

Master Plan Update for
Cecil Field
Jacksonville, Florida
May, 2008

Final



AIP/MAP#: 3-12-0032-006-2004

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JAA#: F-2004-03

EXECUTIVE SUMMARY

ES-1 INTRODUCTION

Cecil Field opened as a military airfield to train and serve as a home base for U.S. Navy and Army aviators during World War II. It continued in a military role until 1999 when it was transferred to local political jurisdictions. Subsequently, Cecil Field was transferred to the Jacksonville Aviation Authority which manages four public-use airports in the Jacksonville area.

The current master plan update began in September 2004 and was structured to identify current and future aviation demands so as to provide guidance for future development strategies. Since Cecil Field is an important part of the Jacksonville airport system, the airport development strategies must integrate with local and regional issues, including environmental concerns, transportation needs and socioeconomic interests. A landuse map of the area surrounding Cecil Field is presented in **Exhibit ES-1**. The initial phase of the planning process identified the following goals and key issues:

- The continued rehabilitation of older military facilities to meet current codes and standards;
- The consideration of multiple environmental issues known to exist within the airport boundaries;
- The need to increase revenue generation from onsite facilities;
- The ability to provide multi-modal capabilities;
- The compatibility of future developments with existing and future land uses within three miles; and
- The ability to provide additional aircraft storage facilities.

The socioeconomic trends indicate substantial population growth, increasing per capita income and decreasing unemployment rates. All of these trends indicate strong economic growth that will directly impact the aviation needs at Cecil Field.

ES-2 EXISTING CONDITIONS

Cecil Field is classified as “General Aviation” in the National Plan of Integrated Airport Systems (NPIAS). Inclusion in the NPIAS is a prerequisite to be eligible for federal funding of infrastructure projects. The FAA’s

Airport Reference Code for Cecil Field is D-IV which includes aircraft having approach speeds from 141 knots to less than 166 knots with wingspans of 118 feet up to and including 171 feet. Cecil Field opened for public-use in 1999, encompassing approximately 6,100 acres in the southwestern corner of Duval County in Northeast Florida. The airport lies southwest of the City of Jacksonville and is one of four public-use airports serving the Jacksonville area. A location map for Cecil Field is presented in **Exhibit ES-2**.

The airport has four runways ranging from 8,000 feet to 12,500 feet in length with each having a width of 200 feet. **Exhibit ES-3** presents the existing and ultimate runway configuration. There is an instrument landing system (ILS) on Runway 36R, allowing precision approaches with ½ mile minimum visibility and 200 foot minimum ceiling. The other runways have non-precision approaches with either GPS or VOR procedures allowing minimums of 1 mile visibility and 420 to 445 foot ceilings.

There is a taxiway system for aircraft to maneuver on the ground between the airport facilities. All taxiways are equipped with blue edge lights and yellow centerline markings.

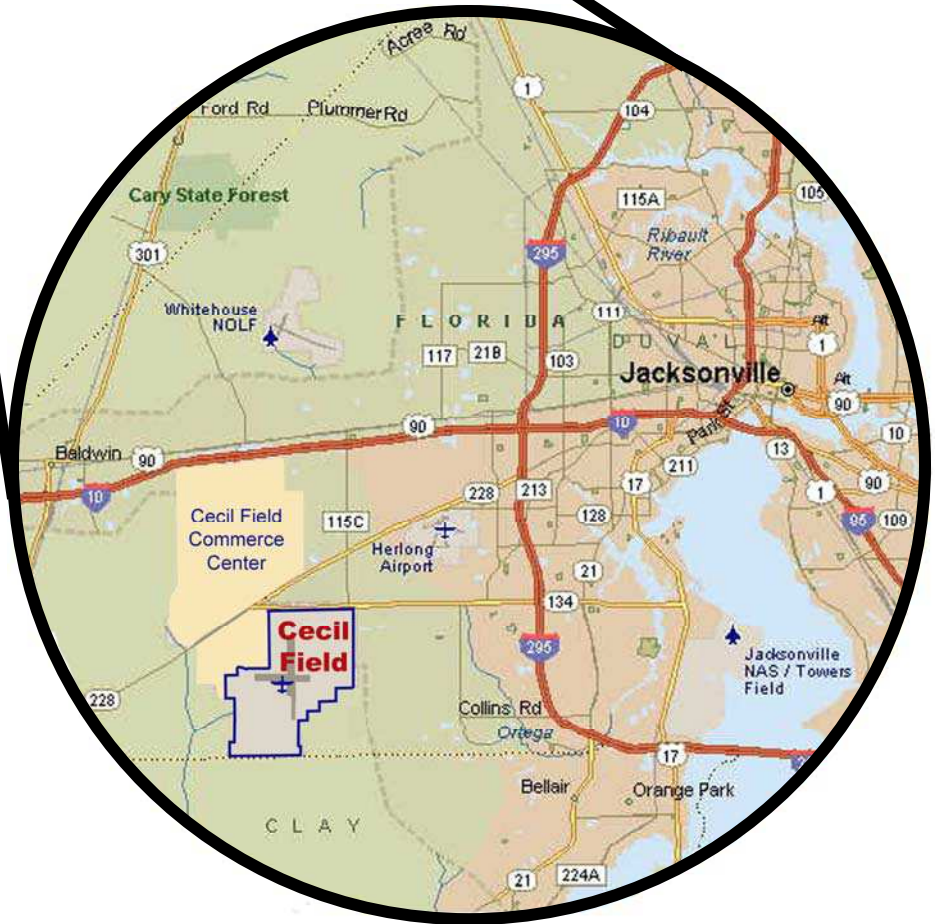
The original airfield signage, installed by the military, has been upgraded to meet FAA standards.

Navigational aids include a rotating beacon, Very-high Frequency Omni-directional Range (VOR) and an Automated Surface Observing System (ASOS). Precision Approach Path Indicators (PAPI) are located at both ends of Runway 9R-27L and Runway 18L-36R. Approach lights are installed at the Runway 9R, 27L and 18L ends. A Medium Intensity Approach Lighting System (MALSR) is on the approach to Runway 36R.

There are two large aircraft parking aprons (385,700 Square Yards and 185,000 Square Yards) that can be used by tenant or transient aircraft.

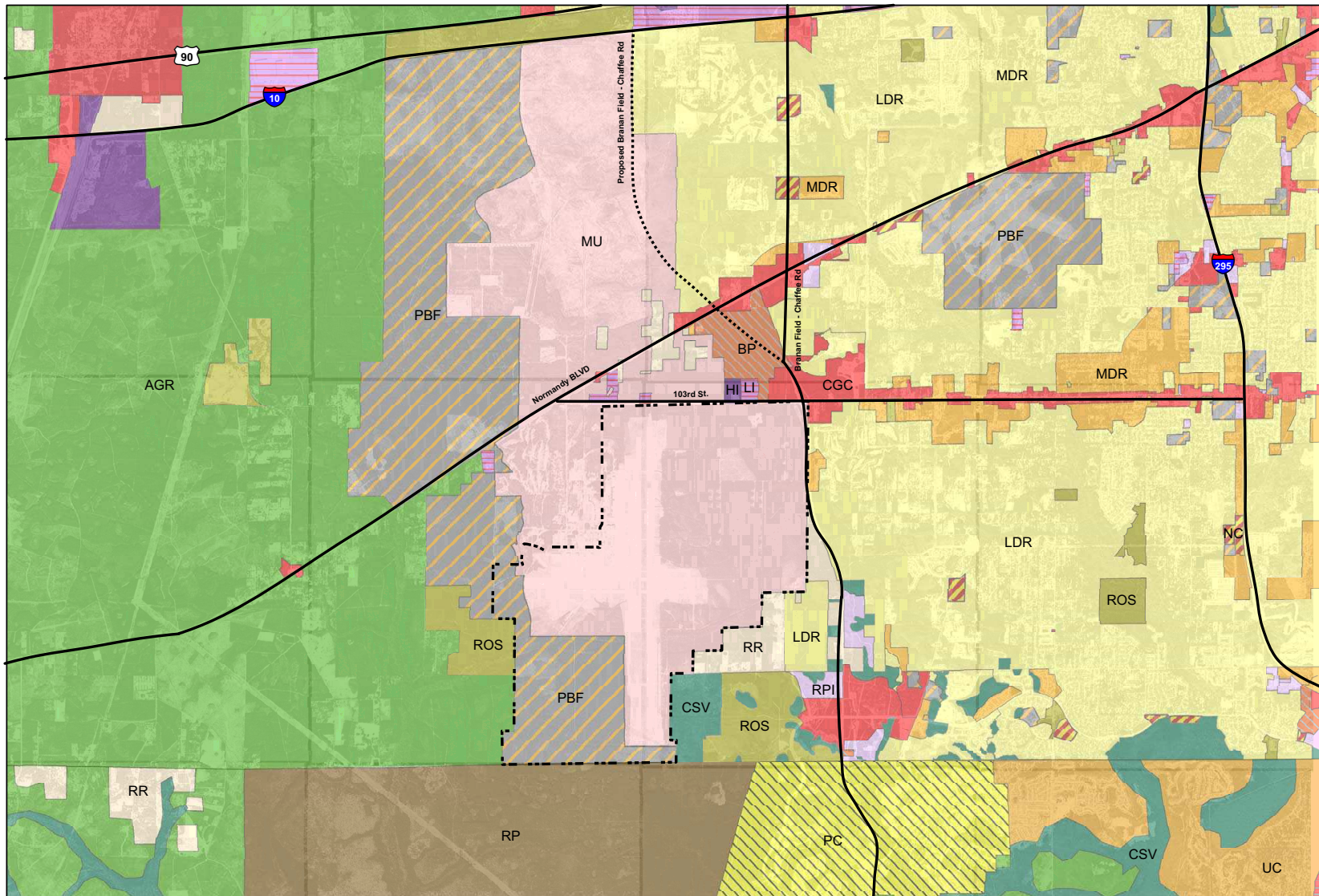
There are 14 tenants currently occupying facilities on Cecil Field offering a wide range of services.

- Airborne Tactical Advantage Company (ATAC) – Military training with tactical fighter aircraft.



Location Map - Exhibit ES-2

CECIL FIELD MASTER PLAN UPDATE

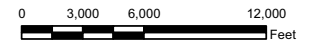


LEGEND

--- Cecil Boundary_Nad83

LANDUSE

- Agriculture (AGR)
- Commercial (CO)
- Conservation (CSV)
- Planned Community (PC)
- Recreation/Preservation (RP)
- Rural Residential (RR)
- Urban Core (UC)
- Business Park (BP)
- Community/General Commercial (CGC)
- Heavy Industrial (HI)
- Light Industrial (LI)
- Medium Density Residential (MDR)
- Multi-Use (MU)
- Neighborhood Commercial (NC)
- Public Buildings and Facilities (PBF)
- Recreation Open Space (ROS)
- Residential Professional Institutional (RPI)
- Rural Residential (RR)

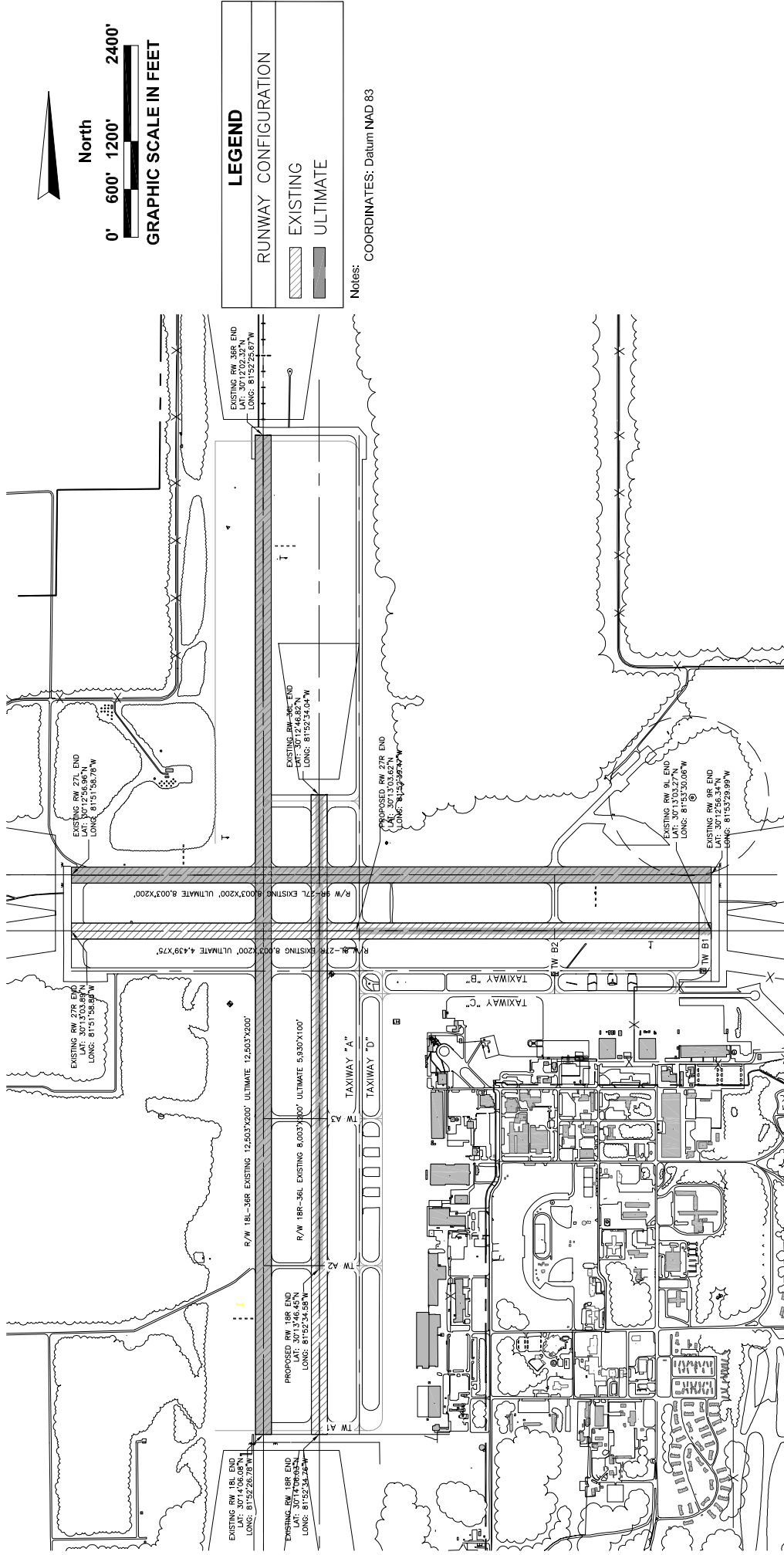


SOURCES:
 JACKSONVILLE PLANNING AND DEVELOPMENT
 DEPARTMENT, JACKSONVILLE, FL:
 JACKSONVILLE FUTURE LAND USE MAP
 JULY 2007

CLAY COUNTY PLANNING AND ZONING
 DEPARTMENT, CLAY COUNTY, FLORIDA:
 CLAY COUNTY FUTURE LAND USE MAP, 2007

FLORIDA LAND BOUNDARY INFORMATION SYSTEM:
 RASTER INFRARED IMAGES, 2004

PREPARED BY AVCON, INC. 2007



EXISTING AND ULTIMATE RUNWAY CONFIGURATION - EXHIBIT ES-3

- Air One – FBO services.
- Boeing Company – Maintenance and modifications to military aircraft.
- Flightstar – Maintenance and repair of commercial aircraft.
- Florida Air National Guard – Military helicopters.
- Florida Community College – Education in aviation services.
- Jet Turbine Services, Inc. – Aircraft jet engine repairs.
- Logistics Services International (LSI) – Aircraft maintenance, repair & overhaul services.
- Fleet Readiness Center, Southeast (FRC SE) – Maintenance and repair of military aircraft.
- Robinson VanVuren & Associates – Air Traffic Control Services.
- Signature Flight Support – FBO services.
- Titan System Corporation – Communications services for national defense.
- United States Customs Agency – P-3 Orion surveillance aircraft.
- United States Coast Guard – Rescue helicopters.

Support facilities include an Aircraft Rescue and Firefighting (ARFF), Air Traffic Control Tower (ATCT), Electrical Vault, Fuel Farm and a Terminal/Administration facility.

ES-3 AVIATION ACTIVITY FORECASTS

The current aviation activity at Cecil Field is not indicative of the traditional activity at a general aviation airport. The operations are influenced by the services provided by the current tenants. The FAA provided a clarification of classification of operations to be used in aviation forecasts, by referencing whether or not the aircraft operator pays fuel taxes. The fuel taxes flow into the Airport and Airway Trust Fund. The FAA uses monies from that fund to finance airport developments. Therefore, activities associated with military and government aircraft operations, not subject to fuel taxes, would not be used in the forecasts.

The second part of forecasts is tied to the timeline when certain levels of activities will be attained. It is important that facilities become available in time to accommodate demand. While the forecast period extends 20 years into the future, the short-term

projections (5 years) are more reliable. The forecasts are divided into three categories:

Short Term: 2007-2011
Mid-Term: 2012-2016
Long-Term: 2017-2026

Aviation activity at Cecil Field is influenced by both national and local factors. The predominant economic indicators show that Cecil Field will experience growth throughout the planning period. National socioeconomic trends include population (+0.8%/year), Gross Domestic Product (GDP) (+3.3%/year) and unemployment (5.4%). In general, the Jacksonville area is one of the fastest growing metropolitan areas in Florida with an annual growth rates in population of 1.56%, per capita income of 4.43% and a decrease of 0.45% in unemployment. Based on these trends and other factors, it is forecasted that the total annual aircraft operations at Cecil Field will increase from about 99,000 in 2007 to 130,500 in 2024.

ES-4 FACILITY REQUIREMENTS

This phase of the study identifies the minimum developments needed at Cecil Field over the planning period to effectively meet the projected demand determined by the aviation activity forecasts. Items considered are:

- Airfield Capacity and Delay
- Airspace Issues
- Airfield Infrastructure
- Landside Facilities
- Land Use and Zoning Requirements

The primary factor is contingent on JAA's efforts to obtain a Federal Aviation Regulation (FAR) Part 139 operating certificate to provide air carrier passenger service.

The following items will need attention over the 20-year planning period:

- Remove or put obstruction lights on objects that penetrate Part 77 surfaces.
- Install new PAPIs on Runway 9L-27R and 18R-36L.
- Install MALSR on Runway 9R, 27L and 18L.
- Perform periodic crack sealing and overlay, as needed.

- Develop Inspection plan for Part 139 Certification.
- Perform periodic maintenance to airfield lights, pavement markings and signs as necessary.
- Update Runway 9R-27L to precision markings.
- Expand GA terminal by a minimum of 3,800 SF.
- Construct an additional 36,268 SY of apron for tie-downs.
- Construct a minimum of 10 additional T-Hangar or box hangar units.
- Construct FBO hangar for storage of 10 aircraft.
- Construct 27 corporate hangars.
- Construct MRO hangars.

ES-5 PLANNING ALTERNATIVES

The primary focus for Cecil Field is to maintain the airport as a General Aviation (GA) facility and to continue the Maintenance, Repair and Overhaul (MRO) services. In a more far-reaching venue, careful consideration should be given to the possible use of Cecil Field as a “spaceport” for horizontal takeoffs and departures.

Airport management will need to address the following items over the 20-year planning period:

- Expand the MRO activities and facilities.
- Develop new GA facilities and expand existing GA facilities to accommodate higher performance aircraft.
- Market Air Cargo Operations and develop Air Cargo Facilities.
- Develop new instrument approaches for the existing runway ends.
- Shorten inboard runways to reduce maintenance costs, but accommodate projected operations.
- Construct a mid-field development area for aviation related commercial and industrial activities and MRO facilities.
- Consider the potential for serving as a future “spaceport” facility to accommodate sub-orbital or orbital launch vehicles utilizing horizontal takeoff/landing procedures.
- Reserve area for a fifth runway parallel to the primary runway to meet long-term needs.

Airport Role: Cecil Field is one of four public-use airports in the Jacksonville area and generally serves a wide range of general aviation operations, including

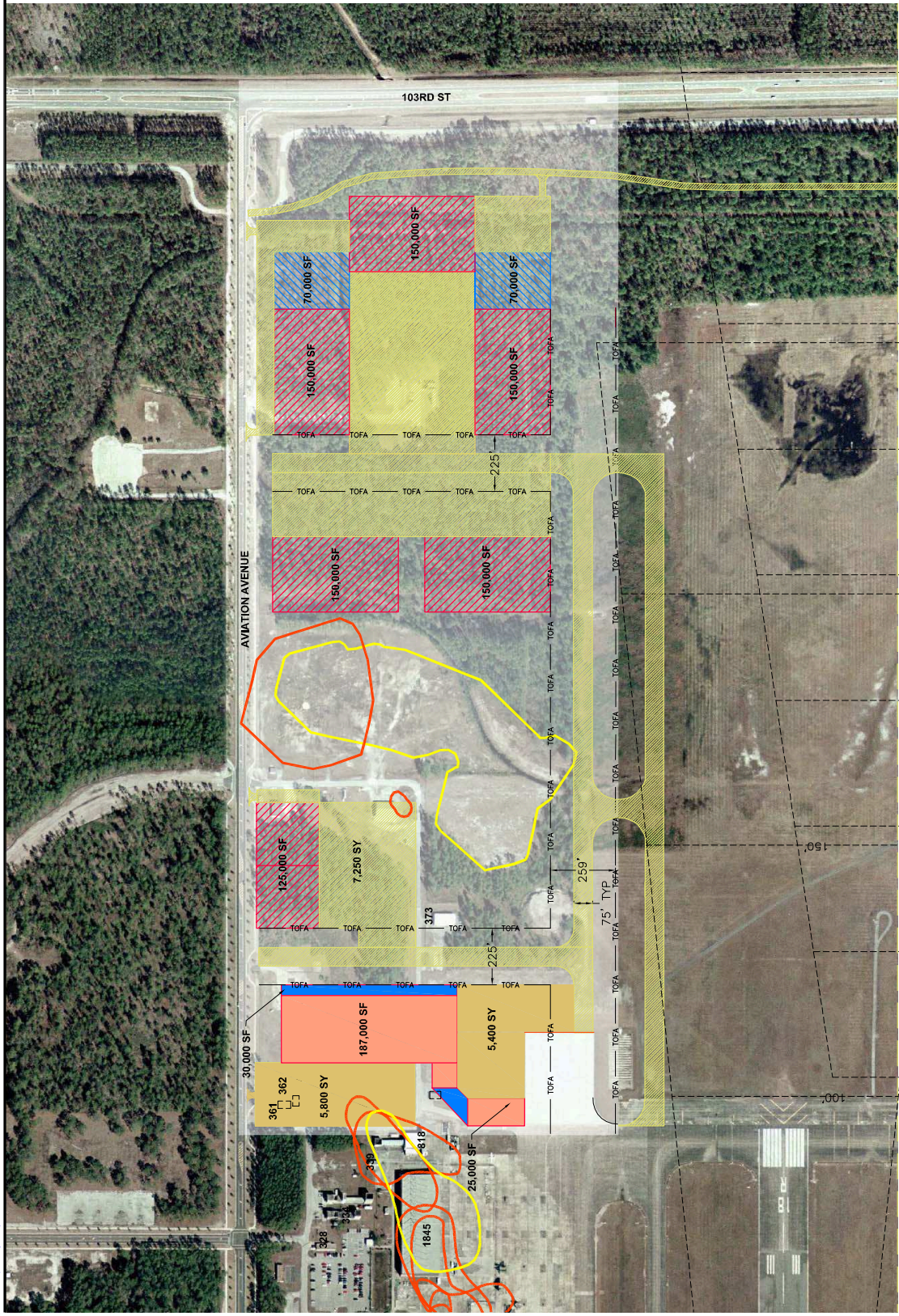
a significant number of corporate jets. It is anticipated that this trend will continue into the future with increased military training, air cargo and aircraft maintenance/repair/overhaul (MRO) activities. Jacksonville International Airport will continue to be the primary commercial service airport with Cecil Field possibly accommodating Class IV charter operations.

MRO: MRO activities have been one of the predominant activities at Cecil Field and it is anticipated that these activities will continue to grow throughout the planning period. The fleet includes MD-80, DC-9, DC-10, B-727, B-737, B-757 and B767 aircraft. The basic facilities require about 14 acres and can range to more than 20 acres. The hangar can be 150,000SF with 50,000SF of office space and a large aircraft parking apron. Eleven sites located in the northwest quadrant of the airfield were considered because of the availability of infrastructure and access without major investments. The preferred MRO alternative (Site 9C) utilizes the existing PCC apron and will require relatively minimal infrastructure development costs. The total capital investment would be approximately \$40 Million. **Exhibit ES-4** illustrates the proposed layout for Site 9C.

General Aviation: The existing airport facilities provide limited capabilities for the storage of general aviation aircraft. Therefore the demand for corporate hangars and T-hangars will require the construction of new facilities. Such construction should be driven by actual demand as it occurs. The area north of the preferred MRO site could be reserved for initial GA facilities. The two primary future general aviation areas are located in the southeast quadrant and northeast quadrant east of the future runway.

Army Aviation Support Facility: The Army Aviation Support Facility (AASF) will remain in its present location but will be expanded to include an unheated, humidity-controlled aircraft storage hangar (35,066SF), several equipment storage sheds, delivery truck entry gate, and a fuel truck access road. The aircraft parking apron will be expanded by 22,400SY and the aircraft tie-down locations will be modified.

Air Cargo: While there are some air cargo activities at Cecil Field, the 12,500 foot long runway and proximity to the interstate highway system offers immense potential as a major air cargo facility. An air cargo development concept has been included in the Master Plan Update.



LEGEND	
[Red Box]	INITIAL MRO HANGAR
[Blue Box]	INITIAL OFFICE SUPPORT
[Yellow Box]	INITIAL PAVEMENT
[Red Hatched Box]	ULTIMATE MRO HANGAR
[Blue Hatched Box]	ULTIMATE OFFICE SUPPORT
[Yellow Hatched Box]	ULTIMATE PAVEMENT
[Orange Line]	SHALLOW SYSTEM/PLUME*
[Yellow Line]	DEEP SYSTEM/PLUME*

*SOURCE: US. DEPT. OF NAVY, 2007;
AVCON, INC.

MRO HANGAR ALTERNATIVE - SITE 9C - EXHIBIT ES-4

Commercial Spaceport: The concept of a commercial spaceport in Florida has been studied and warrants further consideration. Based on the characteristics identified in the feasibility study, Cecil Field was identified as “the best airport for aircraft-like launch vehicles” for operations in Florida. There are adequate facilities and area on Cecil Field to accommodate such operations. Although these types of operations are not committed to Cecil Field at this time, it is prudent to retain the 12,500 foot long runway for at least 5-7 years to accommodate this option.

Preferred Development Plan: The northwest, northeast and southeast quadrants as well as the mid-field area were identified for development alternatives. The availability of infrastructure, access to existing airside and landside facilities, the ability for long-term expansion and environmental issues were examined at each site. The planned facilities in each of the preferred development areas are adequate to satisfy the minimum facility requirements for the planning period. The northwest area offers immediate airside and landside access with relatively low capital costs. The area is sufficient to accommodate future demand for facilities well into the 20-year planning period. **Exhibit ES-5** depicts the proposed development of the northwest area.

ES-6 ENVIRONMENTAL OVERVIEW

The environmental overview of the projects identified in this study has been conducted through examination of several existing documents. The analysis of environmental conditions is based on the FAA Environmental Handbook. The projects include:

- Construction of Site 9C, which includes new MRO/Air Cargo/Corporate and other aircraft storage hangars.
- Construction of aviation and non-aviation commercial development areas.
- Installation of an Instrument Landing System on Runway 9R/27L.
- Construction of the new Mid-Field Development Area.
- Construction of the new Southeast Development Area.
- Construction of the new Northeast Development area.
- Construction of taxiway and apron improvements in the Northwest Development Area.

- Construction of the new east airport access road.
- Construction of the new Runway 17/35 and parallel taxiways.

Continued study and/or coordination in a formal environmental study may be required during preliminary design development of future airport projects. The development of Runway 17-35 will probably require an Environmental Impact Statement to more precisely define impacts of development on specific areas of concern.

The preferred development plan over the 20-year planning period might include some potential environmental impacts such as noise, land use, soil and groundwater contamination, air quality, wetlands, water quality, historically sensitive sites, floodplains, farmlands and hazardous materials. The information contained in the overview indicates that the environmental impacts should be minimal.

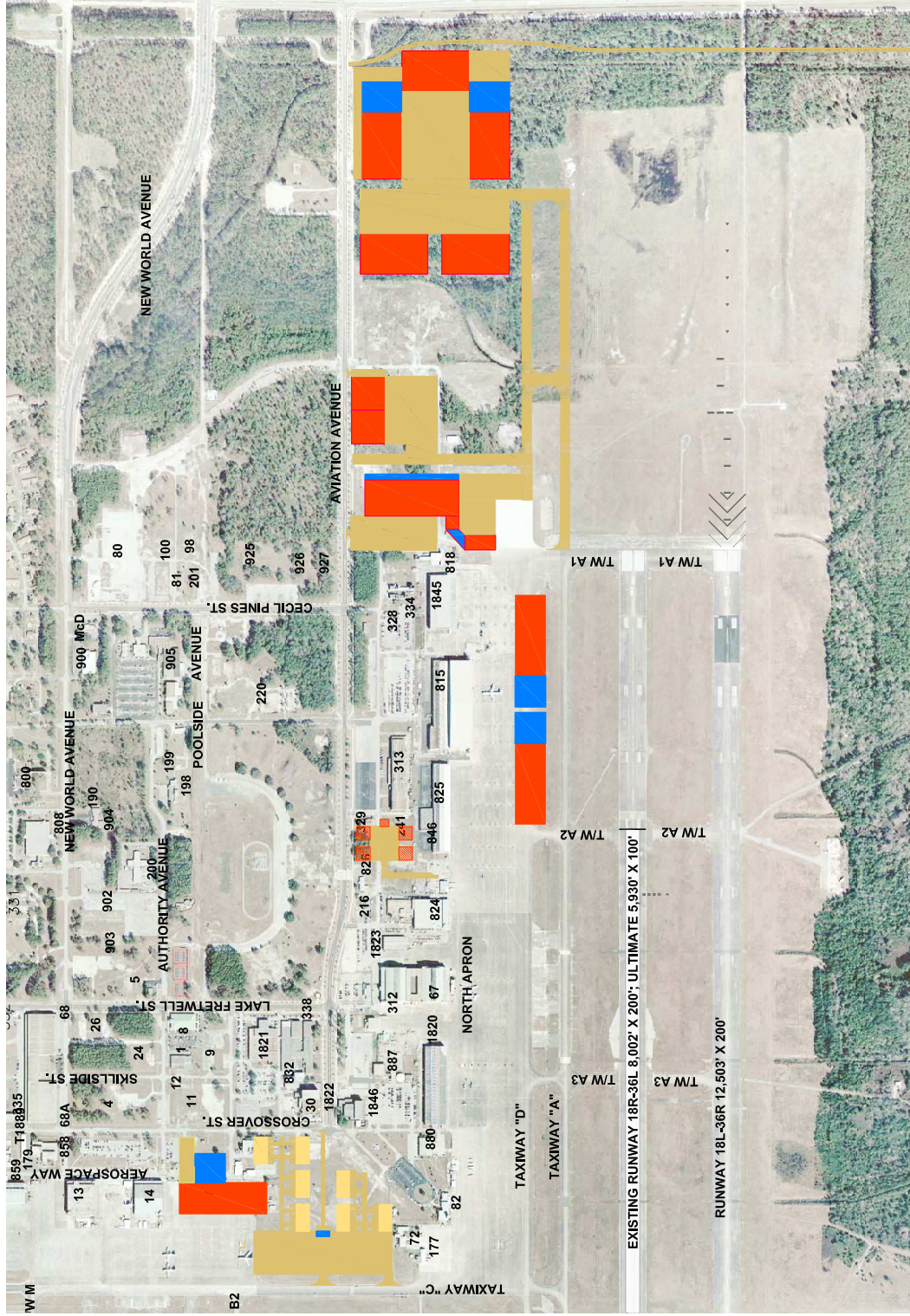
ES-7 CAPITAL IMPROVEMENT PLAN

The proposed airport improvements recommended in this study includes a total of 114 individual airfield, landside and other general projects necessary to accommodate the projected growth in aviation activities and to achieve the goals established for Cecil Field. Each project is defined with a written description, plan sheet, written justification, schedule, cost estimate and possible funding.

The proposed project schedule has been divided into three phases to define the priority of the future airport improvements. The project locations of the Short-Term Improvements are illustrated in **Exhibit ES-6**.

- Short-Term Improvements (2007-2011)
- Mid-Term Improvements (2012-2016)
- Long-Term Improvements (2017-2026)

The estimated total project costs for each improvement reflects a preliminary opinion of costs in 2007 dollars including a contingency for budgeting purposes. The costs include an allowance for mobilization, anticipated fees for design inspection, permitting, surveying, testing and administration in addition to the construction cost.



North

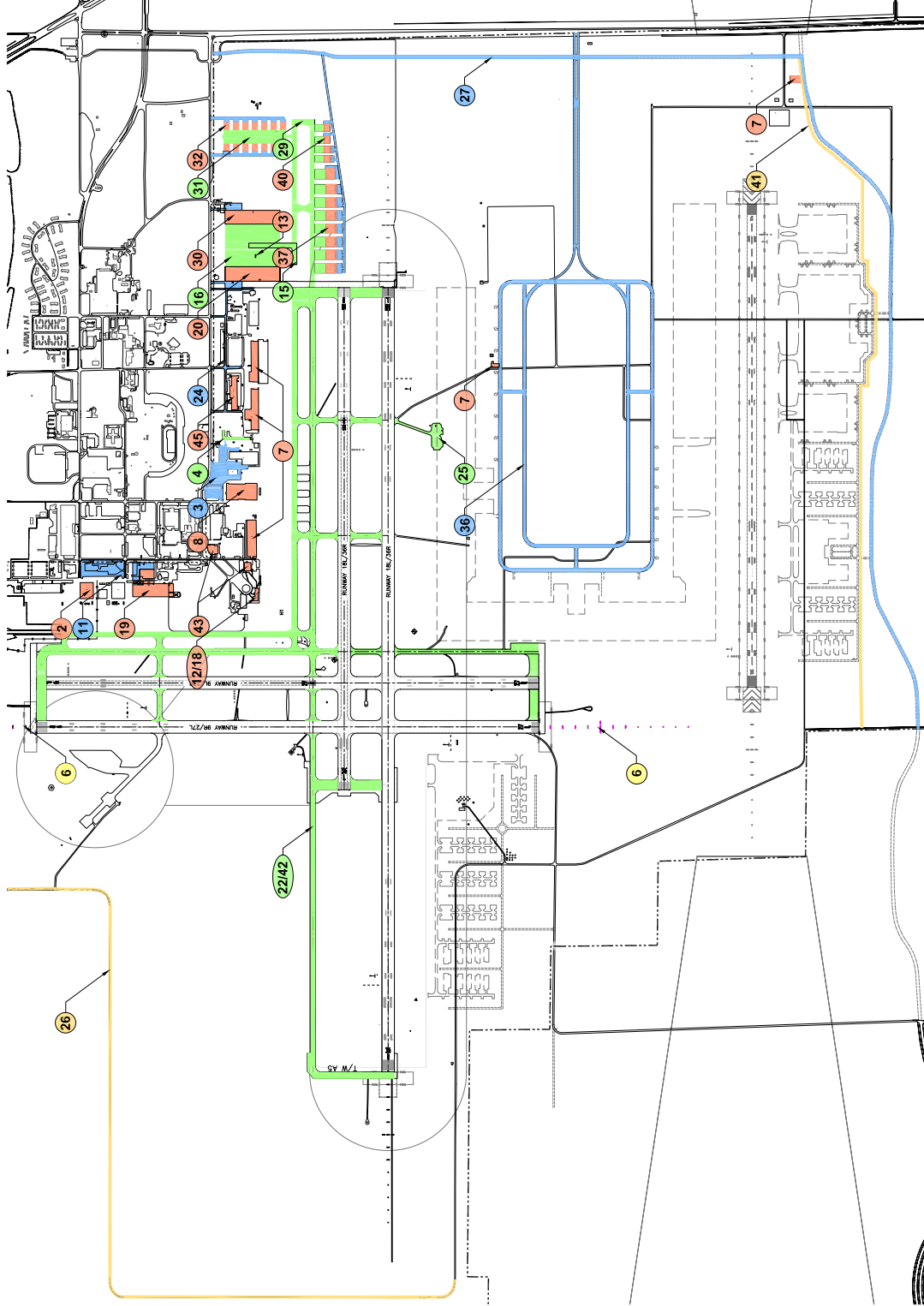
0' 400' 800' 1,600'

GRAPHIC SCALE IN FEET

LEGEND

PROPOSED FACILITIES

- PROPOSED MRO HANGAR
- PROPOSED OFFICE SUPPORT
- PROPOSED PAVEMENT
- PROPOSED CORPORATE HANGAR
- PROPOSED FBO HANGAR



- BUILDING/HANGAR IMPROVEMENTS
- VEHICULAR PAVEMENT IMPROVEMENTS
- AIRFIELD PAVEMENT IMPROVEMENTS
- APPROACH LIGHTING SYSTEM IMPROVEMENTS
- FENCE IMPROVEMENTS



NOT TO SCALE

PROJECT NUMBER	PROJECT DESCRIPTION
2	HANGAR 13 ROOF REHAB
3	AIRPORT PARKING REHAB - PHASE I
4	CENTRAL TAXILANE EXTENSION
6	APPROACH LIGHTING SYSTEM ON RW 9R/27L
7	ROOF REHAB - HANGARS 13, 825, 815, 1820, BLDGS 595 & 504
8	REHAB HANGAR 67 ROOF
12	BUILDING 827 TERMINAL REHAB - PHASE III
13	BUILDINGS 324, 365 AND 366 DEMOLITION
15	SITE 9B TAXILANE
16	CONSTRUCT NEW APRON
18	BUILDING 827 TERMINAL REHAB - PHASE IV AREA
19	MRO HANGAR DEVELOPMENT, NORTHWEST AREA
20	SITE 9B HANGAR & PARKING LOT - PHASE I
22	AIRPORT PAVEMENT JOINT REHAB, TAXIWAYS
24	AIRPORT ROADWAY PAVEMENT REHAB - PHASE I
25	REHAB HIGH POWER AREA, TAXIWAY A2
26	WILDLIFE FENCING
27	MID-FIELD AREA DEVELOPMENT ROADWAY ACCESS
29	DESIGN AND CONSTRUCT TAXIWAY "D" EXTENSION
30	SITE 9B HANGAR, APRON & PARKING LOT - PHASE II
31	SITE 9B TAXILANE
32	SITE 9B HANGAR, APRON & PARKING LOT - PHASE III
36	MID-FIELD AREA DEVELOPMENT ROADWAY ACCESS - PHASE II, INTERIOR LOOP
37	SITE 9B HANGAR, APRON & PARKING LOT - PHASE IV
40	SITE 9B HANGAR, APRON & PARKING LOT - PHASE V
41	AIRPORT SECURITY IMPROVEMENTS - PHASE I
42	REHAB AND REMARK TAXIWAY SURFACES
43	REHAB BUILDING 1840 AND 880 ROOF
45	REHAB BUILDING 313, ROOF REPLACEMENT

PROPOSED SHORT TERM CIP PROJECTS (2007-2011) - EXHIBIT ES-6

The total 20-Year Capital Improvement Program is approximately \$912 Million with an average annual expenditure of about \$45 Million. It is anticipated that \$85 Million of FAA funds will be necessary with \$21 Million of FDOT funds and \$25 Million of local funds. This level of funding would require \$4.3 Million of FAA funds annually with \$1.1 Million from FDOT and \$1.3 Million from local funds on an annual basis. The annual funding program may vary based on priorities and other parameters.

ES-8 FINANCIAL PLAN

The financial plan examines the recent financial status of Cecil Field and general financial projections for the 20-year planning period. The airport operating budget is reviewed and the typical revenues and expenditures incurred in the operation of the facility are provided for analysis. The purpose of this analysis is to outline a strategy by which the construction, operation, and maintenance of the recommended development can be financed.

An analysis was performed on the historical sources of airport revenue and expenses to estimate future revenue and expenses. A summary of this historical revenue and expense analysis is presented in **Table ES-1**. This analysis yielded little correlation between operations and revenue and expenses. The time period for which the historical analysis was conducted is a poor indicator of future trends due to volatility from unusual circumstances with the Defense Base Closure and Realignment Commission (BRAC), an increase in aviation fuel cost, and Cecil Fields continuing development as a civil airport since its transfer from the U.S. Navy in 1999.

**Table ES-1:
Historical Sources of Revenue and Expenses**

Fiscal Year	2004	2005	2006	2007
Operations	83,920	84,110	76,181	76,835
Total Revenue	\$2,930,329	\$3,016,479	\$2,827,522	\$3,115,358
Total Expenses	\$1,221,151	\$1,854,291	\$1,938,335	\$2,520,937

Source: JAA financial records, February 2008

Since a historical trends analysis was unreliable in projecting future trends, the FAA-approved Forecasts developed in **Chapter 3** were used. Future revenues and expenses were projected using two growth rates, the FAA Terminal Area Forecast (TAF) and the Compounded Annual Growth Rate (CAGR). The TAF

is a conservative growth rate calculated at 1.02% and was utilized to estimate future revenue, while the CAGR is a more aggressive growth rate estimated at 2.00% and was utilized to estimate future expenses for this analysis. The results from this analysis estimated that the airport would have a revenue surplus of approximately \$575,000 in 2008, and will decrease steadily to \$105,000 in 2026.

A review of funding sources was performed to organize the relationship between estimated capital costs and funding sources. The funding necessary to meet the projected capital improvement needs of Cecil Field has been estimated in **Chapter 7**. A summary of the estimated cost, in 2007 dollars, for the short-, mid-, and long-term improvements is presented in **Table ES-2**.

**Table ES-2:
20-Year Capital Improvement Program**

Development Period	Projected Costs
Short-term (2007-2011)	\$244,794,000
Mid-Term (2012-2016)	\$330,887,000
Long-Term (2017-2026)	\$336,581,000
Total for 20-Year CIP	\$912,262,000

Source: AVCON, Inc analysis, 2007

The identified funding sources to assist in funding these developments are the Federal Aviation Administration (FAA), Florida Department of Transportation (FDOT), Jacksonville Aviation Authority (JAA), and other funding sources.

The FAA Airport Improvement Program (AIP) provides funding for airport planning and development projects at airports included in the National Plan of Integrated Airport Systems (NPIAS), of which Cecil Field is included. Cecil Field can receive approximately \$150,000 in entitlement funds along with the ability to compete for discretionary funds each year. Cecil Field is also in the military airports program, which provides Cecil Field with approximately \$2.5 million to \$4 million each year in funding. The FAA will typically cover 95% of the AIP-eligible project cost.

The FDOT also provides funding to supplement federal and non-federally funded projects. The FDOT will typically match the local share of project funding and has provided an average of approximately

\$641,000 per year towards improvements at Cecil Field.

The JAA covers the local portion of project funding. Typically, if a project is AIP eligible, the FAA will fund 95% of the overall project cost, with the FDOT and local funds providing 2.5% each. Since 1999, the JAA has provided an average of approximately \$2,036,000 per year towards CIP improvements at Cecil Field.

A large portion of the capital required to execute the short-, mid-, and long-term projects at Cecil Field is anticipated to be provided by private corporate sources. These private sources would fund large hangar developments for MRO and/or Cargo facilities. Approximately \$207,188,000 of the \$244,794,000 in estimated capital required to implement the short-term Capital Improvement Program (CIP) is planned to be provided by private corporate sources.

Other sources of revenue have been provided to Cecil Field in the past for capital improvement projects. The Economic Development Authority (EDA) provided \$2,000,000 in 2004 for the Hangar 815 Expansion. Future projects may also qualify for an EDA grant based on job creation or potential positive economic impact to the region. Additionally, the Office of Tourism, Trade & Economic Development (OTTED) provided \$770,000 in 1999, \$198,896 in 2000, and \$750,000 in 2006 for access road improvements, Florida Air National Guard Infrastructure improvements, and Hangar 13 improvements. Although OTTED funding is not guaranteed, it could be a possible funding source for hangar developments in 2008 and 2009.

Based on the assumptions presented throughout **Chapter 8**, it appears feasible for the JAA to cover anticipated expenses related to the proposed CIP through 2011. According to the revenue versus expense analysis, Cecil Field will continue to operate with a revenue surplus and the FAA, FDOT, JAA, and other funding sources appear to be sufficient to cover the proposed improvements.

If private funds are not available for the large commercial hangar developments, these projects will have to be deferred until appropriate funding is established. Once the short-term planning period has been completed, the mid- and long-term planning periods can be re-assessed based on current funding sources and operational demand.

ES-9 AIRPORT LAYOUT PLANS

The improvement concepts recommended in a Master Plan Update are generally illustrated in a separate set of drawings, called the Airport Layout Plan (ALP) set, which accompanies the Master Plan report. The current airport improvement recommendations presented in **Chapter 4** (Facility Requirements) and **Chapter 5** (Planning Alternatives) of this report are summarized pictorially in a current set of ALP drawings. In addition to depicting the proposed airport improvements, the ALP set also illustrates existing runways, taxiways, hangars, the airport property boundary, and other existing facilities discussed in **Chapter 2** (Inventory of Existing Conditions).

To clearly present the recommended airport improvement information, the ALP set includes a number of individual drawings. Several of these drawings are necessary for the set to be eligible to receive conditional approval from the FAA, whereas some additional drawings may be included in the ALP set to provide detailed illustrations of areas with complex improvement recommendations. The 16 individual drawings included in the current ALP set for Cecil Field include the following:

- Cover Sheet
- Data Sheet
- Airport Layout Plan
- Facility Plan – Northwest
- Facility Plan – Northeast
- Facility Plan – Southeast
- Airport Airspace Drawing (Sheet 1 of 2)
- Airport Airspace Drawing (Sheet 2 of 2)
- R/W 18L-36R Inner Approach Drawing
- R/W 18R Inner Approach Drawing
- R/W 36L Inner Approach Drawing
- R/W 9R-27L Inner Approach Drawing
- R/W 9L Inner Approach Drawing
- R/W 27R Inner Approach Drawing
- Ultimate R/W 17-35 Inner Approach Drawing
- On-Airport Land Use Plan
- Existing & Future Land Use Plan

- Property Map

These drawings have been developed and produced as a set on 42-inch by 30-inch sheets using AutoCAD 2007. Reduced reproductions of the plan drawings are included in **Appendix 48** for illustration purposes. The drawings included in the appendix are for review and decision making purposes. Full-size sets of the drawings are submitted to the FAA and FDOT for approval. An approved ALP is perhaps the single most

important planning tool for an airport.

As the airport develops Cecil Field, these drawings should be revised to reflect what is constructed. These revisions should be noted on the appropriate ALP sheet with a description of the change being documented in the respective Revision Tables. These interim changes should then be incorporated in the next master plan update.

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CHAPTER 1

INTRODUCTION

1.1 GOALS AND KEY ISSUES

Since Cecil Field (VQQ) was opened as a public-use facility in 1999, the Airport, the Jacksonville community, and the aviation industry have undergone many changes. The 1998 Cecil Field Strategic Master Plan was used to guide the facility's transition from a military base to a public-use facility; however, many of those initial projects have been completed or are well underway. In order to respond to the current aviation market, the Jacksonville Aviation Authority (JAA), which owns and operates Cecil Field, undertook an update of the 1998 Master Plan. Several goals and key issues were identified to guide this master plan process.

1.1.1 Goals

The primary goal of any master plan update is to identify the current and projected aviation demand and to provide guidance for future development strategies that address this demand in a safe, efficient, and economical manner. This current study will take into account current trends in aviation and in the Jacksonville community in order to develop appropriate aviation activity projections. In identifying future developments, those projects currently underway or planned for the very near future will be taken into consideration. The final products of this planning process should provide JAA with adequate information to make appropriate financial and development decisions.

This master plan update also attempts to integrate the proposed development strategies for the Airport with local and regional issues, including environmental concerns, transportation planning needs, and socioeconomic interests. This is necessary because Cecil Field does not operate in a vacuum, but rather within the local community. Therefore, it is very important that the final development plan address aspects related to how VQQ can enhance the overall community.

Related to the above, is the stated goal of JAA to support further development of aviation-related businesses at VQQ. The business types envisioned include aircraft manufacturing and maintenance/repair/overhaul (MRO) services. Additionally, some cargo activity could be initiated at VQQ. These developments would build upon those already based

at the Airport and would likely draw related support businesses to the adjacent Cecil Field Commerce Center.

1.1.2 Key Issues

During the early phases of this study, key issues that this study should address were identified. These issues were identified early on so that appropriate information could be gathered to adequately address them throughout the master plan process. The following provides a list of these identified key issues:

- The continued rehabilitation of older military facilities to meet current codes and standards;
- The consideration of multiple environmental issues known to exist within the airport boundary;
- The need to increase revenue generation from onsite facilities;
- The ability to provide multi-modal capabilities;
- The compatibility of future developments with existing and future land uses within three miles; and
- The ability to provide additional aircraft storage facilities.

These items are not intended to be an exhaustive list of airport issues, but rather highlight some areas of concern. This Master Plan Update will seek to address these and other issues in order to provide the best operational environment at Cecil Field and to give the Aviation Authority the flexibility to respond to demands as they arise.

1.2 STUDY PROCESS

This planning study and the accompanying Airport Layout Plan (ALP) set are being prepared in accordance with current editions of Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5370-6A, *Airport Master Plans*, and FAA AC 150/5300-13, *Airport Design*, along with additional guidance provided by FAA and the Florida Department of Transportation (FDOT). The FAA, FDOT, and JAA funded this planning study. It was conducted by AVCON, INC. beginning in September 2004.

The steps in the master planning process are shown in **Exhibit 1-1** and are briefly described below:

- **Facilities Inventory:** The existing airport facilities are catalogued and an evaluation is made as to

their condition. Additionally, information related to the area demographics is also collected.

- **Aviation Activities Forecasts:** Future levels of based aircraft and aircraft operations are determined in this study phase. These forecasts are further broken out into various categories, such as aircraft type or instrument operations. Forecasts are generally developed for several milestone years over a 20-year planning period.
- **Facility Requirements Analysis:** An assessment of the airfield operational capacity is conducted to determine if unacceptable operational delays would be expected over the planning period. Various analyses are conducted to project future demand for facilities, including airfield infrastructure, hangars, apron, terminal space, and vehicle parking spaces. These future facility demands are then compared to the existing facilities to identify any shortfalls. Additionally, a review is conducted to identify any existing facilities that do not meet federal, state, or local regulations, codes, or standards.
- **Alternatives Analysis and Selection:** A variety of alternatives are developed and evaluated to identify the most appropriate development to address the facility shortfalls identified in the previous step. These alternatives consider airside and landside facilities as well as any needed access improvements.
- **Environmental Overview:** An inventory of existing environmental issues is conducted. This information is utilized to identify any potential environment impacts of the proposed development plan, including an assessment of future noise impacts on and beyond the airport property. In addition, this study phase will evaluate the compatibility of the proposed development plan with local land use plans for areas within three miles of VQQ.
- **Capital Improvement Program Development:** Cost estimates and a development timeline are determined for the preferred development plan. This information makes up the Capital Improvement Program (CIP), which is utilized by FAA, FDOT, and JAA in determining funding and development priorities.
- **Airport Layout Plan Production:** A set of engineering-type drawings, referred to as the Airport Layout Plan (ALP), is created showing existing facilities and the selected development plan. The ALP also includes airspace and runway approach drawings, a land use map, and a property map showing the existing and proposed boundaries. These maps and drawings assist airport management in the planning and maintenance of airport boundaries and airspace.

These steps build upon one another to eventually identify a clear action plan that can be used by airport management to guide financial and development decisions. This process leads to the production of two

**Exhibit 1-1
Master Plan Process**



key documents—the ALP and narrative report. The development of an approved ALP is a requirement for public-use airports that receive federal Airport Improvement Program (AIP) funding and FDOT aviation development funds. The master plan report describes and justifies the proposed improvement concepts included in the ALP.

As required by FAA guidelines, this planning process must address both short-term and long-term development needs. This is necessary so that short-term improvements do not preclude long-term developments. Thus, the timeframe considered in this study is a 20-year period from 2007 to 2026, defined as follows:

- Short-term Period: 2007-2011
- Mid-term Period: 2012-2016
- Long-term Period: 2017-2026

One final aspect of this planning process is the need for public involvement. This is required in FAA master plan guidance materials. In this study, two advisory committees have been utilized for review and consultation during this study. The Citizens Advisory Committee consisted of community leaders from the

Jacksonville area, whereas the Technical Advisory Committee was comprised of airport tenants and users as well as federal and state aviation officials. Additionally, a public workshop was held to solicit input from the general public on the proposed development plan.

1.3 HISTORICAL INFORMATION

As with many airports, Cecil Field got its start during the United State's preparations for World War II. The facility, which was then called Naval Air Station (NAS) Cecil Field, served as a training and home base for U.S. Navy and U.S. Army aviators. During the 1990s, the facility was selected for closure as a military base. In order to not lose the use of the valuable infrastructure at the site, ownership was transferred to several political jurisdictions, including the City of Jacksonville, Clay County, and the Jacksonville Port Authority (which at that time was responsible for managing airports). Ownership now resides with the Jacksonville Aviation Authority, which was created in 2001 to focus solely on airports.

Cecil Field is now one of four public-use airports serving the Jacksonville area. Primarily users are either private or corporate aircraft owners. Since opening as a public-use facility, the number of based aircraft has grown to 36 and annual operations have steadily increased to over 79,000 in 2006 according to FAA records. One key to this successful transformation of Cecil Field has been the Aviation Authority's participation in the FAA's Military Airport Program, which provides funding for needed upgrades and facility additions to convert closed military airports or joint-use facilities. This funding program provides federal grants for some projects, such as hangar and fuel farm developments, which are not normally eligible for federal funds. Further details on these events are provided in the following sections discussing previous studies and recent capital improvement projects.

1.3.1 Previous Studies

The transition from an active military base to a public-use facility required several planning and environmental studies to be undertaken.

- **NAS Cecil Field Base Reuse Plan (1996):** This study identified appropriate uses for base facilities. This study recommended dividing the base among the Jacksonville Port Authority (6,200 acres), the City of Jacksonville (10,500 acres), and Clay County (640 acres). The Mayor designated the

Jacksonville Economic Development Commission to lead redevelopment efforts on behalf of the City.

- **Northeast Florida Aviation System Plan Update (July 1997):** The purpose of this study to determine the potential role and service market in which VQQ would fulfill with the northeast Florida area. This study identified Cecil as a general aviation (GA) reliever airport to Jacksonville International Airport.
- **Cecil Field Feasibility Study (July 1997):** VQQ was recommended for inclusion in the Florida Aviation System Plan (FASP) and the National Plan of Integrated Aviation Systems (NPIAS). The addition of Cecil Field would enable JAA to meet projected aviation demand and further economic development in the region. Additionally, this study recommended that JAA pursue acquisition of land north of Normandy Boulevard for economic development reasons to supplement airport revenue.
- **Cecil Field Strategic Airport Master Plan (1998):** This study developed a plan to transition Cecil Field to a public-use facility. GA developments were recommended along the existing southern flight line and to the east of the existing airfield. These developments on the west side included construction of T-hangars and corporate box hangars on the existing apron as well as designating tiedown areas. A southeast development area for GA users was envisioned to have a new GA terminal, T-hangars, box hangars, and tiedowns. The Aircraft Rescue and Firefighting (ARFF) facility would be relocated to the southeast area. This study also included a high-growth scenario that would necessitate the addition of a fifth runway west of the current airfield. Corporate and GA facilities were planned for the mid-field area created between the new runway (designated 17-35) and Runway 18L-36R. A business park was planned for the westernmost property area along the proposed route for Brannan Field-Chaffee Road.
- **Cecil Field Disposal and Reuse Environmental Impact Statement (US Navy, October 1998):** According to federal laws, an environmental impact statement (EIS) is required to close a military base and transfer base property to other entities. This EIS focuses on mitigating environmental hazards created by military operations and on determining the suitability of using the land for various purposes.

Other studies have been completed that include a FDOT Pavement Evaluation Study in 1999 and a Drainage Condition Survey. As necessary, these studies were reviewed and are incorporated as necessary.

1.3.2 Recent Capital Improvement Projects

Since the Aviation Authority took control of Cecil Field, many facility improvements have been undertaken. **Table 1-1** lists these projects with the project timeframe, development cost, funding sources, and the number of jobs created. Many of these projects are related to bringing the aging military infrastructure up to meet current codes and standards.

Several projects have had a distinct impact on the community as a whole with the addition of approximately 280 jobs. Most of this job creation has been related to aircraft manufacturing or maintenance/repair/overhaul (MRO) activity. Notably, L3/Alenia/Boeing is to begin construction of a new facility for the C-27J. Future plans could include assembly of civilian aircraft models currently in production outside of the U.S. Other developments included an expansion to Boeing operations which included 80 new employees in 2003. Currently, the JAA is working with the GSA (Government Services Administration) is leasing bldg. 1846 for the United States Coast Guard (USCG) expansion. The expansion is a result of the USCG changing the aircraft they operate and instead of contracting out the aircraft maintenance, they will conduct their own maintenance at Cecil Field. This development could add approximately 70 employees to Cecil Field.

Example of GA Aircraft: Challenger 300A



1.4 FAA CLASSIFICATIONS

The FAA classifies airports in a variety of ways. The two primary systems address the role an airport serves within the national aviation system and what aircraft types the airport is expected to serve. These classifications are utilized to determine project funding eligibility and various FAA design criteria.

1.4.1 Airport Role

The U.S. Secretary of Transportation is required to present a national plan to Congress that presents data, forecasts, and development plans of all public-use airports. This plan is referred to as the National Plan of Integrated Airport Systems (NPIAS). One of the main outcomes of the NPIAS is a listing of infrastructure that will be eligible for federal grants. Should an infrastructure project not be listed in the plan, the FAA might not participate in funding the project.

The NPIAS also classifies each listed airport based upon the existing and projected role they will serve in the national aviation system. There are two main categories—"Commercial Service" and "General Aviation"—with several subclassifications within each category. The determining factor between these two main categories is whether or not airport users carry passengers or cargo for compensation. VQQ falls within the "General Aviation" (GA) classification.

Additionally, a further classification is given to GA airports that further clarify their role. According to the NPIAS 2001-2005, VQQ is classified as a "Reliever" airport. This classification is given to GA airports that serve as an alternate site to a more congested Commercial Service airport. Thus, "Reliever" airports provide GA users greater access to facilities within larger metropolitan areas. VQQ is classified as a "Reliever" airport to the Jacksonville International Airport.

1.4.2 Airport Reference Code

A second FAA classification system is very important in the master planning process because it determines the appropriate design criteria for future facilities. The Airport Reference Code (ARC) system is a classification system based upon the operating characteristics for the most critical aircraft to use an airport or an individual airport facility. The ARC designation combines the classification of the Aircraft Approach Category and the Airplane Design Group. The classifications of these two criteria are given in **Table 1-2**. The ARC for Cecil Field was reported to be D-IV in the 1998 Master Plan.

**TABLE 1-1
RECENT CAPITAL IMPROVEMENT PROJECTS**

Project Description	Date of Project	Project Cost	Funding Sources
Hangar 13 Roof Replacement (Lower)	2000	\$446,972	FAA, FDOT, JAA
Airfield Lighting Project with Vault Study	2000	\$2,276,000	FAA, FDOT, JAA
Homeruns & High Intensity Runway Lights (HIRL's)	2000	\$1,086,000	FAA, JAA
Airfield Signage Upgrade	2000	\$714,000	FAA, JAA
Navigational Aids, Design and Construction	2001	\$1,381,000	FAA, FDOT, JAA
Facility & Infrastructure	2001	\$5,150,400	FAA, FDOT, JAA
Runway 18L/36R Electrical Improvements	2002	\$913,655	FAA, JAA
Airfield Signage Improvements	2003	\$143,346	FDOT, JAA
Fire Loop Interconnection & Extension	2003	\$257,623	FAA, JAA
Terminal Building Renovations	2003	\$1,500,000	FAA, FDOT, JAA
Boeing Expansion	2003	----	Private
Master Plan Update	2004	\$167,000	FAA, FDOT, JAA
Drainage Rehabilitation & Upgrade	2004	\$893,000	FAA, FDOT, JAA
Fire Loop Modifications	2004	\$400,000	FAA, JAA
Utility Improvements	2004	\$134,500	FDOT
Flightstar Hangar (#815) Expansion	2004	\$7,385,000	JAA, EDA, Private
Florida Community College/US Customs Hangar (#14) Rehabilitation	2004	\$450,000	FAA, JAA
Boeing Hangar (#67) Rehabilitation	2004	\$634,000	FAA, JAA
Facility & Infrastructure	2004	\$138,400	JAA
Airport Electrical System Rehab Phase V	2005	\$1,535,000	FAA, FDOT, JAA
Airport Pavement Remarking	2005	\$147,000	FDOT, JAA
Airport Pavement Rehab/Remark Runway 9L-27R	2005	\$270,000	JAA, FDOT
Fire Loop Connect & Extension Phase IV	2005	\$519,000	FAA, FDOT, JAA
Fire Loop Upgrades Phase V	2005	\$659,000	FAA, FDOT, JAA
Construct Taxilane A2	2006	\$634,000	JAA, FDOT
Airport Parking Rehab Phase I	2006	\$710,000	JAA, FDOT
Pavement Joint Rehab, Phase I	2006	\$1,385,000	FAA, FDOT, JAA
Security Fence	2006	\$471,000	FAA, FDOT, JAA
Hangar 67 Roof Replacement (2006)	2006	\$1,780,000	FAA, FDOT, JAA
Mid-Field Area Development (North Parcel)	2007	\$1,100,000	JAA
Approach Lighting System, RW 9R MALSR	2007	\$1,171,321	FDOT, JAA
Hangar 825 Roof Rehabilitation	2007	\$687,000	FAA, FDOT, JAA
Airport Parking Rehabilitation, Phase II	2007	\$600,000	FDOT, JAA
Hangar 13 Roof Rehab Phase II (Upper Roof)	2007	\$847,300	FAA, FDOT, JAA
Hangar 1820 Roof (Upper & Lower)	2007	\$920,370	FAA, FDOT, JAA
Building 1846 Rehabilitation (Coast Guard)	2007	\$1,000,000	JAA

Notes: FAA=Federal Aviation Administration; EDA=Economic Development Association; FDOT=Florida Department of Transportation; JAA=Jacksonville Airport Authority
Source: Airport records through August 2007.

**TABLE 1-2
AIRPORT REFERENCE CODE**

Aircraft Category	Approach Approach Speed
A	Below 91 knots
B	91 knots up to 121 knots
C	121 knots up to 141 knots
D	141 knots to less than 166 knots
E	166 knots or more

Airplane Design Group	Wingspan
I	Below 49 feet
II	49 feet up to but not including 79 feet
III	79 feet up to but not including 118 feet
IV	118 feet up to but not including 171 feet
V	171 feet up to but not including 214 feet

Source: FAA, AC 150/5300-13 (Change 7), *Airport Design*.

1.5 VICINITY CHARACTERISTICS

This section compiles general information related to the airport's location, climatological conditions, and other nearby airports. As a part of this discussion, brief descriptions of political jurisdictions and the existing and future land uses in the vicinity are provided.

1.5.1 Location

As depicted in **Exhibit 1-2**, Jacksonville, which is located within Duval County, is located in northeast Florida along the Atlantic Ocean. The city center is located approximately 33 miles from the Georgia-Florida border. Cecil Field is positioned in the southwestern corner of Duval County with the airport's southern boundary abutting Clay County. The Cecil Commerce Center, an industrial park, is located along the airport's northwestern boundary. The airport property line is focused around the airfield and encompasses approximately 6,100 acres.

1.5.2 Vicinity Airports

The aviation market in the northeast Florida area is very healthy. This is supported by the number of airports in the region, including the southeastern portion of Georgia, as identified on **Exhibit 1-3**. In addition to Cecil Field, multiple public-use airports are located within 40 nautical miles of VQQ. These include: Craig Municipal Airport, Davis Field Airport, Fernandina Beach Municipal Airport, Herlong Airport, Hilliard Airpark, Jacksonville International Airport, Kay

Larkin Airport, Keystone Airpark, Lake City Municipal Airport, St. Augustine-St. Johns County Airport, and St. Marys Airport. Most of these airports serve general aviation users. In fact, only Jacksonville International Airport provides scheduled commercial passenger service.

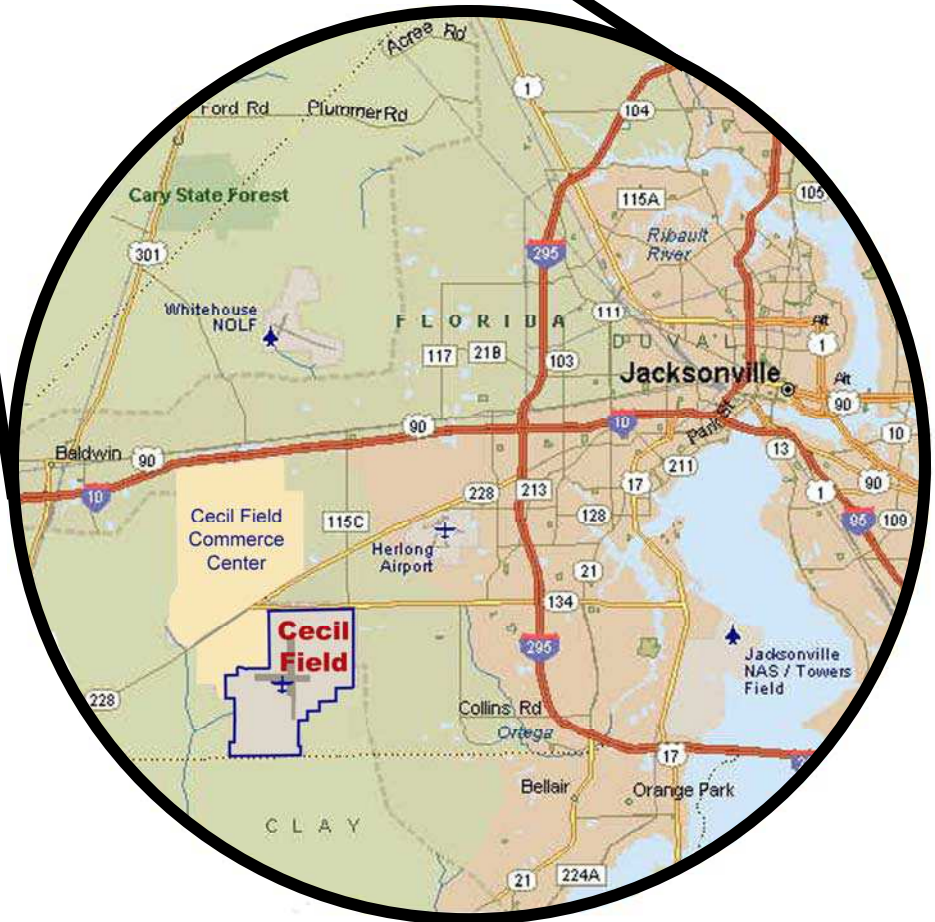
Private airstrips are also quite abundant within this general area. Use of these private facilities is limited to a small group of users, but many will allow other users to operate at these facilities with prior arrangements. Some of the private airstrips in the vicinity of Cecil Field include: Cuyler Field Airport, Deep Forest Airport, Flying Tiger Field Airport, Nassau Baptist Temple Field Airport, Reynolds Airpark, and Williams Field Airport. There are also multiple private heliports in the vicinity most of which are tied to a hospital or police facility.

Several military aviation facilities are also located near the Airport, as shown on Exhibit 1-3. The closest and largest is the Jacksonville Naval Air Station, which is also known as Towers Field. Others include Mayport Naval Air Station and Whitehouse Naval Outlying Field.

1.5.3 Climatological Information

Aircraft operations are sensitive to climatological conditions, especially to prevailing winds. This is due to the fact that aircraft land and takeoff into the wind. The smaller an aircraft is, the more important wind speeds and direction become. According to FAA requirements stated in AC 150/5300-13, the runway or runways at an airport should provide adequate wind coverage for the aircraft types regularly operating there. The minimum wind coverage is considered to be 95 percent, based upon the total number of documented observations.

Historical wind data was obtained from the National Climatic Data Center for Cecil Field, covering the period from July 1989 through June 1999. This data was then used with the FAA's *Airport Design* software to determine the wind coverage provided by the runway system at Cecil Field. The results of this wind coverage analysis are shown in **Table 1-3**. Additionally, wind roses for these two conditions were developed and will be included in the Airport Layout Plan drawing set.



Location Map

Exhibit 1-2



LEGEND	
	Primary
	Reliever
	Commercial Service
	General Aviation

Vicinity Airports

Exhibit 1-3

TABLE 1-3
WIND coverage Analysis

Crosswind (in Knots)	Runway Orientation		
	9-27	18-36	Both
All-weather Conditions			
10.5	96.62%	94.38%	99.55%
13	98.42%	97.04%	99.92%
16	99.73%	99.35%	99.99%
20	99.94%	99.86%	100.00%
Visual Flight Rule Conditions (Ceiling above 1,000 feet; Visibility greater than 3 miles)			
10.5	96.85%	94.04%	99.54%
13	98.55%	96.85%	99.92%
16	99.76%	99.32%	99.99%
20	99.95%	99.86%	100.00%
Instrument Flight Rule Conditions (Ceiling between 200 and 1,000 feet; Visibility from 0.75 to 3 miles)			
10.5	93.39%	97.34%	99.64%
13	96.56%	98.68%	99.93%
16	99.45%	99.65%	99.99%
20	99.92%	99.89%	100.00%

Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center, Cecil Field July 1989-June 1999; FAA, Airport Design software, Version 4.2d.

Several key operational conditions were taken into account for this analysis—All-weather, Visual Flight Rule (VFR), and Instrument Flight Rule (IFR). The difference amongst these conditions relates to visibility limits and the cloud ceiling height. All-weather conditions include all wind observations no matter what the visibility and cloud ceilings were at the time, whereas VFR conditions consist of visibility greater than 3 miles and a cloud ceiling above 1,000 feet and IFR conditions at VQQ correspond to a visibility range of 0.75 to 3 miles and a cloud ceiling between 200 and 1,000feet.

As shown from the data presented in Table 1-3, the 95 percent wind coverage factor is provided by either runway orientation except in a few crosswind conditions. During All-weather and VFR conditions with a crosswind of 10.5 knots, the 18-36 orientation provides slightly less than the requirement. For a 10.5-knot crosswind during IFR periods, the 9-27 orientation falls short of the 95 percent, whereas the 18-27 alignment provides 97.34 percent coverage. This suggests that during inclement conditions that wind conditions shift to a more north-south direction. The combination of these two orientations does provide the appropriate wind coverage during all the weather conditions considered in this analysis.

Other climatological factors, such as temperature and precipitation, will also impact operations at the Airport.

Average weather conditions based upon data going back through at least the 1970s show that July has historically been the hottest month with an average high of 90 degrees. Lows in the area generally average 45 degrees during the winter months. In this temperate climate, temperatures do not often fall below freezing, however, a record low of 7 degrees was observed at the Jacksonville International Airport in 1985. Historically, precipitation has been most prevalent during September, averaging almost 7.3 inches. Fairly frequent rain events also occur throughout the summer months, with monthly precipitation averaging almost 6 inches from June through August.

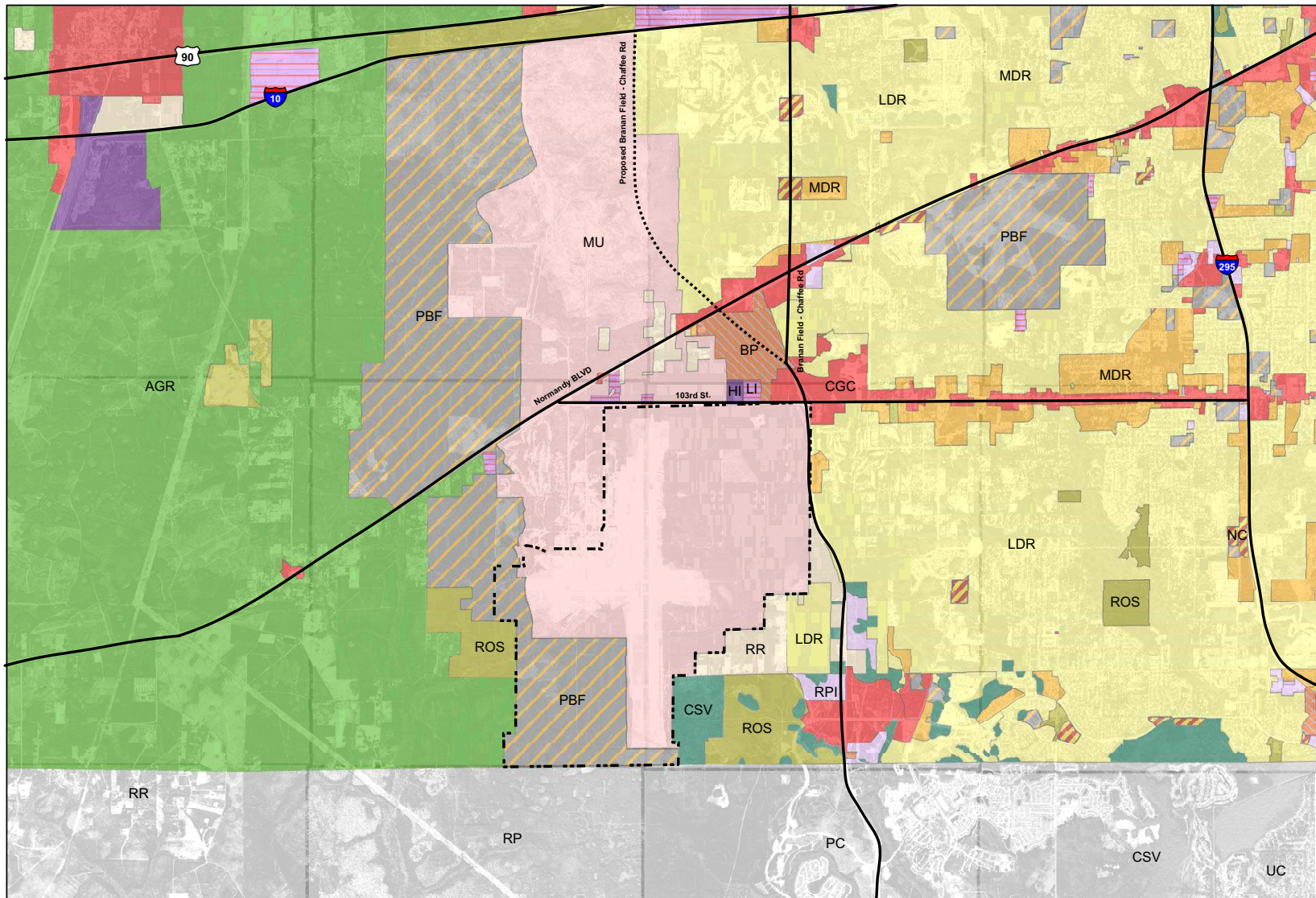
1.5.4 Political Jurisdictions

Several governmental bodies have jurisdiction within three miles of the Airport, as shown on **Exhibit 1-4**. These legislative bodies have zoning authority as well as other responsibilities. This section discusses the three entities that are responsible for land use in the vicinity of the Airport. Additionally, a brief description of the regional transportation agency is provided.

The Jacksonville Aviation Authority owns and operates Cecil Field as well as three other airports within the Jacksonville city limits. In 2001, the Florida state legislature created JAA from the former Jacksonville Port Authority. JAA is a political subdivision of the state, with powers that include implementing regulations and imposing user fees. The Authority is run by a governing board made of seven members—four appointed by the governor and three appointed by the Mayor of Jacksonville. The day-to-day management responsibility falls to an executive director and his staff. JAA has control over on-airport land use and works with neighboring governments to enact appropriate land use legislation for close-in areas.

The second political jurisdiction is the City of Jacksonville, which surrounds the Airport on three sides. In 1968, the City consolidated with Duval County to streamline governmental services. The City's consolidated government is organized with a mayor as the executive officer and a 19-member city council responsible for legislative matters. Additionally, Clay County also has governmental authority over areas in close proximity to VQQ. Clay County is organized with a county manager who is appointed by the county council to execute legislation and handle operational issues. The council consists of five members who are elected from districts within the county for four-year terms, which are staggered.

CECIL FIELD MASTER PLAN UPDATE

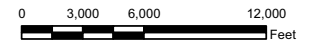


LEGEND

--- Cecil Boundary_Nad83

LANDUSE

- Agriculture (AGR)
- Commercial (CO)
- Conservation (CSV)
- Planned Community (PC)
- Recreation/Preservation (RP)
- Rural Residential (RR)
- Urban Core (UC)
- Business Park (BP)
- Community/General Commercial (CGC)
- Heavy Industrial (HI)
- Low Density Residential (LDR)
- Light Industrial (LI)
- Medium Density Residential (MDR)
- Multi-Use (MU)
- Neighborhood Commercial (NC)
- Public Buildings and Facilities (PBF)
- Recreation Open Space (ROS)
- Residential Professional Institutional (RPI)
- Rural Residential (RR)



SOURCES:
 JACKSONVILLE PLANNING AND DEVELOPMENT
 DEPARTMENT, JACKSONVILLE, FL:
 JACKSONVILLE FUTURE LAND USE MAP
 JULY 2007

CLAY COUNTY PLANNING AND ZONING
 DEPARTMENT, CLAY COUNTY, FLORIDA:
 CLAY COUNTY FUTURE LAND USE MAP, 2007

FLORIDA LAND BOUNDARY INFORMATION SYSTEM:
 RASTER INFRARED IMAGES, 2004

PREPARED BY AVCON, INC. 2007

While not technically a governing authority, the decisions of the regional transportation planning organization do impact Cecil Field. As required by federal law, jurisdictions in the Jacksonville area participate in regional transportation planning. This is accomplished in the Jacksonville area through the First Coast Metropolitan Planning Organization (MPO). This MPO works to bring regional entities together to identify and prioritize needed transportation infrastructure. This regional approach provides a more accurate assessment of needed transportation improvements since people often live in one jurisdiction, while working in another. Coordination with this entity is important for JAA because having adequate vehicular access routes is vital to the Airport's long-term success.

1.5.5 Land Use

Exhibit 1-4 illustrates the existing land use designations for areas within an approximate three-mile radius of Cecil Field. Off-airport areas fall under the jurisdiction of Clay County and the consolidated government of the City of Jacksonville-Duval County. The land use classifications shown in Exhibit 1-4 reflect future planned uses that were determined by the local government through the comprehensive planning process. The developments that are allowed in each land use designation are controlled through zoning ordinances, which will be discussed subsequently.

Within the airport boundary, the City has designated two land use classifications. The first is a large multi-use area, which encompasses existing buildings, the airfield, and undeveloped areas. The second designation, located in the southwest quadrant of the airport property, is public facilities. This area was reserved during the Base Closure Study process for eventual use as an environmental mitigation area and for the development of community hiking trails. Land uses surrounding the Airport cover the full-range of traditional land uses. Agricultural uses predominate to the west whereas residential and commercial land uses dominate to the east of the Airport. Small pockets of recreational and light industrial uses also exist to the west. One of the main residential developments to the southeast is Oakleaf Plantation, which is a master planned community that includes residential, commercial, and public developments. Some of the residential areas east and south of Cecil Field are likely to experience frequent aircraft overflights. Directly south of VQQ is an area designated by Clay County as open space/recreational use. This area encompasses a portion of Jennings State Forest.



To the north and northwest are additional public facility and multi-use land uses. Much of these areas lie with the Cecil Field Commerce Center, a designated industrial park. This park includes some commercial and manufacturing uses as well as some aviation and aviation support developments. Additionally, there are some existing residential units (former military housing) within this boundary. The public-use area northwest of Normandy Boulevard encompasses the Jacksonville Equestrian Center and Cecil Recreation Complex. Additionally, a small amount of heavy industrial use borders the Commerce Center.

1.5.6 Zoning

In addition to land use, the nearby political jurisdictions also implement zoning regulations, which provide the legal controls to the types of developments within each land use category. Additionally, zoning regulations also include items related to airports, mainly concerning height, noise, and safety standards.

The City of Jacksonville has enacted aviation-related zoning regulations in Ordinance Number 2006-1225-E, which pertain to both civilian and military airports within the city limits. These ordinances are published as Title XVII *Land Use*, Section 656 *Zoning Code*, Part 10 *Regulations Related to Airports and Adjacent Lands Thereto*. These regulations address height restrictions in the vicinity of the airports within city boundaries. These height regulations refer to Federal Aviation Regulation Part 77, which describe height restrictions in various areas around an airport. The City also has ordinances regulating land use related to airport noise. Table 656-2 outlines the types of developments which are allowed in different noise zones, such as Noise Notice Zone A which experiences noise ranging from 60-64.99 DNL, Noise

Zone B which experiences noise from 65-69.99 DNL and Noise Zone A which experiences noise greater than 70 DNL. According to this Ordinance, a single-family dwelling is not allowed in Noise Zone A, but could be allowed if the residences are constructed with proper noise insulation. Additionally, landowners are required to submit a disclosure statement when selling land within any of the three zones. The City has established the Airport Noise Advisory Council to review airport noise issues and make recommendations to address them. Environmental impacts due to noise are discussed in **Section 6.2**.

Clay County also has enacted aviation-related zoning through County Ordinance 85-87, as amended. These are detailed in Chapter 2.8, *Aircraft and Airports*. These regulations set forth similar restrictions as those enacted by the City of Jacksonville, including the use of disclosure statements by property sellers. These regulations address land use restrictions related to accident potential zones (APZs), height restrictions, and noise impacts. Variances are handled slightly differently with the requestor applying to the board of adjustment. Clay County still refers to VQQ as “Naval Air Station Cecil Field”; however, the ordinance is written such that the applicability is based upon the use of the airport facility and not a classification imposed within the county zoning ordinance. Although for clarity the Clay County should amend their regulations to reflect the airport’s current name.

1.5.7 Transportation Infrastructure

Key to drawing future businesses to the area is the existing transportation infrastructure within the City, which includes three major interstates, a deep-sea water port, and three active rail lines. The availability of various modes of transportation for people and goods supports economic activity within the region. Brief descriptions of these regional transportation facilities are given below, including an approximation of their distance from VQQ:

1.5.7.1 Interstates and Highways

Major interstates and highways crossing the Jacksonville area that provide a north-south route are Interstate 95 and U.S. Highway 1. Both of these provide access along the eastern coast of Florida as well as into Georgia and coastal states further north. Interstate 10 travels along the southern border of the U.S. in an east-west direction. It goes as far as California and terminates in downtown Jacksonville at its intersection with I-95. Outer areas of Jacksonville have convenient access via Interstate 295, which serves as an access loop, and intersects all three major U.S. highways discussed herein.

The airport is located just 5 miles south of Interstate 10. At this time access to I-10 is provided by Branan Field-Chaffee Road, a two lane rural road. Improvements to Branan Field-Chaffee Road are planned which will provide more efficient access between I-10 and Cecil Field. Access to I-10 is also provided by I-295, which can be reached by heading east on 103rd St.

1.5.7.2 Sea Ports

The Jacksonville Port Authority operates three seaport facilities. In recent years, these facilities have handled 7.3 million tons of cargo, including 540,000 vehicles. The Port Authority has an on-going project to deepen the channel to 40 feet. Each of these port facilities is described below:

- **Talleyrand Marine Terminal:** This is the closest port facility to Cecil Field. The drive time between these two facilities is estimated at 40 minutes to cover the 22.5 miles. The port facility is located along the St. Johns River approximately 21 miles from the Atlantic. This facility provides connections to the CSX, FEC, and Norfolk-Southern rail lines. The facility has 160,000 square feet of storage space, including some cold storage areas. It is part of Foreign Trade Zone No. 64. The facility handles most types of cargo, including containerized, break bulk, and liquid bulk commodities as well as vehicles.
- **Blount Island Marine Terminal:** This is the closest terminal to the Atlantic, which is only nine miles east along the St. Johns River. It is approximately 35 miles from the Airport. The drive using existing roads from Cecil is estimated to take about 50 minutes. This port terminal serves as one of the largest vehicle import-export centers in the U.S. It also handles containerized, break bulk, and Ro/Ro materials. This terminal has a connection with the CSX rail line.
- **Dames Point Marine Terminal:** This facility, covering 585 acres, is the newest of the terminal operated by the Port Authority. It is located west of and adjacent to the Blount Island facility. Therefore, travel distances and times between Cecil Field and this port terminal are similar to Blount Island. Carnival and Celebrity cruise lines began operations began in 2003 at a passenger terminal located on this site. In addition to the cruise activities, operations are currently limited to bulk cargo, such as limestone and granite. A connection with the CSX rail line is located onsite.

1.5.7.3 Railways

Three railways traverse the City of Jacksonville. CSX Transportation and Norfolk Southern Railway are the two largest railroad companies on the east coast. Both provide connections from Jacksonville to Atlanta. Additionally, CSX provides services to multiple cities along the east coast including Savannah, Georgia, and Washington, D.C. The Florida East Coast Railway (FEC) provides service to northwest to Atlanta, Georgia, northeast to Charleston, South Carolina, and west into Alabama. AMTRAK offers some passenger service utilizing the lines of these three railroad companies. The AMTRAK facility is located 19 miles northeast of the Airport.

The closest rail connection to Cecil Field is located north of I-10. It is on the CSX line, but has easy connections to the other two rail companies. The current Cecil Commerce Center land use plan shows a future rail connection on the north side of Normandy Boulevard.

1.6 SOCIOECONOMIC TRENDS

Several key socioeconomic indicators have been tied to the demand for aviation services. The connection between these factors and aviation activity relate to an individual's ability to cover the relatively high-cost of owning and operating an aircraft. Additionally, trends in these indicators can reflect The 2002 Florida Long-term Economic Forecasts (FLEF) was utilized in the following sections to provide a brief overview of these factors in Duval County and Florida. Additionally, data is included for the Jacksonville Metropolitan Service Area (JMSA), which includes the following Florida counties: Clay, Duval, Nassau, and St. Johns. It should be noted that the 2002 FLEF used a base year of 2001 with the first forecast year being 2002. The University of Florida, which published the 2002 FLEF, no longer produces these socioeconomic forecasts annually; therefore, data beyond 2001 was not available.

1.6.1 Population

As more people move to an area, there are more potential users for aviation services. Data from the 2002 FLEF, presented in **Table 1-4**, shows that the population within the JMSA has mirrored that of Florida throughout 2001. Duval County has lagged behind the state slightly. In the future it is projected that these general trends would continue.

**TABLE 1-4
POPULATION TRENDS**

Year ³	Florida	JMSA ¹	Duval County
1994	14,116,816	978,648	716,398
2001	16,399,714	1,129,248	796,311
Historic CAGR ²	2.16%	2.07%	1.52%
2003	16,977,890	1,173,484	821,184
2008	18,513,996	1,274,513	872,889
2013	19,881,710	1,367,517	918,939
2018 ³	21,362,336	1,470,213	969,893
2023 ³	23,089,638	1,588,852	1,027,809
Future CAGR ²	1.57%	1.56%	1.17%

Notes:

- 1: Jacksonville Metropolitan Area (JMSA) includes Clay, Duval, Nassau, and St. Johns counties.
- 2: CAGR = Compounded Average Annual Growth Rate
- 3: Data for these years was extrapolated by AVCON, Inc., at the respective constant growth rate utilized in the FLEF.

Source: University of Florida, Florida Long-term Economic Forecasts, 2002.

1.6.2 Per Capita Income

Per capita income data provides an indication of the amount of disposable income the location population has. A person's ability to use or participate in aviation activities generally increases as disposable income values improve. The trends in per capita income as given in the 2002 FLEF are presented in **Table 1-5**. This data shows growth for the Jacksonville area from 1994 through 2023.

1.6.3 Employment

The Jacksonville area has demonstrated a healthy business market in recent years, highlighted by the fact that since the late 1990s, companies have created over 50,000 new jobs in the area. Workers in the area have one of the highest average wage rankings in Florida. Financial and insurance firms rank amongst the largest employers in the area. These include Merrill Lynch, Bank of America and Citibank, CSX, and Blue Cross Blue Shield. Other key employers include Alltel, Coach, BellSouth, Sprint, and British Airways. Additionally, Jacksonville's information technology sector is reported to be one of the fastest growing in the southeast.

**TABLE 1-5
PER CAPITA INCOME TRENDS**

Year	Florida	JMSA ¹	Duval County
1994	\$ 22,095	\$ 21,963	\$ 21,601
2001	\$ 28,488	\$ 29,037	\$ 27,712
Historic CAGR ²	3.70%	4.07%	3.62%
2003	\$ 30,654	\$ 31,124	\$ 29,742
2008	\$ 37,673	\$ 37,915	\$ 36,239
2013	\$ 47,784	\$ 48,155	\$ 45,748
2018 ³	\$ 60,325	\$ 60,667	\$ 57,429
2023 ³	\$ 75,219	\$ 75,348	\$ 71,155
Future CAGR ²	4.51%	4.43%	4.38%

Notes:

- 1: Jacksonville Metropolitan Area (JMSA) includes Clay, Duval, Nassau, and St. Johns counties.
- 2: CAGR = Compounded Average Annual Growth Rate
- 3: Data for these years was extrapolated by AVCON, Inc., at the respective constant growth rate utilized in the FLEF.

Source: University of Florida, Florida Long-term Economic Forecasts, 2002.

Table 1-6 provides unemployment data from the 2002 FLEF. This data shows that the JMSA and Florida have had fairly close unemployment rates in the past. Duval County, however, has traditionally had lower unemployment rates than either Florida or the JMSA. The FLEF projected a slight increase in the unemployment rate for all three areas in 2003 due to the economic recession ongoing at the time of the forecast development. However, unemployment rates were projected to decrease throughout the planning period. This reflects the economic health of the core service area for Cecil Field.

1.6.4 Supplementary Information

The Jacksonville area is one of the fastest growing metropolitan areas in the United States yet it has the lowest cost of living within Florida according to the Jacksonville Regional Chamber of Commerce. To keep up with this growth, voters approved the “Better Jacksonville Plan” in 2000 to fund new public facilities (including an arena, a library, and sports complexes), preserve sensitive land areas, and support smart growth. This money is to be spent over the next 10 years.

Additional accolades for the area include a ranking as one of the top 5 “Hottest Cities” for businesses to relocate by Expansion Management magazine and as

**TABLE 1-6
UNEMPLOYMENT RATES**

Year	Florida	JMSA ¹	Duval County
1994	6.59%	6.51%	4.91%
2001	4.79%	4.90%	4.48%
Historic CAGR ²	-4.46%	-3.97%	-1.30%
2003	5.73%	5.92%	4.79%
2008	4.89%	4.99%	4.20%
2013	4.52%	4.56%	3.76%
2018 ³	4.49%	4.54%	3.49%
2023 ³	4.41%	4.44%	3.24%
Future CAGR ²	-0.37%	-0.45%	-1.46%

Notes:

- 1: Jacksonville Metropolitan Area (JMSA) includes Clay, Duval, Nassau, and St. Johns counties.
- 2: CAGR = Compounded Average Annual Growth Rate
- 3: Data for these years was extrapolated by AVCON, Inc., at the respective constant growth rate utilized in the FLEF.

Source: University of Florida, Florida Long-term Economic Forecasts, 2002.

one of the top ten most livable cities in the U.S. as ranked by Money magazine. The temperate climate and cost of living are several reasons for these positive reviews of the Jacksonville area. Recreational opportunities, which include nearby beaches and multiple golf courses, also cast the City in a positive light. Several sporting and arts events, such as The Players Companionship and the Jacksonville Jazz Festival, are presented on an annual basis in the area.

The Airport will be most impacted by economic growth related to the Cecil Field Commerce Center. Businesses currently located within this development include Jacksonville Electric Authority, U.S. Department of Homeland Security, and Logistic Services International. With a large portion of this industrial park currently undeveloped there is a significant potential for future growth. This growth would likely impact VQQ by bringing more corporate users, either as hangar tenants or occasional transient operations.

1.7 SUMMARY

Although it has only been open to the public for a relatively short period, Cecil Field plays an important role within Jacksonville and its surrounding communities serving as a center for aviation-related

business development. As described in this chapter, the Jacksonville area is a vibrant community with many positive characteristics to support future aviation growth. The information provided in this chapter provides background information upon which subsequent study phases will build.

CHAPTER 2

INVENTORY OF EXISTING CONDITIONS

The inventory phase of the planning process provides an overview of the various facilities located at Cecil Field (VQQ). A variety of information sources were utilized in compiling this data, including FAA publications and previous reports. Additionally, a field visit was conducted on September 13, 2004, to evaluate the existing condition of these facilities. This field evaluation was general in nature and did not include testing of any kind.

This discussion is divided into two main groups of facilities—airside and landside. Some facilities could accurately fit into either category. For inventory purposes, buildings, including all hangar types, are categorized as landside facilities.

2.1 AIRFIELD FACILITIES

Runways, taxiways, aircraft aprons, and navigational aids (NAVAIDS) make up the airside facilities at VQQ. It is within these facilities that aircraft operate at an airport. In addition to these, a brief description of airspace issues is provided.

2.1.1 Airspace

The Federal Aviation Administration (FAA) has regulatory control over how aircraft operate. This includes determining appropriate rules to safely operate aircraft in flight and on approach or departure from an airport. The following sections describe general characteristics of the airspace in proximity to VQQ and the approved published approaches to the Airport.

2.1.1.1 Classification

The FAA regularly publishes maps defining various airspace classifications. These also show any areas that are restricted or are used for military operations on a regular basis. These maps, referred to as aeronautical charts, are updated semiannually to ensure that pilots have accurate information upon which to base their flight decisions. Cecil Field is included on the Jacksonville Sectional Aeronautical Chart. The area surrounding of VQQ as shown in the September 2, 2004, edition of this chart is included as **Exhibit 2-1**.

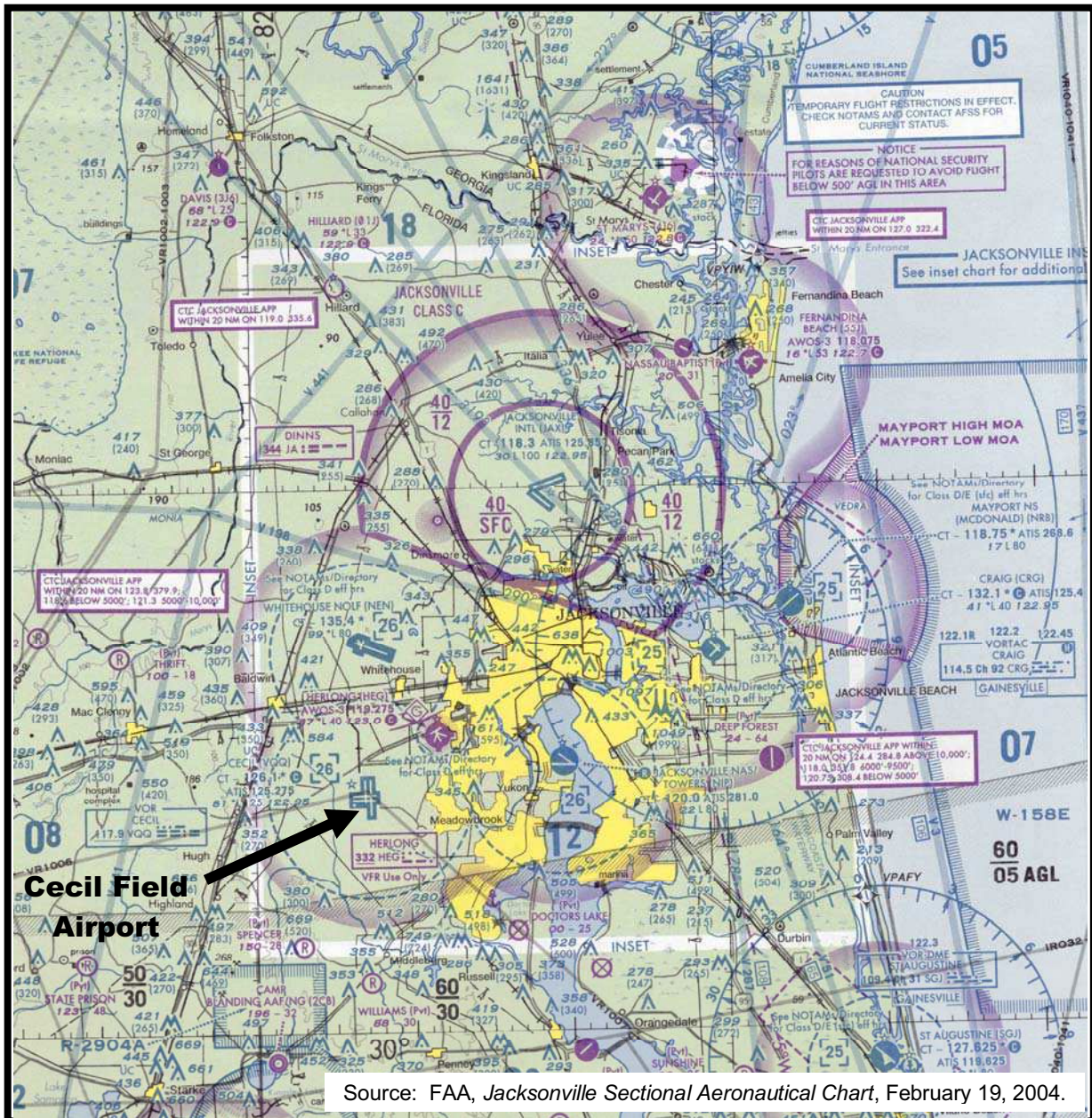
Cecil Field is a controlled airfield located within Class D and E airspace. The Class D airspace is shown as a blue-segmented line centered on the Airport. It is only in effect during operation of the air traffic control tower (ATCT). The Class D airspace around Cecil extends on a radius of approximately 5 nautical miles (NM) centered on the airfield. This airspace extends from the airfield surface up to a defined height of 2,600 feet above mean sea level (AMSL). Aircraft operating in this area must be equipped with a functional two-way radio. Prior to entering Class D airspace, pilots must contact the local ATCT. Aircraft speeds are limited to 200 knots in this airspace.

The Class E airspace classification around Cecil has fewer operational requirements. This airspace classification, shown as a faded magenta line on **Exhibit 2-1**, extends approximately 8.5 NM outward in all directions and begins 900 feet above the airport elevation. There is no specific pilot certification, equipment or area entry requirement associated with the Class E airspace.

As shown in **Exhibit 2-1**, the airspace in the Jacksonville area is quite complex due to the numerous airports within the Jacksonville area. However, those utilizing or managing Cecil Field have identified no concerns or problems from an operational standpoint.

2.1.1.2 Published Procedures

Table 2-1 provides a summary of the current established approach procedures at Cecil Field. This summary includes the minimum values for the visibility and cloud ceiling as published in the September 2, 2004, *Southeast Terminal Procedures* as published by the FAA. These procedures are divided between precision and nonprecision approaches. Both procedure types provide pilots with horizontal guidance to the runway centerline, but precision approaches have additional instrumentation to give pilots vertical guidance to the touchdown zone elevation. The nonprecision approach minimums given below are for aircraft that classified in Approach Categories A or B. Minimums for Category C or D aircraft are generally higher because of their faster



The numerous public-use and military airports in the Jacksonville region create a relatively complex airspace system in northeast Florida.

Aeronautical Chart

Exhibit 2-1

approach speeds. These higher minimums provide a larger margin of safety for these aircraft.

**TABLE 2-1
INSTRUMENT APPROACH PROCEDURES**

Procedure Name	Minimum Visibility (Statute miles)	Minimum Ceiling (AMSL)
Precision Approaches		
ILS RWY 36R	1/2 mile	200 feet
Nonprecision Approaches		
S-LOC 36R	1/2 mile	405 feet
VOR RWY 9R	1 mile	562 feet
GPS RWY 9R	1 mile	422 feet
GPS RWY 18L	1 mile	420 feet
GPS RWY 27L	1 mile	430 feet
GPS RWY 36R	1/2 mile	445 feet
ASR RWY 36R	1 mile	545 feet

Notes: Ceiling is given in feet above the reported touchdown zone elevation. ASR = Airport Surveillance Radar; ILS = Instrument Landing System; RWY = Runway; S-LOC = Straight-in Localizer; VOR = Very-high Frequency Omni-directional Range.

Source: FAA, Southeast Terminal Procedures, September 2, 2004.

In addition to the procedures listed above, circling approaches are also published based upon the above procedures. The approved minimums for circling approaches are generally, but not always, higher than those for straight-in approaches listed above. For example, the lowest minimums associated with the GPS RWY 36R procedure are a visibility of one mile and a ceiling of 459 feet.

In recent years, the FAA has begun implementing Standard Terminal Arrival procedures, commonly referred to as STARs. Four procedures based upon STARs have been implemented at VQQ. These procedures give pilots directions to a selected navigational aid in the vicinity of the airport using predefined paths between instrument checkpoints. The FAA also regularly publishes these STARs procedures.

2.1.2 Runways

The primary airfield components at an airport are the usable runways. At VQQ, four runways (9R-27L, 9L-27R, 18R-36L, and 18L-36R) are currently operational. Each runway is briefly described below, including general information regarding pavement condition. Navigational aids (NAVIADs) associated with these runways are discussed in a subsequent report section. The runways and other airfield facilities are identified on **Exhibit 2-2**.

The four runways were originally developed when the U.S. Navy operated the airport. As such, they were constructed to meet military standards, which differ somewhat from civilian standards set by the FAA. It appears that prior to JAA taking control of the airfield, the military performed limited maintenance on the facility. Because of this factor and the general age of the existing pavement, most of the runways were in various stages of deterioration and show various degrees of cracking when the transition occurred.

Although previous maintenance appears limited, these pavements have had some rehabilitation work completed since the initial construction. Most of the airfield pavement shows some faded or partially removed military markings. **Table 2-2** provides pavement materials used in the various pavement improvement projects since the initial construction of each runway. **Exhibit 2-3** shows several photos taken during an onsite visit in September 2004 of the various areas of airfield pavement.

The pavement construction materials are a major factor in determining the maximum weight aircraft that can utilize a runway on a regular basis without causing pavement deterioration or failure. This maximum aircraft weight is reported as the pavement bearing strength. This value differs based upon an aircraft's landing gear configuration. The pavement bearing strength generally increases as the number of wheels in the aircraft landing gear increases, due to the aircraft's landing weight being distributed over a greater pavement surface area.



EXISTING AS OF OCTOBER 2004.

CLAY COUNTY
DUVAL COUNTY



**Ponding on
Taxiway A-1.**



**Rubber buildup
beginning to obscure
runway centerline
marking.**



**Runway-36 exhibiting
signs of grass growing
in longitudinal cracks.**



Spalling on Runway 18L-36R.



Recent overlay on Runway 18R-36L.



Threshold lights at Runway 36R end.



Example of HIRL along Runway 18L-36R.

Photos taken on September 13, 2004.

Airfield Pavement Photos

Exhibit 2-3

**TABLE 2-2
RUNWAY PAVEMENT HISTORY**

Runway	Initial Construction		Improvements	
	1951		1958	1979
18L-36R	7,040' x 200'	480' x 200' (at each end)	4,500' x 200' (Extension to 36R)	7,040' x 200' (Overlay)
	Asphalt: 3" HMAC 9" Limerock Base 6" Stabilized Subbase 4" Sand	Concrete: 10" PCC 6" Stabilized Base	Concrete: 11" PCC 10" Limerock Base 12" Compacted Subgrade	Asphalt: 1.5" HMAC
18R-36L	7,040' x 200'	480' x 200' (at each end)	1974 7,040' x 200' (Overlay)	---
	Asphalt: 3" HMAC 9" Limerock Base 6" Stabilized Subbase 4" Sand	Concrete: 10" PCC 6" Stabilized Base	Asphalt: 1.5" HMAC	---
9L-27R	7,040' x 200'	480' x 200' (at each end)	1978 7,040' x 200' (Overlay)	1987 7,040' x 200' (Overlay)
	Asphalt: 3" HMAC 9" Limerock Base 6" Stabilized Subbase 4" Sand	Concrete: 10" PCC 6" Stabilized Base	Asphalt: 1.5" HMAC	Asphalt: 1.5" HMAC
9R-27L	7,040' x 200'	480' x 200' (at each end)	1968 7,040' x 200' (Overlay)	1979 7,040' x 200' (Overlay)
	Asphalt: 2" HMAC 9" Limerock Base 9" Stabilized Subbase	Concrete: 10" PCC 10" Limerock Base 12" Compacted Subgrade	Asphalt: 1.5" HMAC	Asphalt: 1.5" HMAC

Note: HMAC = Hot-mix Asphalt Concrete; PCC = Portland Concrete Cement.
Source: Reynolds, Hill & Smith, Cecil Field Strategic Airport Master Plan, 1998.

Aircraft landing gear configurations can range from a single-wheel landing gear on the Cessna 172 to the Boeing 777's twin-triple tandem wheel configuration having a total of 12 wheels in the main landing gear. The 1998 Master Plan, reported runway pavement bearing strengths, based on the noted landing gear configurations, for all runways at VQQ to be the following:

- Single wheel: 105,000 pounds
- Twin wheel: 165,000 pounds
- Single tandem wheel: 175,000 pounds
- Double tandem wheel: 315,000 pounds.

These bearing strengths are based upon information from the 1998 Master Plan report, which referenced Volume 12 of the Low Altitude United States Department of Defense Flight Information Publication.

As such, the gear configurations reflect traditional military terminology.

In order to reflect more common civilian terminology, a current edition of the Airport/Facility Directory for the Southeast U.S. was consulted. This publication, which is produced by the FAA, provides examples of aircraft within each landing gear classification as well as gives some indication of equivalent configurations when considering pavement bearing strength. For example, the DC-6 is given as an example for both the twin-wheel and dual-wheel categories. Based upon the information from the Facility Directory, it was determined that the pavement bearing strength for each runway could be estimated as:

- Single-wheel: 105,000 pounds
- Dual-wheel: 165,000 pounds
- Dual-tandem: 315,000 pounds.

Additionally, when JAA took over management of the facility the associated airfield lighting did not meet FAA standards and was in fair to poor condition throughout the airfield. The electrical cables were either direct buried or placed in asbestos cement duct banks along the pavement edges when originally installed. The older duct banks have over time absorbed water and many of the duct openings have shrunk. Design and construction projects were initiated in 2001 to upgrade the airfield electrical system to address these issues. This multiphase electrical upgrade project also included electrical vault upgrades and installation of a new beacon. This electrical upgrade project was completed in 2006.

2.1.2.1 Runway 18L-36R

The primary runway at VQQ is Runway 18L-36R, which has a length of 12,504 feet and a width of 200 feet. Runway 18L-36R was originally 8,000 feet with two 480-foot concrete sections at each runway end. As noted in the previous table, a 4,500-foot concrete extension was undertaken approximately seven years after the initial construction. The center section, having an approximate length of 7,040 feet, is of asphalt construction. Upon visual inspection, this pavement generally appears to be in good condition although some signs of pavement aging were apparent as shown in **Figure 2-3**.

This runway is equipped with a high-intensity runway light (HIRL) system. The HIRLs emit white light, except in the last 2,000 feet of the runway where the lights are yellow to provide a visual indication to the pilot that they are approaching the runway end. These lights are located approximately five feet from the pavement edge. The edge lights are spaced no more than 200 feet apart. Lights are installed at the each end of this runway to mark the runway threshold. These bi-directional threshold lights appear red to pilots departing the runway and green to those approaching. No centerline lights or reflectors are installed.

Runway 18L-36R has precision markings, which include aiming point, centerline, designation, side stripes, threshold, and touchdown zone markings. They are white in color, but some of the markings, primarily in the touchdown zone area, are currently obscured by rubber build-up.

2.1.2.2 Runway 18R-36L

Runway 18R-36L is separated 700 feet from the primary runway, 18L-36R. This distance allows for simultaneous visual operations. The runway measures 8,003 feet by 200 feet. The pavement is constructed of sections of asphalt and concrete as

previously detailed. Overall, the pavement appeared to be in good condition. During the onsite inventory, signs of cracking and of several patches were observed.

The runway has nonprecision markings that are in fair condition. These include aiming point, centerline, designation, and threshold markings. Additionally, this runway has edge stripes as well as having touchdown zone markings located at the 18R end. This runway is equipped with a medium-intensity runway light system (MIRL), but this system is not operational due to mechanical problems with the aged circuitry.

2.1.2.3 Runway 9L-27R

Runway 9L-27R is one of two runways oriented in a crosswind configuration at Cecil Field. It is separated from Runway 9R-27L by 700 feet. The runway pavement was constructed in a similar manner as other runways at VQQ, with the first 480 feet at each end being concrete and the remaining being asphalt. This runway has dimensions of 8,002 feet by 200 feet. Airport staff reports that the asphalt portion of this runway is in fair condition. It is not equipped with edge or centerline lights at this time.

This runway has nonprecision markings that are generally in poor condition. In addition, side stripes have been added as well as touchdown markings at the Runway 27R end. Runway 9L-27R is not currently equipped with runway edge or centerline lights.

2.1.2.4 Runway 9R-27L

This runway has similar characteristics to Runway 9L-27R. It has dimensions of 8,003 feet x 200 feet and was constructed of a mix of asphalt and concrete pavement sections, as previously discussed. Upon visual inspection the pavement appeared to be in good condition with some localized areas showing signs of minor cracking. Runway 9R-27L currently is equipped with HIRL.

Nonprecision markings have been applied to this runway. As with the other runways, edge stripes have been added. Touchdown zone markings are included for the Runway 9R end only.

2.1.2.5 Runway Safety Criteria

The FAA has developed various safety standards to provide an adequate safety margin for aircraft operators and for others in the general vicinity of a runway. For runways, these standards vary based upon the aircraft wingspan and approach speed as well as the approved approach procedures to each

runway end. The following provides a brief description of the runway standards set by the FAA:

Runway Safety Area (RSA): These areas are centered upon the runway centerline and run along the sides and ends of each runway. The RSA must be able to support maintenance and emergency response vehicles as well as the occasional passage of an aircraft. These areas must be smoothly graded and be free of any objects (except those needed to support aircraft operations) including aircraft and vehicles while an operation is occurring on the active runway. The RSA is intended to minimize damage to aircraft and injuries to passengers in the event an aircraft leaves the runway.

Runway Object Free Area (OFA): This safety criteria provides a defined area, which runs along

the sides of and beyond the runway end and must be free of any permanent objects. It is permissible to taxi and hold aircraft in an OFA, but not to park them in this area.

Runway Protection Zones (RPZ): Airport operators should have legal control over the defined RPZ at each runway end. The RPZ is designed to protect developments and people on the ground. This area is statistically where most aircraft accidents are likely to occur. The shape of the area is a trapezoid with the shorter end located 200 feet beyond the runway end. The RPZs at opposite runway ends can have different dimensions based on the approved approach procedure to that runway end.

Table 2-3 provides the dimensions of each of these standards at VQQ. These standards appear to be met for each of Cecil Field's four runways.

**TABLE 2-3
RUNWAY SAFETY CRITERIA**

Runway	RSA		OFA		RPZ*
	Width	Length Beyond RW End	Width	Length Beyond RW End	
18L-36R	500'	1,000'	800'	1,000'	R/W 18L: 1,700' x 500' x 1,010' R/W 36R: 2,500' x 1,000' x 1,750'
18R-36L	500'	1,000'	800'	1,000'	1,700' x 500' x 1,010'
9L-36R	500'	1,000'	800'	1,000'	1,700' x 500' x 1,010'
9R-36L	500'	1,000'	800'	1,000'	1,700' x 500' x 1,010'

Note: *RPZ dimensions are given as length x inner width x outer width and are the same for both runway ends, unless otherwise noted.

Source: FAA, AC 150/5300-13, Airport Design; AVCON, INC., Analysis, 2004

2.1.3 Taxiways

Aircraft utilize taxiways to maneuver on the ground between various airport facilities. At Cecil Field, taxiways not located along aircraft aprons were constructed in conjunction with the respective runways. All taxiways are equipped with blue edge lights and have yellow centerline markings. Additionally, the appropriate runway hold marking and signage mark each taxiway-runway intersection. It should be noted that at some locations, older markings have not been fully removed. The following sections provide a brief description of the existing taxiways.

2.1.3.1 Taxiway A

This taxiway serves as a parallel taxiway to Runways 18R-36L and 18L-36R. Taxiway A has a centerline-to-centerline separation from Runway 18R-36L of 500 feet and of 1,200 feet from Runway 18L-36R. The asphalt pavement is 75 feet wide and has an

approximate length of 12,500 feet. This taxiway crosses both runways oriented in the 9-27 direction.

2.1.3.2 Taxiway B

Taxiway B serves as a full-length parallel taxiway to Runways 9R-27L and 9L-27R. The asphalt pavement is 75 feet wide and has a length of approximately 8,000 feet. This taxiway crosses both north-south runways.

2.1.3.3 Taxiway C

This taxiway is 75 feet x 3,955 feet and is located along the southern edge of south apron. It extends from the westernmost apron edge and terminates at its intersection with Taxiway A. Taxiway C is constructed of concrete and has blue lights along its southern edge. The centerline for Taxiway B is located 250 feet from the Taxiway C centerline.

2.1.3.4 Taxiway D

Taxiway D serves as a partial, parallel taxiway to the runways aligned at 18-36. It is located on the eastern edge of the north apron. As such, it is of concrete construction and has lights along its east edge. It has a width of 75 feet and is approximately 5,750 feet in length. The centerline-to-centerline separation between Taxiway D and Taxiway A is 250 feet.

2.1.3.5 Other Taxiways

Each parallel taxiway has a variety of right-angle taxiway connectors associated with them. These connector taxiways are 75 feet in width and have the appropriate centerline markings and blue edge lights. These connector taxiways are named with an alphanumeric system related to the full-length parallel taxiway they are associated with.

2.1.4 Airfield Signage

The FAA has designated standard types of signs to be used on airfields. These signs provide a variety of information and can be classified into several functional categories. The airfield at VQQ has the following types of signs:

- **Mandatory Instructional:** These signs designate the entrance to a runway or instrument critical area as well as areas where no entry is allowed. They generally have white letters on a red background.
- **Direction/Destination:** These signs point the user to a certain airfield location, such as which direction a user should turn to reach the terminal. They also indicate the crossing taxiway at an intersection. These signs have black letters on a yellow background.
- **Location:** This classification of sign informs users of their current location, such as on which taxiway they are traveling. These signs have yellow letters on a black background.
- **Informational:** This group includes general informational signs, such as noise procedure reminders. These signs have a yellow background with black writing.
- **Distance Remaining:** This is a series of special informational signs that indicate how many thousands of feet of the runway are remaining for takeoff and landing operations.

When JAA assumed managerial responsibility for the Airport, airfield signage met military standards, but not necessarily FAA standards. Additionally, the signage system was aged and was in need of significant upgrade. Signage was replaced throughout the airfield

in 2003 to address these issues. The cabling for the new signs was installed in conduit. It should be noted that in some areas, such as on the inboard Runways 9L-27R and 18R-36L, they were not connected to a power source since these facilities are for daytime operations only.

Examples of airfield signage.



2.1.5 Navigational Aids

Airports are equipped with various navigational aids (NAVAIDS) to assist pilots as they operate to and from a facility. This equipment gives either visual or electronic cues to the pilot to assist them in navigation. This section describes the navigational equipment currently located at Cecil Field. **Exhibit 2-2** illustrates the location of each NAVAID and **Exhibit 2-4** provides photos of many of these facilities.

2.1.5.1 Airport Beacon

The airport rotating beacon indicates the location of an airport at night or during inclement weather conditions by projecting beams of light spaced 180 degrees apart. The beacon rotates and projects alternating white and green beams, which identify a lighted civil airport. At Cecil Field, the beacon is located on top of the control tower. This beacon was recently installed and is in excellent condition.



**PAPI box
and windcone**



VOR



ASOS



**Glide Slope
Antenna**



Localizer



**Rotating Beacon
(on top of ATCT)**

Photos taken on September 13, 2004.

Existing NAVAIDS

Exhibit 2-4

2.1.5.2 Precision Approach Path Indicators

The outboard runways, 9R-27L and 18L-36R, are equipped with Precision Approach Path Indicators (PAPIs) at each runway end. These units are considered visual approach aids, as pilots are able to determine if they are descending at an appropriate slope. The PAPIs at VQQ consist of four light boxes positioned on the runway's left side and in a row perpendicular to the runway. They are generally placed approximately 1,000 feet from the arrival threshold. The four lights are visible for a distance of 3 to 5 miles during the day and up to 20 miles at nighttime. The individual lights are positioned so as to give vertical guidance to clear all known obstacles plus an adequate safety margin on approach.

2.1.5.3 Approach Lights

Two types of approach lights, which assist pilots in identifying the runway end, are currently installed at Cecil Field. Three runway ends (9R, 27L, and 18L) are equipped with Runway End Identifier Lights (REILS). These lights are placed on each side of the runway threshold. The REILS project an intense white strobe that can be seen by pilots on approach to the runway. These lights mark the arrival threshold on each runway.

The second type of approach light system at VQQ is a Medium Intensity Approach Lighting System with Runway Alignment Lights (MALSR). This MALSR is installed in the grassy area leading up the approach end of Runway 36R. It is 1,400 feet in length and has multiple bars of lights that are approximately 200 feet apart, centered along the extended runway centerline. These lights supplement the precision instrument approach, discussed in **Section 2.1.1.2**.

2.1.5.4 Instrument Landing System

Runway 36R is equipped with an Instrument Landing System (ILS) that supports a precision approach. The ILS consists of a localizer and a glide slope. The localizer is located beyond the Runway 18L pavement end and transmits a signal down the runway centerline towards the approach end of Runway 36R. The localizer provides pilots with horizontal guidance to the runway centerline. The localizer is also equipped with Distance Measuring Equipment (DME), which allows

pilots in aircraft with DME instrumentation to calculate their distance from the airport. Additionally, the localizer can be used alone to support nonprecision approaches. The second component of the ILS is the glide slope, located to the right of Runway 36R approximately 1,050 feet from the arrival threshold. The glide slope provides vertical guidance information to a standard 3.0-degree approach path.

2.1.5.5 Very-high Frequency Omni-directional Range

The Airport is also equipped with Very-high Frequency Omni-directional Range (VOR) equipment to support non-precision instrument approaches. It is located about 1,000 feet south of the Runway 9R threshold. The VOR transmits radio signals in a circular array, which are used by the pilot to determine the course being flown.

2.1.5.6 Weather Systems

Weather conditions, especially wind direction and speed, are important to aircraft operations. Two types of equipment monitor on-airport weather conditions at the Airport. The first is an Automated Surface Observing System (ASOS), which generally monitors various weather conditions such as wind, precipitation, temperature, and surface visibility. The ASOS at Cecil Field is located approximately 1,700 feet southeast of the intersection of Runways 9R-27L and 18L-36R. The other weather monitoring equipment at the Airport are multiple lighted wind cones, such as the one shown in **Exhibit 2-4**.

2.1.6 Aircraft Aprons

Currently, Cecil Field has two aprons that can be utilized by either tenants or transient users. The largest apron at the Airport is oriented in a north-south direction, beginning at Taxiway C and ending at the northern edge of Taxiway D. This apron has multiple hangars along its west side, which are all currently leased or are being upgraded for incoming tenants. The major section of this apron, which is of concrete construction, measures approximately 5,450 feet x 615 feet. Overall this apron has almost 385,700 square yards of pavement.



Pavement patch on apron.

The pavement appeared to be in good condition upon visual inspection, showing very little cracking, spalling, or vertical shifting of the individual concrete pads. Several small areas have been repaired, mostly at the junction of several slabs. Throughout the apron are metal plates that cover the military's former underground fueling stations. The fueling system has been decommissioned, but most of the metal covers remain. This apron has metal tiedown brackets located throughout it for aircraft parking.

The second apron area is located along the flight line for the east-west runways. This apron has approximately 185,000 square yards of pavement. Like the northern apron, it is constructed of concrete and appeared to be in good condition. The western portion of the ramp is utilized solely by the National Guard unit based at the Airport.

2.1.7 Service Roads

The airfield is encircled by a perimeter road, which is paved with asphalt. It is in fair to good condition. Additionally, multiple roads that connect old military bunkers are located in the western portion of the airport property. These roads also provide easy access to the maintenance buildings and various NAVAIDs, such as the ASOS and VOR.

2.2 LANDSIDE AND SUPPORT FACILITIES

This section describes the landside and support facilities at Cecil Field, including tenant buildings, the fuel farm, and the control tower. Some of these facilities were in poor condition when control of the Airport was transferred to JAA. Many of the oldest structures had lead paint and asbestos and were in need of roof repairs. Additionally, some facilities required upgrades to meet current federal, state, and local regulations related to handicapped accessibility and other building codes, including electrical

standards. These improvements were necessary before the Aviation Authority could lease them. **Exhibit 2-5** identifies many of these landside and support facilities.

2.2.1 Tenants

JAA leases most of the current structures located along the two flightlines to various companies and government organizations. Photos of many of the tenant facilities are shown in **Exhibit 2-6**. Many tenants also lease the smaller buildings located near their primary facility. Tenant locations and activities are briefly described below:

- **Airborne Tactical Advantage Company (ATAC):** ATAC provides a growing fleet of tactical aircraft and services to the US military, including outsourced airborne tactical training, threat simulation, and research & development. ATAC sub-leases the southern quarter of Hangar 825 from Boeing.
- **Air One:** Air One is a full service FBO. Currently, they do not conduct maintenance activities but are planning on offering this service once their new hangar is built. Air One currently leases building 47 and has constructed a 90,000 gallon fuel farm.
- **Boeing Company:** In 1999, Boeing opened its Aerospace Support Center–Cecil at the Airport. Currently, Boeing leases four hangars (67, 825, 1820, and 1845) out of which they have performed maintenance and modifications to F-18 Hornet, KC-10, C-17, and T-45 aircraft. These three hangars have a total area of approximately 270,000 square feet (SF). Boeing also leases some ramp space located in front of these hangars.
- **Flightstar:** In 2004, Hangar 815 underwent expansion modifications to provide additional floor space and to accommodate tail sections of aircraft. Flightstar currently leases this hangar where they provide maintenance, overhaul, and repair services. The company has performed these services on B727, B737, DC9, and MD80 aircraft.
- **Florida Air National Guard:** A helicopter unit of the state's National Guard is based at the Airport. This unit currently stores multiple Apache helicopters in their leased Hangar 860, with 84,000 sf. In the near future, this unit will switch to operating Chinook helicopters. Building 858 is used for training rooms and offices.



EXISTING AS OF SEPTEMBER 2007.

BUILDING IDENTIFICATION TABLE	
BUILDING ID. NUMBER	TENANT
13	US COAST GUARD
14	FLORIDA COMMUNITY COLLEGE/US CUSTOMS HANGAR
47	AIR ONE FBO
67	BOEING HANGAR
72	ARFF STATION
82	ATCT/AIRPORT ADMINISTRATION/SIGNATURE
83	ELECTRICAL VAULT
313	JET TURBINE SERVICES INC.
815	FLIGHTSTAR
818	HUSH HOUSE/AIRKAMAN
824	LOGISTICS SERVICES INTERNATIONAL
825	BOEING HANGAR
858	FLORIDA AIR NATIONAL GUARD BUILDING
860	FLORIDA AIR NATIONAL GUARD HANGAR
880	SIGNATURE
887	TITAN SYSTEM CORPORATION/3 COMMUNICATIONS
1820	BOEING HANGAR
1845	FLEET READINESS CENTER, SOUTHEAST (ERC SE)

Landside and Support Facilities

Exhibit 2-5



Florida Army National Guard (#4)



Boeing (#1820)



LSI (#824)



Terminal/ATCT/Administration (#82)



FL Air National Guard (#860)



U.S. Customs/FL Community College (#14)

Photos taken in August and September 2004.

Tenant Photos

Exhibit 2-6

- **Florida Community College at Jacksonville, Aviation Center of Excellence:** This local community college operates a satellite center dedicated to the aviation sector. Students can focus on aviation management or aircraft maintenance as well as flight training. The College leases Hangar 14, which is in poor condition, from JAA. The airport authority has a project programmed for 2004 to rehabilitate this hangar. The College also has additional classrooms in a building located along Lake Fretwell Street.
- **Jet Turbine Services, Inc.:** This firm provides support services for Boeing operations, specifically on aircraft jet engines. Jet Turbine Services operates from Building 313. This 56,100 square foot facility does not have direct access to the apron.
- **Logistics Services International (LSI):** This firm provides maintenance, repair, and overhaul services from Hangar 824. Additionally, LSI provides training services to the aerospace and security industries from a facility in the Cecil Commerce Center.
- **Fleet Readiness Center, Southeast (FRC SE):** FRC SE, previously known as NADEP, provides F-18 modifications for the US Navy. They operate a satellite hangar, Hangar 1845, at Cecil Field with the main hangar at NAS Jacksonville.
- **Robinson VanVuren & Associates (RVA):** This firm is responsible for providing air traffic control services as part of the FAA's Contract Tower Program. This facility is considered a Level 1 Tower, which includes airports with low activity levels. RVA operates from the air traffic control tower (ATCT) that is located within the terminal building (#82). The ATCT is operational daily from 7 a.m. to 9 p.m.
- **Signature Flight Support:** This company serves as the Fixed-Base Operator (FBO) at the Airport. This FBO provides aviation fuel, aircraft parking, hangars, oxygen service, pilot services, and limited catering. Signature moved into the completed terminal in October 2004. They also utilize the hush house (#818) for storage of aircraft and other materials.
- **Titan System Corporation:** Titan offers communication and informational system services

with a focus on national defense issues. This firm operates from Building 887.

- **United States Customs Agency:** This federal agency shares Hangar 14 with the Florida Community College. They typically house six P-3 Orion aircraft in this facility.
- **United States Coast Guard:** This military unit operates a fleet of Agusta helicopters from Hangar 13. They are also currently rehabilitating Hangar 1846 to be used for maintenance.

2.2.2 Support Facilities

Most airports have several facilities dedicated to support activities. At Cecil Field, these support capabilities include airport administration, an electrical vault, emergency response units, a control tower, and fuel farm. These facilities are identified in **Exhibit 2-5** and are described in the following subsections.

2.2.2.1 Aircraft Rescue and Firefighting Facility

Building 22 houses an onsite Aircraft Rescue and Firefighting (ARFF) unit. This facility is a joint-use operation with the City of Jacksonville. Firefighters stationed at this facility are trained to respond to aircraft incidents. The unit has three ARFF vehicles as well as more traditional structural units. These vehicles are stored in the four vehicle bays in the building. The structure is of concrete block construction and has approximately 8,000 square feet of space.

2.2.2.2 Air Traffic Control Tower

As noted in **Section 2.2.1**, Cecil Field has an onsite air traffic control tower (ATCT). This facility is located near the intersection of the inboard runways in Building 82 as shown on **Exhibit 2-5**. Some upgrades are needed to this five-story facility.

2.2.2.3 Electrical Vault

Building 83 serves as the airfield electrical vault. It houses multiple regulators for the various lighting, signage, and NAVAID equipment located on the airfield. It also houses a generator to provide power to these circuits for a limited time as needed. Equipment in the vault has been and will continue to be upgraded in conjunction with airfield electrical upgrade projects.

2.2.2.4 Fuel Farm

Two fuel farms currently serve Cecil Field. The first fuel farm, operated by Signature, is located north of the terminal building. Currently, three aboveground storage tanks (ASTs) are located at this site. Two tanks have capacities of 12,000-gallon whereas the capacity of the third tank is 20,000 gallons. All three



Fuel farm

tanks store Jet A fuel. Signature operates several trucks to deliver fuel to users. Air One FBO also has a second fuel farm. Additionally, the Aviation Authority also has a small self-serve fuel area for unleaded and diesel fuel. These are used by airport staff to fuel airport service vehicles. This fueling area is located north of the aviation fuel farm within the airfield perimeter fence.

2.2.2.5 Airport Administration

JAA has a staff dedicated to managing Cecil Field. This staff includes an airport manager, administrative support staff, operations personnel, and facility maintenance. Since the completion of the terminal renovations in October 2004, staff has moved into their permanent location in Building 82.

2.2.3 Primary Access Roads

Exhibit 2-7 identifies major roadways near Cecil Field. Users access the Airport by traveling through Cecil Field Commerce Center, which has two entrances off of 103rd Street. This road is also designated as County Road 29 and provides a direct connection to I-295 and the downtown area. Located just north of 103rd Street is Normandy Boulevard, which is also known as State Road 228. This road runs along the northwest corner of the Commerce Center and provides access to and from Interstate 295, which is approximately seven miles from the Airport area. Chaffee Road currently provides the most direct connection to Interstate 10. Interstates 10 and 95 can easily be accessed from the Interstate 295 loop. Additionally, Interstate 10 provides a connection to Interstate 75, which is located approximately 66 miles west of Jacksonville. Other roads near the Airport are Bell Road located to the west and Brannan Field-Chaffee Road located to the east. The short-term transportation improvement plan for the Jacksonville area shows improvements slated to widen Brannan Field-Chaffee Road and to construct a new

intersection at Interstate 10, scheduled to be open Fall 2009. Brannan Field Chaffee Road will initially be constructed as a two-lane limited access road with right of way and planning for two additional lanes with overpasses at the major intersections. This improvement will significantly increase ground access for Cecil Field.

2.2.4 Perimeter Fencing

A six-foot high chain-link fence encompasses the majority of the airport boundary. Additionally, a fence is located along the east side of the airfield inside of the outer perimeter fence. This interior fence functions to segregate the Air Operations Area (AOA). Vehicular and pedestrian gates are spaced periodically to allow the passage of individuals who have been granted the authority to enter these areas.

2.2.5 Utility Infrastructure

The multiple buildings at Cecil Field require traditional utility services, including the provision of water, sewer, power and natural gas services. Additionally, stormwater management conveyance systems have to be adequately sized to handle runoff from precipitation events. This section briefly describes the existing utility infrastructure at the Airport. It should be noted that this infrastructure is concentrated along the developed flightline areas, with only limited services in the eastern section of the airport property.

2.2.5.1 Water, Sewer, and Power

Since the Navy turned over management of the property to the Aviation Authority, the Jacksonville Electric Authority (JEA) has assumed control of the water, sewer, and power utilities on airport property and within Cecil Commerce Center. JEA operates an onsite water and sewer treatment plant in the Commerce Center.

Directly tied to the provision of water services, is the ability to provide adequate fire protection in aircraft hangars. In some existing facilities, fire protection capability is somewhat limited. Since taking control of VQQ, the Aviation Authority has undertaken a multi-phase project to improve the existing fire loop, which provides water to the various hangar fire suppression systems. The final phase of this project was completed in 2007.

2.2.5.2 Natural Gas

TECO Gas provides natural gas service to facilities at the Airport. The main service lines run along airport's border with the Commerce Center. JAA utilizes natural gas to power some boiler systems.



2.2.5.3 Stormwater Facilities

Runoff from airport areas is routed and contained in multiple stormwater management facilities. These facilities include a series of inlets and outfalls connected via underground pipes and ditches. In the recent past, some drainage failures have been observed under airfield pavement; however, none were observed during the site visit. The advanced aging is not totally unexpected as many of these facilities were installed over 60 years ago. Further information is provided in the Environmental Overview section of this report.

2.3 SUMMARY

This inventory discussion provides a snapshot of the existing conditions at VQQ through September 2004 with a limited update to 2007. It is not intended that this information represent an exhaustive listing of every detail of the Airport; however, it does provide the basic information for subsequent steps in this master planning process. Facilities identified as being in fair or poor condition will be considered for future improvements or replacement during the Facility Requirements analysis.

CHAPTER 3

AVIATION ACTIVITY FORECASTS

3.1 INTRODUCTION

The development of aviation activity projections is one of the most important steps in the master planning process because these projections will serve as the basis for identifying future facility needs. Generally, aviation forecasts assume an unconstrained demand for aviation services; thus, projections are made based upon the expected need and not upon whether or not the airport can actually provide the necessary facilities to support the projected demand. This is done to clearly identify the potential aviation demand at a particular airport. Later phases in a master plan assess how well or in what timeframe an airport could provide facilities to meet this projected demand.

The Federal Aviation Administration (FAA) has provided guidance on preparing aviation activity forecasts in Advisory Circular (AC) 150/5070-6A *Airport Master Plans*, FAA Order 5090.3C *National Plan of Integrated Airport Systems (NPIAS)*, and a FAA report (dated July 2001) entitled “*Forecasting Aviation Activity by Airport*.” Since forecasting is not an exact science and is highly dependent on the validity of base year and historical data, this FAA guidance recommends that forecasts for an airport should be:

- Realistic
- Based on the latest available data
- Reflect the current conditions at the airport
- Supported by information in the study
- Able to provide an adequate justification for the airport planning and development.

Additionally, this guidance lists the required forecasts that should be developed and suggests various methods and data sources to utilize in those efforts. It also reflects the need to consider the local, regional, state, and national factors in each projection.

To aid in forecast development for this study, socioeconomic and national aviation trends were reviewed to identify those that were relevant to the air service market at Cecil Field. Additionally, activity forecasts developed in past planning studies and by state and national aviation agencies were collected for comparison.

In developing projections of future aviation activity at Cecil Field, it is important to note that the airport has not yet reached its operational maturity as a general aviation (GA) facility. Since the airport was opened to the public in 1999, the operational nature of the facility has continued to change and is, in fact, still in a transition period. Over the last five years, tenants have filled the existing hangars left by the military. Current tenant activities include pilot and mechanic training; national security operations; aircraft manufacturing; and aircraft maintenance/repair/ overhaul (MRO) services. To date, there has been limited GA development on the airport, not due to a lack of demand in the Jacksonville area, but rather from the lack of available space along the northwest flight line. To open other areas adjacent to the airfield for further development will require a significant fiscal investment to develop the initial infrastructure. However, it is expected that Cecil Field will mature into a very active executive level GA facility over the planning period. The Airport will also continue to experience additional industrial development and activity.

In addition, it is important to note that the operational activity at Cecil Field is not reflective of the traditional GA airport. The major difference is related to the various tenants, which includes some military units, other governmental agencies, aircraft manufacturers and aircraft maintenance operators. Some of the tenant activity represents traditional military operations whereas others would more accurately be classified as air carrier, commuter or GA operations depending upon the aircraft's size and type. Airport staff discussed the classification of the tenant activity with FAA representatives through written correspondence. According to the FAA response, the basis for classification of operations to be used to justify further airport developments is whether or not the aircraft operator pays fuel taxes. These fuel taxes flow into the Airport and Airway Trust Fund, which was established by the *Airport and Airway Revenue Act of 1970*. Monies from the Trust Fund are used by the FAA to finance airport developments. **Table 3-1** summarizes the various activities conducted by tenants as well as others and describes how these operations will be counted throughout this forecast discussion.

**TABLE 3-1
CLASSIFICATION OF TENANT ACTIVITY**

Operation Description	Tenant Name or Transient	Pays Fuel Tax?	Tower Classification	Forecast Classification
A. Civilian	ATAC	Yes/No	GA	GA
B. Department of Homeland Security/ U.S. Customs Division	DHS-U.S. Customs	No	GA	Military
C. U.S. Coast Guard	U.S. Coast Guard	No	Military	Military
D. M/R/O of Military Aircraft by Private Industry	Boeing and NADEP	No	Military	Military
E. M/R/O of Commercial or Cargo Aircraft	Flightstar	Yes	Large Air Carrier	Large Air Carrier
F. Military Aircraft Manufacturing	L3/Alenia/Boeing (C-27J)	No	Military	Military
G. Military Aircraft Supplies on Civilian Aircraft	Transient	Yes	Air Carrier or Air Taxi	Air Carrier or Air Taxi
H. Military Aircraft Supplies on Military Aircraft	Transient	No	Military	Military
I. Commercial/Private Aircraft Manufacturing	None Currently	Yes	Air Carrier, Air Taxi or GA	Air Carrier, Air Taxi or GA

Source: Airport staff discussions with representatives of Signature Flight Support (FBO) during summer of 2005.

3.1.1 Forecast Objectives

The primary objective of these activity forecasts is to adequately quantify the projected aviation activity at Cecil Field, reflecting the current and anticipated future conditions in the airport vicinity. As such, subsequent sections will discuss a variety of factors that influence aviation demand both nationally and locally. This information serves as the basis for identifying trends in future activity levels. This process is utilized to update previous forecasts as presented in the 1998 Master Plan, the Florida Department of Transportation (FDOT) Florida Aviation System Plan (FASP) and the FAA Terminal Area Forecasts (TAF).

An additional goal of this forecast analysis is to identify activity levels at key time periods to assist in identifying the general timeframe of when future developments should occur. However, even though a calendar year is associated with the projected level of demand, future developments should be undertaken based upon the actual demand at that time. In this study, forecasts have been developed over a 20-year planning period, ranging from 2005 through 2024. This assumes that available data for 2004 will be utilized as the base year unless otherwise noted. Forecasts will be presented, at a minimum for key horizon years, which were assumed to be every fifth year. The forecasts are divided into the following three study periods:

- 1) Short-term: 2006 – 2010
- 2) Mid-term: 2011 – 2015
- 3) Long-term: 2016 – 2026

Given the nature of forecasting, short-term projections (i.e., within the first five years of the study period) are generally considered more reliable than those beyond that time because relevant data on contributing factors is considered more accurate for this period. Thus, forecasts should generally be updated every five years or when major changes occur in influencing factors. For example, forecasts developed prior to September 2001 could not have accounted for the terrorist events using commercial aircraft nor could they have anticipated the effects of those events on all aspects of aviation activity around the world.

As suggested by FAA guidance materials, activity projections are developed for different classes of aviation activity at Cecil Field. This is necessary to accurately reflect the differing growth rates in the various activity classes occurring at the Airport. Additionally, different airport facilities have different functions and often serve differing user groups, such as based or transient pilots. Therefore, the specific objective of these projections is to identify the anticipated growth at Cecil Field for the following activity categories:

- Based Aircraft
- Aircraft Operations
 - General Aviation
 - Military
 - Air Carrier/Air Taxi
 - Cargo
- Local/Itinerant Operational Ratio

- Instrument Activity
- Fleet Mixes
 - Based Aircraft
 - Operational
- Peak Hour Activity

3.1.2 Methodologies

The development of aviation forecasts entails the use of multiple forecast methodologies. The method chosen for a specific projection is dependent upon the activity being forecast, the availability of historical data, and a variety of existing local and national factors. For example, if local and national factors have not changed much over time, forecasts can be accurately developed utilizing historical growth trends. However, if major events have occurred changing the local or national socioeconomic climate, a forecast based solely on historical trends might not be appropriate.

In the July 2001 FAA report discussing forecasting aviation activity at an airport versus a regional or statewide system, several forecasting methodologies are suggested for use. Of these methods, the three techniques used most often for projecting aviation activity are:

- **Regression Techniques:** These methods involve linking the value being forecast to several influencing factors that can be quantified. One drawback of this technique is the need to have a large number of data points to ensure that a good correlation can be made. In the aviation field, these techniques are often used to link aviation activity to socioeconomic factors, such as population and income levels.
- **Trend Techniques:** These methods utilize past growth rates to project future demand levels. For example, the historical growth rate for based aircraft could be used to predict future based aircraft levels.
- **Share Techniques:** In aviation forecasts, these techniques utilize a comparison of local aviation activity to activity at the regional, state, or national level. One example of this technique is to use the historical based aircraft as a percentage of the national aircraft fleet to project the future number of based aircraft utilizing FAA projections of the national aircraft fleet.

The forecasts presented later in this discussion rely on these and other general techniques as well as a more subjective application of factors that may affect future aviation activity at the airport.

3.2 MARKET TRENDS

Aviation activity at Cecil Field is influenced by both national and local factors. Some of these factors are general in nature, such as socioeconomic trends, whereas other factors are primarily associated with the aviation sector. The background information presented in this section is relatively broad in nature and not always easily quantifiable; as such, more specific information is provided as necessary under the individual presentations of activity forecasts. The following subsections discuss the key indicators that will serve as the basis for the activity projections presented in later sections.

3.2.1 National Socioeconomic Trends

Over the last several years, national socioeconomic levels have fluctuated significantly with short-term highs and lows. For example, in early 2001, the United States was beginning to experience a mild recession. This 2001 economic downturn was worsened by several events, including the September 2001 terrorist attacks and the subsequent Iraqi war. More recently, economic indicators remain mixed, with some signs of positive economic growth spurred by low interest rates, but negative impacts being felt in many industries related to historically high fuel prices in 2004.

However, even though recent national economic conditions remain mixed, the overall outlook is positive according to information in the *FAA Aerospace Forecasts for 2004-2015*. Generally, over longer time periods, economic trends usually cycle through highs and lows, while continuing to experience overall positive growth over the long term. Socioeconomic information for these FAA forecasts was prepared using information from federal agencies and a private economic forecasting firm.

A review of this information showed that the overall U.S. population is expected to grow at 0.8% annually. Growth is expected in all regions of the United States, but the southern Atlantic region is expected to see higher growth than other areas. The *FAA Aerospace Forecasts 2004-2015* attributes this growth to the relocation of business activity to the region from other parts of the country. The national labor force is expected to increase 1.0% annually with individual wages increasing due to the growth in more technical jobs. The Gross Domestic Product (GDP), which serves as an indicator of overall economic health, was projected to increase for the short-term period at 4.0% with long-term growth estimated at 3.3% annually.

More recent statistics available from the U.S. Department of Labor reflect the overall economic growth in the U.S. For example, since September 2003, job creation has been positive with an estimated 2.5 million new jobs being created. Also, unemployment rates have continued to remain around 5.4%; while not an all-time low, this unemployment rate is a positive indication of national economic growth.

3.2.2 National General Aviation Trends

As previously mentioned, future activity at Cecil Field is anticipated to be reflective of an executive level GA airport. This would include a higher percentage of activity by high-end GA users, especially those operating multi-engine piston and turbojet aircraft. Many executive level GA airports also support limited cargo/freight and/or passenger charter activity. Additionally, existing aviation activities at the Airport, including MRO services, aircraft manufacturing, and various governmental activities, would just as likely experience some growth over the planning period. Several national trends in the aviation sector are expected to influence these activities at Cecil Field and are discussed in the following sections.

3.2.2.1 Aircraft Production Trends

In the early 1990s, manufacturers of GA aircraft were closing their operations or limiting future aircraft development due to a sharp rise in liability costs. The General Aviation Revitalization Act of 1994 (GARA) was enacted to remove most liability, except in limited circumstances, from aircraft manufacturers for aircraft accidents. Since its passage, GARA has indeed helped to increase the overall demand for GA aircraft and services. This is supported by aircraft deliveries and the continued development of aircraft models.

A review of GA aircraft deliveries since 2000, as reported by the General Aircraft Manufacturers Association, showed that approximately 2,500 new GA aircraft are delivered annually for civil use in the U.S. Between 2000 and 2003, 69% of these delivered aircraft were piston models. Single-engine aircraft accounted for 93% of the piston deliveries. Turbine aircraft made up 21% of overall aircraft deliveries in this four-year period. Turbojet aircraft production outpaced that of turboprop aircraft by a ratio of 2:1.

A review of available GA aircraft models shows that in addition to making continued upgrades to existing aircraft models, several manufacturers have introduced new GA aircraft since the mid-1990s. Raytheon has continued to improve many of the Beechcraft models it acquired in the early 1980s,

including the Bonanza and Baron models as well as producing updated versions of King Air aircraft. Additionally, Raytheon has added the Premier I and Hawker Horizon to its line of jet aircraft. Cessna has continued to improve upon traditional single-engine models (such as the Skyhawk, Skylane, and Stationair) as well as having added several new jet models (Citation X, CJ1, CJ2, CJ3, Mustang and Sovereign). The New Piper Aircraft corporation has introduced the turbine engine Malibu Meridian and Piper 6X models and have upgraded older models, such as the Saratoga and Seneca.

Additionally, several turbojet manufacturers, including new entrants in this market sector, are developing smaller jet aircraft models. These very light jets are relatively inexpensive when compared to other jet aircraft. This lower price should open up the jet market to a wider range of users. These aircraft, such as the Eclipse 500, Adams 700, or Diamond D-JET, are expected to cost approximately \$1 million or less, which is about 25% of the cost of many current small business jet aircraft.

In 2000, to support the operations of these very light jets, NASA initiated a research project in partnership with the FAA and various state aviation associations. This project, called Small Aircraft Transportation System (SATS), has focused on development of new air traffic monitoring systems to enhance operations by noncommercial aircraft during flight. The primary purpose of SATS was to develop a system of equipment that would allow for several aircraft to conduct operations simultaneously at airports without radar or air traffic control services. Some of the newer technology used by SATS include:

- On-board computing
- Advanced flight controls
- Automated air traffic separation and sequencing technologies
- “Highway in the Sky” displays

The outcome of SATS would be an increase in access to more communities without creating undue demands on the existing air traffic control network. Additionally, the SATS technology would support operations during any weather conditions without airports having to be equipped with traditional instrument landing systems. This multi-faceted system should expand enroute procedures to meet this goal while at the same time maintaining a safe and affordable transportation system. A final demonstration of the SATS developments was scheduled for June 2005. This demonstration was a success and it is anticipated that SATS might be fully deployed by 2015.

A new aircraft category—light sport aircraft—was included in the 2004 Aerospace Forecasts. This category will encompass new aircraft models entering the market in 2004 as well as some existing ultralight aircraft, which are not currently tracked by the FAA. Over time, the FAA should have a more accurate accounting of the actual number of these ultralight aircraft. These light sport aircraft are expected to be used almost exclusively for recreational use.

3.2.2.2 Security Regulation Impacts

Several more recent events have created influences on the GA market. The most dramatic impacts relate to the terrorist events of September 11, 2001 (9/11). Security procedures and regulations have increased substantially in an effort to prevent the use of aircraft by terrorists in the future. These have had both positive and negative effects on the GA market. For example, increased security screening requirements have lengthened travel times and added to the “frustration factor” for commercial passengers, prompting more business and high-end leisure travelers to utilize GA services, including charter, timeshare (such as NetJet), or fractional ownership programs. Negative impacts relate to additional flight restrictions in some parts of the country as well as creating a more in depth screening process for some groups of potential flight students.

3.2.2.3 Projected National Aviation Trends

The *FAA Aerospace Forecasts 2004-2015* includes a projection of the national aviation market, which takes into account the majority of the previously discussed factors. These forecasts present a “cautiously optimistic” view of future aviation growth in the United States. The FAA predicted a return to pre-9/11 levels somewhat sooner than previous Aerospace Forecasts. For commercial passenger service, they show these levels returning by 2005, whereas aircraft operations were predicted to increase more rapidly reaching pre-9/11 levels by 2004. The *FAA Aerospace Forecasts 2006-2017* states that Commercial aviation demand and activity exceeded pre-9/11 levels in 2005. For the GA sector, the FAA projected moderate growth in both the number of aircraft (1.2% annually) and in their utilization rates (1.3% annually).

According to information presented in the 2004 Aerospace Forecasts, some segments of the GA fleet will remain stagnant thru 2015 while others are expected to see substantial growth. One GA sector with a projected limited growth rate of 0.3% annually between 2004 and 2015 is single-engine piston aircraft. The FAA bases this low growth rate on the retirement of older aircraft from the active fleet almost

equaling the acquisition rate for new single-engine piston aircraft. However, piston aircraft will remain the largest aircraft group in the active GA fleet. The turbine-powered aircraft fleet is expected to see the highest growth rate in the GA market, with the number of turbojet aircraft projected to increase by almost 5% annually. Much of the growth in the turbojet category can be attributed to growth in fractional ownership programs and to new jet models at the lower end of the market.

The 2004 Aerospace Forecasts also include projections of operations at towered airports. For many types of activity, future growth rates are given separately for FAA operated control towers and FAA contract towers. For example, itinerant GA activity at FAA towers is expected to increase at an average annual rate of 1.2% whereas at airports with FAA contract towers the expected growth rate is 2.5% annually. A second example is instrument operations, for which the *FAA Aerospace Forecasts 2004-2015* project a compounded average annual growth rate of 2.1% at both FAA operated and FAA contract towers.

3.2.3 Local Factors

An overview of socioeconomic conditions in the Jacksonville area was included in Chapter 1 of this report. In general, the Jacksonville area is one of the fastest growing Florida metropolitan areas. This growth can be attributed to the vibrant business community and the high quality of life experienced in the region. The previous discussion also included projections of several indicators that are routinely used in projecting aviation activity. For ease of reference, a brief summary of these factors is given below:

- Population: Annual growth of 1.56%, which keeps pace with the statewide growth rate of 1.57%
- Per Capita Income: Annual growth of 4.43%, which is slightly below that of Florida’s rate (4.51%)
- Unemployment Rates: Annual decrease of 0.45%, which is slightly faster than the state decrease of 0.37%

In addition to the socioeconomic growth in the Jacksonville area, other local factors will have a positive impact on future activity levels at Cecil Field. For example, several road improvements are currently planned that should enhance access to Cecil Field. The first project involves widening Branan Field-Chaffee Road north to Interstate 10 as well as improving the interchange network. FDOT District 2 currently has plans to initiate this project in the 2006-

2007 timeframe. The second, the southern connector through Clay County to Interstate 95, will provide a more direct route between the airport and the northern portion of St. Johns County.

It is the intent of the Jacksonville Aviation Authority (JAA) to apply for and then maintain a Federal Aviation Regulations (FAR) Part 139 operating certificate. Once approved, unscheduled (i.e., charter) air carrier operations with aircraft holding more than 31 passengers will be able to operate at Cecil Field. An air carrier is defined in the Code of Federal Regulations, Title 14, Chapter 1, Part 1 to include “any a person who undertakes directly by lease, or other arrangement, to engage in air transportation.” These operations are actually counted under both the “Air Carrier” (aircraft over 30 seats) and “Air Taxi” (aircraft under 30 seats) categories used by air traffic personnel. This will open up a market segment that is currently limited at Cecil Field.

Another local factor that will likely influence future activity levels at Cecil Field is the current demand for hangars in the greater Jacksonville area. Currently, neither the airport nor an FBO operator at the airport maintains a waiting list since there are no vacant facilities on the airport. The existing FBO staff did note that approximately once per week users inquire about T-hangars and private hangars. This reflects an interest in having these facilities at the Airport, but not in a quantifiable manner. Therefore, contacts were made to other airports in the Jacksonville vicinity. **Table 3-2** provides an indication of potential tenants on hangar waiting lists at five Jacksonville area airports as of March 2005.

This brief survey showed a demand for approximately 200 hangars at these five airports. While it is not likely that all of these potential users would be captured at Cecil Field if hangars became available, some of them likely would. Even if only 10% of them were, this would increase based GA aircraft by approximately 20.

A further positive factor influencing future activity at Cecil Field is the acquisition of the local FBO by an internationally recognized FBO operator, Signature Flight Support. Transient users who have used Signature at any of the company’s 60 other airport locations could be more inclined to use Cecil Field when flying to the northeast Florida area. Signature also includes the airport in their marketing information, such as on their website, increasing the exposure of the airport to potential users. Additionally, in early 2005 a second FBO opened at the airport. Air 1 FBO, LLC., a locally-owned company, has also undertaken

**TABLE 3-2
AIRCRAFT STORAGE DEMAND
IN JACKSONVILLE AREA**

Airport	Hangars	Vacancies	Waiting List	2004 Based Aircraft
Cecil	9	0	0	38
Craig	111	0	15	392
Herlong	78	0	65	164
Jacksonville International	8	0	0	36
St. Augustine	122	0	119	331
Totals	328	0	199	961

Notes:

1. Hangar count includes all T-hangar units, box hangar units, port-a-ports, clearspan/FBO hangars, and corporate or private freestanding hangars.
2. Cecil Field FBOs did not as of early 2005 maintain a waiting list since they had no hangars to lease. It should also be noted that the airport has thus far attracted industrial and commercial aviation users. This trend is expected to continue. These users do not typically place their names on waiting lists.
3. 2004 based aircraft numbers as reported in FAA TAF as of January 2005.

Sources: Correspondence with airport and FBO staff from each respective airport, March 2005.

marketing efforts to increase awareness of potential users regarding Cecil Field. Additionally, the City of Jacksonville was the host city to the 39th Super Bowl in February 2005. Cecil Field was utilized to handle the large influx of GA users, including many air taxi and business jet operators. This further helped to increase the exposure of Cecil Field to transient users, especially in the upper-end of the GA market.

3.3 PREVIOUS FORECASTS

Several aviation activity forecasts have been developed for Cecil Field, including the 1998 Master Plan, the FDOT Florida Aviation System Plan (FASP), and the FAA Terminal Area Forecasts (TAF; as of January 2005). Each of these forecasts cover a variety of activity types, with the 1998 Master Plan being the most detailed. A summary of the based aircraft and total operations from each of these forecasts is given in **Table 3-3**. These values reflect the key study years in this master plan update.

The data in this table illustrates a range of values for these two key operational activities. The FAA TAF projects the fastest growth in based aircraft with an annual growth rate of 3.45%. The 1998 Master Plan projected the fastest operational growth with a growth rate of 2.20%. The differences in the projected growth rates are not surprising considering that each of these projections utilized different forecasting methodologies

based on the best data available at that time. However, although they differ one commonality is that they all show positive activity growth for Cecil Field in both based aircraft and annual operations. Additional information from these previous forecasts is provided as needed in subsequent report sections.

**TABLE 3-3
PREVIOUS FORECASTS**

Year	1998 MPU	FDOT FASP	FAA TAF
Based Aircraft			
2004	99	112	116
2009	111	127	141
2014	121	144	166
2019	131	163	191
2024	141	184	226
CAGR	1.83%	2.49%	3.45%
Annual Total Operations			
2004	72,723	65,219	82,895
2009	84,454	70,259	86,616
2014	93,449	75,689	90,956
2019	102,039	81,539	95,729
2024	111,420	87,840	100,778
CAGR	2.20%	1.50%	0.98%

Notes:

1. Numbers given in italics reflect values either interpolated or extrapolated by AVCON, INC. assuming the applicable growth rates in the respective forecast.
2. CAGR=Compound Annual Average Growth Rate; FASP=Florida Aviation System Plan; MPU=Master Plan Update; and TAF=Terminal Area Forecast.

Sources: Cecil Field Strategic Airport Master Plan, RS&H, 1998; Continuing Florida Aviation System Plan Forecasts, FDOT, 2002; Terminal Area Forecast, FAA, 2005.

3.4 HISTORICAL DATA

Several sources were consulted to collect data on historical activity at Cecil Field, including airport staff, FDOT FASP, FAA TAF, FAA Air Traffic Activity Data System (ATADS), and local staff of Robinson, VanVuren & Associates (RVA), which operates the local air traffic control tower. This data focuses on two key activities at the airport: based aircraft and aircraft operations. The following subsections provide a comparison of the data obtained from available sources and makes recommendations as to the appropriate base year value to be utilized in the individual activity projections.

3.4.1 Historical Based Aircraft

Table 3-4 documents the reported values for based aircraft at the airport from the FDOT FASP and FAA TAF. Values for each year do not directly correspond between these two sources. This variability is rather

common between these data sources and is generally related to aircraft counts being conducted by different people or on different days within the stated year. Another possible reason for this variation could relate to some of these counts including transient aircraft that might have been parked on the ramp. For example, several times throughout the year, the U.S. Navy has approximately 60 aircraft temporarily located at Cecil Field conducting training operations in conjunction with U.S. Navy Atlantic Fleet. These aircraft spend only a couple of weeks at the airport.

**TABLE 3-4
HISTORICAL BASED AIRCRAFT**

Year	FDOT FASP	FAA TAF	Airport Estimates
1999	18	30	0
2000	32	99	3
2001	99	99	31
2002	107	107	31
2003	110	111	37
2004	112	116	38
CAGR	44.14%	31.06%	106.99%

Note: Airport Estimates were based on counts of tenant aircraft located at Cecil Field the majority of the year and took into account the lease start date for each tenant. It was assumed that FDOT and FAA counts included significant numbers of transient aircraft, possibly some military, GA or commercial, temporarily located either on the ramp or in MRO facilities.

Sources: Airport Lease Information, 2005; Continuing Florida Aviation System Plan Forecasts, FDOT, 2002; Terminal Area Forecast, FAA, 2005.

Also shown in Table 3-4 is an "Airport Estimate" of those aircraft that use Cecil Field as their home base. This based aircraft estimate was compiled using lease information for tenants at Cecil Field as well as from data supplied by airport staff. Actual based aircraft levels for 2004 were significantly lower than those reported in both the FDOT FASP and FAA TAF according to airport staff. For 2004, the airport documents 38 aircraft being based at the Airport versus the values of 112 and 116 reported in the FASP and FAA TAF, respectively. This difference was assumed to be related to the inclusion of transient aircraft, located temporarily either on the ramp or in MRO facilities. Additionally, airport staff noted that it is most likely that the FDOT based aircraft count occurred during one of the previously mentioned U.S. Navy training periods. This is based on knowledge of the existing activity levels, which indicates that this is the only time when the number of aircraft would exceed 100.

Upon further investigation, the difference between these values relates to whether or not the aircraft located at Cecil Field for MRO services should be included in the annual based aircraft value. It is generally accepted that a based aircraft is one that is located at the subject airport for at least 60% of a given year. At Cecil Field, many of the tenants have aircraft at their facilities for MRO services. These aircraft do not spend a majority of the year at Cecil Field and therefore are not included in the airport's annual counts of based aircraft. However, it should be noted that MRO operators have a storage capacity for well over 100 aircraft. Thus, a 2004 value of 38 will be used as the starting value in the based aircraft projections developed in this study. This inconsistency

in reporting of historical based aircraft will limit the usefulness of the reported historical data for trend-based forecasting methods.

3.4.2 Historical Annual Operations

An air traffic control tower (ATCT) has been operational at the airport since the airport opened as a public-use facility. From October 1999 through the end of March 2002, the ATCT was a non-federal tower. The tower was operational Monday through Friday for 10 hours a day (8 a.m. to 6 p.m.). It should also be noted that the non-federal tower was closed for major holidays. In April 2002, the ATCT began operations under the federal contract tower program. The hours of operations were extended to 7 a.m. to 9 p.m. daily.

**TABLE 3-5
HISTORICAL OPERATION LEVELS**

Activity Description	1999	2000	2001	2002	2003	2004	CAGR
FDOT FASP							
Total Operations	12,269	57,242	65,000	64,255	N/A	N/A	5.95%
FAA TAF							
Total Operations	43,032	43,798	77,210	<u>72,196</u>	82,895	83,167	14.09%
FAA ATADS							
Total Operations	0	0	0	<u>75,603</u>	86,510	83,920	5.36%
ATCT Records							
Itinerant Operations							
Air Carrier	0	0	0	2	29	105	624.57%
Air Taxi	0	0	0	312	590	617	40.63%
General Aviation	763	5,328	5,215	8,962	13,359	17,176	34.00%
Military	475	3,534	6,500	11,232	10,894	10,579	31.54%
Subtotal-Itinerant	1,238	8,862	11,715	20,508	24,872	28,477	33.89%
Local Operations							
Civil	1,261	5,433	6,807	11,162	16,643	24,847	46.24%
Military	5,411	37,665	39,358	43,933	44,995	30,596	-5.06%
Subtotal-Local	6,672	43,098	46,165	55,095	61,638	55,443	6.50%
Total Operations	7,910	51,960	57,880	75,603	86,510	83,920	12.73%

Notes:

1. Growth rate reflects the growth from the first full year of available data to the latest available historical data.
CAGR=Compound Average Annual Growth Rate
2. Underlined values represent values adjusted with ATCT data to include a full 12-month period.
3. FAA TAF values are based on the federal fiscal year whereas all other data sources reflect calendar year values.
4. Both "Air Carrier" and "Air Taxi" operators hold a FAA commercial ("for hire") operating certificate. Tower personnel count those commercial aircraft over 30 seats as "Air Carrier" and those with less than 30 seats as "Air Taxi."

Sources: AVCON, INC., Analysis, 2005; FAA, ATADS, 2005; FAA, Terminal Area Forecasts, 2005; FDOT, FASP, 2002; RVA, Inc., Tower Activity Records, 1999- 2005.

These operational changes had to be considered when identifying historical operational trends. This change in hours, especially to include weekends, captures a more accurate counting of operations at

Cecil Field. Additionally, some users prefer to conduct operations when a tower facility is open, thereby contributing to increased activity levels. These operational changes could create an artificial inflation

in the recorded number of total annual operations if appropriate adjustments are not made.

Table 3-5 shows the annual total operations from all available sources. This data includes those operations conducted under instrument conditions. It should be noted that the FDOT FASP, FAA ATADS, and ATCT records reflect the calendar year whereas FAA TAF reflect the federal fiscal year.

Additionally, this table provides a detailed breakout by activity type as reported on monthly ATCT activity reports. This data shows the continual increase in GA activity over the historical period. Also, this data reflects that local activity dominates over itinerant activity. Since 2002, limited air carrier and air taxi operations have occurred at Cecil Field. The compounded average annual growth rates shown in the table are much higher than industry standards, reflecting the emerging maturation of the airport. Further analysis of these trends will be discussed in later report sections.

A review of this annual operations data identified several differences between the various sources. The FDOT FASP historical data reflects estimated values collected during the annual inspection visits by a FDOT representative. These estimations include not only recorded ATCT operations, but also, an estimate of activity during the periods the ATCT is closed. The variations of the FAA TAF values from the other data sources relate almost entirely to the differences in

totaling the data over the federal fiscal year instead of the calendar year.

Adjustments were made to the 2002 values reported in the FAA TAF (39,229) and the FAA ATADS (57,377) databases. These reported values do not account for the months during which the tower was operated as a nonfederal facility. The FAA TAF data represented only those operations conducted between March and September 2002. Thus, the first six months of the fiscal year were not accounted for. This could be related to the fact that the FAA TAF values for towered airports are collected directly from the FAA ATADS which only contains data from FAA and federal contract towers. Similarly, the FAA ATADS data does not reflect operations at Cecil Field when the tower was operated as a nonfederal facility. Considering the variability in these data types, the actual monthly ATCT records were determined to be the most complete source of aircraft operational activity.

ATCT personnel also maintain records of instrument activity at Cecil Field. This historical data has been summarized in **Table 3-6**. Instrument operations have totaled 20,374 accounting for approximately 5.6% of the total recorded operations since 1999. General aviation traffic makes up the largest percentage, 50.56%, of instrument activity, with reported military operations accounting for 47.74%. The occasional air carrier or air taxi operator conducts the remaining instrument operations, accounting for less than 2% of the instrument activity.

**TABLE 3-6
HISTORICAL INSTRUMENT ACTIVITY**

Year	Air Carrier	Air Taxi	General Aviation	Military	Annual Total
1999	0	0	28	119	147
2000	0	0	1,264	747	2,011
2001	0	0	968	1,607	2,575
2002	1	21	840	2,218	3,080
2003	21	110	3,639	2,288	6,058
2004	111	82	3,556	2,754	6,503
Total	133	213	10,295	9,733	20,374
% of Operations	0.65%	1.05%	50.56%	47.74%	---

Note: The instrument landing system became operational in 2002.

Sources: AVCON, INC., Analysis, 2005; RVA, Inc., Tower Activity Records, 1999- 2005.

For the period prior to April 2002, only limited traffic counts on weekends were conducted, yielding reported annual activity values lower than the actual activity for this period. Airport management had used the following as estimates of this unreported activity:

- 10/1999-9/2000: 4,202

- 10/2000-9/2001: 5,301
- 10/2001-9/2002: 2,116

In addition, further analysis was completed using the tower data to characterize how much activity occurs

over weekends. **Table 3-7** presents this data by activity type for the two periods.

This information shows that GA activity is higher on Saturday or Sunday than on a day during the week. Additionally, reported local military operations drop off

significantly on the weekends. This decrease in military operations could be attributed to not only the normal Monday to Friday workweek, but also that aircraft rescue and fire fighting (ARFF) services are not available over the weekend.

**TABLE 3-7
DAY OF WEEK TOTAL OPERATIONS**

	10/99 – 3/02			4/02 – 12/04		
	Weekdays	Weekends	Total	Weekdays	Weekends	Total
Itinerant Operations						
Air Carrier	0	0	0	96	40	136
Air Taxi	3	0	3	1,072	444	1,516
General Aviation	12,411	198	12,609	26,548	11,646	38,194
Military	12,920	683	13,603	25,711	3,900	29,611
Itinerant Subtotal	25,334	881	26,215	53,427	16,030	69,457
Local Operations						
Civil	14,841	340	15,181	35,829	15,143	50,972
Military	94,486	94	94,580	102,390	4,988	107,378
Local Subtotal	109,327	434	109,761	138,219	20,131	158,350
Total Operations	134,661	1,315	135,976	191,646	36,161	227,807
Percent of Activity for the Time Period	99.03%	0.97%	100.00%	84.13%	15.87%	100.00%

Note: Both "Air Carrier" and "Air Taxi" operators hold a FAA commercial ("for hire") operating certificate. Tower personnel count those commercial aircraft over 30 seats as "Air Carrier" and those with less than 30 seats as "Air Taxi."

Sources: AVCON, INC., Analysis, 2005; RVA, Inc., Tower Activity Records, 1999- 2005.

A review of this information also shows that weekend operations have accounted for almost 16% of the total operations since April 2002. For the period prior to April 2002, the reported weekend operations only accounted for 1% of the reported operations. Therefore, it is reasonable to make a conservative estimate that the reported operations prior to April 2002 are low by approximately 10%, which will also contribute to slightly inflated historical growth rates. This under-reported activity will be taken into account during the development of the operations forecasts.

3.5 BASED AIRCRAFT FORECASTS

As noted under **Section 3.4.1**, information was collected from airport staff and users as to the number of based aircraft in 2004. This showed that there were 38 based aircraft at Cecil Field in 2004. This estimation, rather than the FAA TAF or FASP values for 2004, was used in this forecasting analysis for the base year value.

Many of the traditional forecasting techniques utilize historical trends as the basis of future trends; however, this was not deemed practical for this forecasting effort. Therefore, techniques utilizing historical growth rates, market share, and correlations with socioeconomic data were not considered viable given the limited and imprecise reported historical data. The following subsections provide a description of independent projections completed, the selected forecast, and based aircraft fleet mix determination.

3.5.1 Governmental Aircraft Projection

The inventory of existing based aircraft at the airport shows that 32 of these aircraft are operated by governmental agencies. These agencies currently include the Florida Army National Guard and the Department of Homeland Security. Based on historical activity in the aviation industry, it is a reasonable assumption that the future growth of these governmental aircraft will be at a slower rate than for the purely general aviation sector.

Therefore, a separate projection for governmental based aircraft was prepared. The future growth of

governmental aircraft is dependent upon funding levels and adjustments to each agencies mission, which are directly tied to national security issues. The protection of American interests both here and abroad will remain a vital goal for government throughout the 20-year planning period. With the increasing threats from terrorists and the existing instability in some areas of the world, it is likely that a moderate expansion of either military or homeland security forces (such as U.S. Customs or U.S. Coast Guard) would occur over the 20-year period. An additional consideration for future based aircraft levels is a change in the helicopter fleet used by the National Guard unit. During 2005, this unit completed a transition from eighteen AH-64 Apaches to eight CH-47 Chinooks and six H-60 Black Hawks. This will reduce their fleet by four.

(1.3%) of the national GA fleet from the *FAA Aerospace Forecasts 2004-2015*. By 2024, this method projects 8 based aircraft.

2. **TAF Growth:** This projection applied the reported annual growth rate specific to Cecil Field in the current FAA TAF of 3.40% (calculated between 2004 and 2020). This yields 12 GA aircraft in 2024.
3. **FASP Growth:** As with the “TAF Growth” method, the FDOT FASP forecast was adjusted to reflect the latest count of based aircraft in 2004. Thus, the annual growth rate (2.49%) for Cecil Field used in the FDOT FASP was applied to the base year value. This method projects 10 based GA aircraft by 2024.

**TABLE 3-8
GOVERNMENTAL AIRCRAFT PROJECTION**

Year	Number of Aircraft
Base Year	
2004	32
Forecast Years	
2009	34
2014	36
2019	38
2024	39
CAGR	1.00%

Note: CAGR=Compounded Average Annual Growth Rate.
Source: AVCON, INC., Analysis, 2005.

A conservative annual average growth of 1% was utilized to estimate a moderate growth in governmental based aircraft at Cecil Field through 2024. **Table 3-8** shows the projected growth in governmental based aircraft utilizing this assumed annual growth rate. This data shows that an additional seven governmental aircraft would be based at the airport by 2024.

3.5.2 Initial General Aviation Aircraft Projections

Several forecasting methods were initially considered to project GA based aircraft at Cecil Field; however, as previously noted, techniques using historical values were not viable approaches due to data inconsistencies. The three methods chosen for initial consideration involved the application of growth rates from known sources to the 2004 base year value of six based GA aircraft. The results of these projections are presented in **Table 3-9**, which is shown under **Section 3.5.3**.

1. **National Growth:** This technique involves the application of the expected annual growth rate

3.5.3 Selected General Aviation Aircraft Forecast

The initial projections described above rely upon growth rates from previous forecasts that do not necessarily take into account the existing local demand for based aircraft storage in the Jacksonville vicinity. As discussed under **Section 3.2.3**, there is a reported need for approximately 200 hangar units for based aircraft. It is likely Cecil Field could capture some portion of the current demand. Therefore, a different approach was utilized to determine the forecasts for this study.

**TABLE 3-9
GENERAL AVIATION BASED AIRCRAFT PROJECTIONS**

Method	National Growth	FAA TAF Growth	FDOT FASP Growth	Selected Forecast
Base Year				
2004	6	6	6	6
Forecast Years				
2009	6	7	7	31
2014	7	8	8	37
2019	7	10	9	43
2024	8	12	10	51
CAGR	1.30%	3.40%	2.49%	11.31%

Note: CAGR=Compounded Average Annual Growth Rate.
Source: AVCON, INC., Analysis, 2005.

For purposes of this forecast, a conservative capture rate estimate for Cecil Field was assumed to be 25 aircraft within the first five-year period. This equals approximately 13% of the existing waiting list aircraft within the Jacksonville area. Additional growth beyond

2009 was then assumed to occur at the FAA TAF growth rate, 3.40%. Table 3-9 presents this forecast results.

Overall, this forecast, which was determined to be the most appropriate considering national and local factors, yields the addition of 45 new GA aircraft by 2024. The overall annual growth rate for GA based aircraft from 2004 to 2024 was determined to be 11.31%, which might seem high, but is not unreasonable considering that the GA market sector at Cecil Field is still maturing.

The selected forecast represents a projection based upon linear growth patterns. However, future additions of based aircraft will likely occur in a more staggered pattern related to the development of hangars. Additionally, if certain commercial activities become located at the airport, such as a flight training school or as a headquarters location for a time-share aircraft operator (like NetJet), there might be a very large increase from one year to the next. This could lead to based aircraft numbers closer to those reported (refer to **Table 3-3**) by the FAA TAF and/ or FDOT FASP.

3.5.4 Comparison with FAA TAF

Table 3-10 presents the summation of both the governmental and GA based aircraft projections presented in the previous two subsections. This data shows that overall based aircraft would grow from the reported 2004 value of 38 to 91 in 2024. The annual growth rate for all based aircraft was determined to be 4.40%, which is 1% higher than that reported in the FAA TAF.

As required by FAA methodology, a comparison of the selected total based aircraft forecast to the FAA TAF data was undertaken and is also presented in **Table 3-10**. Ideally, the selected forecast should be within 10% of the FAA TAF value for year five and within 15% for the remaining forecast period. These criteria are based on guidance given in a FAA memo from the Director of Airport Planning and Programming, dated December 23, 2004, which revises a previous requirement of 10% over the entire planning period.

As shown in this table, the based aircraft forecast for Cecil Field falls below the FAA TAF values by more than 50%. This difference can be attributed to the discrepancy in the reporting of the 2004 base year value. However, projected growth in based aircraft would be spurred by the anticipated high growth in the west Jacksonville area, including the adjacent industrial park. Thus, given these two factors, the rather large difference from the FAA TAF should not be considered unreasonable.

**TABLE 3-10
BASED AIRCRAFT SUMMARY**

Method	GOV	GA	Total	FAA TAF	% FAA TAF
Base Year					
2004	32	6	38	111	34.5%
Forecast Years					
2009	34	31	65	136	47.8%
2014	36	37	72	161	44.9%
2019	38	43	81	186	43.5%
2024	39	51	91	219	41.4%
CAGR	1.00%	11.31%	4.40%	3.40%	---

Notes:

1. *Italicized value for 2024 represents an extrapolation based on FAA TAF growth rates.*
 2. CAGR=Compounded Average Annual Growth Rate
 3. GOV=Governmental Based Aircraft
 4. GA=General Aviation Based Aircraft
- %TAF="Total" divided by "FAA TAF" multiplied by 100.

Source: AVCON, INC., Analysis, 2005; FAA, TAF, 2005.

3.5.5 Based Aircraft Fleet Mix

In order to adequately plan future facilities, an estimation of the future based aircraft fleet mix was conducted. This is necessary because jet aircraft require larger facilities than single-engine piston aircraft. The fleet mix for the selected based aircraft forecast is given in **Table 3-11**.

**TABLE 3-11
BASED AIRCRAFT FLEET MIX**

Year	Single-Engine	Multi-Engine	Jet	Rotor	Total
Base Year					
2004	4	7	1	26	38
Forecast Years					
2009	16	13	7	29	65
2014	18	14	9	31	72
2019	22	16	11	32	81
2024	26	19	13	33	91

Source: AVCON, INC., Analysis, 2005.

This determination takes into account the existing based aircraft types and national growth trends as presented in the *FAA Aerospace Forecasts 2004-2015*. Additionally, given the projection that Cecil Field will mature into an executive level airport in the future, it is not unreasonable to expect a higher percentage of both multi-engine and jet aircraft.

3.6 MISCELLANEOUS OPERATIONS

As discussed under **Section 3.1**, there is an incongruity between how the tower counts some operations by users and whether or not those users pay fuels taxes into the Aviation Trust Fund. It is important for purposes of this planning study to account for users who do pay into the Aviation Trust Fund separately from those that do not. As such, those operations, which do not.

3.6.1 Miscellaneous Operations Forecasts

International flight training is included in this Miscellaneous Operations category because the users pay full fuel taxes. In the last quarter of 2003, a previous tenant began operations at Cecil Field. This company provided tactical flight training on a contract basis, primarily to U.S. approved foreign military units. Flight training was conducted in designated military air operations airspace located in the Jacksonville vicinity. A typical training scenario involved four sorties a day of two aircraft, yielding 16 operations per day. Training was generally conducted on weekdays. This previous tenant’s business was expected to grow over time, providing for an increase in annual operations. Therefore, it was estimated that this international training could reach 3,744 annual operations by 2024 assuming training was conducted for 90% of the year on weekdays only. Taking these items into account, a base year value of 2,080 was determined assuming that training occurred for approximately 50% the time in 2004.

Recently, a similar company, Airborne Tactical Advantage Company (ATAC), began training operations for the Navy. Although these operations are not for international training, the facilities and demand for international training is still in place today. It is reasonable to assume that these operations could take place over the 20 year planning period.

The last operations group in the Miscellaneous category relate to aircraft operations conducted by various tenants as a part of civilian MRO/manufacturing services. This group would also include aircraft conversions from one use to another (e.g., from passenger to cargo configurations. As of 2005, Flightstar was the only tenant performing MRO/manufacturing activities on civilian aircraft. Normally MRO/manufacturing activities involve only limited activities related to test flights and the transportation of the aircraft to and from the facility, airport representatives project activity levels of two or

three operations weekly in 2005, yielding an annual estimate of 260 operations for 2005. Projected growth for these activities in the short-term period was estimated to double to approximately five operations weekly in 2009. Beyond the short-term period, growth was estimated at a nominal 1% per year through 2024 to account for additional MRO/manufacturing operators.

Table 3-12 provides a summary of projected activity within this Miscellaneous Operations category. In 2004, it is estimated that approximately 2,080 operations occurred by various users in this category. By 2024, these activities could reach 4,348 annual operations. This operations category is projected to experience an average annual growth of 3.76% over the planning period, based upon the assumptions previously described for each activity within this category. In subsequent report sections, International Training operations will be accounted for under “GA” activity, whereas Civilian MRO/Manufacturing will be counted under the “Air Carrier” category.

**TABLE 3-12
ANNUAL OPERATIONS FORECAST:
MISCELLANEOUS**

Year	International Training	Civilian MRO/ Manufacturing	Total
Base Year			
2004	2,080	0	2,080
Forecast Years			
2009	2,496	520	3,016
2014	2,912	547	3,459
2019	3,328	574	3,902
2024	3,744	604	4,348
CAGR	2.98%	4.53%	3.76%

*Note: CAGR=Compounded Average Annual Growth Rate
Source: AVCON, INC., Analysis, 2005.*

3.7 MILITARY OPERATIONS

Prior to its opening as a public-use facility, Cecil Field was a very active military base. The airport continues to experience significant military activity. This can be attributed to the fact that the airport is equipped with the necessary infrastructure (long runways, ATCT, VOR, and ILS) to support military activity as well as to the number of military installations in the general vicinity. Additionally, as presented in **Section 3.1**, activity by the DHS-U.S. Customs (estimated at 1,080 annually) and AeroGroup (refer to **Section 3.6.1**) are included under the military category by tower personnel. The following provides an overview of

historical military activity conducted at Cecil Field and a projection for future annual military operations.

14 days, accounting for approximately 2,600 operations each time.

3.7.1 Historical Military Activity

Military activity at the Airport primarily consists of operations by the Florida Army National Guard unit and transient military aircraft from military installations in the Jacksonville vicinity. Periodically, groups of U.S. Navy T-45 Goshawk's are temporarily located at Cecil Field. These units, consisting of as many as 60 aircraft, generally fly to and from the Airport to practice landings and takeoffs on air carriers from the U.S. Navy's Atlantic Fleet. These carrier training periods usually occur four or six times per year and last 10 to

Two data sources (the FAA TAF and ATCT records) were consulted to identify historical annual levels of military operations at Cecil Field. **Table 3-13** provides a summary of this data. Additionally, the table shows an adjustment to the FAA TAF and ATCT values based on the classifications given in **Table 3.1**. Thus, appropriate adjustments were made to the historical data based upon the lease date of tenants. It should be noted that the reported values for 1999 reflect operations from October through December only and that the FAA TAF value for 2002 was adjusted with ATCT so that it would reflect 12 months of activity.

**TABLE 3-13
ANNUAL OPERATIONS FORECAST: MILITARY**

Year	Reported Values		Adjusted Values		Independent Projection
	FAA TAF	ATCT Records	FAA TAF	ATCT Records	
Historical and Base Year					
1999	30,817	5,886	30,817	5,886	---
2000	33,131	41,199	33,131	41,199	---
2001	53,739	45,858	53,739	45,858	---
2002	54,883	55,165	54,883	55,165	---
2003	55,190	55,889	54,430	55,129	55,129
2004	42,217	41,175	41,937	40,895	40,895
Historical (00-04) CAGR	6.25%	-0.01%	6.07%	-0.18%	---
Forecast Years					
2009	42,217	---	41,521	---	40,900
2014	42,217	---	41,105	---	40,900
2019	42,217	---	40,689	---	40,900
2024	42,217	---	40,273	---	40,900
Forecast CAGR	0.00%	---	-0.20%	---	0.00%

Notes:

1. FAA TAF values represent the federal fiscal year (October through September) whereas ATCT data represents calendar year activity.
 2. CAGR=Compounded Average Annual Growth Rate.
- Source: AVCON, INC., Analysis, 2005; FAA, TAF, 2005; and RVA, Inc., ATCT Records, 2005.

Military operations have fluctuated over the historical period. FAA TAF data from 1999 through 2004 shows military activity reached a high in 2003. The ATCT data shows that military operations have ranged from a low of 41,175 in 2004 to a high of 55,889 in 2003 to the adjusted values of 40,895 and 55,165, respectively. The operational fluctuations in 2002 through 2004 might be attributed to various units in the area preparing to be deployed to either Afghanistan or Iraq. In fact, a portion of the National Guard unit based at the Airport has been deployed over the last 18 to 24

months, which may account for a portion of the activity decrease observed in 2004. In the short-term, the fleet changes occurring for the National Guard unit (as discussed under **Section 3.5.1**) will also likely impact future activity levels.

3.7.2 Forecast of Military Activity

Federal funding levels for military operations and U.S. foreign policy decisions are the primary factors affecting future military activity across the nation. Both of these issues impact how military units are deployed

across the nation and even worldwide. Given the uncertain nature of these issues, changes in military activity levels are very difficult to anticipate. The *FAA Aerospace Forecasts 2004-2015* and the FAA TAF generally show no growth in military operations.

Thus, the use of an average activity level appears appropriate as a projection of future military activity at Cecil Field. Historical data as reported by the ATCT, adjusted as previously discussed, was used as the basis for this determination. Since Cecil Field was not opened as a public-use facility for the full year of 1999, only historical data from 2000 through 2004 was used. The results of this exercise showed that on average approximately 47,800 annual military operations had been conducted at the airport over the five-year historical period. Due to the uncertainty associated with future federal policy decisions, neither an increase nor decrease could reasonably be identified for military operations levels. Therefore, the approximate adjusted value for 2004 of 44,900 was used throughout the planning period as shown in Table 3-13.

3.8 GENERAL AVIATION OPERATIONS

General aviation (GA) activity is anticipated to be the largest activity sector at Cecil Field over the 20-year planning period. This category includes any activity not considered “commercial” (which includes air carrier and air taxi operators) or “U.S. military” under FAA regulations. A commercial operation includes the carriage of passengers or goods for a fee. These commercial operators have to obtain the appropriate FAA operating certificate, under Title 14, Parts 119, 121, 125 or 135 of the U.S. Code of Federal Regulations. In ATCT counts and FAA TAF reports, GA would also include non-military, governmental operations, such as the DHS-U.S. Customs activity. The following provides a description of historical GA activity and presents several GA activity projections.

3.8.1 Historical Data

As with other activity groups, several sources were consulted for records of historical annual GA operations as well as for previous activity forecasts. **Table 3-14** provides data from three sources.

Values for GA-only operations were not available from the FDOT FASP. This statewide system plan only develops forecasts for two classifications: commercial and GA. Commercial operations relate to passenger and cargo service only. All other operations, including military and air taxi, are included under the broad

heading of “GA.” Therefore, the FDOT FASP could not be used for comparison in the current analysis.

Since 1999, GA operations have grown quite rapidly and have exceeded the 1998 MPU forecast operations through 2004. It should be noted that the FAA TAF value for 2002 was adjusted with monthly ATCT data to give a full 12 months of activity. The ATCT data shows a CAGR of 40.58% over this period, resulting from an additional 8 to 10 thousand additional GA operations each year since 2001. This significant growth in GA operations over the historical period is fairly typically of a new airport opening within a busy regional aviation system, such as the northeast Florida area.

**TABLE 3-14
GA OPERATIONS: HISTORICAL &
EXISTING FORECASTS**

Year	1998 MPU	FAA TAF	ATCT Data
Historical and Base Year			
1999	-	9,215	2,024
2000	<i>27,000</i>	10,667	10,761
2001	<i>28,191</i>	23,052	12,022
2002	<i>29,434</i>	17,102	20,124
2003	<i>30,732</i>	27,151	30,002
2004	<i>32,087</i>	40,187	42,023
Historical CAGR	4.41%	34.25%	40.58%
Forecast Years			
2009	<u>42,782</u>	44,471	Not Applicable
2014	<u>57,043</u>	48,895	Not Applicable
2019	<u>70,780</u>	53,759	Not Applicable
2024	<u>76,058</u>	<u>59,202</u>	Not Applicable
Forecast CAGR	4.41%	1.96%	Not Applicable

Notes:

1. Values in italics represent forecast values, not actual historical operations whereas underlined values represent values either interpolated or extrapolated from previous forecasts.
2. FAA TAF values represent the federal fiscal year (October through September) whereas other data sources represent calendar year activity.
3. ATCT data values for 2003 were adjusted to reflect the estimated operations conducted by DHS-US Customs, which were included in the Military Operations category.
4. Historical CAGR represents the period 2000 to 2004 except for the FAA TAF values that cover federal fiscal years 1999 through 2004.
5. CAGR=Compounded Average Annual Growth Rate.

Sources: AVCON, INC., *Analysis, 2005*; FAA, TAF, 2005; FDOT, FASP, 2002; RS&H, *Cecil Field Strategic Master Plan Update, 1998*; RVA, Inc., *ATCT Reports, 2005*.

As noted under **Section 3.5**, Cecil Field currently only has a few based GA aircraft. This low number is related to the lack of available GA hangar space. Therefore, it can be safely assumed that transient users conduct the majority of GA operations at the airport. This transient activity includes the full spectrum of GA aircraft, as noted by ATCT and FBO personnel. The percent of jet activity, consisting primarily of various Hawker, Citation and smaller Lear models, was considered higher than what is experienced at most other GA airports in the area. This is likely due to the available runway length and instrument approaches at Cecil Field.

Projected GA operations through 2024, as presented in the previous MPU and the FAA TAF, are also included in Table 3-14. The previous master plan relied on average activity levels at other northeast Florida airports as the basis for the GA operations forecast. A comparison of the 1998 MPU forecast with historical data shows that through 2004, GA traffic was slower than initially anticipated; however, GA operations surpassed the projected activity in 2004 by almost 10,000.

The FAA TAF projects much slower growth, 1.96% annually, of GA operations at Cecil Field. The projected activity in 2024 was estimated via extrapolation to be 59,202 operations since the most current edition of the FAA TAF projections stops at 2020.

3.8.2 Independent Projections

Several methodologies were used to forecast future GA operations through 2024. Traditionally, forecasts developed in a master plan would rely quite heavily on historical trends at the facility. However, in the case of Cecil Field that was not possible for two reasons: 1) the previously discussed data reporting discrepancies and 2) the limited time the facility has been open for public use. Thus, forecasting methodologies relied heavily on FAA operations per based aircraft (OPBA) methodology and the use of growth rates from projections of national and statewide trends.

Additionally, per the classifications in **Section 3.1**, some adjustments were necessary to account for DHS-U.S. Customs operations and ATAC. For the independent projections relying on projected annual growth rates, the ATAC projection previously presented in Table 3-12 was added after the growth rate was applied to the base year value.

3.8.2.1 Base Year Value

The accuracy of various forecasting methodologies is directly tied to the currency of the base year data. As

shown under **Section 3.8.1**, the annual GA operations increased by over 12,000 from 2003 to 2004. Since tower personnel stated that DHS-U.S. Customs operations are included in the GA category on ATCT reports, an adjustment of 1,800 was made to the ATCT value for 2004 since those operations were already accounted for under the Military category (refer to **Section 3.7**). This gave a base year 2004 value of 40,223. Therefore, for those forecasting methods employing an established growth rate to project future activity levels, the growth rate was applied to this base year value. For other methods, the 2004 value generated by those techniques was compared to the actual value to test the applicability of the technique to activity at Cecil Field.

3.8.2.2 OPBA-Historical

A standard forecasting methodology is to estimate operations utilizing a ratio of operations per based aircraft (OPBA). At some airports, this ratio remains fairly constant. Annual OPBA values for Cecil Field were calculated using the estimated based aircraft values (see Table 3-4) and the GA-only operations data as reported by the ATCT.

The historical GA-only OPBA ranged from a low of 388 to a high of 3,587. The wide range is reflective of the current lack of GA aircraft storage facilities and of the emerging nature of Cecil Field. These annual values from 2000 through 2004 were averaged to yield a GA-only OPBA value of approximately 1,300.

This OPBA was then used in conjunction with the forecast based aircraft to project future activity levels, as given in **Table 3-15**. This method estimates GA operations in 2004 at 49,400, which exceeds the actual value of 40,223. By 2024, GA operations were projected to increase to 118,300. This methodology was considered to give projected annual GA operations higher than should be expected because as based aircraft numbers grow the OPBA value should decrease. More time is needed for this value to stabilize prior to using it as the basis of activity projections.

3.8.2.3 OPBA-FAA Order 5090.3C

In FAA Order 5090.3C, *National Plan of Integrated Airport System*, it is stated that for busy GA reliever airports, the OPBA is usually around 450, but that it could be as high as 750 if the airport experienced higher levels of itinerant activity. These values given by the FAA reflect operations conducted by all users, not just GA traffic. Since Cecil Field's historical GA-only OPBA presented in the previous subsection was not deemed usable, GA activity at a similar airport in the area was studied to determine if the FAA values

**TABLE 3-15
ANNUAL OPERATIONS FORECAST: GENERAL AVIATION**

Year	OPBA– Historical	OPBA– FAA	National Growth	TAF Growth	Short-term High Growth*
Base Years					
2004	49,400	17,100	42,303	42,303	42,303
Forecast Years					
2009	84,500	29,250	45,828	46,810	62,538
2014	93,600	32,400	49,592	51,732	69,061
2019	105,300	36,450	53,616	57,113	76,204
2024	118,300	40,950	57,919	62,999	84,031
CAGR	4.49%	4.49%	1.58%	2.01%	3.49%

Note: CAGR=Compound Average Annual Growth Rate.

Source: AVCON, INC., Analysis, 2005.

were reflective of aviation activity in the Jacksonville area.

Of the three other airports in Jacksonville, Craig Municipal Airport might be the most reflective of future activity at Cecil Field. Data available from the FAA TAF and FAA ATADS for Craig was gathered for the period of 1990 through 2004. Analysis determined that the average GA-only OPBA at CRG over this period was 464. Thus, the use of 450 for GA-only operations appeared that it might be a reasonable approximation of future GA activity at the Airport.

However, as shown in Table 3-15, this method only projects 40,950 GA operations by 2024 yet activity in 2004 exceeded this value. This forecast was therefore determined to not be an appropriate projection of future GA activity at Cecil Field.

3.8.2.4 National Growth

In the *FAA Aerospace Forecasts 2004-2015*, a projection of annual hours flown by GA users is presented. This projection reflects an average annual growth of 1.50% through 2015. The FAA based this overall, nationwide growth on user surveys and historical activity. This annual growth corresponds coincidentally to the growth projected for Cecil Field by the FDOT FASP forecasts.

This national growth forecasting technique involves the application of the expected nationwide annual growth rate (1.50%) to the 2004 base year value and then the AeroGroup activity projection was added. Therefore, the actual average annual growth rate in this projection is 1.58%. By 2024, this method projects 57,919 GA operations to occur. This equates to only an additional 15,616 operations over the 20 years or 781 per year. Given the emerging nature of Cecil Field, its increased exposure in the GA market from the 2005 Super Bowl,

and the addition of a nationally recognized FBO, this projection was considered too low.

3.8.2.5 TAF Growth

The FAA also prepares forecasts for individual airports in the annual Terminal Area Forecasts (TAF). These forecasts take into account various regional and local characteristics in addition to just nationwide trends. These forecasts are based on the federal fiscal year running October through the September of the following year.

Similar to the National Growth projection, this forecasting methodology grows the base year value at the growth rate of 1.96% given in the FAA TAF specifically for Cecil Field. The projection of Aerogroup activity was then added leading to an increase of the average growth to 2.01%. This yields a 2024 value of 62,999, or an overall increase of approximately 1,035 operations per year for 20 years. This FAA TAF Growth forecast of GA operations was considered low for much the same reasons as given under the National Growth scenario.

3.8.2.6 Short-Term High Growth

As previously noted, annual increases in activity have ranged from 8 and 12 thousand since 2001, yielding a CAGR of 40.6% for that historical period. Since the airport is still considered to be a relatively “new” facility, it would not be unreasonable that several more years of high growth should be expected in the short-term period followed by more moderate growth for the remainder of the planning period.

Therefore, a conservative high-growth annual growth rate of only 10% annually, compared with 40.6% annually since 2001, was used through 2008. By this time, Cecil Field will have reached the 10-year mark and should be approaching a more “balanced” or

“mature” state. The FAA TAF growth rate, 1.96%, was used to project growth from 2010 to 2024. As shown in Table 3-15, this methodology leads to almost double the annual number of GA operations by the 20-year mark and gives an average annual growth of 3.49% between 2004 and 2024.

3.8.2.7 Selected GA Operations Forecast

In selecting the most applicable of these operations projections, various factors were considered, including the most recent annual activity level, the available infrastructure, the positive economic conditions in the area, and the future growth of the adjacent industrial park, Cecil Commerce Center. Therefore, the “Short-term High-Growth” projection, as given in Table 3-15, was selected as the preferred forecast for use in this master plan update.

3.9 AIR CARRIER/AIR TAXI FORECASTS

An aircraft operator must be certified by the FAA to carry passengers and/or cargo on a “for hire” basis. This can occur on a regularly scheduled or as needed basis. Air traffic personnel count activity by these operators in either the “Air Carrier” or “Air Taxi” category. Generally, aircraft with more than 30 seats are reported in ATCT in the Air Carrier classification; all others are reported under Air Taxi operations.

Cecil Field does not have nor is it expected that it would have regularly scheduled passenger service throughout the planning period. However, the airport does experience some limited air carrier and air taxi activities. These activities are mostly related to charter passenger and cargo activity. Additionally, tower personnel have noted some training activity by air carrier users. This section describes the potential increase in these operations related to cargo and other “for hire” activities at Cecil Field.

3.9.1 Air Cargo Activity

In previous planning studies related to Cecil Field, the potential for regular cargo activity was considered. Although to date this activity has not yet been realized, it remains a goal of the Aviation Authority to support this activity should the opportunity present itself. Since historical data was not available from which to base activity forecasts, estimations were developed based on the previous forecast and the general characteristics of the surrounding area as well as current national trends in the cargo industry. Brief summaries of the prior forecasts, a synopsis of recent national air cargo trends, and the selected air cargo projections are presented in the following subsections.

3.9.1.1 Previous Forecasts

The 1997 Northeast Florida Aviation System Plan and Cecil Field Feasibility Study (Feasibility Study) presented several potential scenarios to project cargo activity as described below:

- Domestic Air/Ground Terminal: This scenario assumed that current JIA shippers would relocate and that JAA would change their policy to support this shift. There is no local support for this option at this time.
- Domestic Mini-hub: This projection assumed the initiation of a mini-hub by one of the major all-cargo carriers, presumed to be DHL because other operators have sufficient activity levels at other Florida airports. This situation is probably no longer realistic given that DHL and ABX merged.
- International Alternative Gateway: This development alternative assumes the initiation of cargo transport activity to/from Europe, Latin America, or the Caribbean. Under this scenario, activities at the port could be coordinated to maximize the profitability of this all-cargo activity.
- Expedited Trucking Hub/Container Freight Station: This option would involve the development of a truck freight center on or adjacent to airport property, but would not involve any air cargo activity.

The 1997 Feasibility Study projected future activity considering national trends at the time. Each forecast also involved the identification of an aircraft fleet mix based upon the projected tonnage. **Table 3-16** shows the annual tonnage and operations for the Mini-hub and International Gateway forecasts.

The 1998 MPU also projected all-cargo activity. This previous study took a different approach by assuming that any cargo activity would be related to business activity on airport property and in the adjacent industrial park. Thus, any freight would be to meet the on-time demand of a “niche” market, such as aircraft MRO services. Annual enplaned tonnage was estimated to start at 2,000 tons in 2000 and grow to 10,000 tons by 2020. **Table 3-16** shows the values for this master plan’s key study years.

For both of these previous forecasts, operations were estimated by assuming the fleet mix of jet and turboprop aircraft. The enplaned tonnage was distributed based upon the cargo capacity of the aircraft. For example, for the International Gateway projection, all flights were assumed to be on jet aircraft

**TABLE 3-16
PREVIOUS AIR CARGO ACTIVITY FORECASTS**

Year	1997 Feasibility Study: Mini-hub Scenario		1997 Feasibility Study: International Gateway		1998 MPU	
	Tonnage	Operations	Tonnage	Operations	Tonnage	Operations
2000	3,452	1,300	8,106	260	2,000	300
2001	3,846	1,348	8,790	278	2,169	318
2002	4,285	1,398	9,531	297	2,352	337
2003	4,774	1,450	10,334	318	2,551	357
2004	5,319	1,504	11,205	340	2,766	378
2009	6,394	1,765	13,520	405	4,149	696
2014	6,642	1,920	14,555	436	6,193	1,029
2019	6,803	2,052	15,438	463	9,233	1,409
2024	6,967	2,194	16,375	491	13,763	1,929
CAGR	1.36%	1.91%	1.91%	1.85%	8.35%	8.50%

Notes: Tonnage represents the enplaned cargo weight. Italicized values represent interpolate or extrapolated values and not those reported directly by the previous report.

Sources: AVCON, INC., Analysis, 2005; RS&H, Northeast Florida Aviation System Plan and Cecil Field Feasibility Study, 1997; RS&H, Cecil Field Strategic Airport Master Plan, 1998.

due to the haul length between destinations. The 1998 MPU assumed a mix of turboprop and jet aircraft would be utilized.

3.9.1.2 Air Cargo Trends

Several sources were consulted to identify current air cargo trends to help evaluate the potential of air cargo activity being initiated at Cecil Field. The FAA *Aerospace Forecasts 2004-2015* notes that historically there has been a correlation between the U.S. Gross Domestic Product and overall cargo activity. Using that as a basis, the FAA expected domestic cargo activity to increase at 3.4% annually over the period of 2004 to 2015 whereas international cargo activity was expected to grow at a faster rate of 5.4% annually. The 2004/2005 Boeing Air Cargo World Forecast estimates that worldwide air cargo would grow at an average rate of 6.2%. The largest segments of growth were within Asian markets. Domestic cargo activity was anticipated to grow much slower, 0.7% annually. This slower growth is due to the maturity of the cargo market within the United States.

Several of the largest all-cargo carriers currently have significant activity at airports within a three-hour drive of Jacksonville. The following list identifies some of this activity:

- ABX Air: Orlando International Airport
- Federal Express: Jacksonville International Airport, Savannah/Hilton Head International Airport, Orlando International Airport, and Tallahassee Regional Airport.

- United Parcel Service: Jacksonville International Airport, Southwest Georgia Regional Airport, and Orlando International Airport.

Another trend in air cargo operations is the future use of super jumbo aircraft by air cargo operators. Both Federal Express and United Parcel Service have placed firm orders for 10 each of Airbus 380 freighter versions. Cecil Field could accommodate these types of aircraft with only minimum airfield improvements.

3.9.1.3 Annual Air Cargo Tonnage and Operations

Considering the existing level of service by air cargo companies in close proximity to Jacksonville, it is unlikely that any of the major all-cargo carriers would initiate service at Cecil Field. It is, however, very likely that all-cargo activity would occur to support industrial activities of airport tenants as well as those in the Cecil Commerce Center. Given the high level of MRO and aircraft manufacturing currently at the airport, deplaned cargo could likely outpace enplaned tonnage.

Future levels of cargo activity were based upon an assumption of 500 tons being enplaned in 2005 growing to 2,000 tons in 2008. After this year, additional growth was based upon multiples of the annual growth rate of 3.4% given in the FAA *Aerospace Forecasts 2004-2015*, as shown in **Table 3-17**. The annual growth rates used through the remainder of the planning period were as follows:

- 2009–2014: 10.2% (three times 3.4%)

- 2015–2019: 6.8% (two times 3.4%)
- 2020–2024: 3.4%

The basis for these growth rates assumes that in the early years of this activity being initiated larger annual increases would be likely. This early growth would be spurred on by airport tenants and new companies in Cecil Commerce Center. In later years, as these developments mature and fewer new developments occur, air cargo levels would more likely reflect national trends.

Having projected the anticipated enplaned cargo levels, estimates of the annual cargo related operations were made. The annual tonnage was split between air carrier and air taxi operators. Air carrier aircraft were assumed to be B727 and would handle 60% of the annual tonnage. Cessna 208s, classified under air taxi, were assumed to handle the remainder of the annual enplaned cargo. As shown in the table, air taxi operations would be the primary mode of transporting such cargo through 2024.

3.9.2 Miscellaneous Air Carrier/Air Taxi Operations

According to available data, air carrier and air taxi operations did not begin at Cecil Field until 2002. Since that time they have continued to increase annually. These activities are mainly charter or training related. With the exposure from the 2005 Super Bowl, the operation of the FBO by a nationally known operator, the airport eventually acquiring a Part 139 certification, and the existing facilities, it is easily to foresee some growth in this activity category.

The projected annual growth rates as reported in the *FAA Aerospace Forecasts 2004-2015* were used to project future annual activity for these two operations categories. The future level of these miscellaneous air carrier operations was projected at 2.84% annually whereas air taxi operations were forecast at 3.04% annually. These annual growth rates reflect activity at contract air traffic towers only. **Table 3-17** provides the historical and forecast air carrier operations.

**TABLE 3-17
ANNUAL OPERATIONS: AIR CARRIER/AIR TAXI**

Year	Air Cargo			Civilian MRO/Manu.	Miscellaneous		Totals	
	Enplaned Tonnage	AC	AT	AC	AC	AT	AC	AT
Historical and Base Years								
2002	0	0	0	0	2	312	2	312
2003	0	0	0	0	29	590	29	590
2004	0	0	0	0	105	617	105	617
Forecast Years								
2005	500	43	286	0	108	1000	411	1286
2009	2,204	192	1,259	520	121	716	832	1,975
2014	3,471	302	1,984	547	139	831	987	2,815
2019	4,670	406	2,669	574	160	965	1,140	3,634
2024	5,520	480	3,154	604	184	1,121	1,268	4,275
CAGR	13.47%	13.47%	13.47%	4.53%	2.84%	3.03%	13.26%	10.16%

Note: CAGR=Compound Annual Average Growth Rate: 2005-2024 for Cargo and 2004-2024 for Miscellaneous and Totals.

Source: AVCON, INC., Analysis, 2005.

3.10 OPERATIONS SUMMARY

Sections 3.6 through 3.9 discussed the various operations occurring at Cecil Field on a regular basis. These individual forecasts have taken into account the latest available data as well as projected national trends. **Table 3-18** presents these individual projections and shows the total annual operations projected over the 20-year planning period.

This data shows that overall, total annual operations are forecast to increase by approximately 46,560 operations over the next 20 years. Much of this growth is related to increases in GA activity. This gives an overall CAGR of 2.23%. The projected activity growth at Cecil Field is reasonable considering the local conditions and projected economic growth in the general vicinity airports.

**TABLE 3-18
ANNUAL OPERATIONS SUMMARY**

Year	Air Carrier	Air Taxi	General Aviation	Military	Total Operations	FAA TAF	% FAA TAF
Base Year							
2004	105	617	42,303	40,895	83,920	83,167	100.9%
Forecast Years							
2009	832	1,975	62,538	40,900	106,246	87,451	121.5%
2014	987	2,815	69,061	40,900	113,763	91,875	123.8%
2019	1,140	3,634	76,204	40,900	121,878	96,739	126.0%
2024	1,268	4,275	84,031	40,900	130,473	101,802	128.2%
CAGR	13.26%	10.16%	3.49%	0.00%	2.23%	1.02%	---

Source: AVCON, INC., Analysis, 2005.

3.10.1 Comparison with FAA TAF

As discussed under **Section 3.5.4**, a comparison of the projected annual operations with the current version of the FAA TAF was conducted and the results are given in **Table 3-18**. Current FAA guidelines require additional review prior to approval if the proposed forecast differs from the FAA TAF by more than 10% at the five-year mark and by 15% beyond the first five years.

As given in the table, the 2009 annual operations exceed the FAA TAF by 21.5% and the 2014 activity exceeds it by 23.8%. Most of the difference between these forecasts is related to the projection of future GA activity that assumed several additional years of high growth before slowing to the FAA TAF annual growth rate. However, this difference should not be considered unreasonable given the overall market potential in the Jacksonville area.

3.10.2 Local/Itinerant Split

A key to determining appropriate facilities at an airport is related to the percentage of local versus itinerant activity. According to FAA definitions, local operations are conducted by aircraft staying within a single airport's traffic pattern, which is usually within a 20-mile radius of the airport. Itinerant operations are those that are not considered local; thus, the term "itinerant" generally refers to an aircraft that departs from one airport and travels to another.

The amount of local versus itinerant traffic was determined for each of the major activity categories at Cecil Field. These are given in **Table 3-19**. The various percentages change over time based upon the

assumptions of the individual forecasts, reported tower personnel observations, and general trends at mature corporate level GA airports.

Related to the local activity is the percentage of touch-and-go traffic, which is a traditional training activity. A touch-and-go involves an aircraft landing on the runway and then applying full power to take off without first coming to a full stop. The majority of local operations are touch-and-go activity; therefore, these operations can be estimated to equal the percentage for total local operations as shown in Table 3-19.

3.10.3 Instrument Activity

The FAA tracks the usage of annual instrument operations at individual towers to determine appropriate staffing levels. Additionally, these values are indicative of the utilization of navigational aids at a facility. The *FAA Aerospace Forecasts 2004-2015*, projects instrument activity for commercial operations to grow at 2.8% annually whereas an annual growth of 1.0% was projected for non-commercial operations.

Historical growth in instrument activity at Cecil Field showed an average annual growth of 34.1% between 2000 and 2004. Much of this growth can be attributed to the ILS coming online in 2002. During that same period, approximately 7.4% of the total annual operations were other types of instrument operations. Taking local and national conditions into account, future growth of instrument activity at Cecil Field was projected to grow at 3% annually over the 20-year planning period. The results of this annual instrument activity projection are presented in **Table 3-20**. This forecast predicts 11,745 instrument operations in 2024.

**TABLE 3-19
ANNUAL OPERATIONS: LOCAL-ITINERANT ACTIVITY**

Year	Air Carrier		Air Taxi		GA		Military		Total	
	Operations	Percent	Operations	Percent	Operations	Percent	Operations	Percent	Operations	Percent
Local-Base Year										
2004	0	0.0%	0	0.0%	23,267	55.0%	30,388	74%	53,655	0
Local-Forecast Years										
2009	0	0.0%	0	0.0%	31,269	50.0%	30,675	75%	61,944	0
2014	0	0.0%	0	0.0%	32,228	46.7%	30,675	75%	62,903	0
2019	0	0.0%	0	0.0%	33,022	43.3%	30,675	75%	63,697	0
2024	0	0.0%	0	0.0%	33,612	40.0%	30,675	75%	64,287	0
Itinerant-Base Year										
2004	105	100.0%	617	100.0%	19,036	45.0%	10,507	26%	30,265	105
Itinerant-Forecast Years										
2009	832	100.0%	1,975	100.0%	31,269	50.0%	10,225	25%	44,302	832
2014	987	100.0%	2,815	100.0%	36,832	53.3%	10,225	25%	50,859	987
2019	1,140	100.0%	3,634	100.0%	43,182	56.7%	10,225	25%	58,181	1,140
2024	1,268	100.0%	4,275	100.0%	50,419	60.0%	10,225	25%	66,186	1,268

Source: AVCON, INC., Analysis, 2005.

**TABLE 3-20
ANNUAL OPERATIONS:
INSTRUMENT ACTIVITY**

Year	Total Operations	Instrument Operations	% Instrument Activity
Base Year			
2004	83,920	6,503	7.7%
Forecast Years			
2009	106,246	7,539	7.1%
2014	113,763	8,739	7.7%
2019	121,878	10,131	8.3%
2024	130,473	11,745	9.0%
CAGR	2.23%	3.00%	---

Source: AVCON, INC., Analysis, 2005.

3.10.4 Operational Fleet Mix

As with the based aircraft projection, it is important to have an understanding of the aircraft types utilizing the airport. Historical operational fleet mix data is a good indication of future activity, but this data was not available due to the short timeframe that Cecil Field has been operational as a civil, public-use airport. This operational fleet mix is influenced by both national and local aviation trends. For example, one national trend likely to be observed at the Airport in the long-term is

the overall increase in business jet aircraft usage. Local factors that will heavily influence the operational fleet mix include the various activities of each tenant as has been previously discussed.

Table 3-21 presents the estimated annual number operations conducted by each aircraft type as well as the percentage to which this relates. The various groupings were determined to consist of the following operational types:

- **Single-Engine:** Military + GA
- **Multi-Engine:** Military + Air Taxi + GA
- **Jet:** Military + Air Taxi + Air Carrier + GA
- **Rotor:** Military + GA

3.11 PEAKING ANALYSIS

It is generally accepted that adequate airport facilities should be planned and provided to accommodate the demand of the “peak hour.” At airports, this peak hour is defined as the peak hour of an average day during the peak month as described in FAA AC 150/5300-13, *Airport Design*. Monthly ATCT records were reviewed to identify what the peak month was in each of the last five years and what percent of annual activity occurred in that month.

**TABLE 3-21
OPERATIONAL FLEET MIX**

Year	Single-Engine		Multi-Engine		Jet		Rotor		Annual Operations
	Operations	Percent	Operations	Percent	Operations	Percent	Operations	Percent	
Base Year									
2004	25,241	30.08%	14,903	17.76%	37,571	44.77%	6,205	7.39%	83,920
Forecast Years									
2009	33,796	31.81%	18,880	17.77%	46,354	43.63%	7,217	6.79%	106,246
2014	35,167	30.91%	19,697	17.31%	51,355	45.14%	7,543	6.63%	113,763
2019	36,477	29.93%	20,373	16.72%	57,128	46.87%	7,900	6.48%	121,878
2024	37,702	28.90%	20,877	16.00%	63,602	48.75%	8,292	6.35%	130,473

Source: AVCON, INC., Analysis, 2005.

The average peak month over this historical period averaged 10.8% of the annual operations. A different month each year had the peak activity from 2000 through 2004 at Cecil Field. However, three of the five years were months with 30 days in them. Thus, for this analysis the average day of the peak month (ADPM) was determined by dividing the peak monthly operations by 30. This assumes that operations are evenly distributed throughout the month, even though it is known that weekdays have a slightly heavier activity. For the peak hour an assumption was made that 8% of the ADPM operations would occur during the peak hour. **Table 3-22** shows the results of this peaking analysis.

Jacksonville area. Also, the forecasts were influenced by the projection that Cecil Field would become an executive level airport with numerous tenants providing MRO services and manufacturing aircraft.

Table 3-23 provides a summary presentation of the aviation activity forecasts for the Airport. This data is presented for each year of the planning period. These projections will serve as the basis to determine minimum facility requirements needed over the planning period.

**TABLE 3-22
PEAKING ANALYSIS**

Year	Annual Operations	Peak Month	ADPM	Peak Hour
Base Year				
2004	83,920	9,063	302	24
Forecast Years				
2009	106,246	11,475	383	31
2014	113,763	12,286	410	33
2019	121,878	13,163	439	35
2024	130,473	14,091	470	38

Note: ADPM=Average Day in the Peak Month

Source: AVCON, INC., Analysis, 2005.

3.12 SUMMARY OF FORECASTS

This chapter has presented projections of aviation activity at Cecil Field over the next 20 years. These forecasts took into account historical activity and existing conditions in the aviation sector and within the

TABLE 3-23
AVIATION ACTIVITY FORECAST SUMMARY

Year	Operations											Based Aircraft						
	Itinerant				Local		Total Operations	TAF	% Variance from FAA TAF	Instrument Operations	Peak Hour	Single-Engine	Multi-Engine	Jet	Rotor	Total	FAA TAF	% Variance from FAA TAF
	Air Carrier	Air Taxi/Commuter	General Aviation	Military	General Aviation	Military												
Base Year																		
2004	105	617	19,036	10,507	23,267	30,388	83,920	83,167	0.91%	6,503	24	4	7	1	26	38	116	-66.98%
Forecast Years																		
2005	411	1,286	21,532	10,225	25,277	30,675	89,406	84,079	6.34%	6,698	26	5	7	2	27	41	121	-66.12%
2006	523	1,226	23,931	10,225	26,986	30,675	93,565	84,991	10.09%	6,899	27	7	8	3	27	45	126	-64.29%
2007	635	1,531	26,816	10,225	29,051	30,675	98,932	85,795	15.31%	7,106	28	8	10	4	28	50	131	-61.95%
2008	746	1,837	30,039	10,225	31,265	30,675	104,787	86,616	20.98%	7,319	30	15	13	7	29	64	136	-52.94%
2009	832	1,975	31,269	10,225	31,269	30,675	106,246	87,451	21.49%	7,539	31	16	13	7	29	65	141	-53.90%
2010	861	2,125	32,323	10,225	31,473	30,675	107,682	88,302	21.95%	7,765	31	16	13	7	30	66	146	-54.79%
2011	891	2,289	33,406	10,225	31,671	30,675	109,157	89,170	22.41%	7,998	31	17	13	8	30	68	151	-54.97%
2012	924	2,468	34,518	10,225	31,863	30,675	110,672	90,055	22.89%	8,238	32	17	14	8	30	69	156	-55.95%
2013	959	2,664	35,660	10,225	32,049	30,675	112,231	90,956	23.39%	8,485	32	18	14	9	30	71	161	-55.90%
2014	987	2,815	36,832	10,225	32,228	30,675	113,763	91,875	23.82%	8,739	33	18	14	9	31	72	166	-56.73%
2015	1,017	2,975	38,036	10,225	32,401	30,675	115,330	92,811	24.26%	9,002	33	19	14	10	31	74	171	-56.79%
2016	1,049	3,145	39,272	10,225	32,567	30,675	116,934	93,765	24.71%	9,272	34	20	15	10	31	76	176	-56.84%
2017	1,082	3,326	40,542	10,225	32,726	30,675	118,576	94,737	25.16%	9,550	34	21	15	10	32	78	181	-56.89%
2018	1,117	3,518	41,845	10,225	32,878	30,675	120,257	95,729	25.62%	9,836	35	21	15	11	32	79	186	-57.48%
2019	1,140	3,634	43,182	10,225	33,022	30,675	121,878	96,739	25.99%	10,131	35	22	16	11	32	81	191	-57.51%
2020	1,164	3,754	44,555	10,225	33,157	30,675	123,530	97,768	26.35%	10,435	36	23	17	11	32	83	198	-57.96%
2021	1,189	3,878	45,964	10,225	33,284	30,675	125,216	98,761	26.79%	10,748	36	24	17	12	32	85	205	-58.33%
2022	1,215	4,006	47,411	10,225	33,403	30,675	126,934	99,765	27.23%	11,071	37	25	17	12	33	87	212	-58.72%
2023	1,241	4,138	48,895	10,225	33,512	30,675	128,686	100,778	27.69%	11,403	37	26	18	12	33	89	219	-59.12%
2024	1,268	4,275	50,419	10,225	33,612	30,675	130,473	101,802	28.16%	11,745	38	26	19	13	33	91	226	-59.79%
CAGR (04-24)	13.26%	10.16%	4.99%	-0.14%	1.86%	0.05%	2.23%	1.02%		3.00%	2.32%	9.81%	5.12%	13.68%	1.14%	4.42%	3.40%	

Notes:
1. Annual Air Carrier and Air Taxi/Commuter operations are assumed to be related to charters, MRO and potential air cargo activities.
Sources: AVCON, INC., Analysis, 2005; and FAA, TAF, Jan. 2005.

CHAPTER 4

FACILITY REQUIREMENTS

4.1 GENERAL CONSIDERATIONS

The goal of the facility requirements study phase is to determine the minimum developments needed at Cecil Field over the planning period to effectively accommodate the projected demand, presented in **Chapter 3, Aviation Activity Forecasts**. A variety of analyses are used to identify the type and minimum size of infrastructure needed. In addition, this analysis also includes an overview of applicable design standards to be followed during future development. Items considered in this evaluation include:

- Airfield Capacity and Delay
- Airspace Issues
- Airfield Infrastructure
- Landside Facilities
- Land Use and Zoning Requirements

A primary consideration throughout these analyses is the Jacksonville Aviation Authority (JAA) plan to obtain and maintain a Federal Aviation Regulation (FAR) Part 139 operating certificate, as mentioned in **Section 3.2.3**. The FAA and TSA have implemented various regulations covering design standards and operational requirements that an airport must maintain in order to keep an active Part 139 certificate. Improvements needed to meet these Part 139 requirements will be identified throughout the chapter.

Several other key factors were taken into account throughout this study phase, including:

- The continued role of Cecil Field in the future as a general aviation reliever airport focusing on the business jet and aviation-related industrial markets as well as the potential for air cargo service in the long-term.
- Further expansion of aviation-related industrial developments, as well as capitalizing on other economic development opportunities to

provide a significant revenue stream to support airport operations.

- The need to balance future airport improvements with other community needs, especially as related to airport land use and zoning requirements.
- The stated goal of JAA staff to transform the inboard parallel runways into general/utility runways, for use during day hours and visual flight rule (VFR) conditions only.
- The 1998 Master Plan included an ultimate fifth runway, oriented at 18-36 and located approximately 5,800 feet to the east of the existing airfield. This analysis provides a re-evaluation of this proposed airfield development.

Several sources were utilized as the basis of this facility needs determination. Federal Aviation Administration (FAA) Advisory Circulars (AC) were consulted in evaluating the facility requirements for the airport. Primarily, airfield design standards were based on FAA AC 150/5300-13, *Airport Design*, as well as FAA ACs 150/5340-1J, *Standards for Airport Markings*; 150/5340-18D, *Standards for Airport Sign Systems*; and 150/5325-4B, *Runway Length Requirements for Airport Design*. Applicable federal security regulations as implemented by the Transportation Security Administration (TSA) were also considered in these evaluations. Additionally, facilities at Cecil Field were evaluated for compliance with Florida Department of Transportation (FDOT) criteria per Florida Administrative Code (FAC) Chapter 14-60, *Airport Licensing, Registration, and Airspace Protection*. As applicable, other federal and state standards and standard aviation planning methodologies were used and are referenced in the following discussions.

These facility requirement analyses document the minimum facility need; however, as Cecil Field moves forward with the design for such facilities, the space requirements may need to be adjusted based upon updates of projected demand at that time or based on

general business decisions. While some of these facility requirements are associated with a certain year related to the activity forecasts, the actual development should not be undertaken until the aviation demand justifying the development actually materializes. Furthermore, the Strategic Planning Activity Level II (SPAL II) forecasts from the previous master plan are used as an alternate high-growth scenario for some of these analyses. Development alternatives to meet or exceed the identified facility requirements will be evaluated in Chapter 5.

4.2 AIRFIELD CAPACITY AND DELAY

An important operational consideration in effective airport planning is the overall airfield capacity. Airfield capacity describes the theoretical annual throughput of aircraft given the existing and proposed future airfield layouts. This theoretical throughput, referred to as the Annual Service Volume (ASV), is then compared to the projected annual demand level of operations to determine if aircraft delays would be expected to reach an unacceptable level. The ASV is not a constant number from year to year at the same airport because of changing operational characteristics. However, it does tend to remain relatively consistent unless major airfield configuration changes are made. The delay level considered to be unacceptable varies from airport to airport due to varying user expectations and acceptance levels. The following sections provide a general overview of the detailed FAA methodology presented in Chapter 3 of AC 150/5060-5, *Airport Capacity and Delay*.

4.2.1 Factors Affecting Airfield Capacity

To accurately estimate the capacity of the existing and planned airfield configurations at Cecil Field and to determine the future requirements for additional capacity, several types of information were gathered and analyzed. Factors such as the airfield configuration, taxiway layout, historical weather, aircraft fleet mix, and forecast annual operations must be examined. Taken together, these factors determine the ASV of the airfield.

4.2.1.1 Airfield Configuration

Airfield capacity is a direct function of the number of available runways. Generally, as the number of runways increase, so does the annual operational capacity. This increase in capacity is due to the greater level of flexibility both pilots and air traffic control have in performing or directing operations at an airport.

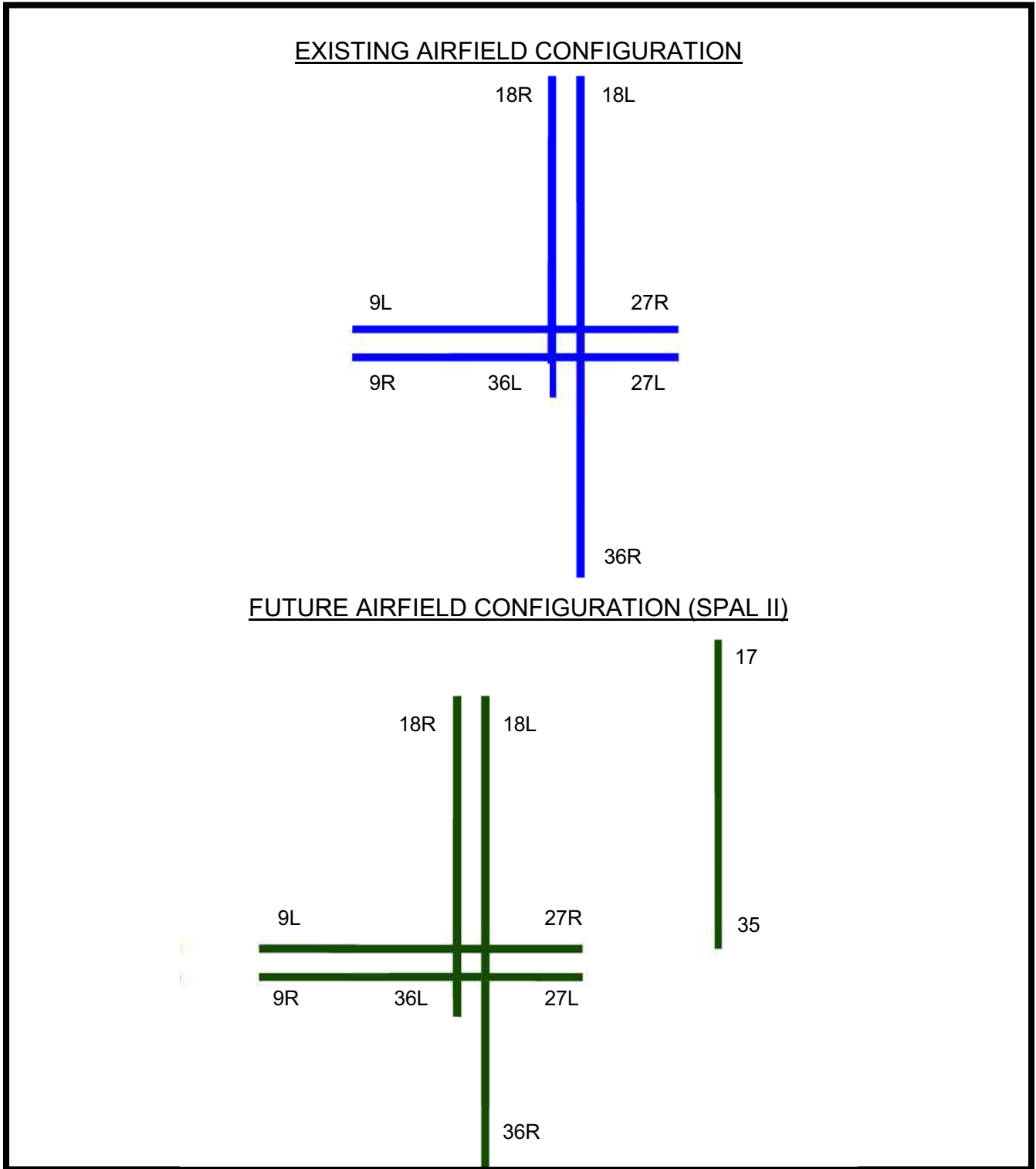
The current airfield configuration of Cecil Field is depicted in **Figure 2-2**. The general layout consists of two sets of parallel runways (18L-36R/18R-36L and 9L-27R/9R-27L) oriented 90° to each other. Runway 18L-36R is considered the primary runway and Runway 9R-27L is the primary crosswind runway. These runways are lighted and are equipped with various instrument approaches. The other runways, 18R-36L and 9L-27R, are equipped for daytime use during visual flight rule (VFR) conditions only. Throughout these discussions, the two visual only runways are referred to as the “inboard runways”, whereas the primary and primary crosswind are referred to as the “outboard runways.” A fifth runway parallel to Runway 18L-36R was considered in the previous master plan. This analysis includes an ASV determination with the fifth runway and the SPAL II forecasts in 2024. **Exhibit 4-1** shows schematic representations of the existing and proposed airfield configurations.

The methodology given in the AC 150/5060-5 considers the nature of operations conducted on the runways, not just the physical layout of the airfield. This is necessary because although the airport has four runways, all four are not used simultaneously and operation types vary. Discussions were held with air traffic control representatives to determine operational traffic patterns at Cecil Field. Assumptions for future scenarios were made based on the existing runway utilization.

4.2.1.2 Taxiways

The availability of taxiways can affect the airfield capacity by influencing the amount of time that an aircraft will spend on a runway. Simply stated, the quicker an aircraft can exit the runway the quicker another aircraft can conduct an operation; thereby increasing operational capacity. The taxiway exit time is related to the distance the taxiway is from the landing threshold on the corresponding runway as well as the types of aircraft operating on the runway. **Table 4-1** displays the different taxiway exits available to each runway. All of the exit taxiways at Cecil Field are arranged at right angles to the corresponding runway.

Additionally, the AC 150/5060-5 assumes that a runway being evaluated for capacity is equipped with a full-length parallel taxiway. Both parallel systems have full-length parallel taxiways to serve the associated parallel runways. Taxiway A serves Runways 18L-36R and 18R-36L and Taxiway B serves Runways 9L-27R and 9R-27L. Taxiways A and B are located to the interior of the inboard runways; thus, aircraft utilizing Runway 9R-27L and portions of Runway 18L-36R



Airfield Configuration Schematics

Exhibit 4-1

**TABLE 4-1
EXIT TAXIWAYS**

Taxiway Name	Distance from Runway 36R Threshold (feet)	Distance from Runway 18L Threshold (feet)
A5	0	12,430
A4	4,580	7,925
Runway 9R-27L	5,495	7,000
Runway 9L-27R	6,200	6,300
B	6,700	5,800
A3	8,560	3,940
A2	10,375	2,125
A1	12,450	0
Taxiway Name	Distance from Runway 36L Threshold (feet)	Distance from Runway 18R Threshold (feet)
A4	0	7,925
Runway 9R-27L	990	7,000
Runway 9L-27R	1,695	6,300
B	2,200	5,800
A3	4,060	3,945
A2	5,875	2,125
A1	7,950	0
Taxiway Name	Distance from Runway 9R/9L Threshold (feet)	Distance from Runway 27R/27L Threshold (feet)
B1	0	7,925
B2	1,950	6,050
A	4,395	3,605
Runway 18R/36L	4,895	3,105
Runway 18L/36R	5,600	2,400
B3	7,925	0

Source: AVCON, INC., Analysis, 2006.

have to stop at the corresponding inboard parallel prior to reaching the full-length parallel systems. During busy periods, this can have the effect of lowering the overall airfield capacity.

4.2.1.3 Historical Weather

The weather conditions at an airport can also affect its operational capacity. The wind dictates the runway end primarily used for arrival and departure operations, particularly for smaller aircraft that are often more susceptible to crosswinds. This is because operations are typically aligned into the wind. Additionally, during low visibility and low cloud ceiling conditions, aircraft separation increases and operations can be limited to only certain runways. Visibility and cloud ceilings determine whether the airport operates under Visual Flight Rules (VFR), Marginal VFR (MVFR), Instrument Flight Rules (IFR), or Low IFR conditions. **Table 4-2** lists the criteria for each of these conditions. AC 150/5060-5 considers VFR and MVFR jointly and IFR and Low IFR as one.

Because of its location, Cecil Field experiences relatively good weather throughout the year. Approximately 90% of the year the airport is under

VFR conditions. IFR conditions are experienced approximately 8% of the year, while less than 2% of the year operations are severely limited due to weather conditions falling below approved IFR weather minima.

**TABLE 4-2
CLASSIFICATION OF WEATHER CONDITIONS**

Condition	Visibility (statute miles)		Cloud Ceilings (ft AGL)
VFR	> 5	and	> 3,000
MVFR	≤ 5 but ≥ 3	and/or	≤ 3,000 but ≥ 1,000
IFR	< 3 but ≥ 1	and/or	< 1,000 but ≥ 500
Low IFR	< 1	and/or	< 500

Source: Federal Aviation Regulations, 2006; FAA, Aeronautical Information Manual, 2006.

4.2.1.4 Aircraft Fleet Mix

The aircraft fleet mix is another factor that can affect the capacity of an airfield. For a uniform fleet mix with aircraft of similar approach speeds, the sequencing of aircraft for arrivals can be performed relatively

efficiently. However, a diverse fleet mix will generally decrease the hourly capacity. This decrease in the capacity is due to the operational separation distances that must be maintained between aircraft. This distance, referred to as “in-trail” separation, varies based upon the aircraft weight. Airfield capacity decreases as the required in-trail separation increases. This in-trail separation is necessary to ensure that one aircraft does not pass through the wake turbulence of another aircraft. The wake turbulence created behind an aircraft disrupts the airflow to the following aircraft thereby making it unsafe for the aircraft to follow closely.

In order to account for the uniformity or diversity of an airport’s fleet mix and the impact that the fleet mix has on the airfield capacity, an aircraft “mix index” is calculated based on the distribution of aircraft weights and sizes operating at an airport. The mix index is a mathematical expression representing the portion of large aircraft in the fleet. The mix index for a particular fleet is calculated by adding the percentage of Class “C” aircraft to three times the percentage of Class “D” aircraft using the categories defined in **Table 4-3**

**TABLE 4-3
FLEET MIX CLASSIFICATIONS**

Class	Maximum Takeoff Weight	Engines	Wake Turbulence Classification
A	12,500 lbs or less	Single	Small
B	12,500 lbs or less	Multi	Small
C	12,500 to 300,000 lbs	Multi	Large
D	300,000 lbs or more	Multi	Heavy

Source: FAA AC 150/5060-5, *Airport Capacity and Delay*.

The current mix index for Cecil Field was approximated at 68. By 2024, the mix index is expected to increase to 70. These mix index values are higher than anticipated for most general aviation facilities. However, as shown throughout this study, Cecil Field does not meet the typical conditions due to the current concentration of industrial activity. In the future, the facilities at Cecil Field are also likely to attract the higher end of the general aviation market.

4.2.1.5 Touch-and-Go Operations

Cecil Field has a high percentage of touch-and-go operations related to the various flight training schools in the Jacksonville area. In addition to general aviation flight training, large numbers of military aircraft frequently visit Cecil Field to conduct touch-and-go operations. It was estimated for 2004 that 44% of

annual operations at Cecil Field were touch-and-go operations. Over time, this percentage is expected to decrease at a rate of 2% every five years, reaching approximately 36% by 2024.

4.2.1.6 Runway Separation Criteria

Chapter 2 of FAA AC150/5300-13 *Airport Design Advisory Circular*, requires minimum runway separations to operate simultaneous visual flight rule (VFR) and instrument flight rule (IFR) operations for departures or takeoffs. Cecil Field currently operates two sets of parallel runways, 18R-36L/18L-36R and 9R-27L/9L-27R. Simultaneous VFR operations of D-I through D-IV runways require a centerline-to-centerline separation of at least 700 ft. With the outboard runways having a D-IV designation, both sets of parallel runways meet this criteria with each separated by 700 ft. For VFR operations for Airplane Design Group V and VI, the minimum recommended separation increases from 700 ft to 1,200 ft. It should be noted that due to large wingtip vortex concerns, any 757 or similar aircraft operations will be treated differently by the ATC. During these operations, a parallel runway system with less than 2,500 ft of separation will be treated as a single runway.

Independent IFR operations considering simultaneous takeoffs or simultaneous landings require a centerline-to-centerline separation of at least 5,000 ft. The current runway configuration at Cecil Field will not support simultaneous (independent) IFR operations.

Simultaneous radar controlled IFR approaches and departures require the following separations. When the thresholds are not staggered, there must be at least 2,500 ft of separation. If the thresholds are staggered and the approach is to the near threshold, the 2,500 ft separation can be reduced by 100 ft for each 500 ft of threshold stagger to a minimum separation of 1,000 ft. For Airplane Design Groups V and VI runways, a separation of at least 1,200 ft is recommended. At Cecil Field, both sets of parallel runways have staggered and non-staggered thresholds so the most demanding case should control. Therefore, the minimum separation for simultaneous IFR arrivals and departures is 2,500 ft.

The proposed 5th runway will be located parallel and east of runway 18L-36R and will be offset 5,800 ft. This offset meets the current separation requirements for simultaneous VFR and IFR operations.

TABLE 4-4
Annual Service Volumes

Runway Diagram # & Diagram	Runways Utilized	Mix Index	% Touch-and-Go	Touch-and-Go Factor (T)	Exit Factor (E)	Weather	Percentage Utilization (P)	Hourly Capacity Based (C*)	Hourly Capacity of Runway (Cn)	% Maximum Cn	ASV Weighting Factor (Wn)	P*W	P*W	Weighted Hourly Capacity (Cw)	Daily Demand Ratio	Hourly Demand Ratio	ASV	
2004 (Base Year)																		
1	9R-27L 18L-36R	68	44%	1.40	0.91	VFR	8%	60	76.44	54%	20	122.30	1.60					
			0%	1.00	0.91	IFR	3%	55	50.05	35%	20	30.03	0.60					
			44%	1.40	0.91	VFR	10%	60	76.44	54%	20	152.88	2.00					
9	9L-27R & 9R-27L 18L-36R & 18R-36L	68	0%	1.00	0.91	IFR	7%	55	50.05	35%	20	70.07	1.40					
			44%	1.40	0.91	VFR	30%	111	141.41	100%	1	42.42	0.30					
			0%	1.00	1.00	IFR	0%	56	56.00	40%	25	0.00	0.00					
68	9R-27L, 9L-27R & 18L-36R 18L-36R, 18R-36L & 9R-27L	68	44%	1.40	0.91	VFR	40%	111	141.41	100%	1	56.57	0.40					
			0%	1.00	1.00	IFR	0%	56	56.00	40%	25	0.00	0.00					
			44%	1.40	0.91	VFR	2%	111	141.41	100%	1	2.83	0.02					
Sum												481.34	6.35	75.8	278	13	265,055	
2009																		
1	9R-27L 18L-36R	67	42%	1.40	0.91	VFR	10%	59	75.17	52%	20	150.33	2.00					
			0	1.00	0.91	IFR	3%	56	50.96	35%	25	38.22	0.75					
			42%	1.40	0.91	VFR	15%	59	75.17	52%	20	225.50	3.00					
9	9L-27R & 9R-27L 18L-36R & 18R-36L	67	0	1.00	0.91	IFR	7%	56	50.96	35%	25	89.18	1.75					
			42%	1.40	0.91	VFR	24%	113	143.96	100%	1	34.55	0.24					
			0	1.00	1.00	IFR	0%	56	56.00	39%	25	0.00	0.00					
68	9R-27L, 9L-27R & 18L-36R 18L-36R, 18R-36L & 9R-27L	67	42%	1.40	0.91	VFR	36%	113	143.96	100%	1	51.83	0.36					
			0	1.00	1.00	IFR	0%	56	56.00	39%	25	0.00	0.00					
			42%	1.40	0.91	VFR	2%	113	143.96	100%	5	14.40	0.10					
Sum												608.32	8.23	73.9	277	12	253,329	
2014																		
1	9R-27L 18L-36R	68	40%	1.31	0.91	VFR	10%	69	82.25	61%	20	164.51	2.00					
			0	1.00	0.91	IFR	3%	56	50.96	38%	25	38.22	0.75					
			40%	1.31	0.91	VFR	15%	69	82.25	61%	20	246.76	3.00					
9	9L-27R & 9R-27L 18L-36R & 18R-36L	68	0	1.00	0.91	IFR	7%	56	50.96	38%	25	89.18	1.75					
			40%	1.31	0.91	VFR	24%	113	134.71	100%	1	32.33	0.24					
			0	1.00	1.00	IFR	0%	57	57.00	42%	25	0.00	0.00					
68	9R-27L, 9L-27R & 18L-36R 18L-36R, 18R-36L & 9R-27L	68	40%	1.31	0.91	VFR	36%	113	134.71	100%	1	48.49	0.36					
			0	1.00	1.00	IFR	0%	57	57.00	42%	25	0.00	0.00					
			40%	1.31	0.91	VFR	2%	113	134.71	100%	1	2.69	0.02					
Sum												626.23	8.15	76.8	277	12	264,890	
2019																		
1	9R-27L 18L-36R	69	38%	1.31	0.91	VFR	10%	59	70.33	52%	20	140.67	2.00					
			0	1.00	0.91	IFR	3%	56	50.96	38%	25	38.22	0.75					
			38%	1.31	0.91	VFR	15%	59	70.33	52%	20	211.00	3.00					
9	9L-27R & 9R-27L 18L-36R & 18R-36L	69	0	1.00	0.91	IFR	7%	56	50.96	38%	25	89.18	1.75					
			38%	1.31	0.91	VFR	24%	113	134.71	100%	1	32.33	0.24					
			0	1.00	1.00	IFR	0%	59	59.00	44%	25	0.00	0.00					
68	9R-27L, 9L-27R & 18L-36R 18L-36R, 18R-36L & 9R-27L	69	38%	1.31	0.91	VFR	36%	113	134.71	100%	1	48.49	0.36					
			0	1.00	1.00	IFR	0%	59	59.00	44%	25	0.00	0.00					
			38%	1.31	0.91	VFR	2%	113	134.71	100%	1	2.69	0.02					
Sum												566.63	8.15	69.5	278	13	242,102	

TABLE 4-4 (CONTINUED)
ANNUAL SERVICE VOLUME

Runway Diagram # & Diagram	Runways Utilized	Mix Index	% Touch-and-Go	Touch-and-Go Factor (T)	Exit Factor (E)	Weather	Percentage Utilization (P)	Hourly Capacity Based (C ¹)	Hourly Capacity of Runway (C ₂)	% Maximum C ₂	ASV Weighting Factor (W _e)	P*C*W	P*W	Weighted Hourly Capacity (C _w)	Daily Demand Ratio	Hourly Demand Ratio	ASV	
2024																		
1	9R-27L 18L-36R	70	36%	1.31	0.91	VFR	10%	57	67.95	51%	20	135.90	2.00					
			0	1.00	0.91	IFR	3%	55	50.05	37%	25	37.54	0.75					
			36%	1.31	0.91	VFR	15%	57	67.95	51%	20	203.85	3.00					
9	9L-27R & 9R-27L 18L-36R & 18R-36L	70	0	1.00	0.91	IFR	7%	55	50.05	37%	25	87.59	1.75					
			36%	1.31	0.91	VFR	24%	112	133.52	100%	1	32.04	0.24					
			0	1.00	0.86	IFR	0%	57	49.02	37%	25	0.00	0.00					
68	9R-27L, 9L-27R & 18L-36R 18L-36R, 18R-36L & 9R-27L	70	36%	1.31	0.91	VFR	36%	112	133.52	100%	1	48.07	0.36					
			0	1.00	0.98	IFR	0%	57	55.86	42%	25	0.00	0.00					
			36%	1.31	0.91	VFR	2%	112	133.52	100%	1	2.67	0.02					
												Sum	551.66	8.15	67.7	278	12	232,408
High-Growth Scenario (SPAL II)																		
1	9R-27L 18L-36R	70	36%	1.31	0.91	VFR	10%	59	70.33	35%	25	175.83	2.50					
			0	1.00	0.91	IFR	3%	55	50.05	25%	25	37.54	0.75					
			36%	1.31	0.91	VFR	15%	59	70.33	35%	25	263.75	3.75					
9	9L-27R & 9R-27L 18L-36R & 18R-36L	70	0	1.00	0.91	IFR	3%	55	50.05	25%	25	37.54	0.75					
			36%	1.31	0.91	VFR	24%	113	134.71	66%	15	484.95	3.60					
			0	1.00	1.00	IFR	0%	57	57.00	28%	25	0.00	0.00					
68	9R-27L, 9L-27R & 18L-36R 18L-36R, 18R-36L & 9R-27L	70	36%	1.31	0.91	VFR	9%	113	134.71	66%	15	181.85	1.35					
			0	1.00	1.00	IFR	0%	57	57.00	28%	25	0.00	0.00					
			36%	1.31	0.91	VFR	2%	113	134.71	66%	15	40.41	0.30					
31	18L-36R, 18R-36L & Future Parallel	70	0	1.00	1.00	IFR	0%	57	57.00	28%	25	0.00	0.00					
			36%	1.31	0.91	VFR	3%	113	134.71	66%	15	60.62	0.45					
			0	1.00	1.00	IFR	0%	57	57.00	28%	25	0.00	0.00					
12	18L-36R & Future Parallel	70	36%	1.31	0.91	VFR	18%	170	202.66	100%	1	36.48	0.18					
			0	1.00	1.00	IFR	0%	113	113.00	56%	20	0.00	0.00					
			36%	1.31	0.91	VFR	9%	118	140.67	69%	15	189.90	1.35					
												Sum	1,608.06	15.98	100.6	278	12	345,513

Source: AVCON, INC., Analysis, 2006.

**TABLE 4-5
COMPARISON OF FORECAST OPERATIONS AND AIRFIELD CAPACITY**

Year	Annual Demand	ASV	Demand to ASV		Delay Per Aircraft (Minutes)	Total Annual Delay (Hours)
			Ratio	Percentage		
2004	83,920	265,055	0.32	32%	0.10	139.9
2009	106,246	253,329	0.42	42%	0.15	265.6
2014	113,763	264,890	0.43	43%	0.15	284.4
2019	121,878	242,102	0.50	50%	0.20	406.3
2024	130,473	232,408	0.56	56%	0.20	434.9

Source: AVCON, INC., Analysis, 2006.

4.2.2 Annual Service Volume

Using the method described in Chapter 3 of FAA AC 150/5060-5 *Airport Capacity and Delay*, the airfield capacity for Cecil Field was evaluated.

The primary measure of airfield capacity utilized in this analysis is the Annual Service Volume (ASV). The ASV is an estimate of the total annual airfield capacity based on the factors previously discussed. Based on these factors and the methodology in Chapter 3 of the reference AC, the hourly runway capacity is first determined. This hourly capacity is then translated into the annual estimated capacity by calculating the ASV.

Based on the calculated mix index and an estimated arrival percentage of 50%, the Hourly Capacity Base (C*) for each operational airfield configuration under VFR and IFR conditions was determined for each operational runway configuration identified in **Table 4-4**. A variable Touch-and-Go Factor (T) is given under VFR conditions depending on the runway configuration in use. For IFR conditions, no touch-and-go operations are assumed and consequently are assigned a T value of 1.00. The Exit Factor (E), based on the amount of exit taxiways available on arrival runways, is also given based on the aircraft fleet mix index in the Runway Use Diagrams.

The hourly capacity of each operational runway configuration and weather condition is determined by multiplying the Hourly Capacity Base (C*), the Touch-and-Go Factor (T), and the Exit Factor (E). Each of these individual capacities is combined into one weighted airfield capacity by considering the percentage of time that each airfield configuration is used and by applying an ASV Weighting Factor (W_n) from Table 3-1 of AC 150/5060-5. The ASV is obtained by multiplying the Weighted Hourly Capacity (C_w) times the Daily Demand Ratio and the Hourly Demand Ratio. **Table 4-4** provides the values for these factors and the ASV determination for each key study year as well as for the proposed fifth runway scenario.

4.2.3 Capacity Assessment

As shown in Table 4-4, the ASV for Cecil Field throughout the planning period under its current configuration is projected to decline slightly from approximately 265,000 operations in 2004 to approximately 232,000 operations in 2024. The development of a fifth runway associated with SPAL II would increase the ASV to approximately 345,500

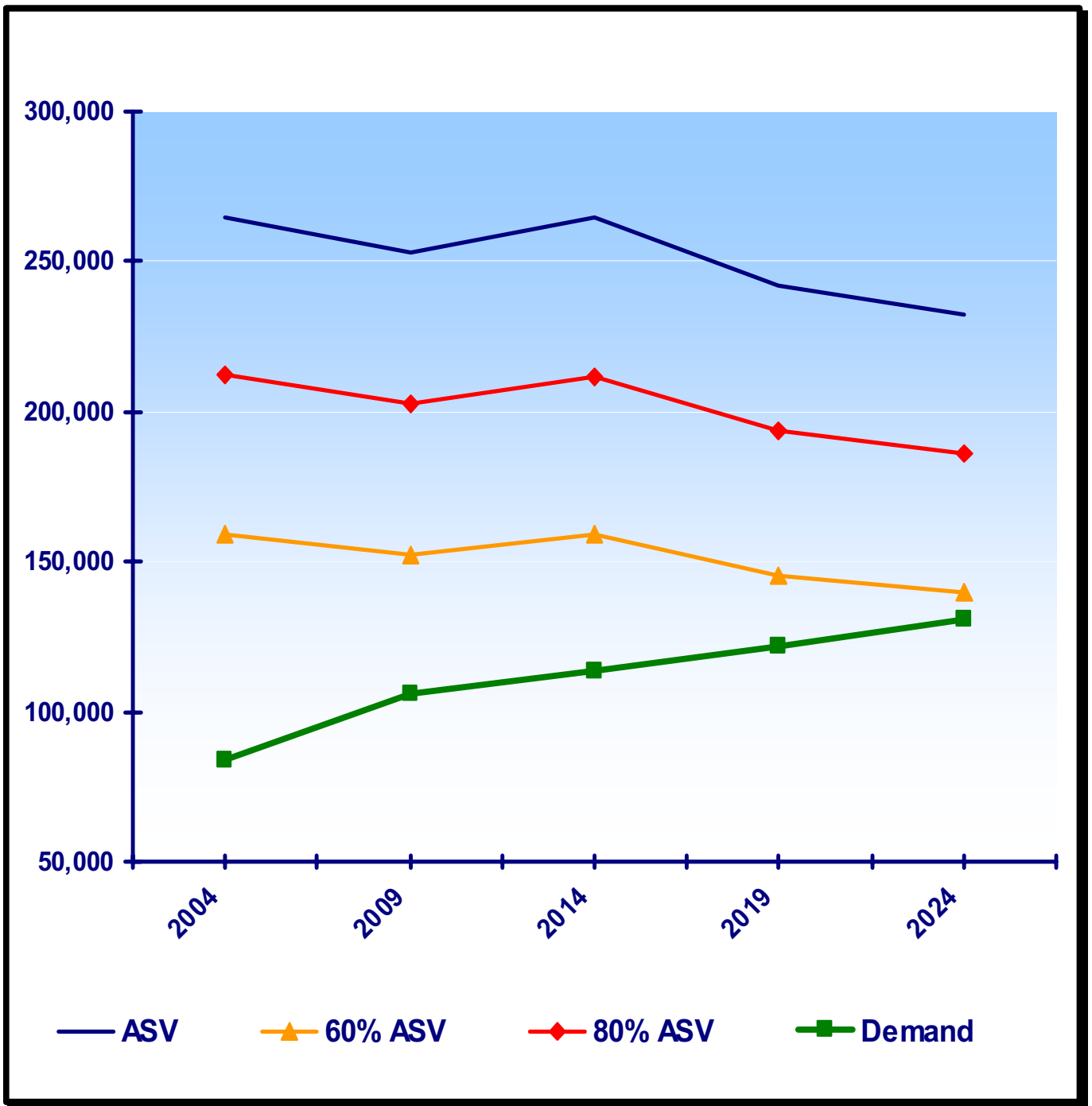
annual operations. A ratio of the forecast demand to the ASV is determined and is presented in **Table 4-5**. This ratio is used as an indicator of when an airfield will require capacity enhancements, such as an additional runway.

Guidelines in FAA Order 5090.3B *Field Formulation of the National Plan of Integrated Airport Systems* suggest that when this ratio, expressed as a percentage, reaches 60% then planning studies should be initiated to address capacity enhancement. This guidance also recommends that design and construction of the identified capacity enhancements should be underway when the demand reaches 80% of the ASV. However, the ultimate timing of construction should be determined by the airport operator in consultation with users.

By the end of the 20-year planning period, this percentage begins to near 60%, as shown in **Table 4-5**. A graphical presentation of the ASV, 80% ASV, 60% ASV, and the projected demand is given in **Exhibit 4-2**. This indicates that if operations grow as predicted in the forecasts, then the Aviation Authority will need to begin planning for capacity enhancements. However, no airfield capacity enhancements are expected to be needed during the 20-year planning period.

4.2.4 Estimated Delay

Many factors combine to create and influence the amount of delay at an airport.



Demand-ASV Comparison

Exhibit 4-2

Table 4-6: Current Instrument Approach Procedures

	9L	27R	9R	27L	18L	36R	18R	36L
PART 77 Approach Category	Visual	Visual	Non-Precision	Non-Precision	Non-Precision	Precision	Visual	Visual
Instrument Approach Type	None	None	GPS/VOR	GPS	GPS	ILS	None	None
Approach Minima	1000'-3mi	1000'-3mi	422'-1mi	430'-1mi	420'-1mi	200'-1/2mi	1000'-3mi	1000'-3mi
Approach Slope	20:1	20:1	34:1	34:1	34:1	50:1	20:1	20:1

Table 4-7: Proposed Instrument Approach Procedures

	9L	27R	9R	27L	18L	36R	18R	36L	17	35
PART 77 Approach Category	Visual	Visual	Precision	Precision	Non-Precision	Precision	Visual	Visual	Precision	Precision
Instrument Approach Type	None	None	ILS/LPV	GPS/LPV	GPS/LPV	ILS/GPS	None	None	GPS	GPS
Approach Minima	1000'-3mi	1000'-3mi	200'-1/2mi	200'-1/2mi	200'-1/2mi	200'-1/2mi	1000'-3mi	1000'-3mi	200'-1/2mi	200'-1/2mi
Approach Slope	20:1	20:1	50:1	50:1	50:1	50:1	20:1	20:1	50:1	50:1

These factors include airfield layout, the operational policies of Air Traffic Control, weather, and other factors. Although the airfield is only one of many factors, the ASV and total annual operations can be compared and used to provide an estimate of delay.

The demand-to-ASV ratio is also used to estimate the anticipated delay per aircraft and on an annual basis. This delay estimation is based upon Figure 2-2 of AC 150/5060-5 and is presented in Table 4-5. This data shows that the projected amount of delay under the current configuration at Cecil Field is less than one-half minute. However, as shown in the table, the annual delay increases three-fold. This indicates that the frequency of delays will increase over the planning period.

4.3 AIRSPACE

As previously discussed in Chapter 2 of this report, Cecil Field lies within controlled Class D and E airspace. The airspace factors for Cecil Field include the approved approach procedures. The FAA has developed close-in airspace requirements based upon

these procedures to ensure a safe operating environment for airport users.

4.3.1 Approach Procedures

Pilots conduct approaches to airports relying upon either visual or instrument information.

Pilots operate under different operation standards depending upon whether they are flying under Visual Flight Rules (VFR) or Instrument Flight Rules (IFR). When operating under VFR conditions, a pilot bases his/her navigation on visual observations. During IFR operations, navigation is based on data from instrumentation. Sometimes IFR standards are utilized even if VFR weather conditions are prevailing. IFR standards include a variety of instrument-based approaches, which are airport specific.

There are multiple instrument approach procedures at Cecil Field including precision Instrument Landing System (ILS), non-precision Global Positioning System (GPS), and Very-high Frequency Omni-Directional Range (VOR) approaches. The current instrument approach procedure type and visibility minimums for the runway ends are listed in **Table 4-6**.

Throughout the planning period, the instrument approaches to Cecil Field will be updated with GPS/LPV approaches if they are not already equipped with one. This is anticipated to lower the visibility minimums to ½ mile. A summary of the proposed instrument approach procedures is presented in **Table 4-7**. Planning to protect the airspace for future approaches must be undertaken so the airspace for future developments such as new approaches and a third parallel runway to 18L-36R can be preserved. Through actions such as zoning, local government can protect the airspace of Cecil Field for existing and future operations.

4.3.2 Part 77 Surfaces

Code of Federal Regulations (CFR) Title 14, Chapter 1, Part 77, *Objects Affecting Navigable Airspace*, provides criteria for defining an airport’s airspace. These criteria include, but are not limited to, the definition of imaginary surfaces and vertical clearance requirements over buildings, trees, and other structures. The airport’s imaginary surfaces are based upon the future approach procedures to each runway end. Although these surfaces do not represent clearance requirements, it is strongly advisable to keep the surfaces clear of obstructions.

4.4 AIRFIELD REQUIREMENTS

The primary facility at Cecil Field is the airfield, which consists of the various runways and taxiways. These facilities are necessary for the operation of any airport as they support the maneuvering of aircraft at the facility. This section provides an assessment of needed airfield improvements identified for Cecil Field.

4.4.1 Airfield Configuration

Wind speed and direction is a primary factor in determining the appropriate runway orientation on any airfield. **Section 1.5.3** presented the wind coverage results for the current runway orientations at Cecil Field. FAA guidance in AC 150/5300-13 states that if a single runway does not provide 95% wind coverage for the forecast aircraft types then a crosswind runway is recommended. As stated in Chapter 1, under a 10.5 knot crosswind during VFR and All Weather conditions Runways oriented at 18-36 do not provide adequate wind coverage. Additionally, under a 10.5 knot crosswind during IFR conditions Runways oriented at 9-27 do not provide adequate coverage. Because of these reasons both Runways oriented at 18-36 and 9-27 are needed to provide a safe operating environment.

4.4.2 FAA Airfield Classification

Airfields are typically designed to accommodate the most demanding aircraft regularly utilizing the facility. This section reviews the FAA system used to categorize aircraft and then presents the identification of both the existing and projected critical aircraft for Cecil Field over the planning period. Finally, the FAA classification for each runway at the airport is identified.

4.4.2.1 Critical Aircraft

As noted, airfield design criteria is based on the critical aircraft type using or anticipated to use the airfield component. According to FAA guidance, this critical aircraft should conduct or should be expected to conduct at least 500 operations annually. Sometimes the critical aircraft is chosen to represent a group of aircraft having similar characteristics instead of identifying a unique aircraft make and model. In some cases, the critical aircraft for one airport component is not the same one use component.

Each runway was analyzed independently to determine the critical aircraft anticipated to utilize it on a regular basis. This is done to evaluate whether changes to a runway width or length are justified. At Cecil Field, it has been observed that the inboard runways serve slightly different aircraft types than the outboard runways. For this analysis, the inboard runways, 18R-36L and 9L-27R and the outboard runways, 18L-36R and 9R-27L, are each considered independently.

Cecil Field accommodates a significant amount of military operations; however, FAA guidance on identifying the critical aircraft excludes these operations from consideration. Therefore, the most demanding civilian aircraft types utilizing each runway are considered and are presented in **Table 4-8**.

**TABLE 4-8
CRITICAL AIRCRAFT**

Existing-2004	
Runways	Critical Aircraft
Inboards (18R-36L/9L-27R)	Boeing 767-400
Outboards (18L-36R/9R-27L)	Boeing 767-400
Future-2024 and beyond	
Inboards 18R-36L 9L-27R	Gulfstream GV King Air 300
Outboards (18L-36R/9R-27L/17-35)	Boeing 767-400

Source: FAA AC 150/5300-13, *Airport Design*, Avcon, Inc. Analysis.

**TABLE 4-9
FAA AIRCRAFT CLASSIFICATIONS**

Aircraft Approach Category	
Category	Approach Speed (knots)
A	< 91
B	91 but < 121
C	121 but < 141
D	141 but < 166
E	> 166
Airplane Design Groups	
Design Group	Wingspan (feet)
I	< 49
II	49 but < 79
III	79 but < 118
IV	118 but < 171
V	171 but < 214
VI	214 but < 262

Source: FAA AC 150/5300-13, Airport Design.

The inboard runways are currently utilized as daytime/VMC runways only. Both of the inboard runways do not have lights. These runways are utilized during busy periods when the weather is favorable. Usually these activities occur in smaller general aviation aircraft, such as single-engine piston aircraft. Some activities occur in slightly larger, multi-engine aircraft, including some turboprops. No records are kept of the exact aircraft types that utilize the inboard runways, though recent observations support that various multi-engine turboprop use these runways. Therefore, the Beechcraft King Air 300 is selected to represent the aircraft group currently utilizing the inboard runways. In the future, it is anticipated that Runway 18R-36L will accommodate the family of business jets which are expected to operate at the Airport. As a result, the Gulfstream GV is considered the critical aircraft for future operations on Runway 18R-36L.

For the outboard runways, this determination was

**TABLE 4-10
RUNWAY ARCS**

Existing-2004	
Runways	ARC
Inboards (18R-36L/9L-27R)	D-IV
Outboards (18L-36R/9R-27L)	D-IV
Future-2024	
Inboards 18R-36L	C-III
9L-27R	B-II
Outboards (18L-36R/9R-27L/ 5th Runway)	D-IV

Source: FAA AC 150/5300-13, Airport Design.

based on selecting a wide-body commercial aircraft to represent those operations that occur or are anticipated to occur. Several tenants currently conduct MRO operations with these aircraft, as well as narrow-body commercial aircraft. In 2006, 506 air carrier operations were conducted and these operations are increasing due to developing tenant activities. Thus, it is appropriate to select the Boeing 767-400 as the critical aircraft for the two outboard runways. This aircraft will also be considered for the fifth runway once it is constructed.

4.4.2.2 ARC Determination

The Airport Reference Code (ARC) is an FAA classification system used to describe an aircraft's physical and operating characteristics. The ARC consists of an alphanumeric designation based on the Aircraft Approach Category (AAC) and the Airplane Design Group (ADG). The AAC, which is given as a letter, is based on an aircraft's approach speed under set conditions whereas the ADG, reported in Roman numerals, is based on the aircraft's wingspan. **Table 4-9** provides the criteria for each of these categories.

Using the critical aircraft for the runways at Cecil Field, the respective ARCs are determined. **Table 4-10** presents the ARC of the critical aircraft for the inboard and outboard runways based on operations in the base year, 2004, and for the future in 2024 based on the projected activity demand.

4.4.3 Runway Length Requirements

The required length for a runway is based on many factors. FAA AC 150/5325-4B, *Runway Length Requirements for Airport Design*, provides guidelines to determine recommended runway lengths. The FAA's *Airport Design* software which uses the methodologies from AC 150/5325-4B to produce runway length recommendations based on key variables such as airport elevation, temperature, change in runway elevation, length of haul, and runway conditions. These factors for Cecil Field were determined and are presented in **Table 4-11**.

The data presented in Table 4-11 is not specific to a single aircraft but rather a general grouping of aircraft by weight. For the inboard runways, 18R-36L and 9L-27R, the most appropriate classification is the "Small aircraft with 10 or more passenger seats". As shown, a runway length of 4,270 feet is needed to accommodate these aircraft. The current inboards exceed this runway length. Additionally, airport management has expressed a need to lower the overall cost of on-going pavement maintenance costs. Given these factors, alternatives to evaluate shortening these runways should be considered.

**TABLE 4-11
RUNWAY LENGTH ANALYSIS**

Runway Length Criteria	Value Used
Airport Elevation	81 feet
Mean Daily Maximum Temperature of the Hottest Month	90°F
Maximum Difference in Runway Centerline Elevation	7
Average Length of Haul	1000 miles
Runway Conditions	Wet and Slippery
Aircraft Description	Runway Length (feet)
Small airplanes with approach speeds of less than 30 knots	300
Small airplanes with approach speeds of less than 50 knots	810
Small airplanes with less than 10 passenger seats:	
75% of these small airplanes	2,530
95% of these small airplanes	3,090
100% of these small airplanes	3,670
Small airplanes with 10 or more passenger seats	4,270
Large airplanes of 60,000 pounds or less:	
75% of these large airplanes at 60% useful load	5,360
75% of these large airplanes at 90% useful load	7,000
100% of these large airplanes at 60% useful load	5,510
100% of these large airplanes at 90% useful load	8,400
Airplanes of more than 60,000 pounds	5,980

Source: Chapter 2, AC 150/5325-4A, Change 1, Runway Length Requirements for Airport Design.

The critical aircraft for Runways 18L-36R and 9R-27L, the outboards, is the Boeing 767-400. The Boeing 767 falls into the large airplanes of more than 60,000-pound category with its 450,000-pound maximum takeoff weight. As presented in Table 4-11 a runway length of 5,980 feet is recommended based on the Airport Design software calculations. However, FAA guidance in AC 150/5325-4B recommends that the runway length for aircraft in this category be determined based upon data found in the critical aircraft's Airport Planning Manual (APM).

Boeing provides an APM to determine runway length requirements specific to this aircraft. At the Boeing 767's maximum takeoff weight on a 90°F day with wet and flat runways, approximately 11,400 feet is needed for takeoff. On a wet runway at its maximum landing weight with 30° of flaps the Boeing 767 requires approximately 7,100 feet of runway for landing. The outboard runways, 18L-36R and 9R-27L, are of sufficient length to support normal operations of this aircraft.

Under some conditions, Runway 9R-27L might not be long enough, however, in those cases the aircraft could land or takeoff on Runway 18L-36R.

4.4.4 Runway Design Standards

As previously mentioned in Section 2.1.2.5, there are many different runway criteria that apply for the safe operation of a runway. As Cecil Field progresses into the future, the current criteria must be updated as necessary to meet the FAA's requirements. In addition to the safety criteria mentioned in Section 2.1.2.5, Part 77 surfaces protect the airspace in and around an airport. Protection of the Part 77 surfaces along with the Runway Protection Zone (RPZ) is important in the protection of a runway's approach capabilities. The Part 77 surfaces are established to minimize potential obstructions such as buildings, trees, power lines, etc., from interfering with aircraft operations. In addition to the Part 77 surfaces, there are other design criteria based upon an airport or particular runway's design aircraft. Table 4-12 lists the applicable runway design criteria for Cecil Field.

Runway RPZs must be clear of vegetation or other obstructions to ensure safety of the aircraft and compliance with FAA standards. While the safety areas are maintained substantial tree growth exists close to the boundary. These safety areas should continue to be maintained to prevent any obstructions.

4.4.5 Taxiways

Taxiways play a very important role in the efficient functioning of an airport. A taxiway should provide for

**TABLE 4-12
RUNWAY DESIGN STANDARDS**

Design Parameter	Runway 18L-36R, 9R-27L (D-IV)	Runway 18R-36L (C-III)	Runway 9L-27R (B-II)
Width	150'	100'	75'
Shoulder Width	25'	20'	10'
Pavement Grades			
Maximum Longitudinal:	0 to 1.5% ¹		0 to 2%
Transverse:	1 to 1.5%		1 to 2%
Runway Safety Area Width	500'		150'
Runway Safety Area Length Prior to Landing Threshold:	600'		300'
Beyond Runway End:	1,000'		300'
Obstacle Free Zone Width		400'	
Obstacle Free Zone Length (Beyond RW Threshold)		200'	
Object Free Area Width	800'		500'
Object Free Area Length Beyond Runway End	1,000'		300'
Runway Protection Zone Dimensions (Visual, ≥ 1 mile visibility)	1,700' x 500' x 1,010' Acreage: 29.465		1,000' x 500' x 700' Acreage: 13.770
Runway Protection Zone Dimensions (< 1 mile ≥ ¾ mile visibility)		1,700' x 1,000' x 1,510' Acreage: 48.978	
Runway Protection Zone Dimensions (< ¾ mile visibility)		2,500' x 1,000' x 1,750' Acreage: 78.914	
Runway Centerline Separation Distance From:			
Hold Line		250'	200'
Taxiway/Taxilane Centerline	400'	300'	240'
Aircraft Parking Area	500'	400'	250'

Source: FAA, AC 150/5300-13, *Airport Design*, 2006.

¹ - Except last 25% of runway: 0% to 0.8%

free movement to and from runways, terminal apron, and many other airfield facilities. FAA AC 150/5300-13 *Airport Design*, states that taxiways should meet the following design principles:

- Provide each runway with a full length parallel taxiway (or the equivalent capability)
- Provide bypass capability or multiple access to runway ends
- Minimize the necessity to cross runways
- Avoid traffic bottlenecks

The design of a taxiway is based on the runway or facility that it is associated with and the critical aircraft that uses those facilities. At Cecil Field, the design aircraft for much of the airfield is a Boeing 767-400, which is of the Aircraft Design Group (ADG) D-IV while areas such as Runway 18R-36L, assumes a Gulfstream GV which is a C-III aircraft, and Runway 9L-27R assumes a King Air 300 which is a B-II aircraft for its design standards. **Table 4-13** lists the taxiway design standards for groups II, III, and IV aircraft.

Cecil Field has an excellent taxiway system that currently meets all applicable design standards. Future developments-such as the previously mentioned cargo facility located to the northeast-will require access to the current airfield via a new system of taxiways. Like the current taxiways, this new system should be designed to match or exceed all required design characteristics for the design group of aircraft the facilities will serve.

Because Cecil Field's taxiways currently meet all required design standards, no major taxiway improvements projects are necessary. However, with the needs for additional hangars, the taxiway system will be expanded to accommodate growth. Maintenance of the taxiway pavement should be completed as necessary to assure the taxiways are able to support aviation activity throughout the planning period. Jacksonville Aviation Authority has plans to complete taxiway maintenance including the maintenance of the taxiway pavement joints during the Fiscal Year 2008.

4.4.6 Navigational Aids

Navigational Aids (NAVAIDS) are used by pilots to assist in the flight of their aircraft. There are many

types of NAVAIDS that perform different functions. These include instrument approaches and visual landing aids, lighting, terminal navigation aids, and enroute navigational aids. As noted in the Chapter 2, the following NAVAIDS are currently installed at the Cecil Field:

- Airport Beacon
- Precision Approach Path Indicator (PAPI) to Runways 9R-27L and 18L-36R
- Approach Lights, REILS to Runways 9R-27L, 18L, MALSR to Runway 36R
- Instrument Landing System (ILS) to Runway 36R
- Very-high Frequency Omni-Directional Range (VOR)
- Automated Surface Observing System (ASOS)
- Lighted Windcones

Throughout the planning period, many of the runways are projected to have additional or new NAVAIDS installed. A PAPI system is recommended for each of the following runways: 9L-27R and 18R-36L. Runway ends 9R, 27L, and 18L will have a Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) installed because by changing the approach type to a precision approach this system meets the approach light requirements.

4.4.7 Pavement Condition and Strength

The existing and anticipated operational fleet mix for a designated runway is used in determining the necessary runway pavement strength. The pavement strength calculations take into account not only the type of aircraft but also the number of annual operations projected for each aircraft type. The landing gear configuration of each aircraft type also plays an important role in the pavement strength because the aircraft weight is distributed on all the wheels in the landing gear. **Section 2.1.2** discussed the current runway strengths based upon landing gear configurations. Based upon the projected fleet mix for the planning period, the current pavement strengths are suitable for future operations.

**TABLE 4-13
TAXIWAY CHARACTERISTIC BY DESIGN GROUP**

Taxiway Characteristic	Dimensions		
	Group II	Group III	Group IV
Width	35'	50'	75'
Safety Margin Edge	7.5'	10'	15'
Shoulder Width	10'	20'	25'
Safety Area Width	79'	118'	171'
OFA Width	131'	186'	259'
Taxilane OFA Width	115'	162'	225'
Wingtip Clearance	26'	34'	44'
Taxilane Wingtip Clearance	18'	22'	27'
Turn Radius	75'	100'	150'
Fillet Length	50'	150'	250'
Transverse Grade	1% - 2%	1% - 1.5%	
Separation between Taxiway Centerline and:			
Runway Centerline	300'	400'	
Parallel Taxiway	105'	152'	215'
Fixed or Movable Object	65.5'	93'	129.5'

Source: FAA AC 150/5300-13, Airport Design

Cecil Field intends to pursue Part 139 certification. For an airport to maintain its FAR Part 139 certification the certificate holder must take many steps to ensure the safety of the airfield pavements. Part 139 requires the certificate holder to maintain and promptly repair the pavement of each runway, taxiway, loading ramp, and parking area available for air carrier use. Daily inspections of the airfield pavements are required to make sure that they are in good operating condition. FAR Part 139, Subpart D, Section 139.305 provides the criteria that must be met for pavement maintenance.

4.4.8 Lighting, Marking, and Signage

The lighting, pavement markings, and signage play an important role on an airfield. These systems assist pilots with the navigation and safety of an airfield system. The current inventory of these systems is mentioned in Chapter 2 of this report. As mentioned, additional systems need to be installed or upgraded. In addition to the minimum standards required by the FAA, an airport which maintains a FAR Part 139 certificate must meet more stringent standards for airfield lighting, marking, and signage.

4.4.8.1 Airfield Lighting

Airfield lighting plays a major role in the safety of an airfield. Airfield lights provide pilots with visual

references to obstructions, pavement edges, and other hazards. An airfield lighting system consists of many components. Included in an airfield lighting system are approach lights, runway lighting, taxiway lighting, and a rotating beacon.

Many of the lighting systems at Cecil Field were installed by the military many years ago and have become inoperable because of their age. As a result, the Jacksonville Aviation Authority (JAA) is conducting a multiyear project to update the runway and taxiway lighting systems. Currently, the airport is on electrical rehabilitation phase 5 and the airfield is almost completely rewired with new cable runs, cans and lights.

Airports operating under a Part 139 Certificate must maintain certain standards for airport lighting. A certificate holder must provide and maintain lighting systems for air carrier operations when the airport is open at night or conditions below VFR minimums. The types of lighting systems required are runway lights, taxiway lights, an airport beacon, approach lighting, and obstruction marking and lighting. In addition to providing these lighting systems the certificate holder is responsible for proper maintenance of the lighting systems.

4.4.8.2 Airfield Markings

Most of the airfield markings at Cecil Field, which consist of runway and taxiway markings, have been recently repainted. The outboard runways were remarked in 2005 as part of a Capital Improvement Project. These markings and any future markings or remarking should be painted in accordance with federal standards in FAA AC 150/5340-1H, *Standards for Airport Markings*. All of the runways have the proper markings for their respective approach type as well as their planned future approach.

Like airfield lighting, a Part 139 certificate holder must maintain markings for air carrier operations on the airport. These markings include runway markings that meet the specifications for takeoff and landing minimums for each runway, a taxiway centerline, taxiway edge markings, holding position markings, and markings for the ILS critical area.

4.4.8.3 Airfield Signage

As mentioned in Chapter 2 of this report, JAA replaced the existing signage at Cecil Field in 2003. No new signage or replacement of any signage is needed at the current time. Periodic inspection of the airfield signage should be conducted to make sure that its current condition is maintained.

Part 139 certification requires that an airport maintain certain signage requirements. Certificate holders must provide and maintain sign systems for air carrier operations. These sign types include signs identifying taxiing routes on the movement, holding position signs, and ILS critical area signs. Additionally, these signs must be lit if the airport performs night operations.

4.5 LANDSIDE FACILITIES

With the increase in business and industrial development at Cecil Field and the surrounding Commerce Center, the potential for a significant increase in the amount of general aviation (GA) traffic can be expected. Many of the businesses that move to these areas may base an aircraft at Cecil Field. Currently two Fixed Based Operators (FBOs), Signature Flight Support and Air 1, exist to provide services the general aviation community utilizing Cecil Field. However, as the traffic increases at the airport, so must the facilities to support the demand.

4.5.1 Terminal/FBO Requirements

To serve the needs of both GA pilots and passengers a GA terminal is necessary. The GA terminal provides facilities such as restrooms, a waiting area, vending machines, flight planning areas, and administrative offices. Often a FBO serves as the GA terminal because they have the required facilities and are staffed to support pilots and passengers. Additional facilities that are typically offered at a GA terminal are a pilot shop, pilot lounge, flight training, and a restaurant.

As with other facilities, a GA terminal should be sized to meet the peak hour demand so that the facility has adequate space to accommodate pilots and passengers during peak busy periods. A general method to determine the approximate square footage required for a GA terminal is given in FAA AC 150/5360-13, *Planning and Design Guidelines for Airport Terminal Facilities*. This methodology assumes that each peak hour passenger requires approximately 150 square feet of GA terminal space. The peak hour GA operations of this report were used as the basis for this analysis. Not every GA user during the peak hour uses the GA terminal. This is because the user may be conducting touch-and-go operations without a stop at the airport, or the user taxis directly to their hangar. The number of pilots and passengers was estimated to be equal to two times the peak hour GA operations. This takes into account that some aircraft have only the pilot whereas others have multiple passengers. The square footage was then determined by multiplying the number of passengers by 150 square feet.

Presented in **Table 4-14** are the forecast of peak hour GA passengers and the required GA terminal space for these passengers. The two FBOs collectively provide approximately 7,600 square feet of FBO space for GA passengers. Of this area 2,800 square feet belongs to Signature and 4,800 to Air1. Currently, there is a shortage in the amount of GA terminal area compared to the projected need. Expansion of the current FBOs or construction of a facility at a new location on the airport should be taken into consideration.

**TABLE 4-14
GA TERMINAL REQUIREMENTS**

Year	Peak Hour GA Operations	Peak Hour GA Passengers	Peak Square Footage	Future Need
2004	24	48	7,200	0
2009	31	62	9,300	1,700
2014	33	66	9,900	2,300
2019	35	70	10,500	2,900
2024	38	76	11,400	3,800

*Note: The future need was determined by subtracting the existing FBO area of 7,600 square feet from the "Peak Square Footage."
Source: AVCON, INC., Analysis, 2006.*

4.5.2 Apron Requirements

A major component of any facilities that serve GA aircraft is the apron. While a GA apron often has areas for based users to store their aircraft, transient users temporarily store their aircraft on the GA apron as well. Typical ratios found in Appendix 5 of AC 150/5300-13, *Airport Design* are often used to determine the minimum area required for the GA apron.

4.5.2.1 Transient Aircraft

Since transient aircraft are not based at the airport and do not have a reserved parking area, they temporarily store their aircraft on a GA apron. Transient aircraft use the GA apron not only for aircraft parking, but to fuel and service their aircraft, and to drop off and pick up passengers. The FAA recommends using 360 square yards (SY) per aircraft for transient users. However, GA transient aircraft may require as much as two to three times this area, especially for turboprop aircraft and business jets (such as the King Air or Challenger). Therefore, the following assumptions were made regarding transient users:

- **Single-engine:** 75% at 360 square yards and 25% at 600 square yards
- **Multi-engine:** 50% at 360 square yards and 50% at 600 square yards

- **Jet:** 100% at 2,000 square yards
- **Rotor:** 100% at 2,000 square yards

Table 4-15 Shows the required areas for transient users of the GA apron.

**TABLE 4-15
GA APRON REQUIREMENTS: TRANSIENT**

	2004	2009	2014	2019	2024
Number of Tiedowns	33	47	53	61	64
Total Apron SY	8,820	10,080	11,340	13,020	14,700

Source: AVCON, INC., Analysis, 2006.

4.5.2.2 Based Aircraft

Based aircraft owners also utilize the GA apron. Many owners who choose not to store their aircraft in a hangar will often use tiedowns located on the GA apron for aircraft storage. Generally, tiedowns are the least expensive way to store aircraft. While it is common to see single and multi-engine aircraft stored at tiedowns, many larger turboprops and jets are most commonly stored in hangars. The amount of GA apron needed to accommodate based users at Cecil Field is shown in **Table 4-16**.

The data provided in Table 4-16 can be misleading when determining facility requirements. The table indicates only 6 based aircraft in 2004 and 31 in 2009. Cecil Field's large amount of Maintenance/Restoration/Overhaul operations results in a high percent of transient aircraft, which could typically be stationed at the airport from 4-7 months. An average of 100 transient aircraft, or as many as 200, could be stationed at the airport and these aircraft would require apron and/or hangar space. The number of transient aircraft should be a consideration along with based aircraft in the determination of apron demand.

**TABLE 4-16
GA APRON REQUIREMENTS: BASED AIRCRAFT**

	2004	2009	2014	2019	2024
Total Based Aircraft	6	31	36	43	51
Stored at Tiedowns	4	8	3	3	4
Total Apron SY	3,200	3,225	1,200	1,200	1,575

Source: AVCON, INC., Analysis, 2006.

4.5.2.3 GA Apron Summary

Table 4-17 presents the total amount of GA apron that will be needed for both transient and based aircraft during the planning period. By far, the majority of GA

apron is for transient aircraft use. Currently there is approximately 50,700 square yards (SY) of apron space available among the two FBOs. A majority of the current apron (27,111 SY) is leased to Signature and the remaining (23,612 SY) is leased to Air 1. As of 2004, the amount of apron space matches the demand, however, throughout the planning period new apron should be developed to accommodate the projected demand.

**TABLE 4-17
TOTAL GA APRON REQUIRED (SY)**

Apron Needed For:	2004	2009	2014	2019	2024
Based Aircraft	3,200	3,225	1,200	1,200	1,575
Transient Aircraft	25,220	42,400	48,140	56,300	60,540
Subtotal	28,420	45,625	49,340	57,500	62,115
Plus 40% for Circulation	39,788	63,875	69,076	80,500	86,961
Existing FBO Apron	50,723	50,723	50,723	50,723	50,723
Total Apron Needed	N/A	13,152	18,353	29,777	36,238

Source: AVCON, INC., Analysis, 2006.

4.5.3 Hangar Requirements

Cecil Field has vast amounts of infrastructure, including 8 major hangars that provide for storage and maintenance of aircraft, however all these hangars have been leased. New facilities must be developed to match the projected growth in activity and to match capacity demand. While there is currently sufficient apron area for aircraft to park, hangars are the preferred method of aircraft storage. A variety of hangar types, such as Box, T-hangars, corporate, FBO/community, and MRO may be developed in the future for aircraft storage at Cecil Field.

4.5.3.1 Box and T-hangar Requirements

Box and T-hangars are a very common hangar type for smaller single and multi-engine aircraft. Box hangars are single or multi-unit structures that are square in shape. T-hangars are usually constructed in multi-unit rows where the units are nested, sharing the interior walls. Sometimes these hangar types are built on an individual unit basis.

Currently, there are no Box or T-hangars located at Cecil Field. As the amount of based aircraft grows, especially single-engine aircraft, T-hangar units will be needed to store these aircraft. A projected initial need for T-hangars in 2009 is six units, shown in Table 4-16. Throughout the planning period a total need of 10 T-hangars is expected. The increase in the amount of T-hangars needed is very low because it is projected

that many of the based aircraft will be stored in other hangar types.

4.5.3.2 Corporate Hangar Requirements

Corporate hangars provide storage for one or more aircraft in a stand-alone structure typically dedicated to a single user. Corporate hangars commonly have offices attached to the hangar. Because they can be developed according to individual users requirements, corporate hangars are often desirable for businesses that wish to base their aircraft at Cecil Field. In addition to businesses that base larger aircraft in corporate hangars, flight schools often make use of corporate hangars to store many single and light multi-engine aircraft.

Because Cecil Field offers an opportunity to attract more corporate aviation with larger turboprops and jets, growth in corporate hangars may be necessary to store these types of based aircraft. **Table 4-18** presents the projected growth in corporate hangar needs over the planning period. In addition to the larger turboprops and jets, many single and light multi-engine aircraft may also be stored in corporate hangars. Typically, corporate hangars range from 8000 sf, which could provide storage for a GII aircraft, to 10,000 sf, which could provide storage for a GV aircraft. A demand of 27 corporate hangars over the planning period equates to approximately 243,000 sf of corporate hangar development depending on the size of the hangars.

**TABLE 4-18
AIRCRAFT PER HANGAR TYPE DEMAND**

Year	T-Hangars	Corporate	FBO/	
			Community	Total
2004	0	2	0	6
2009	6	12	5	31
2014	7	19	7	36
2019	9	24	7	43
2024	10	27	10	51

Source: AVCON, INC., Analysis, 2006

4.5.3.3 FBO/community Hangar Requirements

FBO/community hangars, sometimes referred to as clearspan or bulk hangars, are typically operated by an FBO and house multiple aircraft from different individuals or companies. Aircraft storage in this type of hangar is generally less expensive than a box hangar, T-hangar or corporate hangar; however, the aircraft owner must share the hangar space with other users. This type of hangar is very versatile because of the different configurations and combinations of small single-engine aircraft to jets that can be stored at the same time.

Currently, Signature Flight Support is the only FBO with a hangar used to house General Aviation aircraft and other materials. The projected number of aircraft that will be stored in a FBO/Community hangar throughout the planning period is presented in Table 4-18. The demand for hangars is determined from the amount of based aircraft that are hangared versus those stored at tiedowns. Those aircraft that are stored in hangars are then divided among the different hangar types. The different hangar types are given a different percentage of total storage. Not all aircraft are considered for every hangar type; for example, jets are not considered for T-hangar storage.

4.5.3.4 MRO Hangar Requirements

Maintenance/Restoration/Overhaul (MRO) hangars are typically large hangars, ranging from 50,000 sf to 200,000 sf. These hangars provide large spaces to provide services to larger aircraft. The demand for these hangars is increasing as the demand for MRO services increase due to an aging fleet of aircraft. Flightstar Aircraft Services, Inc. currently occupies hangar 815, which was recently renovated to allow access of aircraft with tall tail sections. This is one example of the growth of the MRO industry. Cecil Field provides an attractive location for these types of services, just 30 miles southwest of Jacksonville International Airport, and large amounts of developable land to support this type of operation. Runway 18L/36R at 12,500 feet provides access for any type of aircraft which might need MRO services.

Currently, Cecil Field has 8 large hangars which could serve as MRO hangars. Large parcels of land could be available for development of MRO hangars. The number of hangars to be developed should be based on realized demand over the planning period. Typically, MRO developments are privately funded and the owner would approach the airport and enter into negotiations considering lease rates, location and size of the development.

4.6 VEHICULAR FACILITIES

Sufficient vehicular access points and parking at the airport's facilities should be provided to maintain efficient and safe traffic flow. The following sections identify future improvements to parking, the existing road network, and identify airport areas still in need of access routes.

4.6.1 Access Roads

Cecil Field is located just 5 miles south of Interstate-10, which serves as the main artery. Chaffee Road, a north/south two lane rural road provides the most direct access route between I-10 and the airport. This

road will need to be improved to meet future transportation demand at the airport. Air Cargo operations are expected to increase over the planning period and a new Branan Field-Chaffee Road will provide access to and from Interstate 10. FDOT has began a project to realign Branan Field-Chaffee Road to the west and join it with I-10. Construction will occur north of New World Avenue, extending the 4-lane roadway north and connecting to I-10 with a new interchange. This new alignment is presented in Exhibit 2-7. Also included in this project is the construction of three bridges over I-10 creating a full interchange between I-10 and the new Branan Field-Chaffee Road. I-10 will also be widened from four to six lanes within the interchange limits. This project is scheduled to be completed Fall 2009.

The FDOT has several other projects planned over the next 5 years to improve the roadways surrounding Cecil Field including road resurfacing and interchange improvements. These projects include 103rd Street, Normandy Boulevard, New World Avenue, Interstate 295 and Interstate 95.

4.6.2 Parking

The amount of parking available to users of Cecil Field is very important for the future growth and development of the airport and its surrounding industrial park. As the amount of users grow, so will the need for adequate parking. The Ordinance Code of the City of Jacksonville, Section 656.604 (f) and (g) provides guidelines for the amount of parking certain establishments should maintain. Future developments must adhere to these codes by providing adequate parking depending on the type of development.

4.7 ZONING

Land use near airports is of vital concern in most communities throughout the country, due to various safety issues as well as the noise generated from aircraft overflights. Additionally, developments have continued to encroach upon airports as communities have grown thereby limiting aviation-related development options. Both federal and state regulations have been enacted to address the issue of having compatible land uses near airports. Overall, Federal Regulations require that local governing entities establish future land use and zoning regulations to ensure compatible land use around airports. However, both Federal and State law make it very clear that zoning is a local responsibility and local governments have allowed development not recommended in the Federal and State Statues. The

following sections summarize the federal and state requirements for the zoning of airports.

4.7.1 Federal Requirements

The FAA is the federal agency responsible for enacting regulations and requirements outlining the details of items contained in federal statutes. The following list describes the various federal requirements:

- **Code of Federal Regulations, Title 14, Chapter 1, Part 77, Objects Affecting Navigable Airspace:** As discussed previously in this report, this federal regulation defines airspace surrounding airports. It defines vertical clearances for the existing and future approach procedures to the Airport. This section of the federal code also describes obstruction standards related to airports and heliports. Subparts B and D discuss requirements to provide notice of construction, which then initiates an FAA aeronautical study.
- **FAA Order 5190-6A, Airports Compliance Handbook:** This document covers a variety of compliance issues related to land use compatibility near airports. Specifically, Sections 4-9 and 4-10 summarize the need to comply with Part 77 requirements and how zoning ordinances can help communities address land use near airports.
- **FAA AC 70/7460-2K, Proposed Construction or Alteration of Objects that May Affect the Navigable Airspace:** Construction involving objects greater than 200 feet in height above ground level or that are located near or on an airport require a notification to be sent to the FAA. This notification is should be done at least 30 days prior to construction. FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, is the standard notification form. The FAA will then make a determination as to whether the object will be a hazard to navigation. Additionally, this airspace review may be required at the request of the FAA. Those who willfully and knowingly do not comply with this notification process can be subject to civil penalties.
- **FAA AC 150/5190-4A, Model Zoning Ordinance:** This FAA guidance material presents a standard local zoning ordinance to address height limitations of objects located near airports. This standard incorporates the airspace requirements from 14 CFR Part 77.

- **FAA AC 150/5222-33A, Hazardous Wildlife Attractants on or near Airports:** For those airports that have received federal grant-in-aid assistance for airport development, the sponsor must comply with the standards set forth in this advisory circular. This document describes several key wildlife attractant developments including, but not limited to: solid waste landfills, wetlands, stormwater management ponds, wastewater treatment plants, golf courses, and agricultural production. Criteria include no wildlife attractants within 10,000 feet of the airport's aircraft operations area. Furthermore, it is recommended that these types of developments be located a distance greater than five miles from the airport's aircraft operations area. Additional guidance regarding the location of landfills specifically is provided by FAA AC 150/5200-34, *Construction or Establishment of Landfills Near Public Airports*.
- **FAA Airport Improvement Program (AIP) Grant Assurance 21:** Any airport owner that has received federal funds through the AIP grant program shall comply with multiple assurances that are made a part of the grant agreement. Grant assurance 21 requires the airport owner to exercise control to the greatest extent possible regarding nearby land use compatibility. Cecil Field has received federal grant funds in past years and is therefore subject to this requirement.

4.7.2 State Requirements

The State of Florida has also adopted various laws and administrative regulations addressing airport operations. Some of these include sections related to zoning and land use near airports. Again, these laws make clear the local government's responsibility for zoning. Brief synopses of these related state regulations are given in the following:

- **Florida Title XI, Chapter 163, County Organization and Intergovernmental Relations:** This statute discusses local comprehensive plan requirements related to airports. Additionally, this section states that an airport master plan may be incorporated into a comprehensive plan by reference through the plan amendment process. The aviation element should address airport zoning requirements from Florida Statute Chapter 333. Furthermore, land use decisions should take into account aviation activity. Florida

Administrative Code, Chapter 9J-5 covers comprehensive plans in further detail.

- **Florida Title XXV, Chapter 330, Regulation of Aircraft, Pilots, and Airports:** This chapter of state law gives the Department of Transportation (DOT) authority to license and inspect airports. Section 330.30 requires that new airport sites comply with local government land development and zoning requirements. Paragraph 2 of Section 330.35 gives airports zoning protection according to criteria in Chapter 333.
- **Florida Statute 333, Airport Zoning:** Section 333.03 requires local governments to enact appropriate zoning ordinances to ensure compatible land use on and around airports. Landfills are limited to areas as discussed in FAA AC 150/5222-33A. Paragraph (2) (d) of Section 333.03 requires that schools and residential uses be located further than one-half the length of the longest runway from the sides and end of each runway. Furthermore, educational facilities cannot be located along the direct arrival path to each runway end for a distance of five miles and having a width equal to one-half the runway length, unless waived by the local government. Other sections address the need to prevent further

incompatible land uses within airport safety clearance zones.

- **Florida Administrative Code (FAC) Chapter 14-60, Airport Licensing, Registration, and Airspace Protection:** In general, this section of the FAC provides more detailed explanations of aviation-related state statutes as well as providing minimum design standards for airports. Paragraph 8 of Section 14-60.007 requires that all objects determined to be airport hazards by FDOT to be removed. Section 14-60.009 requires objects located within 10 miles of an airport that exceed Part 77 height restrictions may be permitted after a review by FDOT. Additionally, this section also states that obstructions should be marked and lighted.

4.8 SUMMARY

Improvements at Cecil Field needed over the 20-year period have been identified throughout this chapter. **Table 4-19** summarizes the improvements that have been identified. Some of the recommendations in the various discussions relate facility needs to the aviation forecasts. However, some of the improvements are needed to bring existing facilities into compliance with FAA criteria. The results of this chapter will be used in the development of the Alternatives Analysis chapter.

**TABLE 4-19
FACILITY REQUIREMENT SUMMARY**

Facility Category	Improvement Needed	Reason for Improvement (Safety, Security, Standards, Capacity, or Other)
Airspace	Remove or light penetrations to Part 77 surfaces as noted under Section 4.4.4	Safety & Standards
Navigational Aids	Install new PAPIs to Runways 9L-27R and 18R-36L	Standards & Other-Enhanced Operational Capability
	Install MALSAR to Runway 9R, 27L, and 18L	Standards & Other-Enhanced Operational Capability
Airfield Pavement	Perform periodic crack sealing and overlay, as needed	Other-Periodic Maintenance
	Develop Inspection plan for Part 139 certification	Standards
Airfield Lighting	Develop Inspection plan for Part 139 certification	Standards
	Perform periodic maintenance to lights as necessary	Other-Periodic Maintenance
Airfield Markings	Update Runway 9R-27L to precision markings	Standards
	Develop Inspection plan for Part 139 certification	Standards
	Perform periodic maintenance to markings as necessary	Other-Periodic Maintenance
Airfield Signage	Develop Inspection plan for Part 139 certification	Standards
	Perform periodic maintenance to signs as necessary	Other-Periodic Maintenance
GA Terminal	Expand GA terminal by a minimum of 3,800 SF over the planning period	Capacity
Apron	Construct additional 36,238 SY of apron for tiedowns	Capacity
Hangars	Construct a minimum of 10 additional T-hangar or box hangar units	Capacity
	Construct FBO hangar for storage of 10 aircraft	Capacity
	Construct 27 corporate hangars	Capacity
	Construct MRO hangars based on demand	Capacity

Source: AVCON, INC., Analysis, 2006.

CHAPTER 5

PLANNING ALTERNATIVES

5.1 INTRODUCTION

The goal of the Planning Alternatives chapter is to identify potential airport development strategies, to evaluate those strategies based on efficiency, safety, and utility, and to recommend the preferred overall airport development strategy. In developing the planning alternatives, standards from the Federal Aviation Administration (FAA) are used to consider potential solutions to the identified facility requirements associated with the airfield facilities. Landside development strategies generally rely on a more subjective analysis using governmental standards and information from airport management to evaluate and compare alternatives. These alternatives generally address projected demand for facilities and airport self-sufficiency goals. The development alternatives are evaluated in a comprehensive manner to determine the best overall development plan for the airport.

5.2 AIRPORT GOALS

The overall development goals of the airport have been identified by airport management through conversations and with public meetings held by the Jacksonville Aviation Authority (JAA). These conversations and meetings take into account the goals and objectives of airport management, airport tenants, as well as members of the surrounding community.

Many of the comments received in these meetings focus on maintaining Cecil Field as a facility specializing in General Aviation (GA) and Maintenance, Repair, and Overhaul (MRO) services. The following items represent these and other issues that airport management will attempt to resolve or otherwise address over the 20-year planning period:

- Expand the MRO activities and facilities at the airport
- Develop new GA facilities and expand existing GA facilities for higher performance corporate aircraft
- Market Air Cargo Operations and develop Air Cargo Facilities

- Develop new instrument approaches for existing runway ends
- Shorten inboard runways to reduce maintenance costs, but accommodate projected operations
- Construct a mid-field development area for aviation related commercial and industrial developments and MRO facilities
- Consider the potential for serving as a future “spaceport” facility to accommodate future sub-orbital or orbital launch vehicles utilizing horizontal takeoff/landing procedures
- Reserve area for a fifth runway parallel to the primary runway for long-term needs

5.3 DEVELOPMENT CONSIDERATIONS

JAA also operates Herlong Airport, Craig Airport, and Jacksonville International Airport and has developed specific roles for each of these airports. Airport facilities to serve a majority of the general aviation aircraft fleet are located at Herlong Airport east of Cecil Field and at Craig Airport on the east side of Jacksonville between downtown and the beaches. The future development strategies for Cecil Field will need to consider the airport’s role in the JAA airport system as well as several other considerations. These include general aviation operations, the continued expansion of MRO activities at the airport, the ultimate runway lengths to be maintained at Cecil Field, as well as the potential for future commercial spaceport activities.

5.3.1 Airport Role

While accommodating some larger general aviation and military operations as well as other commercial activities, Herlong Airport’s primary role centers on smaller general aviation aircraft operations and recreational use. Cecil Field is located closer to Jacksonville’s business district and generally serves a wide range of general aviation operations, including a significant number of corporate jets.

Future growth at Cecil Field is expected to involve increased operations related to recreational and corporate general aviation, military training, air cargo and aircraft maintenance/repair/overhaul (MRO) activities. Although Craig Airport and Jacksonville International Airport currently accommodate a significant percentage of local corporate jet operations, the existing runway length and development opportunities at Cecil Field make it an ideal facility for supporting a larger percentage of these types of operations. As a result, the planned expansion and development of general aviation facilities at the airport will largely focus on a growing trend for larger corporate turboprops and jets operations, including operations by narrow-body and wide-body aircraft.

While Jacksonville International Airport will remain the primary commercial service airport and the only airport with scheduled passenger service, Cecil has applied for a Part 139 operations/certification for Class IV, large charter operations. Therefore, limited ground handling equipment may be located at Cecil Field, but JAA does not anticipate the development of traditional commercial passenger terminal facilities at Cecil Field.

5.3.2 MRO Activities

In addition to the development related to general aviation, airport management is prepared to accommodate the increasing interest in Maintenance/Repair/Overhaul (MRO) activities in the region. With its proximity to military airport installations, available development areas, and efficient access to the interstate system and nearby port facilities, Cecil Field represents an advantageous site for MRO operators to efficiently and effectively perform their services.

Since its opening as a public-use airport in 1999, MRO activities have been one of the predominant activities on the airfield. Significant portions of the developed airport property with airfield access are currently dedicated to MRO activities, including major facilities currently operated by Flightstar and Boeing west of Taxiway A.

Flightstar Aircraft Services, Inc. has recently relocated its MRO activities from Jacksonville International Airport to Hangar 815 at Cecil Field and has experienced significant growth in the demand for aircraft conversion services. The MRO activities provided by Flightstar are primarily dedicated to MD-80, DC-9, DC-10, B-727, B-737, B-757, and B-767 aircraft.

In 2003, Flightstar engaged in an average of two-to-three launch and recovery cycles per day, subject to production and test flight schedules. Since that time, Flightstar's operations have grown to as many as six-to-eight B-757 operations per day during peak production and testing periods. Currently, Flightstar accounts for more than 500 annual B-757 operations at Cecil Field and this level is anticipated to increase in the near future. In addition, Flightstar has recently expanded its facilities at Cecil Field to include a B-767-compatible hangar facility measuring more than 200,000 sf to better accommodate the projected growth in the demand for B-767 related MRO services.

Current MRO operations provide a large number of jobs and revenue generation at Cecil Field. With increased MRO operations projected for facilities associated with existing tenants and increased interest in additional MRO investment at the airport, it is anticipated that MRO activities involving large narrow-body and wide-body aircraft will continue to grow at Cecil Field.

5.3.3 Runway Length Considerations

The future development strategies for Cecil Field will directly depend on the airfield facilities available to support various types of operations. Most notably, the available runway length at the airport can be a significant factor in determining not only the types of aircraft operating at the airport, but also the types and locations of facilities that should be considered as part of the future development. As a result, the determination of the future length (and width) of the primary runway is an important process in the identification of the preferred development plan for the airport.

According to officials from the air cargo industry, the need for freighter conversions similar to those provided by Flightstar will continue to grow. United Parcel Service (UPS) officials, with more than 100 B-757-PF and B-767-300ER aircraft, have noted that there has never been an aircraft purchased for their fleet that has not required some modification, indicating a continued demand for these types of services.

Air Cargo Management Group (ACMG), a Seattle-based firm, recently indicated that their research supports an active market for freighters in the future, with "the need for 3,170 freighters to be added through 2024 to meet both growth and replacement needs." The medium widebody (i.e. B-767, A-300, etc.) represents the fastest growing freighter category over the past five years and cargo carriers have generally

preferred to utilize the lower-cost option of converting used passenger aircraft to freighter configurations as opposed to ordering new freighter aircraft. As a result, the demand for freighter conversions has risen dramatically in recent years and is expected to continue growing.

Each year, Boeing issues its World Air Cargo Forecasts that identifies cargo industry trends as well as trends in the aircraft used to transport cargo. According to their World Air Cargo Forecast 2006/2007, Boeing projects that the world air freighter fleet will increase from 1,789 airplanes to approximately 3,563 airplanes in the next 20 years. In addition, another 1,209 aircraft will be needed as replacements for aircraft to be retired over this period. The greatest growth in the worldwide air cargo fleet will be in wide-body freighters such as the Boeing 747, 777, and 767 models. The forecasts project that approximately 2,217 of these airplanes (more than 75% of the new airplanes added to the fleet) will originate from passenger-to-freighter modifications, similar to the services currently offered at Cecil Field. It is anticipated that a percentage of these modifications will occur at facilities based at Cecil Field.

It should also be noted that in August 2005, the Jacksonville Port Authority signed a 30-year lease agreement with a large Japan-based shipping company, Mitsui O.S.K. Lines Ltd., which will allow the company to invest \$200 million to develop a 158-acre cargo terminal in Jacksonville. This project will directly connect the City of Jacksonville to an Asian shipping lane and is expected to create thousands of local jobs. It is reasonable to anticipate this major investment will involve a complex and significant distribution network from the Jacksonville area, using the local interstate and rail network to efficiently transport bulk goods that arrive by ship. There will be instances where some of these goods will require expedited delivery.

Long-lead times for shipping cargo can often impose costs to the recipient (i.e. perishable goods) and these importers have shown a significant willingness to pay premiums for air shipping in some situations to avoid those costs. History has demonstrated a significant shift in goods transported to the U.S. from shipping to air transport. With a significant volume of shipped cargo arriving in Jacksonville anticipated with this new agreement, it is reasonable to assume that a percentage of this volume will be accommodated by air over the next 20 years. Cecil Field, with its existing airfield infrastructure and efficient access to the

interstate system, is ideally positioned to accommodate these types of air cargo operations.

For this analysis, the B-767 family of aircraft is considered the design aircraft for identifying the appropriate Airport Reference Code (ARC). This ARC is used for determining the specific FAA design standards for the primary runway and taxiway system. Based on moderate approach speeds and a wingspan of 156 ft-to-170 ft and tail heights as much as 55 ft-11in, depending on the model, the aircraft is classified in the “C” Aircraft Approach Category and the “IV” Design Group; or an ARC of C-IV. It also serves as the specific aircraft type for determining runway length requirements in accordance with FAA Advisory Circular 150/5325-4.

To determine runway length requirements for the B-767 aircraft, various models of the B-767 are considered. In addition, several assumptions regarding the runway environment are necessary. The assumptions used in this analysis are presented in **Table 1**.

TABLE 1: B-767 RUNWAY LENGTH ANALYSIS ASSUMPTIONS

Characteristic	Assumed Condition
Temperature:	90°F
Winds:	Calm
Airport Elevation:	81 ft MSL
Runway Condition:	Dry
Runway Gradient:	0% (assumed)
Aircraft Flap Settings:	As recommended

Source: Runway Length Analysis, RS&H, July 2003; AVCON, Inc. analysis, 2006

Because aircraft associated with MRO services are generally without payload when operating at Cecil Field, the analysis assumes maximum fuel with only 2.5% of the aircraft’s rated payload to account for crew and other equipment weight. Using these assumptions, runway length requirements for various models of the B-767 aircraft were determined based on the aircraft manufacturer’s technical manuals. These runway length requirements are shown in **Table 2**.

TABLE 2: RUNWAY LENGTH REQUIREMENTS FOR B-767 AIRCRAFT AT CECIL FIELD

Aircraft Type	Operating Empty Weight (lb)	Maximum Fuel Weight (lb)	2.5% of Payload Weight (lb)
B-767-200	176,650	111,000	1,834
B-767-200ER	181,610	161,738	1,960
B-767-300	189,750	111,890	2,206
B-767-300ER	198,440	161,740	2,414
B767-300 Freighter	188,000	161,740	3,025
B-767-400ER	229,000	161,738	2,525

Aircraft Type	Engine Type	Runway Length Requirement
B-767-200	CF6-80C2B2	^a 5,400 ft
B-767-200ER	CF6-80C2B2	^a 8,200 ft ←
B-767-300	JT9D-7R4D	^b 6,700 ft
B-767-300ER	CF6-80C2B4	^a 7,500 ft
B-767-300 Freighter	CF6-80C2B4	^a 7,200 ft
B-767-400ER	CF6-80C2B8F	^a 7,800 ft

Source: Boeing 767 Airplane Characteristics for Airport Planning; Sept. 2005
(www.boeing.com/commercial/airports/acaps/767sec3.pdf);
FAA AC 150/5323-4B, paragraph508; AVCON analysis 2006

^a Assumed air temperature of 90°F

^b Assumed air temperature of 86°F

A Boeing 767-200ER requires approximately 8,200 ft of usable runway length for takeoff operations in dry conditions with negligible payload and without fuel restriction. This length would also be adequate for accommodating the family of B-767 aircraft operating at Cecil Field. It should be noted that variations in the assumptions provided could increase or decrease the runway length requirement determined in each instance.

As mentioned above, Cecil Field is ideally positioned to accommodate air cargo operations, therefore these operations need to be included in the discussion of runway lengths. It is reasonable to assume that these air cargo carriers will be operating close to their maximum takeoff weights to maximize revenue. These maximum takeoff weights along with associated required runway lengths are included in **Table 3**.

With sustained growth in MRO services associated with the Flightstar Aircraft Services, the Jacksonville Aviation Authority is justified in selecting the B-767 aircraft as the current design aircraft for determining runway length and width requirements eligible for AIP funding participation. Although other governmental

TABLE 3: RUNWAY LENGTH REQUIREMENTS FOR B-767 AIRCRAFT AT MAXIMUM TAKEOFF WEIGHT AT CECIL FIELD

Aircraft Type	Engine Type	Maximum Takeoff Weight (lb)	Runway Length Requirement
B-767-200	CF6-80C2B2	317,000	^a 6,300 ft
B-767-200ER	CF6-80C2B2	380,000	^a >12,000 ft←
B-767-300	JT9D-7R4D	352,000	^b 10,800 ft
B-767-300ER	CF6-80C2B4	413,000	^a 11,000 ft
B-767-300 Freighter	CF6-80C2B4	413,000	^a 11,000 ft
B-767-400ER	CF6-80C2B8F	451,000	^a 11,300 ft

Source: Boeing 767 Airplane Characteristics for Airport Planning; Sept. 2005;
(www.boeing.com/commercial/airports/acaps/767sec3.pdf);
FAA AC 150/5323-4B, paragraph508; AVCON analysis 2006

^a Assumed air temperature of 90°F

^b Assumed air temperature of 86°F

aircraft may require additional runway length or width, federal funding participation is limited to aircraft that are not exempt from aviation fuel taxes. As a result, a minimum runway length of 8,200 ft and a width of 150 ft is recommended for evaluating AIP-eligible improvements associated with Runway 18L-36R.

However, **Section 5.4.1** discusses the potential for new entrants into Cecil Field as a result of the existing 12,500 ft runway length currently available at the airport and recommends that the preservation of the existing length be maintained until such time that the airport initiates a major runway rehabilitation project. This recommendation will allow this relatively new public-use airport to more fully evolve and take advantage of potential opportunities to introduce additional tenants that may require a minimum runway length beyond 8,200 ft.

5.3.4 Commercial Spaceport Improvements

Since 1999, Cecil Field has experienced growth in various types of aircraft activities and remains a candidate airport for operations by new aircraft types. One of the more notable types of operations identified as potentially operating at Cecil Field within the 5- to 10-year period is the operation of small commercial suborbital and/or orbital launch vehicles. Because these operations are anticipated to include horizontal takeoffs and departures, operations of this type would likely require extended runway lengths and widths for landings and takeoffs.

Although these types of operations have been primarily limited to federal installations to date, it is anticipated that the demand of these types of facilities will require non-federal facilities to minimize regulatory, bureaucratic and cost burdens. Based on the available facilities at Cecil Field, the airport currently provides existing infrastructure to accommodate these types of operations at minimal future investment relative to other potential sites in Florida and the southeast. Based on interest by industry groups, provisions to accommodate future operations should be considered as part of the future planning for Cecil Field. Additional information on the potential development of commercial spaceport activities at Cecil Field is included in **Section 5.8**.

5.4 AIRFIELD ALTERNATIVES

In planning the overall development of Cecil Field over the 20-year forecast period, alternative layout concepts are considered. These concepts are evaluated to determine the best use of airport property with respect to the facility needs and identified goals.

Prior to being conveyed to JAA, Cecil Field served as an airfield for the U.S. Department of Navy. Because of the large number of operations by naval aircraft, four runways were maintained. With the relocation of many military aircraft formerly operating at Cecil Field,

the runway requirements of the airport have changed from the period in which it operated as a Naval Air Station. In order for Cecil Field to meet the future aviation demands stated in Chapter 3 as well as remain economically feasible, the current runway configuration will ultimately be modified.

Because the airfield configuration will dictate the areas available for efficient development of future facilities, the evaluation of future development alternatives for Cecil Field will initially consider and establish planned modifications associated with the four existing runways.

5.4.1 Primary Runways

The runway length analysis performed in **Section 5.3.3** indicates that a minimum runway length of 8,200 ft and a width of 150 ft is recommended for evaluating AIP-eligible improvements associated with Runway 18L-36R. This determination is based on the identification of the B-767 as the design aircraft.

However, the airport is only in its sixth year as a public-use facility and the existing length of the runway coupled with the available property for development provides a unique opportunity to allow the variety of airport operations to more fully develop without limitations or constraints. This has been evidenced by the recent interest in the airport by several aircraft manufacturers and aircraft conversion firms requiring relatively extended runway lengths. Because the strong possibility exists that Cecil Field may attract air cargo operators and other tenants operating large aircraft, it is recommended that JAA preserve the existing runway length of 12,500 ft and width of 200 ft until such time that significant investment is required for maintaining the runway. At that time, projected operations should again be considered to determine the required runway length necessary prior to implementing any reductions in the existing length.

As a result, it is recommended that the current runway length associated with Runway 18L-36R be maintained at the full length of 12,500 ft until the next major rehabilitation is required (at which time the justified runway length may need to be re-evaluated). Similarly, Runway 9R-27L shall be maintained at its current length of 8,000 ft and width of 200 ft throughout the planning period to serve as an effective crosswind facility for the projected aircraft fleet.

5.4.2 Secondary Runways

Under the current level of operations four runways are not necessary based on FAA delay and capacity standards. However, airport management has expressed a desire to keep as much of the existing pavement as economically feasible to provide for future touch-and-go training opportunities and larger air cargo and MRO operations. As a result, all four runways are anticipated to remain operational throughout the planning period. However, the inboard runways, Runway 18R-36L and 9L-27R, will be shortened in length and narrowed in width.

The shortening and narrowing of the inboard runways is necessary as supporting the two runways at their existing length and width would not be economically feasible based on the projected level of operations. In addition to the physical changes in these runways, they are each assigned a new Airport Reference Code (ARC) and design aircraft based on the projected needs.

Runway 18R-36L is planned to be reduced from a length of 8,003 ft to 5,930 ft in the future to generally align the Runway 18R end with the intersection of existing Taxiway A. Although a shorter runway length may accommodate the large majority of general aviation operations on the runway, the proposed alignment for the Runway 18R end will eliminate the need for back-taxi operations on the runway. The 5,930 foot length provides access to each end of the runway via existing connector taxiways. Runway 18R-36L extends from the existing Runway 36L threshold to Taxiway A2. The relocation of the Runway 18R end will improve the capabilities for developing the areas north of the runway and while continuing to allow for a large volume of touch-and-go training operations.

This shortened length of 18R-36L will maintain the capability to accommodate the majority of operations associated with the general aviation fleet, including most Gulfstream V (G-V/G-550) operations. **Section 4.4.3** states that 4,270 feet is needed to accommodate the most appropriate classification of aircraft using the inboard runways and the proposed length of 5,930 feet adequately meets this requirement. It is recommended that this reduction occur as part of a future project for pavement or lighting rehabilitation involving significant investment and prior to developing facilities north of the existing runway.

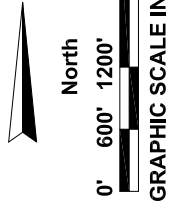
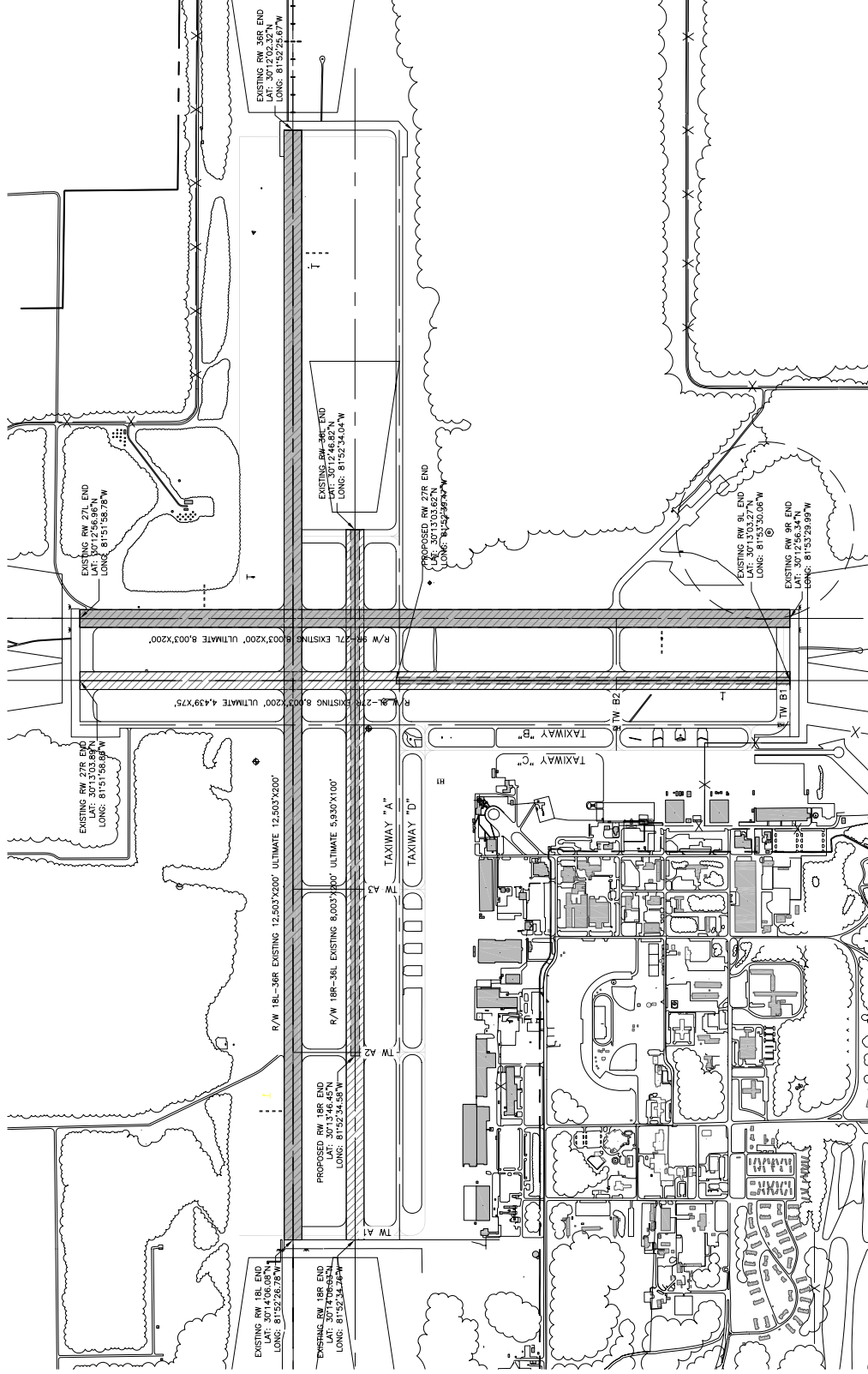
In addition to the shortened length, a modified ARC of C-III is assigned with a design aircraft of a Gulfstream G-V/G550. This proposed length does not meet the length requirements of the G-V/G550 at its maximum

takeoff weight at high temperatures; however, it can support G-V/G550 operations under most other circumstances. If a pilot determines he/she needs more than 5,930 ft for takeoff, Runway 18L-36R at a length of 12,500 ft is available.

The change in the design aircraft and corresponding change in the ARC to C-III will also dictate a narrowing of the runway consistent with FAA standards. When the runway length is ultimately reduced, the future Runway 18R-36L should be narrowed from 200 to 100 ft. This narrowing will occur from the existing runway edges symmetrically towards the centerline. The 50 ft of pavement that is located on each outer edge of the runway may serve as a paved 20-ft shoulder area with 30 ft of paved Runway Safety Area (RSA). It should be noted that the transverse grades within the limits of the revised RSA will likely be less than the FAA standards and it is recommended that, because an entire 200 ft is uniformly paved, a formal modification to standards be requested from FAA to waive any need to revise the transverse grade within the RSA width. Otherwise, the excess pavement may need to be removed to ensure RSA compliance.

Like Runway 18R-36L, Runway 9L-27R will also be assigned a lesser ARC and a corresponding shortening and narrowing of the runway. Based on an evaluation of projected aircraft operations and reasonable modifications to the runway length to eliminate the intersection with Runway 18R-36L, Runway 9L-27R will be designed to accommodate a majority of the general aviation fleet included in ARC B-II with an ultimate length of 4,439 ft. This length is determined by locating the runway ends at the existing Runway 9L end and where Taxiway A intersects the runway to provide efficient access to the runway ends via existing connector taxiways. **Exhibit 5-1A** illustrates the ultimate runway configuration for all four existing runways at Cecil Field. **Exhibit 5-1B** illustrates the ultimate FAA supported runway configuration.

In addition to the shortening, the runway will also need to be narrowed from 200 to 75 ft per ARC B-II standards. Like Runway 18R-36L the runway will be narrowed from the outer edges inward such that the runway centerline remains in its current location. This adjustment will create 62.5 ft of pavement that may be used as a paved shoulder (B-II shoulder width is 10 ft) or otherwise removed. If the pavement width beyond the new runway width of 75 ft remains, then a formal modification to standards should be requested from FAA to waive any need to revise the transverse grade within the RSA width.

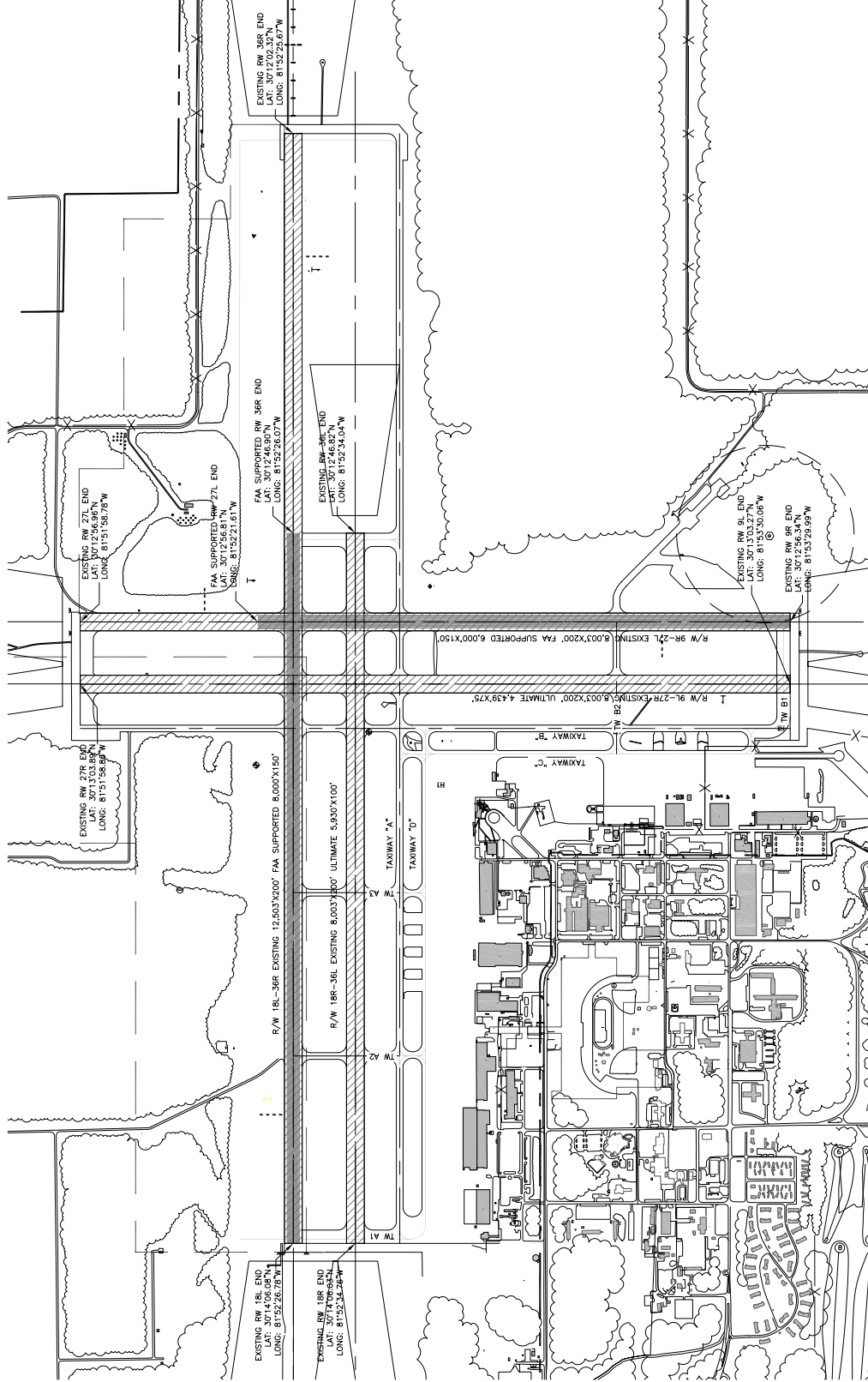


LEGEND

RUNWAY CONFIGURATION	
	EXISTING
	ULTIMATE

Notes: COORDINATES: Datum NAD 83

ULTIMATE RUNWAY CONFIGURATION - EXHIBIT 5-1A



North



GRAPHIC SCALE IN FEET

LEGEND	
RUNWAY CONFIGURATION	
	EXISTING
	FAA - SUPPORTED

Notes:
Coordinates Datum NAD 83
AIP eligibility per FAA 316/07

FAA-SUPPORTED RUNWAY CONFIGURATION - EXHIBIT 5-1B

5.4.3 Future Runway

The existing airfield configuration of Cecil Field is anticipated to provide adequate operational capacity throughout the 20-year planning period. However, it is important to continually plan beyond a 20-year period to provide the ability to maximize an airport's growth potential. Planning for a fifth runway has been considered since the 1998 master plan; however, the need for this runway has not been justified by the projected aviation demand.

It is anticipated that a fifth runway will be needed beyond the 20-year planning period and initial plans to preserve the land and airspace both on and off the Airport's property are necessary to protect the ability to construct this runway when the demand for a parallel runway with increased separations is realized. The fifth runway, Runway 17-35, will be located on the eastern side of the airport approximately 5,800 ft from the existing Runway 18L-36R. Because it is greater than the 5,000 ft recommended by FAA for simultaneous takeoff and landing capability on the runways under IFR conditions, this separation will preserve future capability to implement a precision instrument approach on the new runway without operational restriction.

Runway 17-35 will be planned to accommodate B-767 operations (ARC C-IV) in the future, similar to the existing primary runway. It will be aligned parallel to Runway 18L-36R and provide a total runway length of 7,700 ft and width 150 ft. Although the planned length is less than 8,200 ft previously identified for the B-767 operations, it will accommodate a majority of B-767 operations and will ensure that the limits of the associated Runway Protection Zones (RPZs) remain within existing airport property. The proposed location of future Runway 17-35 is depicted in **Exhibit 5-2**.

By planning for this runway now, the land located off of Airport property can also be preserved to some extent. The Airport Environ Zones adopted under Ordinance 2006-1225-E, acknowledge and regulate development based on the potential impacts of future Runway 17-35.

5.4.4 Instrument Approaches

Instrument approaches allow for a greater safety factor for pilots when landing, especially during bad weather. Under extremely poor weather conditions an airport can shut down completely if the proper instrument approaches do not exist. To support and enhance the operational capabilities of Cecil Field, an instrument approach is programmed for all but the inboard runways.

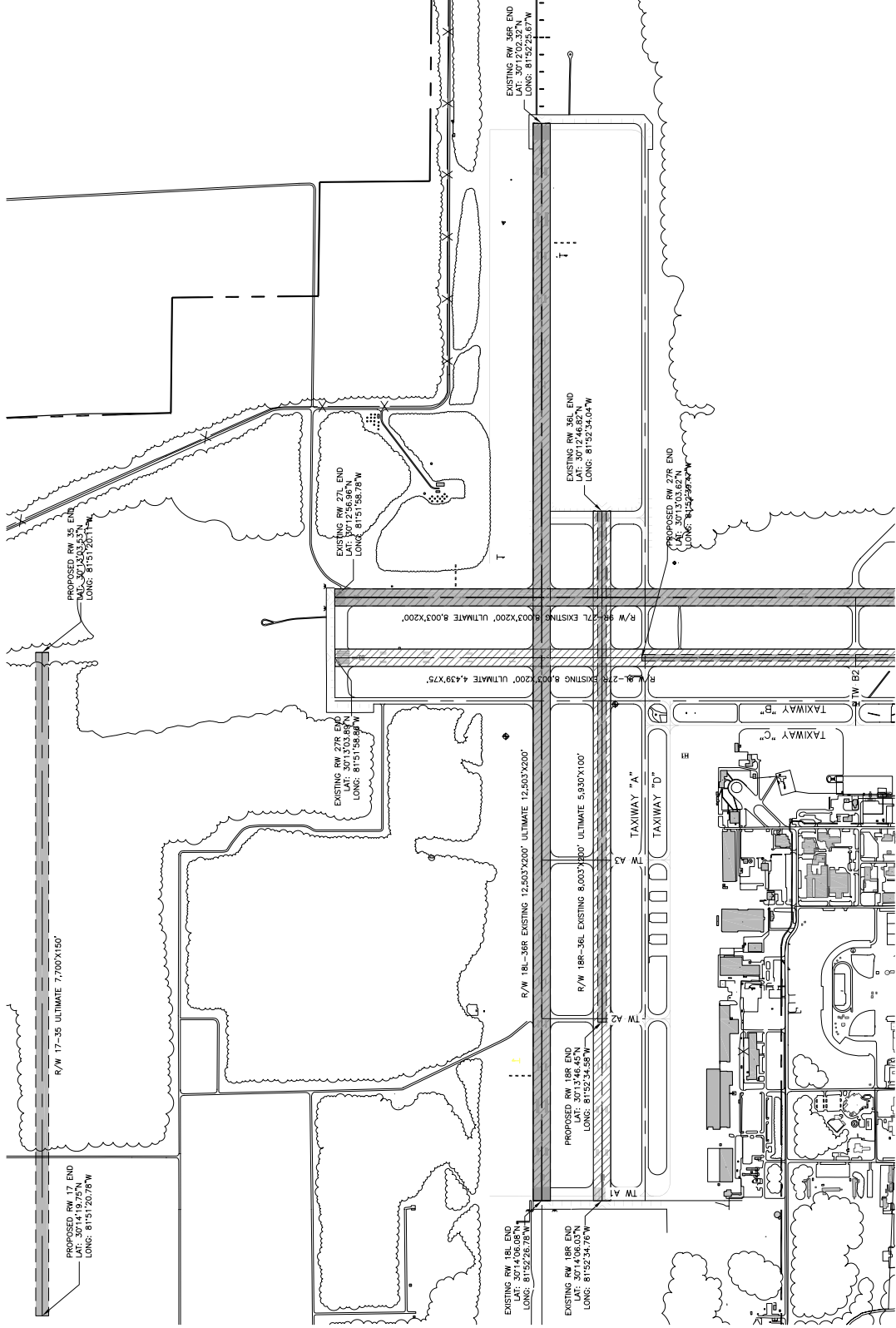
In addition to its VOR approach, Runway 9R is planned to include a precision instrument ILS approach installed with ½ mile visibility and 200 foot decision height. Prior to the ILS, this runway is expected to include a lateral-precision with vertical guidance approach (non-precision LPV). LPV is a relatively new category of approach that utilizes WAAS technology to provide vertical guidance to aircraft. Runway 36R is already equipped with a precision instrument approach with the same minima that will be maintained throughout the planning period.

A precision GPS with LPV approach is planned for runway 27L with ½ mile visibility and 200 ft decision height. In addition to the GPS approach, a VOR approach is also proposed for Runway 27L. For Runway 18L, a non-precision approach with localizer and LPV is planned with ¾ mile visibility and 200 ft decision heights. Precision GPS approaches with ½ mile visibility and 200 ft decision heights are planned for future runway ends 17 and 35.

The installation of these instrument approaches will not only increase the Airport's operational capabilities in all weather conditions but potentially attract more aircraft due to the increased level of horizontal and vertical guidance.

An important aspect in the overall development of Cecil Field is the ability of the surrounding airspace to support the development of the airport's facilities on the ground. This relates specifically to the implementation of instrument approaches and the construction or changes in the existing runways. There are no conflicts with the existing airspace at Cecil Field and, by taking proper measures in developing the airport's future facilities, this condition can remain the same.

With the development of not only a greater number but more precise instrument approaches, the runway ends will require a greater amount of airspace surrounding the airport to remain clear of obstructions. A large portion of the airspace required by these approaches lies off of airport property. Through proper planning and the establishment of airport zoning areas, potential obstructions to navigation can be minimized.



North



GRAPHIC SCALE IN FEET

LEGEND	
[White box]	RUNWAY CONFIGURATION
[Diagonal hatching]	EXISTING
[Solid grey box]	ULTIMATE

Notes:
COORDINATES: Datum NAD 83

RUNWAY 17-35 CONFIGURATION - EXHIBIT 5-2

As the amount of air traffic grows at an airport, the amount of noise-related issues also generally increases. Cecil Field is unique in this case as the airport formally served as a Naval Air Station. During this time, a significant number of fighter jet and other military aircraft operations occurred. Because aircraft-specific noise regulations are less stringent for these aircraft the noise contours produced are significantly larger than those produced by civil aircraft. The size of the noise contours are expected to decrease from the previously developed contours because of the lack of military aircraft operations and because new jet-engine technology is much quieter than older engines. A further discussion of the noise impacts will be discussed in **Chapter 6**.

5.5 MRO ALTERNATIVES

Cecil Field currently hosts a wide range of MRO activities within various facilities located in the northwest quadrant of the airfield. These activities include conversions/modifications to MD-80, DC-9, DC-10, B-727, B-737, B-757, and B-767 aircraft.

Recently, significant improvements have been made to the existing facilities to expand the hangar space available for MRO services. Flightstar has recently expanded its hangar at Cecil Field to more than 200,000 sf and similar expansions are being considered. Interest in additional MRO or manufacturing-type operations at Cecil Field has continued over recent years by various operators.

Because of the significant size requirements associated with the development of MRO hangars, aprons and related facilities, the planning of future MRO facilities is another important aspect of future Cecil Field development strategies. The following sections include the identification of anticipated MRO requirements followed by an evaluation of various alternative sites on the airport to determine the optimal location and configuration for future MRO or manufacturing facilities requiring airfield access.

5.5.1 MRO Requirements

Because of the type of activities associated with an MRO operation, these facilities generally require a large hangar and apron to accommodate aircraft servicing, aircraft parking, and maneuvering. In addition, office space and vehicular parking facilities can represent relatively large facilities within the particular MRO tenant lease boundary.

Sizes for the various MRO facilities can vary greatly depending on the types of aircraft and number of employees associated with the MRO operation.

Exhibit 5-3 and **Exhibit 5-4** illustrate potential MRO layouts or “modules” to provide a reference for minimal space requirements for future MRO planning. These exhibits indicate that a minimum lease area of at least 14 acres is necessary for considering basic MRO facilities at the airport. Based on the needs of the individual MRO operator, the lease area requirements for MRO activities can range to 20 acres or more.

Based on recent discussions with a potential MRO tenant, a short-term need identified by JAA for Cecil Field is the siting for a significant MRO facility representing a 150,000 sf hangar with 50,000 sf of office space. In addition, parking for approximately 120 to 150 vehicles is estimated. It is also noted that in addition to these facilities, this type of development will generally require other infrastructure improvements, most notably access roads and major water supply lines to address fire protection requirements associated with the buildings.

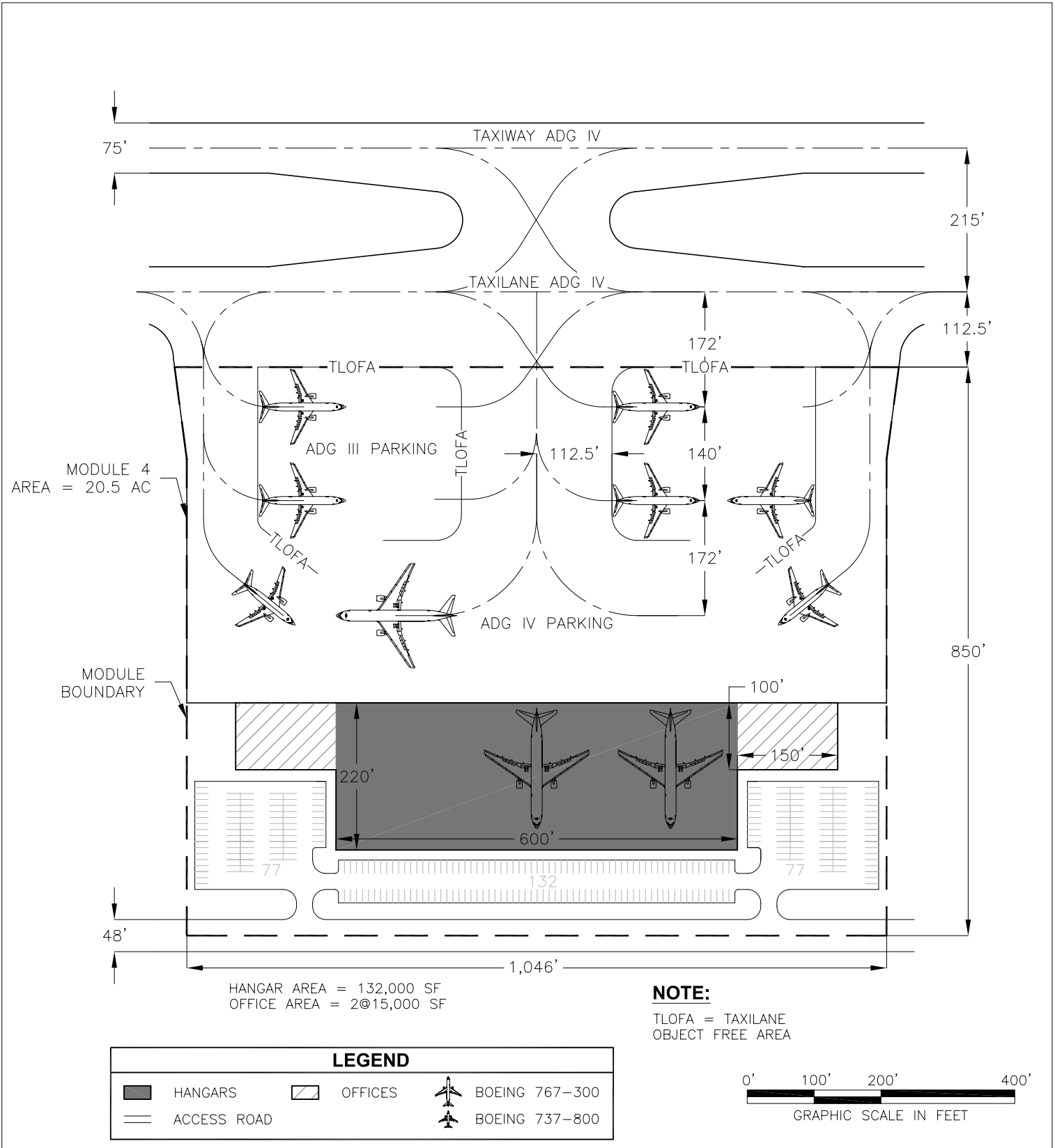
5.5.2 MRO Siting Alternatives

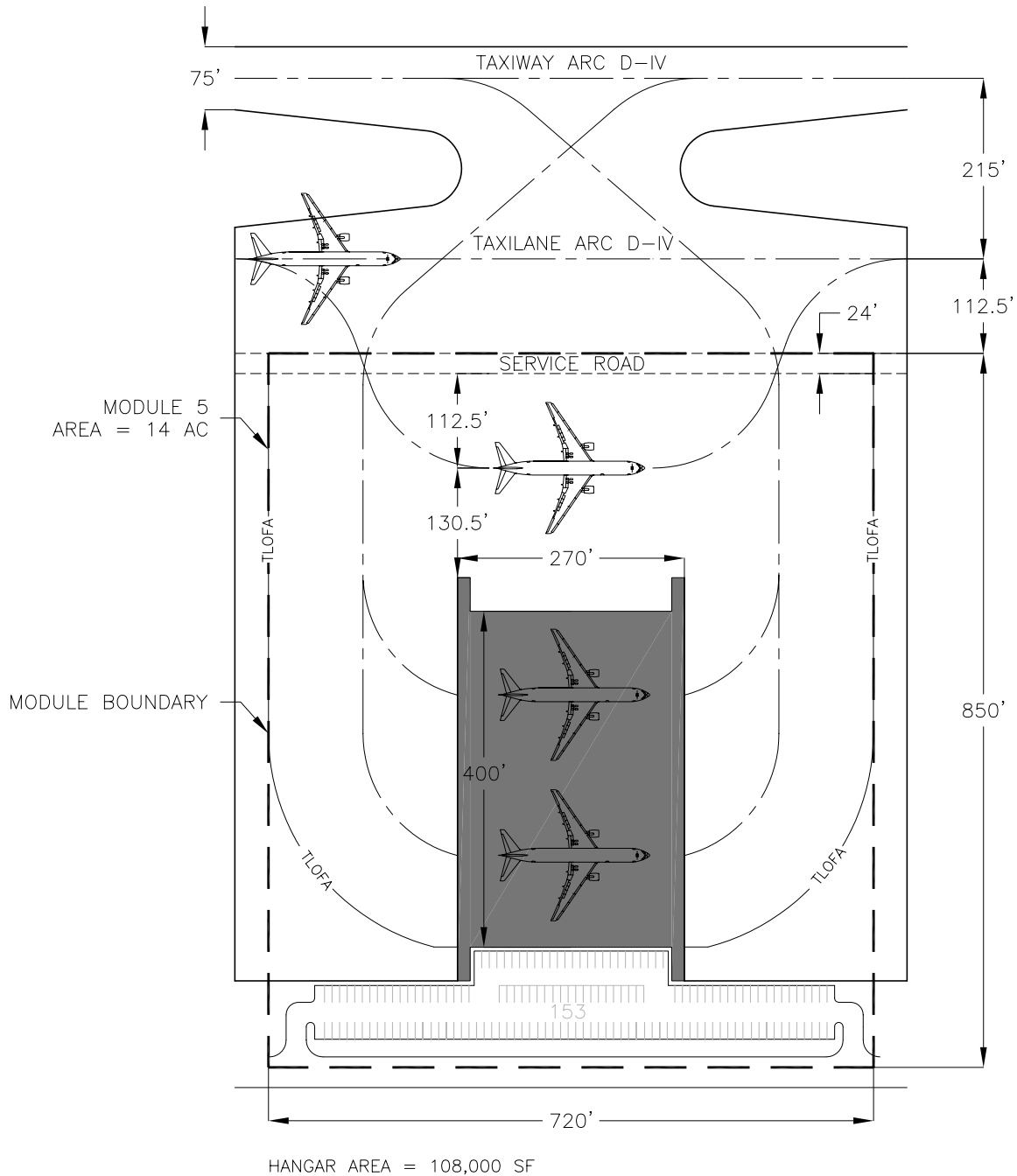
To address the short-term requirement for the projected 150,000 sf hangar and 50,000 sf office space identified in **Section 5.5.1**, an analysis of nine sites was conducted to determine the location offering the most effective configuration. The effectiveness of the various alternatives is evaluated based on proximity (and associated costs) to access existing infrastructure while facilitating efficient use of available property in areas adjacent to the site. The ability to further develop an additional hangar for aircraft painting applications is also considered in the evaluation.

The various sites considered are each located in the northwest airfield quadrant where existing infrastructure and access would facilitate cost-effective development of the facilities in the short-term. Other locations are not considered to enable construction of this new facility in the short-term before significant investment in other quadrants of the airfield is initiated. While each alternative attempts to achieve the same goal, there are some major and subtle differences between the sites. The layout of the various MRO siting alternatives is provided in **Exhibit 5-5**. An overview of each of the alternative sites is provided in the following sections.

Site 1

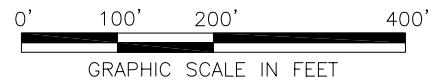
Located on the north end of the apron and west of Runways 18R-36L, the proposed hangar is placed on the eastern edge of the apron across from the existing NADEP hangar (Building 1845), which is shown in **Exhibit 5-6**.

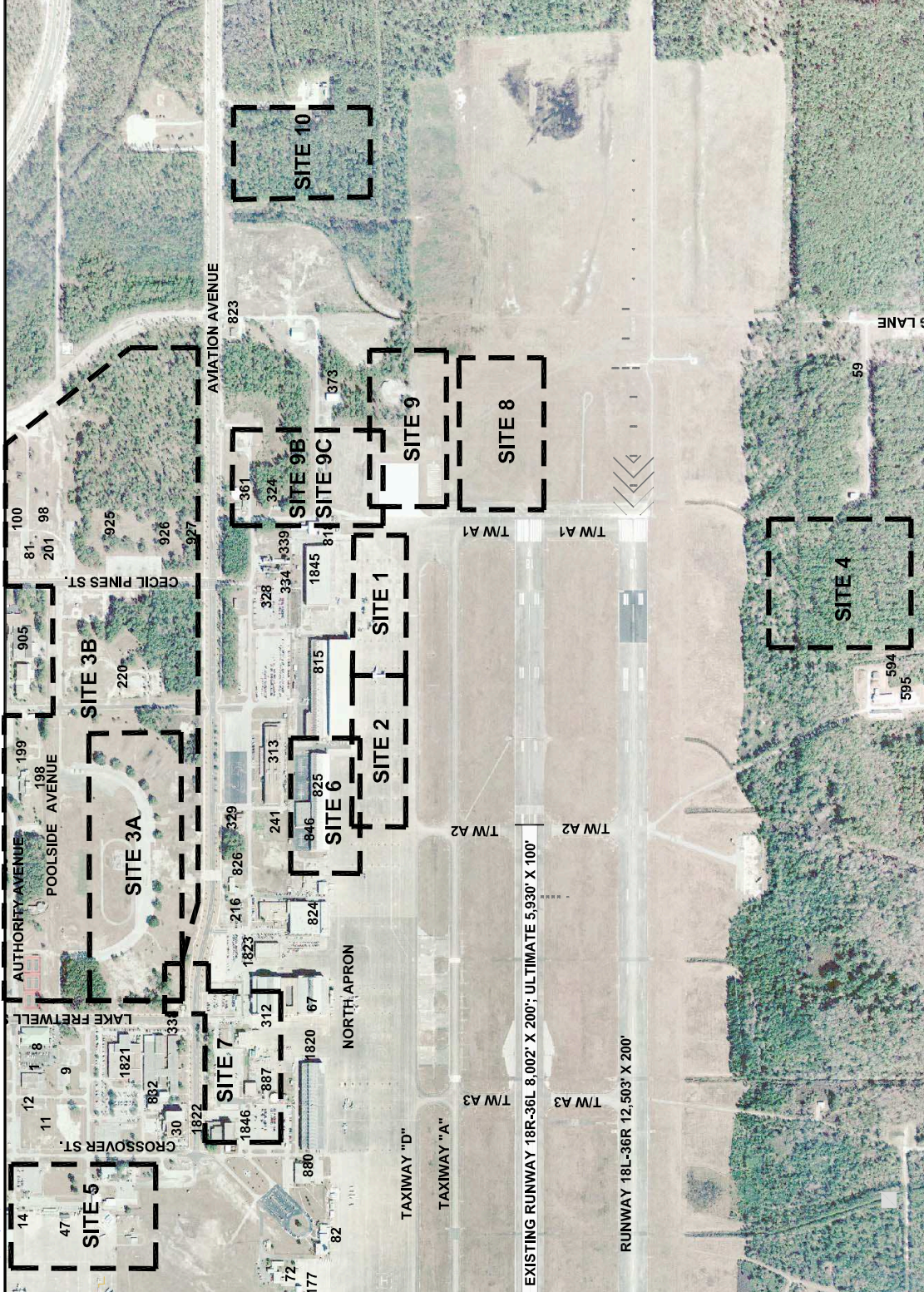




LEGEND	
	HANGARS
	SERVICE ROAD
	ACCESS ROAD
	BOEING 767-300

NOTE:
TLOFA = TAXILANE
OBJECT FREE AREA

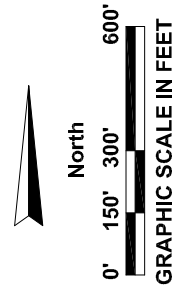
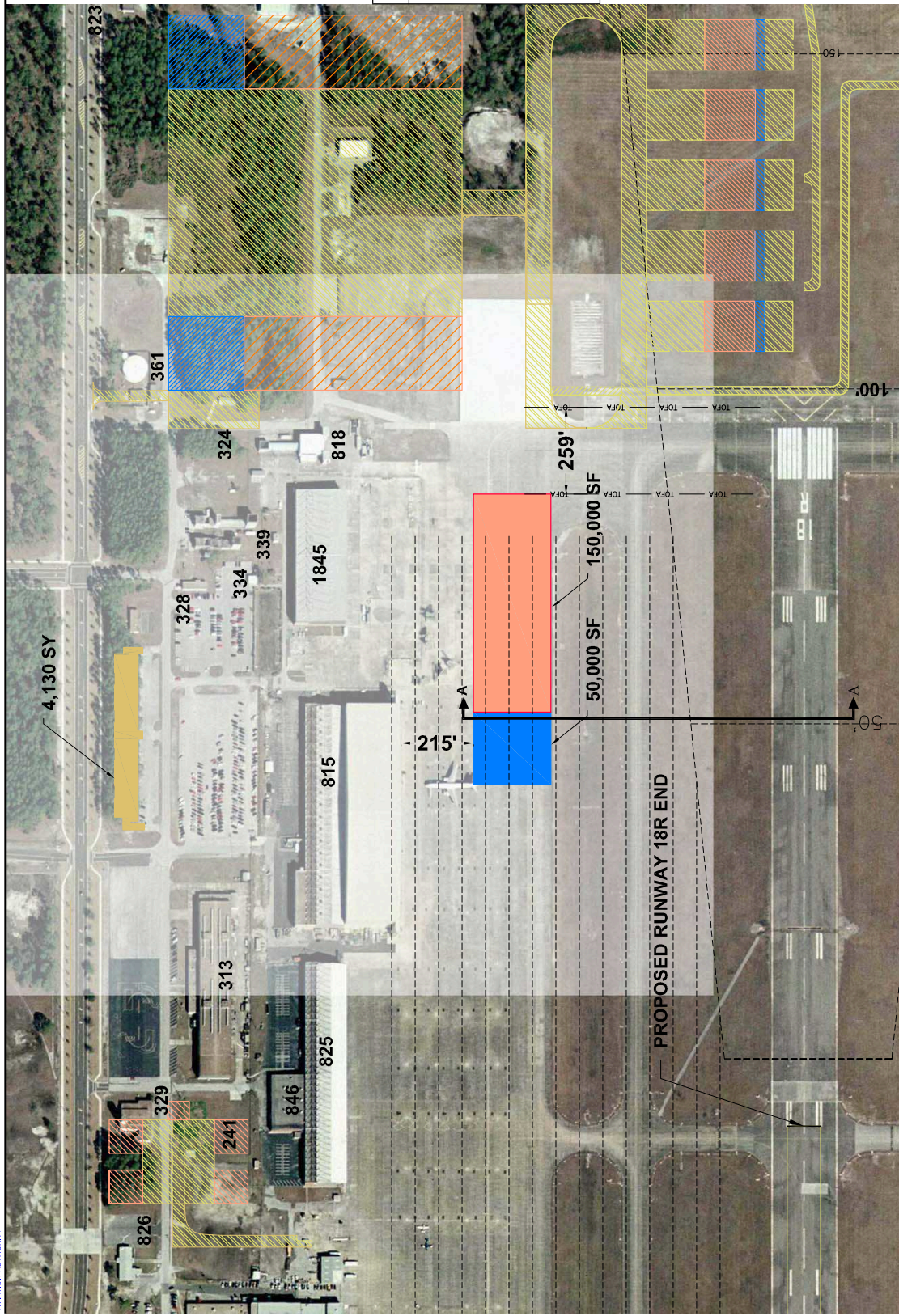




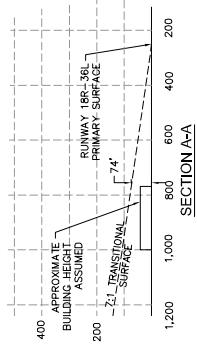
North



GRAPHIC SCALE IN FEET



LEGEND	
	PROPOSED PAVEMENT
	PROPOSED MRO HANGAR
	PROPOSED OFFICE SUPPORT
	ULTIMATE CORPORATE HANGAR
	ULTIMATE PAVEMENT
	ULTIMATE OFFICE SUPPORT
	ULTIMATE MRO HANGAR



MRO HANGAR ALTERNATIVE - SITE 1 - EXHIBIT 5-6

The hangar runs along the eastern edge of the apron for 650 ft and is approximately 230 ft deep. The office support is located at the south end of the hangar and is located across from the Flightstar hangar (Building 815). The developments of Site 1 include a 150,000 sf MRO hangar with a 50,000 sf office and a 4,130 sy parking lot located adjacent to Aviation Ave. This hangar development would provide approximately 215 feet of clearance from Building 815. The site shares approximately 20,000 sy of apron with the NADEP facility. Concerns of Site 1 include:

- Potential interference between airside access to the Flightstar hangar and airside access to MRO hangar
- A requirement for employees and others to cross the aircraft ramp to access the hangar
- The limited room for expansion of facilities
- Roof height limited to approx. 80 ft due to FAR Part 77 transitional surfaces
- Existing grades (sloping from west to east) would likely require significant modification of existing apron pavement to facilitate positive drainage away from proposed hangar per NFPA requirements.

Advantages related to this site include:

- No major access or utility infrastructure is needed since the site is located near Aviation Avenue (this alternative assumes adequate water supply for fire suppression requirements)
- Only minimal impervious areas are added as most of the site is located on existing apron pavement.

Site 2

Similar in layout to Site 1, Site 2 is located to the west of Runways 18R-36L across from the existing Flightstar (Building 815) and Boeing hangar (Building 825), south of Site 1, which is shown in **Exhibit 5-7**. The dimensions of this hangar and office match those of Site 1; however, the office support is located at the north end of the hangar. Parking would be available in the same lot designated for Site 1. Site 2 shares approximately 28,000 sy of apron between the proposed MRO hangar and the existing Flightstar and Boeing hangars. Key concerns and advantages of Site 2 are similar to those associated with Site 1.

Site 3A

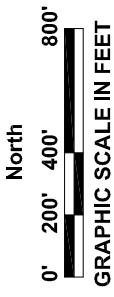
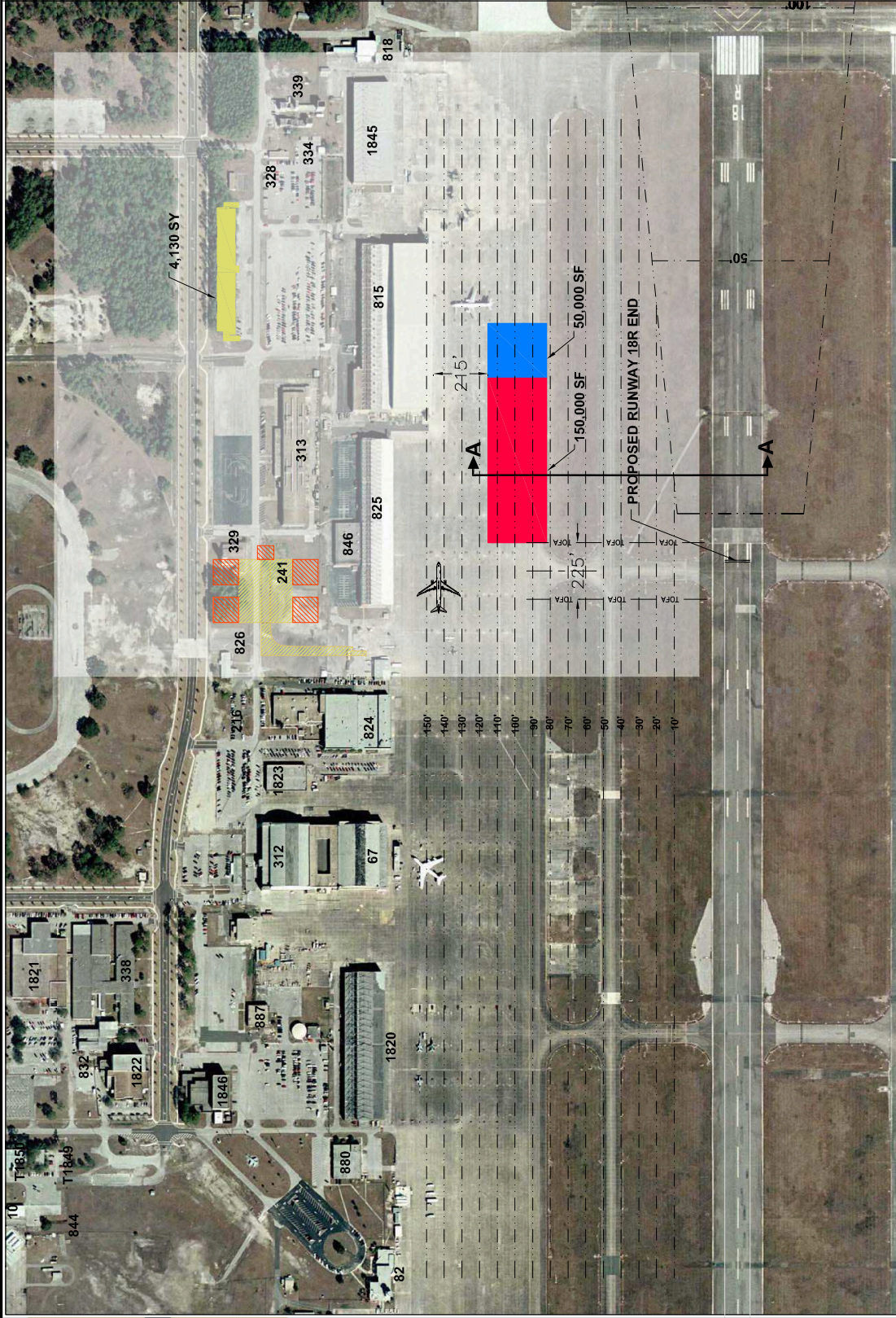
Site 3 is located west of Aviation Avenue in an open area along Poolside Avenue that is currently owned by the City of Jacksonville, which is shown in **Exhibit 5-8**. Site 3 features a MRO and a paint hangar each on opposite sides of a new taxiway that will access the existing apron. This new taxiway will be required to cross Aviation Avenue on an existing concrete slab designed for the taxiing of large commercial aircraft. The initial developments of Site 3 include the construction of a 150,000 sf MRO hangar with 20,915 sy apron, a 50,000 sf office and a 6,667 sy parking lot for approximately 200 vehicles. Room for additional developments is available including a 150,000 sf paint hangar with same apron, office, and parking setup. In addition to these developments an additional 112,500 sf expansion to the MRO hangar and a 65,500 sf expansion to the paint hangar would be possible without significant impact to other existing facilities.

While great potential exists for Site 3 there are some concerns that also exist with the site. Some of the issues that exist with this site include:

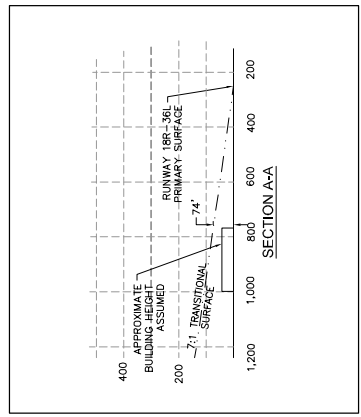
- The Airport would be required to negotiate and obtain the land from the City prior to development
- A requirement for gates to stop vehicle and pedestrian traffic to allow aircraft to taxi across Aviation Avenue to the apron
- Security fencing improvements would be necessary to keep unauthorized vehicles and pedestrians from entering the hangar areas as well as the airfield
- Numerous small metal building would need to be removed from the path of the proposed taxilane.
- Relatively higher development costs associated with the taxilane and apron facilities.

Advantageous factors related to this site include:

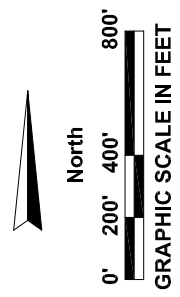
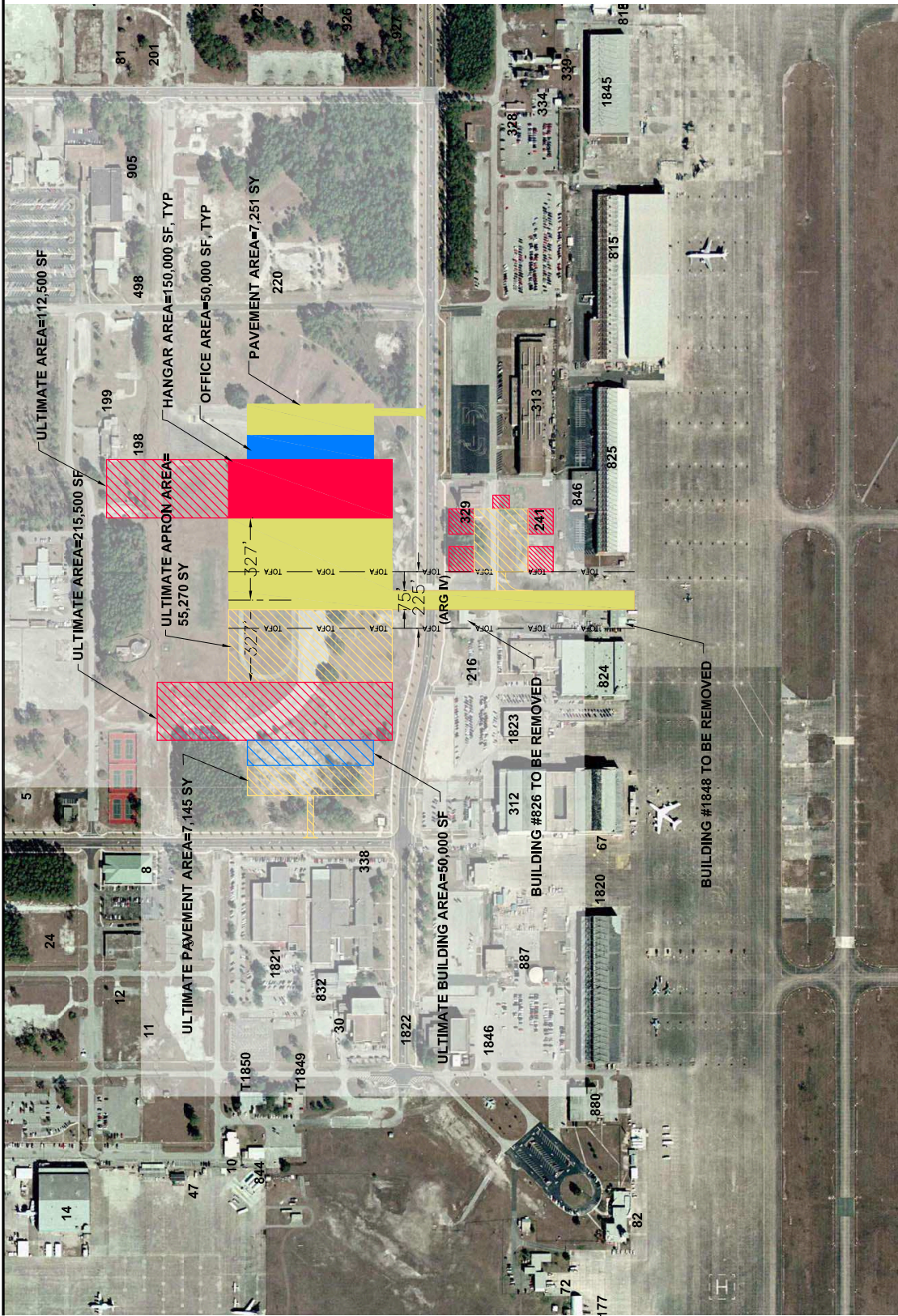
- Aviation Avenue and Lake Fretwell Street provide landside access and utilities are readily available off of Aviation Avenue
- The proposed development would not impact access to the major hangar facilities currently located on the existing apron pavement.



LEGEND	
PROPOSED FACILITIES	
[Red Box]	PROPOSED MRO HANGAR
[Blue Box]	PROPOSED OFFICE SUPPORT
[Yellow Box]	PROPOSED PAVEMENT
[Orange Box]	ULTIMATE CORPORATE HANGAR
[White Box with Black Outline]	ULTIMATE PAVEMENT



MRO HANGAR ALTERNATIVE - SITE 2 - EXHIBIT 5-7



LEGEND	
PROPOSED FACILITIES	
	PROPOSED MRO HANGAR
	PROPOSED OFFICE SUPPORT
	PROPOSED PAVEMENT
	ULTIMATE CORPORATE HANGAR
	ULTIMATE PAVEMENT
	ULTIMATE OFFICE SUPPORT
	ULTIMATE MRO HANGAR

Site 3B

Site 3B occupies the same space as Site 3A but also incorporates an additional property acquisition, as illustrated in **Exhibit 5-9**. The land currently occupying Site 3B is owned by the City of Jacksonville. This proposed MRO Development is much larger than any of the other sites proposed in this chapter. Two 75-foot taxiways will provide access to the development, one taxiway to the south and one to the north. The south taxiway will be required to cross Aviation Avenue on an existing concrete slab designed for the taxiing of large commercial aircraft. Part of this taxiway is already constructed with a width of 35-feet and is in place to serve the ultimate corporate hangars illustrated in the exhibit. The north taxiway will also need to cross Aviation Avenue. A concrete pad would need to be constructed across Aviation Avenue. This taxiway will serve the proposed Site 9B development as well. Different types of corporate hangars, maintenance hangars, office buildings and warehouses could be constructed at this site due to the abundance of space available. This development would effectively double the airside hangar capacity. This site would be phased over a period of time and the specific development would be dependent on aviation demand. Key concerns and advantages of Site 3B are similar to those associated with Site 3A.

Site 4

Site 4 is located on the proposed mid-field development area located to the east of Runway 18L-36R, which is shown in **Exhibit 5-10**. As with Site 3, there are no existing airside facilities at this site; as a result, new construction of aircraft infrastructure is required. Airside access will be provided by the construction of a taxiway which leads to the threshold of Runway 18L. Airside and landside access exists, but would require extensive improvements to support the proposed development. Landside access would need to be provided by constructing a road that connects to 103rd Street or Aviation Avenue.

Because no existing facilities are in place a great level of flexibility in the design of the site is available. Proposed in the initial development of Site 4 is a 150,000 sf MRO hangar with approximately 27,000 sy of apron, a 50,000 sf office and a 5,278 sy parking lot for approximately 155 vehicles. Ample space is available for additional developments including a potential 150,000 sf paint hangar south of the MRO hangar with a similar apron, office, and parking lot configuration.

Significant investment would be required to develop roadway and utility infrastructure to the site prior to

utilization of any facilities in this area. However, such investment would effectively initiate a new development area for future development of other industrial/commercial hangar developments, corporate hangar developments, and other aviation related facilities requiring airfield access.

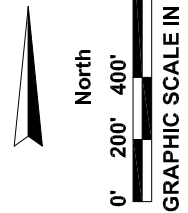
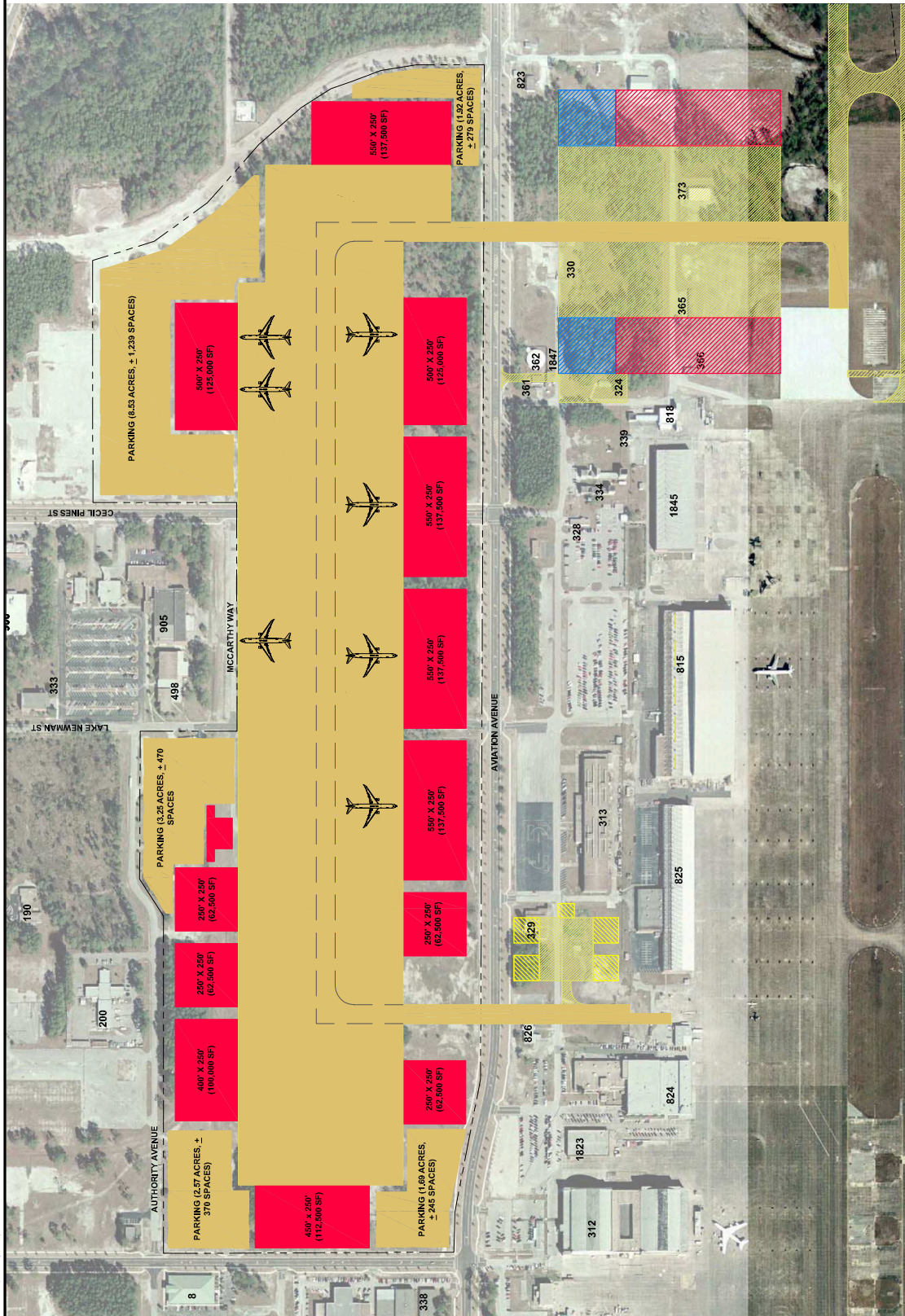
Site 5

Located to the north of Runway 9L-27R along Taxiway C, Site 5 occupies the existing Air-One FBO and U.S. Customs apron area, shown in **Exhibit 5-11**. This area is currently leased by Signature Flight Support. Aside from the proposed 150,000 sf hangar and the 50,000 sf office, no significant infrastructure development would be needed. Parking would be available in the area of an existing parking lot located to the north of the hangar. If needed, additional parking could be developed to the north and east of the proposed office. At this site, approximately 41,000 sy of apron already exists and could be available for use. Landside and utility access is already available from facilities associated with Aerospace Way. The primary benefit of this site is that much of the needed infrastructure is already in place; however, the area is currently subject to lease obligations associated with the existing tenant. The development of an MRO facility within this area will require coordination with and concurrence from Air-One and/or Signature representatives.

Site 6

Site 6 consists of a 120,000 sf expansion of the existing Boeing Hangar (Building 825), similar to the recent expansion of the Flightstar facilities immediately north of the site, shown in **Exhibit 5-12**. In addition to the hangar expansion, an additional 40,000 sf of office could also be constructed on the south end of the hangar. These facility expansions will extend onto the existing apron. Additional parking would come from the same 4,130 sy lot assumed for Site 1 and Site 2. This expansion allows approximately 27,000 sy of existing apron and should not adversely affect existing and future apron access for other facilities in this area. Because of the Part 77 transitional surface, the height of the expanded building is limited to approx. 128 ft above grade; however, this should not have any significant impact on the proposed facility.

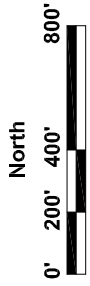
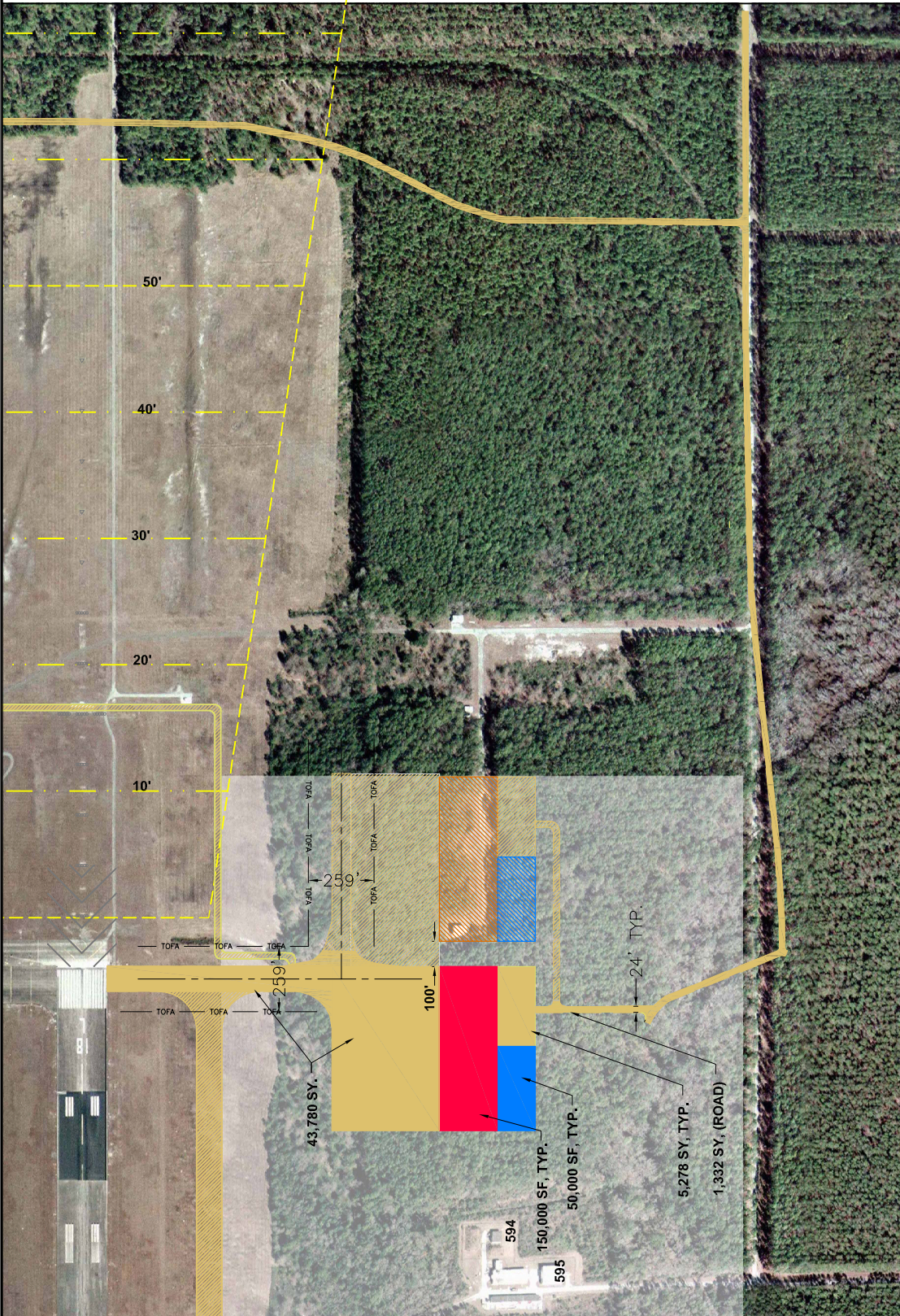
Additional expansion is somewhat limited due to the existing buildings located around the site. Utility infrastructure would primarily come from the existing systems serving the existing building.



LEGEND	
	INITIAL PAVEMENT
	INITIAL MRO HANGAR
	ULTIMATE PAVEMENT
	ULTIMATE MRO HANGAR
	ULTIMATE CORPORATE HANGAR
	ULTIMATE OFFICE SUPPORT

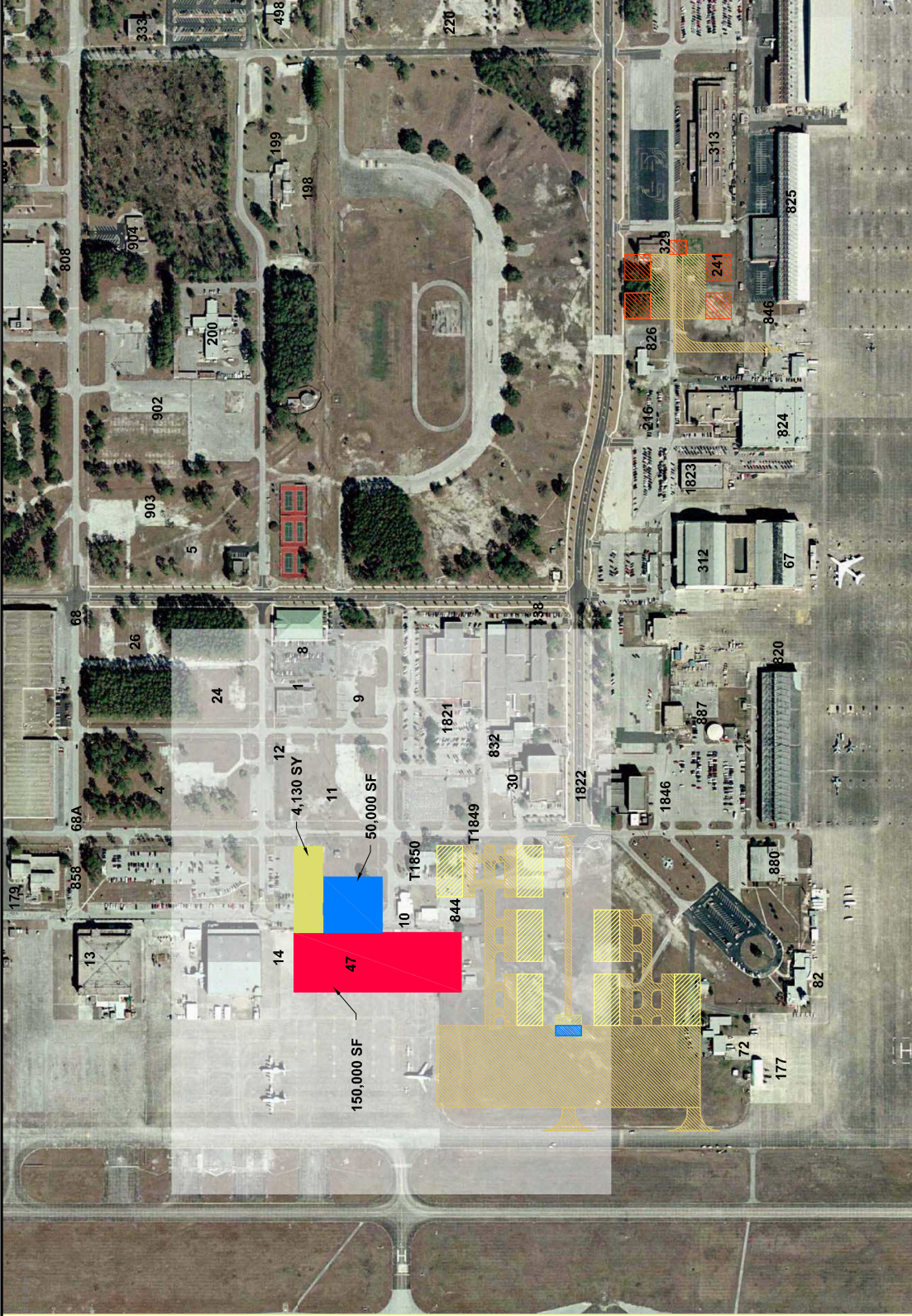
MRO HANGAR ALTERNATIVE - SITE 3B - EXHIBIT 5-9

CONNECTS TO AVIATION AVENUE



GRAPHIC SCALE IN FEET

LEGEND	
PROPOSED FACILITIES	
■	PROPOSED MRO HANGAR
■	PROPOSED OFFICE SUPPORT
■	PROPOSED PAVEMENT
▨	ULTIMATE PAINT HANGAR
▨	ULTIMATE PAVEMENT
▨	ULTIMATE OFFICE SUPPORT



North

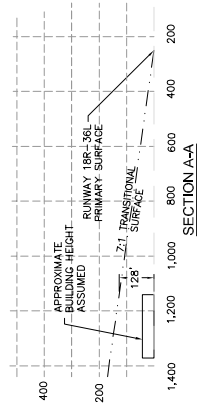
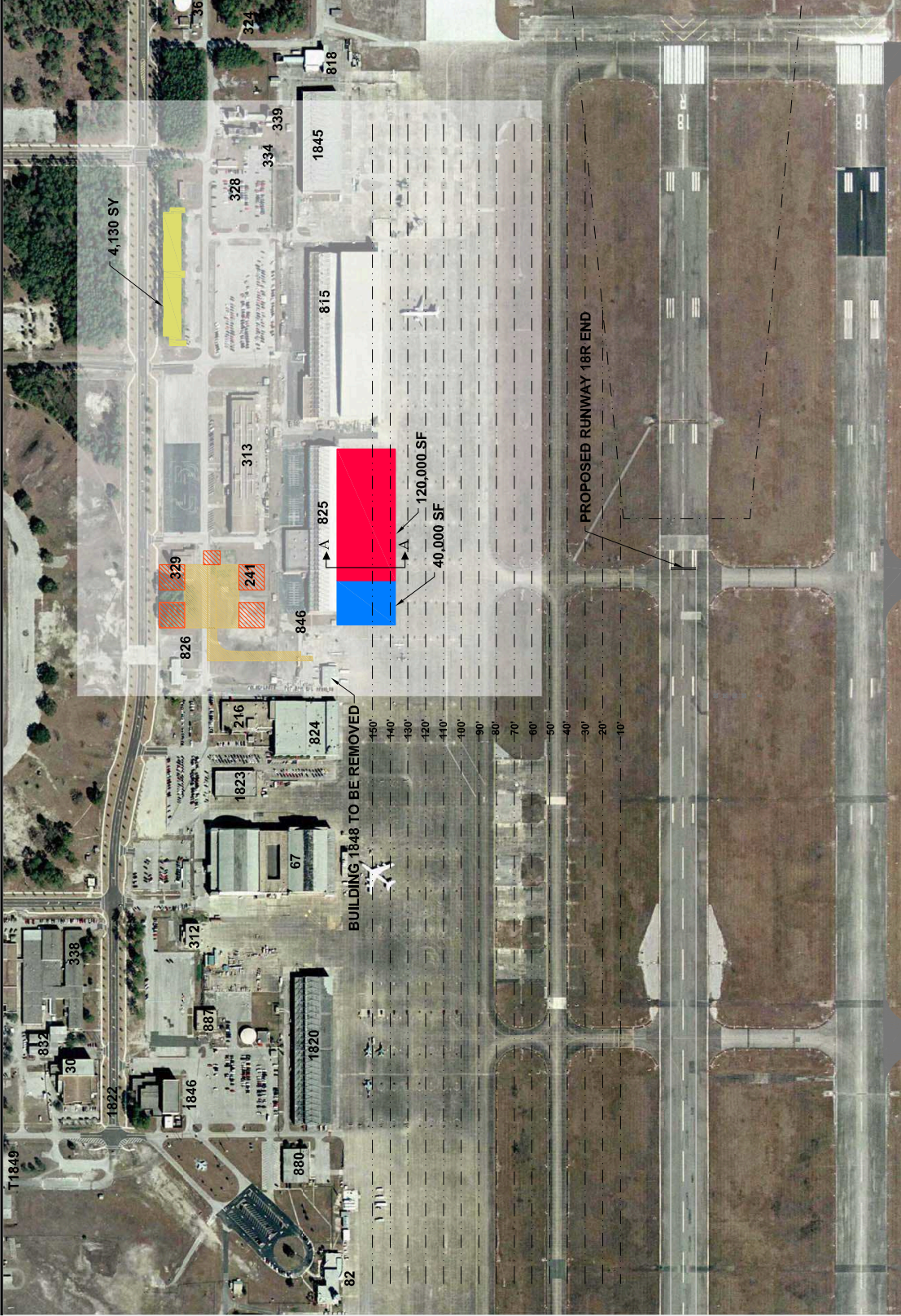


GRAPHIC SCALE IN FEET

LEGEND

PROPOSED FACILITIES

- PROPOSED MRO HANGAR
- PROPOSED OFFICE SUPPORT
- PROPOSED PAVEMENT
- ULTIMATE CORPORATE HANGAR
- ULTIMATE PAVEMENT
- ULTIMATE OFFICE SUPPORT
- ULTIMATE FBO HANGAR



MRO HANGAR ALTERNATIVE - SITE 6 - EXHIBIT 5-12

Site 7

Site 7 features a 150,000 sf hangar that is located west of (Building 1820) and south of (Building 312 and 67) multiple existing Boeing hangars, shown in **Exhibit 5-13**. Much of the required apron pavement already exists and airside access is provided by apron located between Buildings 1820, 312, and 67. An estimated 9,275 sy of new apron would need to be constructed to satisfy access requirements. A 50,000 sf office and a 4,350 sy parking lot would be located at the northwest corner of the intersection of Aviation Ave. and Lake Fretwell St. Numerous parking areas exist around the proposed hangar and they may provide a feasible parking solution if a joint use agreement can be reached between Boeing and the new tenant. To construct this hangar an existing water storage facility would need to be relocated and the corrosion hangar along with other small structures would need to be demolished. Utility infrastructure for the new hangar and office would be available off of Aviation Avenue.

Site 8

Located to the north of the threshold of Runway 18R, Site 8 includes a 150,000 sf hangar with a 50,000 sf office located adjacent to the south end of the hangar, shown in **Exhibit 5-14**. An apron approximately 20,550 sy in size would be located west of the proposed hangar and office. Parking would be provided from a 4,130 sy lot located east of the north end of the hangar.

As with Site 4, there is no airside or landside infrastructure in the local proximity of this area at the current time. New airside and landside access will need to be constructed. An extension of Taxiway A to the north is needed to provide airside access. The apron will be constructed to provide access and aircraft parking for the hangar. Landside access will be provided via a new road that will run north and connect with another new road linked to Aviation Avenue. In addition to the new airside and roadway infrastructure, utilities will need to be accessed from Aviation Avenue.

Site 9

Site 9 is positioned north of the existing NADEP hangar (Building 1845), east of Aviation Avenue, shown in **Exhibit 5-15**. It includes the development of a 150,000 sf hangar facility with a 50,000 sf office located on the north side of the hangar. Access to the site would be from a new access drive linked to Aviation Avenue with approx. 4,130 sy of parking adjacent to the proposed office space. Similarly, utilities for the facility would be extended from existing systems located along Aviation Avenue.

Although some infrastructure development would be necessary to support this alternative site, this site utilizes the relatively new PCC apron pavement connected to the existing pavement serving the existing NADEP hangar (Building 1845). This PCC pavement was originally constructed to serve a similar development, but remains primarily unused due to the proposed tenant withdrawing their plan to locate facilities in this area. The ability to effectively utilize the existing PCC apron pavement is a primary advantage of this site.

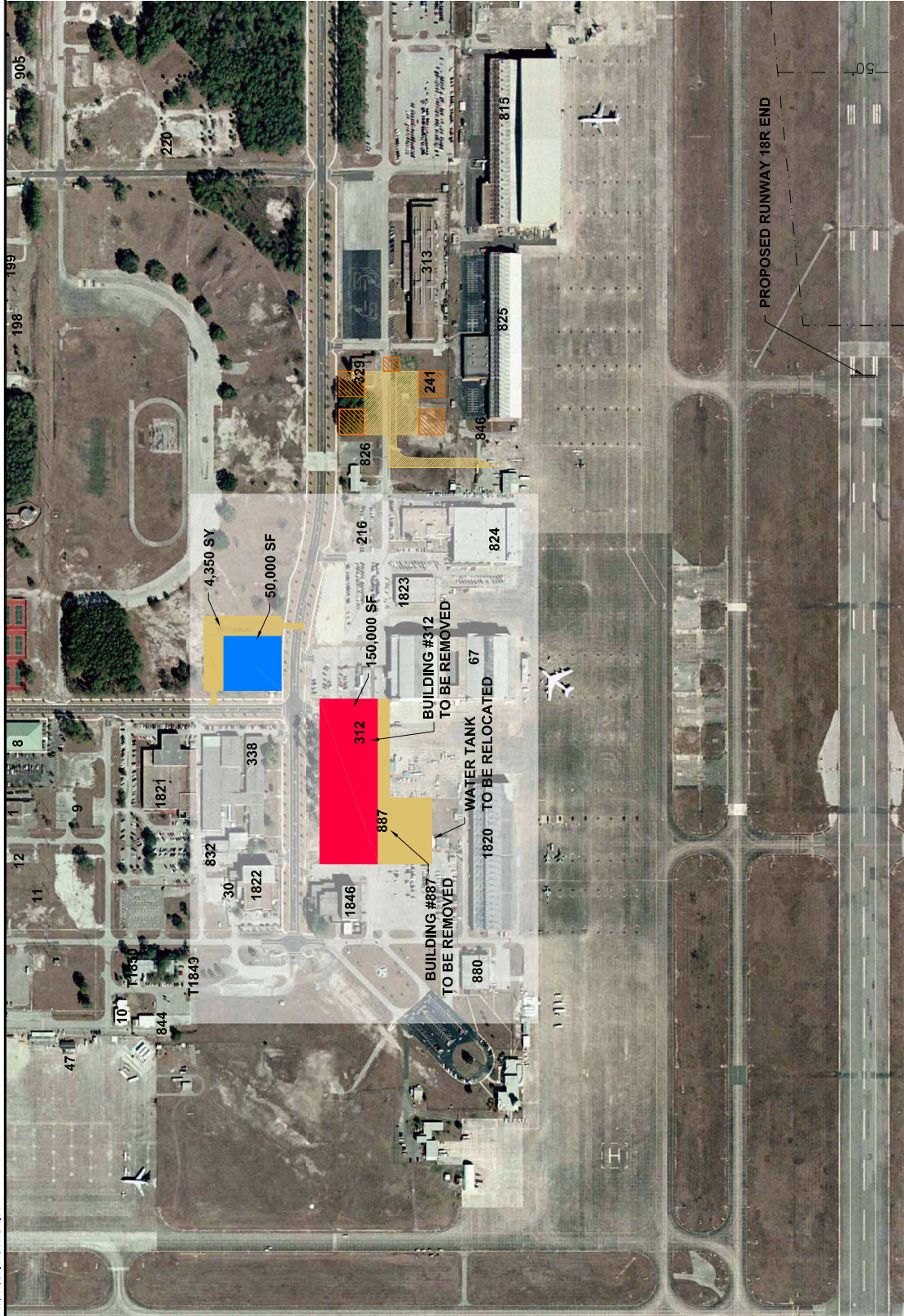
Site 9B

Based on a review of the benefits associated with Site 9, Site 9B represents a similar but modified configuration that reduces infrastructure costs and better utilizes the existing development area associated with this area, shown in **Exhibit 5-16**. Site 9B is also positioned north of the existing NADEP hangar (Building 1845), east of Aviation Avenue, but includes an east-west alignment of the proposed 150,000 sf hangar facility with a 50,000 sf office located on the east side of the hangar. An access drive to the site would be directly linked to Aviation Avenue with approx. 4,250 sy of parking adjacent to the proposed office space. Utilities for the facility would also be extended from existing systems located along Aviation Avenue, but would involve shorter distances for the required service.

This site also utilizes the relatively new PCC apron pavement connected to the existing pavement serving the existing NADEP hangar (Building 1845) for taxiway access. Although the utilization of the full extent of the existing PCC pavement is somewhat reduced (i.e. portions of the apron would be in a proposed taxilane/taxiway Object Free Area, the reduced infrastructure requirements for this alternative appear to offset this utilization concern. The proposed apron associated with Site 9 would allow for immediate development of future industrial or corporate hangar development along the north side of the apron.

Site 9C

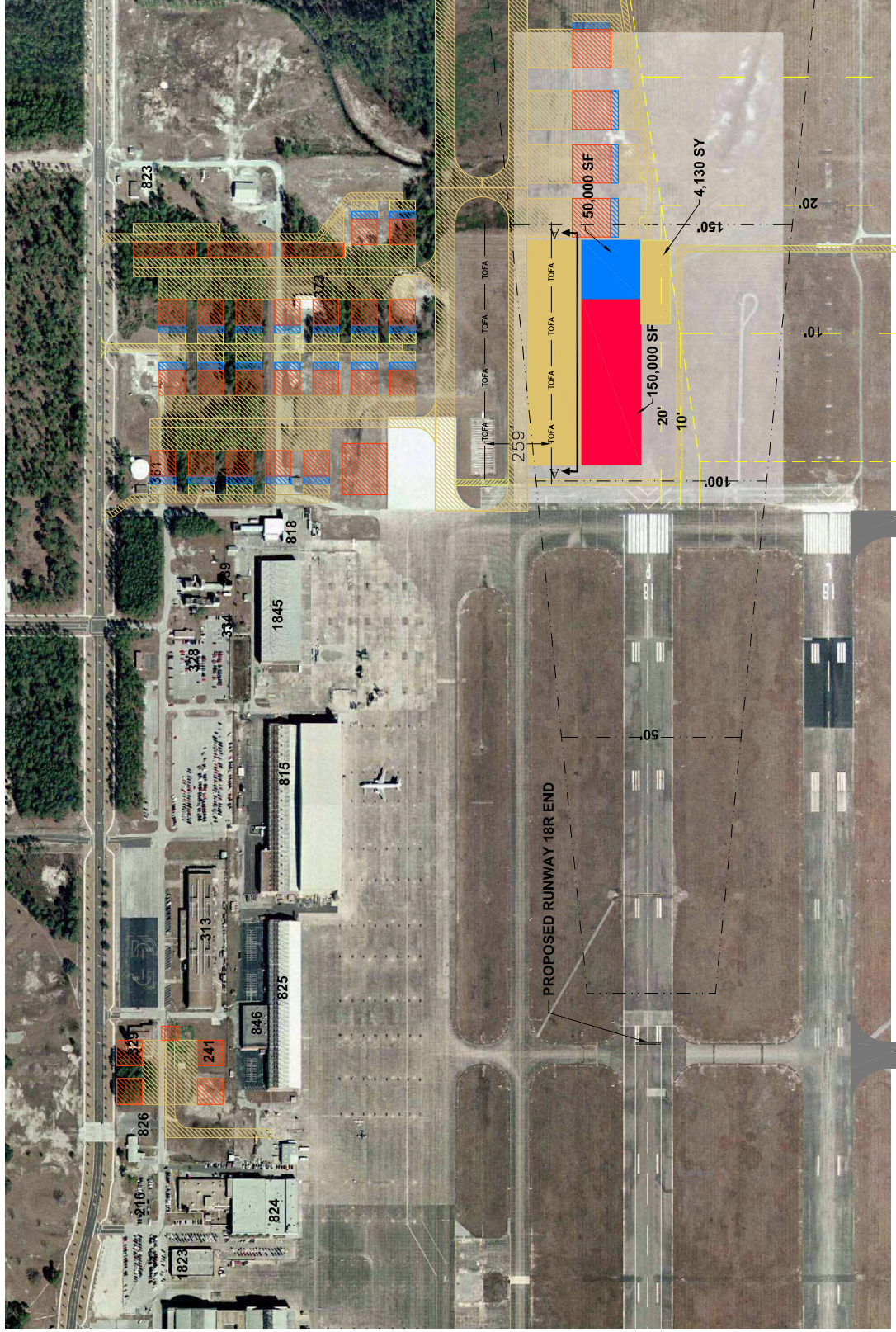
After analyzing the benefits of Sites 9 and 9B, Site 9C represents a revised layout. Site 9C would occupy the same land area as Site 9B but the orientation of the MRO hangars has been modified based on feedback provided by potential tenants, see **Exhibit 5-17**. This alternative provides for an east-west alignment of the southern MRO hangar. The existing PCC apron would be utilized as well and expanded by approximately 5,400 sy to provide outside storage space for aircraft and equipment.



LEGEND

PROPOSED FACILITIES	
■	PROPOSED MRO HANGAR
■	PROPOSED OFFICE SUPPORT
■	PROPOSED PAVEMENT
▨	ULTIMATE CORPORATE HANGAR
▨	ULTIMATE AIRFIELD PAVEMENT

MRO HANGAR ALTERNATIVE - SITE 7 - EXHIBIT 5-13

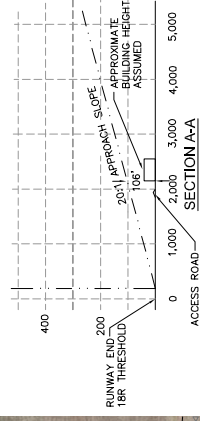


North
0' 200' 400' 800'
GRAPHIC SCALE IN FEET

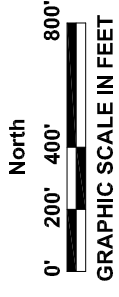
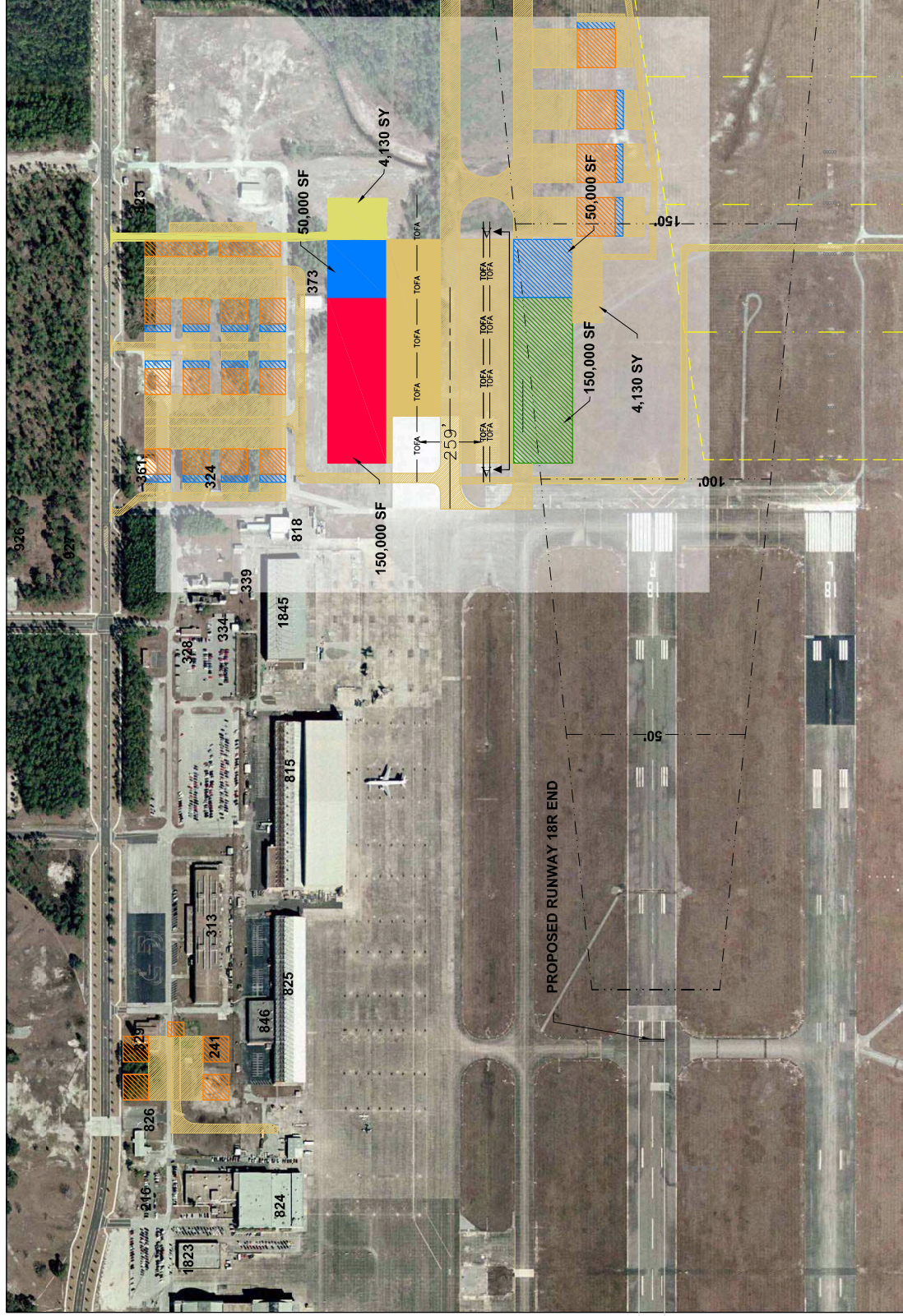
LEGEND

PROPOSED FACILITIES

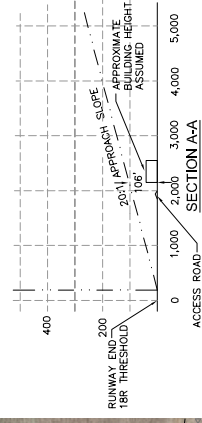
- MRO HANGAR
- OFFICE SUPPORT
- PROPOSED PAVEMENT
- ULTIMATE CORPORATE HANGAR
- ULTIMATE AIRFIELD PAVEMENT
- ULTIMATE OFFICE SUPPORT



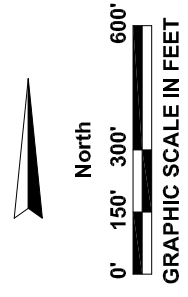
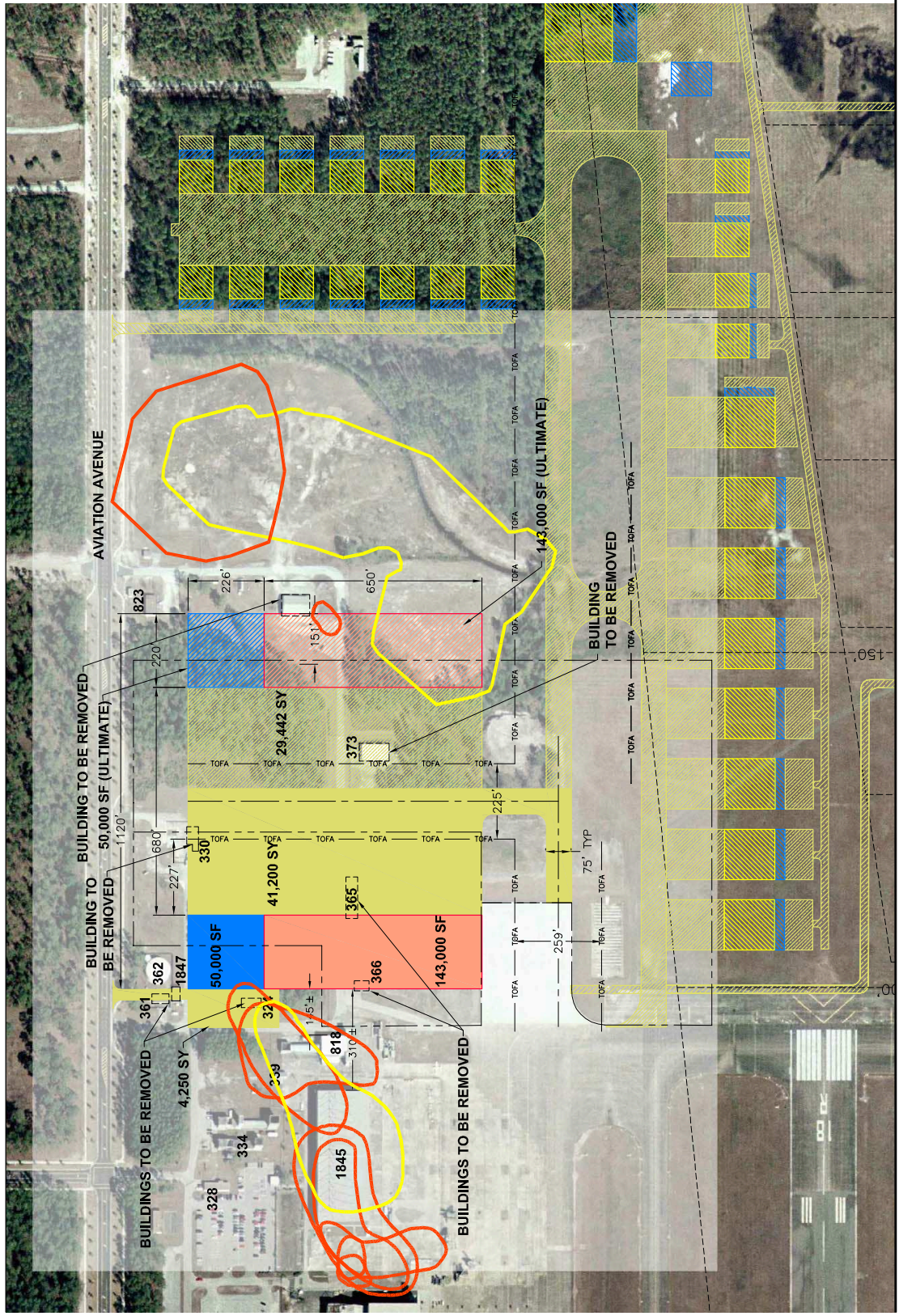
MRO HANGAR ALTERNATIVE - SITE 8 - EXHIBIT 5-14



LEGEND	
PROPOSED FACILITIES	
[Red Box]	PROPOSED MRO HANGAR
[Blue Box]	PROPOSED OFFICE SUPPORT
[Yellow Box]	PROPOSED PAVEMENT
[Orange Hatched Box]	ULTIMATE CORPORATE HANGAR
[Light Orange Hatched Box]	ULTIMATE PAVEMENT
[Blue Hatched Box]	ULTIMATE OFFICE SUPPORT
[Green Hatched Box]	ULTIMATE MRO HANGAR

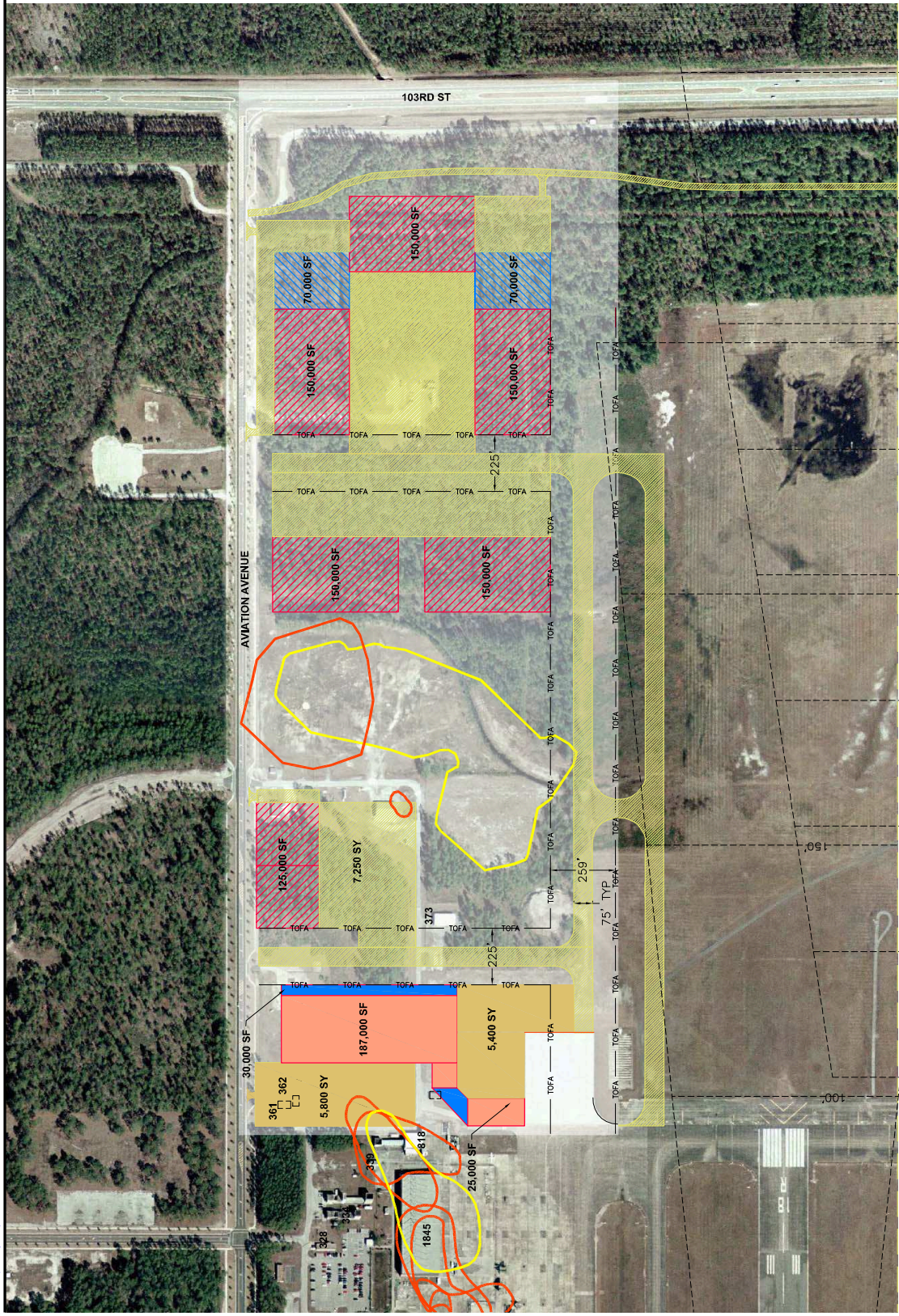


MRO HANGAR ALTERNATIVE - SITE 9 - EXHIBIT 5-15



LEGEND	
[Red box]	INITIAL MRO HANGAR
[Blue box]	INITIAL OFFICE SUPPORT
[Yellow box]	INITIAL PAVEMENT
[Red diagonal lines]	ULTIMATE MRO HANGAR
[Blue diagonal lines]	ULTIMATE OFFICE SUPPORT
[Yellow diagonal lines]	ULTIMATE CORPORATE HANGAR
[Green diagonal lines]	ULTIMATE PAVEMENT
[Red line]	SHALLOW SYSTEM/PLUME
[Yellow line]	DEEP SYSTEM/PLUME

SOURCE: U.S. DEPT. OF NAVY, 2007;
AVCON, INC.



LEGEND	
[Orange Box]	INITIAL MRO HANGAR
[Blue Box]	INITIAL OFFICE SUPPORT
[Yellow Box]	INITIAL PAVEMENT
[Red Box]	ULTIMATE MRO HANGAR
[Blue Box]	ULTIMATE OFFICE SUPPORT
[Green Box]	ULTIMATE PAVEMENT
[Orange Line]	SHALLOW SYSTEM/PLUME*
[Yellow Line]	DEEP SYSTEM/PLUME*

*SOURCE: US. DEPT. OF NAVY, 2007;
AVCON, INC.

MRO HANGAR ALTERNATIVE - SITE 9C - EXHIBIT 5-17

Approximately 5,800 sy of parking would be provided south of the proposed MRO hangar which would connect to Aviation Avenue. The initial development of Site 9C would not require the construction of a 75-foot taxiway due to access via the PCC apron.

The second phase of development would include construction of a 125,000 sf paint hangar, 7,250 sy apron, a 75-foot taxiway and parking. This development would be located north of the first phase of development and south of the soil contamination plumes. The third phase of development would be considered for long term planning. If the demand for MRO hangars is realized, five 150,000 sf hangars could be developed as shown in the exhibit. This development would be located north of the soil contamination plumes and south of the proposed road running parallel to 103rd Street. Construction of the third phase would require an extension of Taxiway D. Access to parking would be provided from Aviation Avenue and the proposed road parallel to 103rd Street.

Site 10

Site 10, situated north of the proposed Site 9B, is proposed to be reserved for aviation related development. This site is positioned between the soil contamination plumes to the north of Site 9B, and south of 103rd St. The proposed Site 9B development, Exhibit 5-16, depicts a corporate hangar development in this area, however, an alternate MRO hangar development could be developed in this area depending on future aviation demand. This MRO development would mirror the two 150,000 sf MRO hangars depicted in Site 9B but would be located north of the contamination plumes and south of the proposed road parallel to 103rd Street. This site provides available access to Aviation Avenue and 103rd St. The location of this site, in the northwest corner of the airport, would also provide privacy to tenants. Currently, this site does not provide airside access but an investment in the required infrastructure would benefit not only this site, but also proposed corporate and other aviation related development. Utility access is readily available along Aviation Avenue and would reduce the capital needed to develop a typical project of this size. The proposed Site 10 is illustrated in **Exhibit 5-18**.

5.5.3 Preferred MRO Alternative

Because Site 9C includes several advantages compared to other alternative sites considered, it is recommended that this site be considered as a recommended alternative for short-term development of MRO hangar facilities. Advantages include:

- Utilization of the existing PCC apron pavement northeast of the NADEP hangar
- Relatively small infrastructure development costs, including vehicular access and utility systems
- No impacts to existing apron space or airfield access associated with the existing airfield tenants.
- Immediate development space for future MRO facilities north of the proposed taxiway/apron construction.

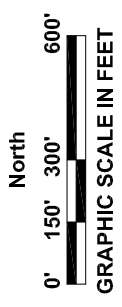
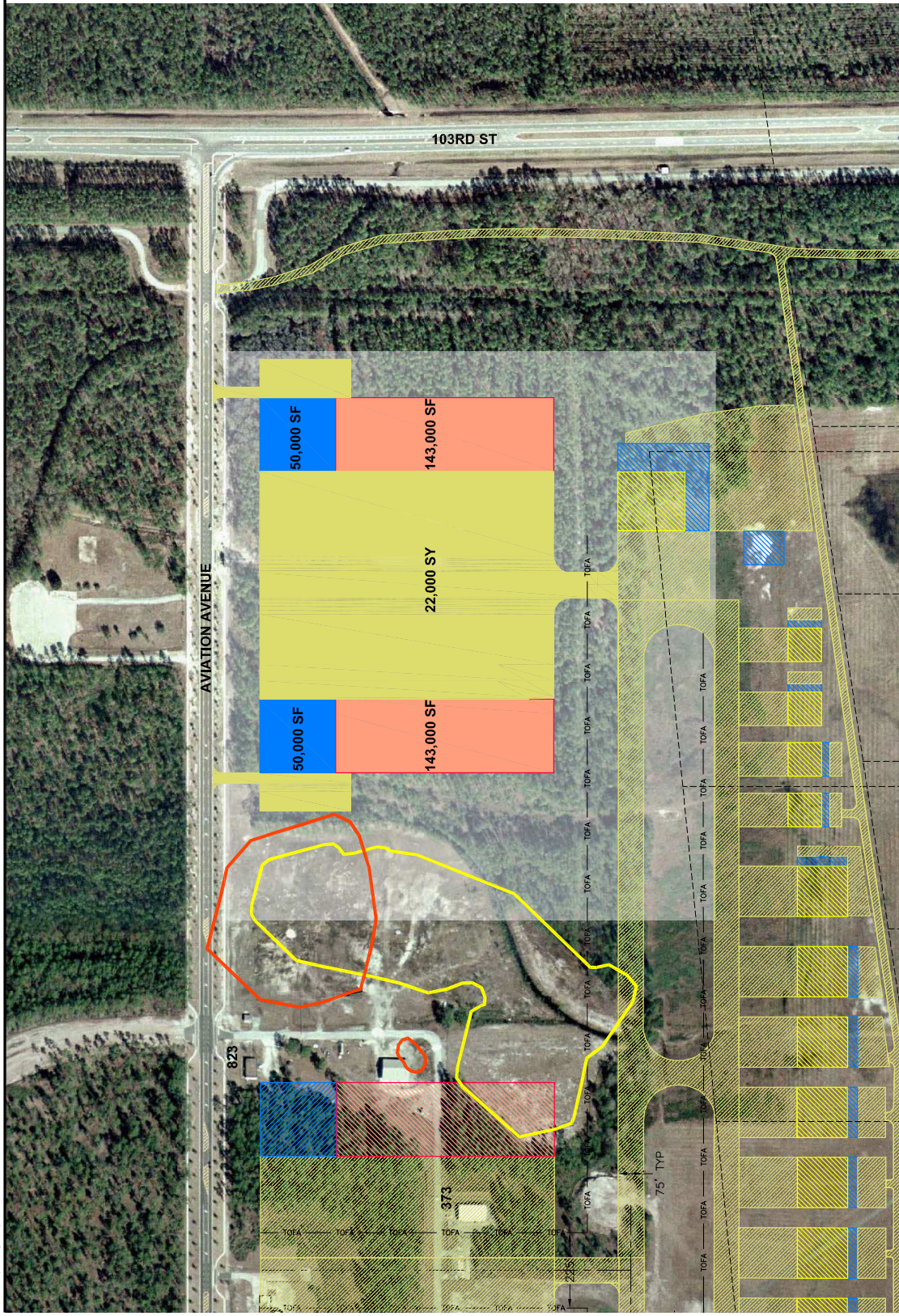
With consideration of necessary hangar facilities, office facilities, airfield pavement improvements, vehicular access and parking improvements, and utility infrastructure improvements, it is estimated that the construction of the 187,000 sf hangar, associated 30,000 sf office, and associated infrastructure would require a capital investment of approx. \$40,000,000 (including 20% contingency). However, this capital cost would facilitate future hangar development along the north side of the taxiway/apron with limited airfield pavement costs.

Although Site 9C is chosen as the preferred MRO alternative, the construction of this site is not exclusive to the other sites outlined previously. The airport may chose to develop two or more sites as a way to meet future demand. Site 9C is the preferred initial short term MRO alternative and in the future other sites may be chosen for construction once Site 9C has been completed. The locations and characteristics of Sites 1 and 2 also make their development a serious consideration in the next 5 to 10 years.

5.6 GENERAL AVIATION ALTERNATIVES

To accommodate future growth in general aviation activity at Cecil Field, development strategies for the airport shall include required T-hangars, corporate hangars, and Fixed-Base Operator (FBO) facilities for the 20-year planning period.

It is important to note that Cecil Field offers significant area along the existing airfield facilities that may potentially serve as general aviation development areas supporting future hangar facilities.



LEGEND	
[Red Box]	INITIAL MRO HANGAR
[Blue Box]	INITIAL OFFICE SUPPORT
[Yellow Box]	INITIAL PAVEMENT
[Orange Box]	ULTIMATE MRO HANGAR
[Blue Hatched Box]	ULTIMATE OFFICE SUPPORT
[Yellow Hatched Box]	ULTIMATE CORPORATE HANGAR
[Green Hatched Box]	ULTIMATE PAVEMENT
[Red Line]	SHALLOW SYSTEM/PLUME*
[Yellow Line]	DEEP SYSTEM/PLUME*

*SOURCE: US. DEPT. OF NAVY (7/2/03);
AVCON, INC.

5.6.1 Corporate Hangars and T-hangars

The existing airport facilities provide limited capabilities for storage of private general aviation aircraft. However, with robust growth in the western portion of Jacksonville, the demand for corporate hangars and T-hangars is projected to grow steadily over the planning period.

In general, sites for general aviation facilities within the northwest quadrant are somewhat limited; however, it is recommended that the areas east of the preferred MRO alternative, Site 9C as identified in Section 5.5.2 and Section 5.5.3, be reserved for corporate and T-hangar development. The corporate and T-hangar developments could be located east of the proposed Taxiway D expansion and are presented in Site 9B, Exhibit 5-_. Additionally, if MRO demand is not realized over the planning period, the corporate hangars located north of the soil contamination area, illustrated in Site 9B, could be constructed in place of the MRO hangars presented in Site 9C to meet corporate and T-hangar demand. The primary benefit for developing these types of facilities in this location is the ability to expand these facilities with relatively limited infrastructure improvements.

With consideration of the fact that most aircraft associated with corporate hangar and T-hangar facilities are significantly smaller than those associated with MRO activities, it is generally recommended that the MRO facilities be situated more closely to the airfield such that the extent of (and investment in) the taxiway/taxilanes with wider pavement widths can be limited. These wider pavements can dually serve as access for smaller general aviation and for the larger aircraft; whereas the reverse is not true.

Additional corporate hangar and T-hangar development options include available development areas north of Taxiway B and west of Taxiway A as shown in **Exhibit 5-19**.

The development of corporate hangars and T-hangars should only progress as the actual demand for these facilities is realized. Upon build-out of the available hangar areas in the airport's northwest quadrant, the airport will need to consider additional hangar development areas in alternate (and currently undeveloped) portions of the airfield.

Two primary general aviation areas have been identified for the future development of corporate hangars and T-hangar facilities. These include the southeast quadrant and the northeast quadrant east of the future runway, Runway 17-35. Both areas would

be accessible from Brannon-Chaffee Road and would likely necessitate the development of at least one independent FBO facility to support general aviation operations in the respective areas.

The recommended development plans for the southwest quadrant and northeast quadrant are more discussed in **Section 5.9.2** and **Section 5.9.3**, respectively. It is recommended that the airport consider these development strategies as general guidelines only and that actual development be based on the actual demand for facilities.

To provide better guidance in the overall planning of these areas, three separate corporate hangar/T-hangar development concepts or "modules" have been identified for consideration. These modules represent development concepts that provide efficient use of the areas adjacent to the airfield by providing utilization of approximately 1,000 ft of depth perpendicular to a parallel taxiway.

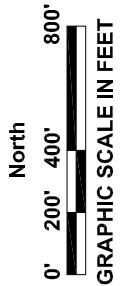
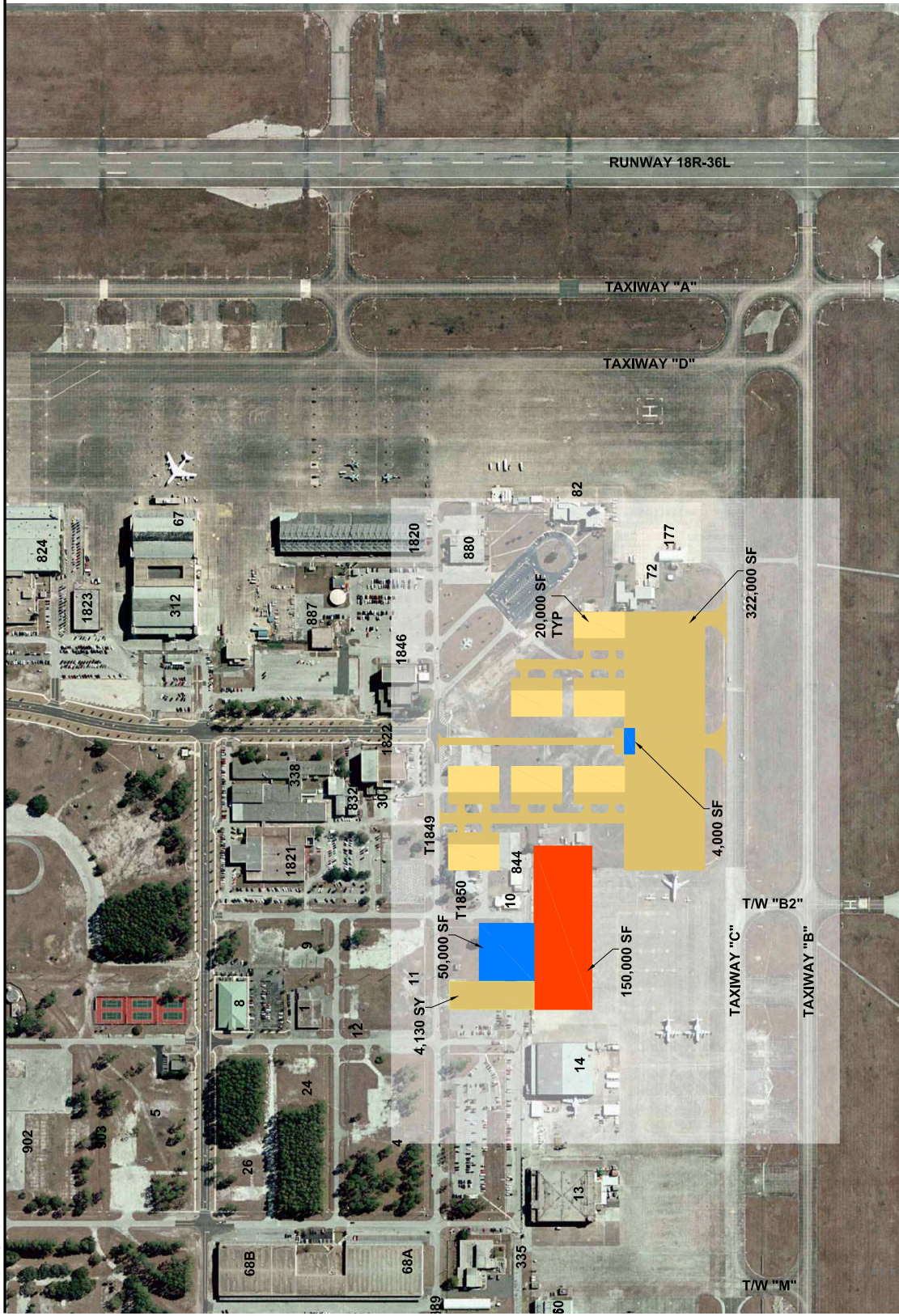
Exhibit 5-20 illustrates a basic corporate hangar layout module that efficiently accommodates up to ten individual box-type hangars in a width (measured parallel to the associated runway centerline) of less than 600 ft. These hangars are sized to accommodate basic B-II type aircraft with appropriate NFPA (Section 409) separations.

Exhibit 5-21 depicts a similar module that includes a series of T-hangar structures in conjunction with corporate hangars. The layout assumes a variety of ADG-I and ADG-II aircraft storage hangars with an approximate 15 acre area.

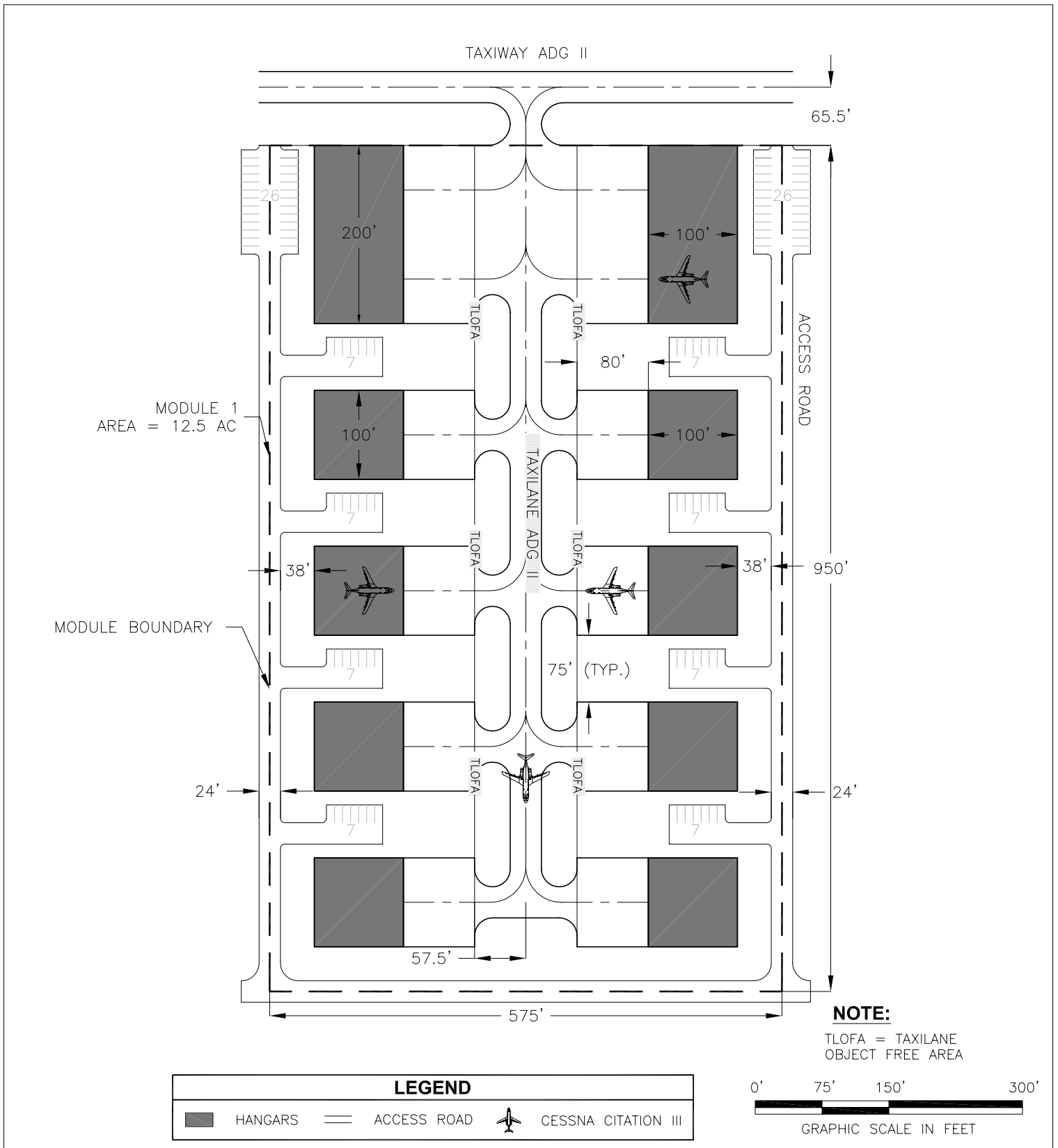
For larger aircraft, such as the Gulfstream V (ADG-III), a corporate hangar module measuring approximately 21 acres may be considered. **Exhibit 5-22** illustrates a corporate hangar layout that efficiently accommodates six 32,000+ sf hangar/office facilities with a shared-use apron.

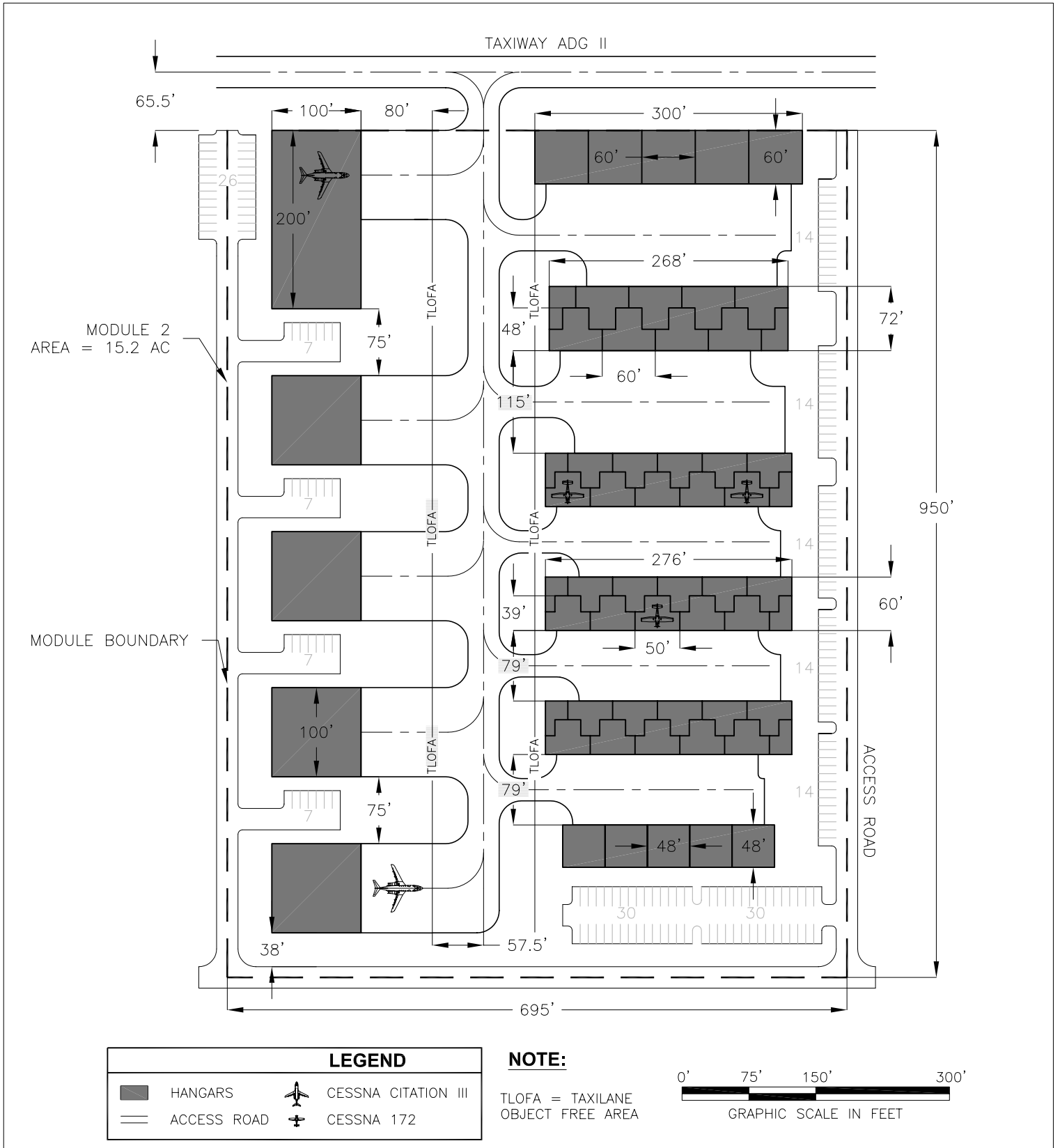
5.6.2 Army Aviation Support Facility

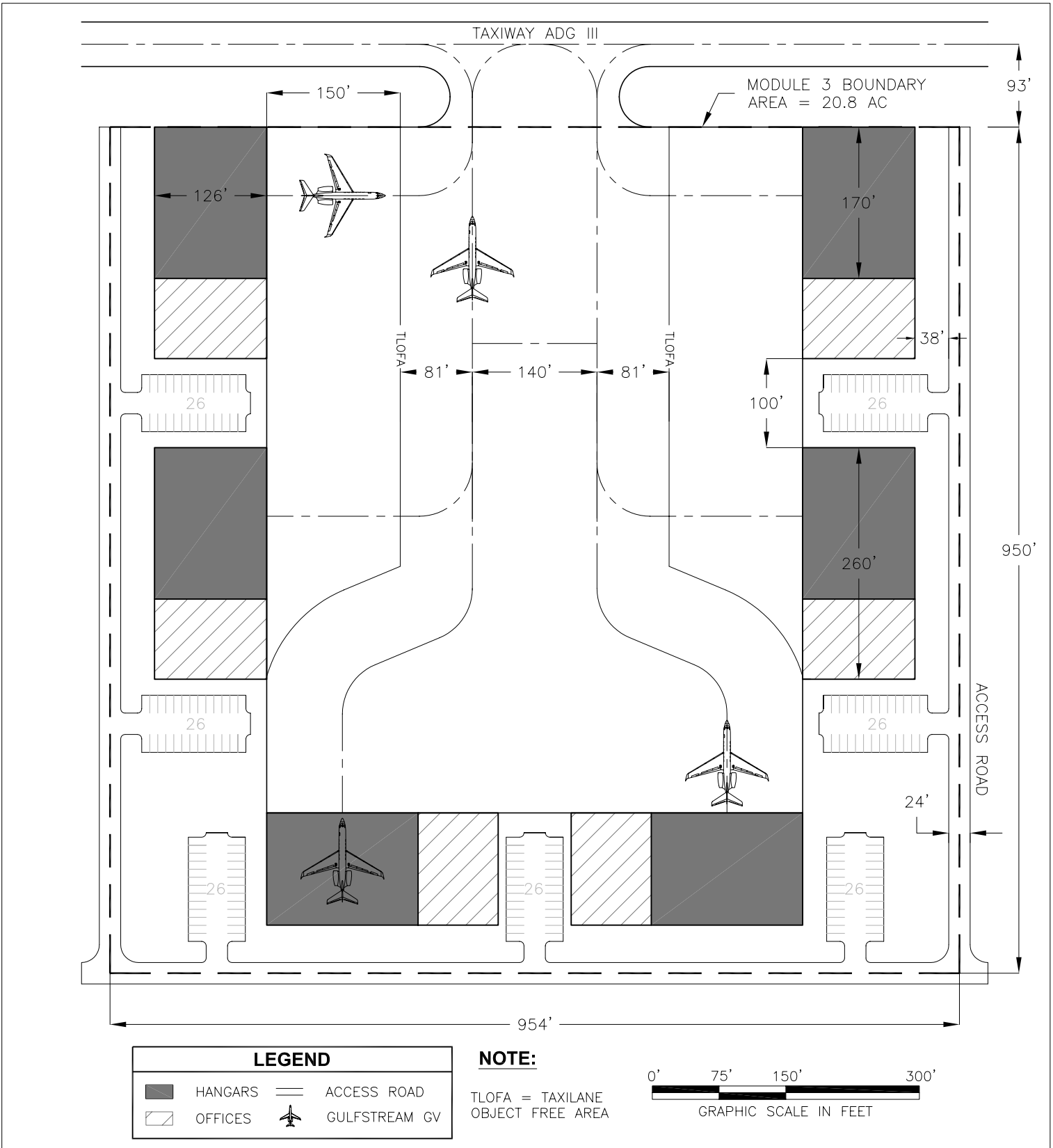
The Florida Army National Guard (FLARNG) operates the Army Aviation Support Facility (AASF) #1 located at the western end of the West Apron. AASF #1 supports all flight operations and maintenance requirements for CH 47, UH 60 and OH 58 helicopters assigned to FLARNG. AASF #1 consists primarily of an aircraft maintenance hanger, apron, taxiways, and associated facilities including a wash rack and several small storage buildings.



LEGEND	
	PROPOSED FACILITIES
	PROPOSED BULK HANGAR
	PROPOSED OFFICE SUPPORT
	PROPOSED PAVEMENT
	PROPOSED FBO HANGAR







The proposed improvements for the FLARNG will alter the infrastructure of AASF #1 to eliminate its current space, design, and operational deficiencies. Specifically, the facility has inadequate aircraft hangar storage, equipment storage, apron space, delivery truck loading capability, incompatible tie-down design and locations and operational deficiencies of the shops and administration area within the existing maintenance hangar. A summary of the existing conditions and estimated space requirements is shown in **Table 4**.

**Table 4:
Existing and Required Space for AASF #1 Components**

Component	Existing Quantity (SF)	Minimum Required Quantity (SF)	Proposed Addition (SF)	Proposed Alteration (SF)
Aircraft Storage Hangar	0	35,066	35,066	N/A
Aircraft Parking Apron	502,317	685,998	183,681	0
Ground Support Equipment Storage	527	1,200	673	0
Aircraft Maintenance Hangar	59,904	51,743	0	0
Shops & Admin areas (within Maintenance Hangar)	52,669	43,258	0	23,113

Source: DoD Form 1391C, AASF Add/Alt Cecil Field

The proposed expansion at Cecil Field includes the construction of an unheated, humidity-controlled aircraft storage hangar, several equipment storage sheds, a loading dock facility, delivery truck entry gate, and fuel truck access road as well as the expansion of the apron and modification of the aircraft tie-down locations as shown in **Exhibit 5-23**. The proposed humidity-controlled aircraft storage hangar would be located just west of the facility wash rack and positioned to face southward toward the northwest part of the expanded apron. The storage hangar is projected to be approx. 35,066 sf in total area and would provide sufficient space for simultaneously storing three CH-47 helicopters, three UH-60 helicopters and two OH-58 helicopters.

The existing aircraft parking apron at AASF #1 is proposed to be expanded to the west and south. A total of 20,400 sy of additional apron area is proposed to provide the minimum required space needed. The northern part of the expanded apron will provide access to the proposed aircraft storage hangar and the existing facility wash rack. The proposed expansion of the apron will require replacing the onsite drainage

ditch with an alternative drainage system. The drainage system may consist of either a trench drain system or a system of culverts and catch basins. In addition to expanding the parking apron, the existing aircraft tie-downs will be modified to accommodate rotary wing aircraft and their locations reconfigured to support FLARNG flight operations.

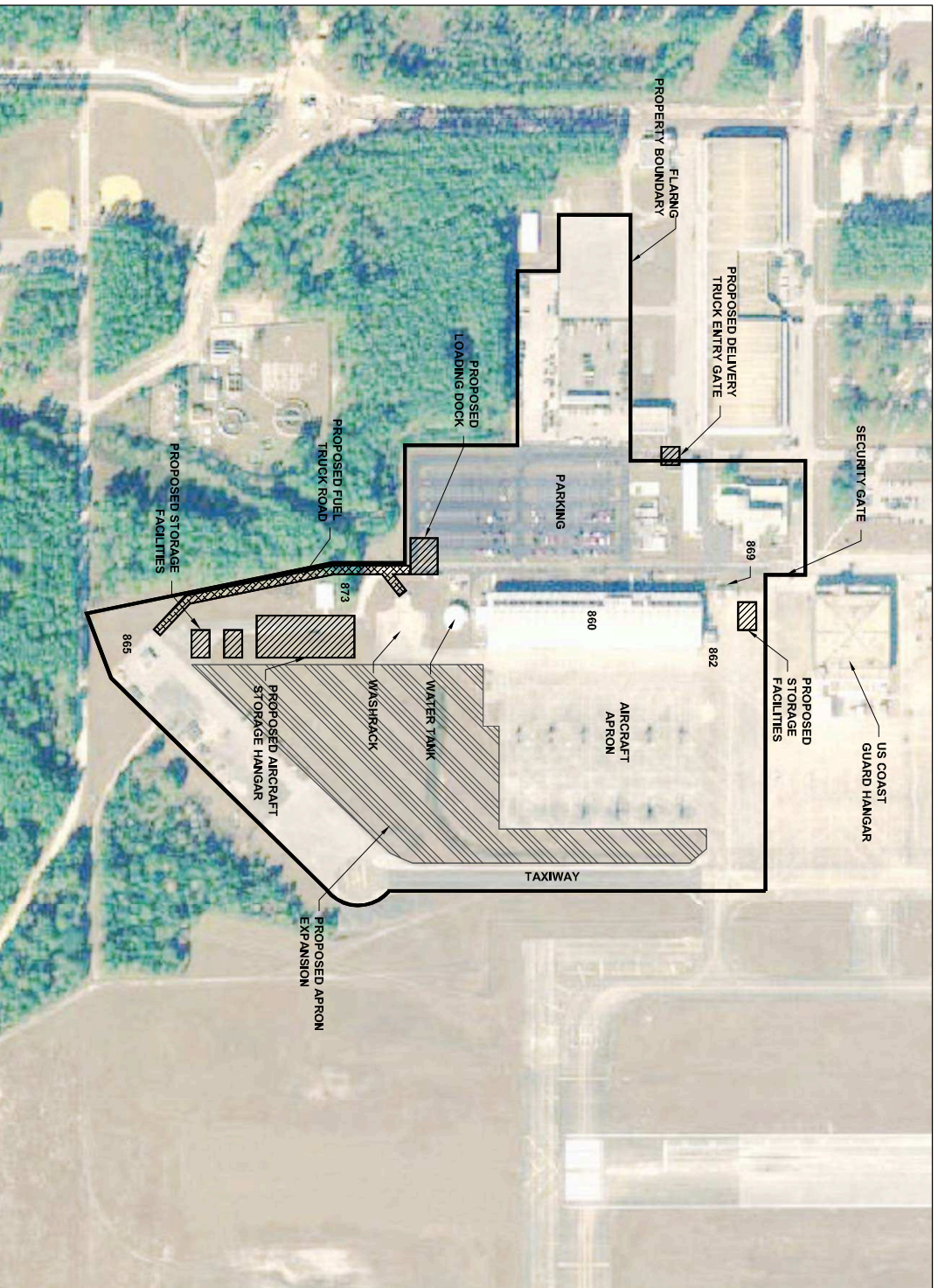
A freestanding loading dock facility is proposed to be constructed near the southwestern part of the parking lot north of the facility wash rack. The dock consists of two sections of different heights to accommodate multiple types of trailers. An entry gate near the northwestern part of the parking lot will be provided to offer delivery trucks direct access to the loading dock. An access road that connects the loading dock to the taxiway is also proposed for the facility fuel trucks.

Two storage facilities located on the western side of the proposed aircraft storage hangar and one storage facility located on the eastern side of the existing maintenance hangar are proposed. The storage facilities would have a combined area of 673 sf. Several modifications to the shops and administration areas within the existing maintenance hangar are proposed to improve their utilization and functionality

5.7 AIR CARGO ALTERNATIVES

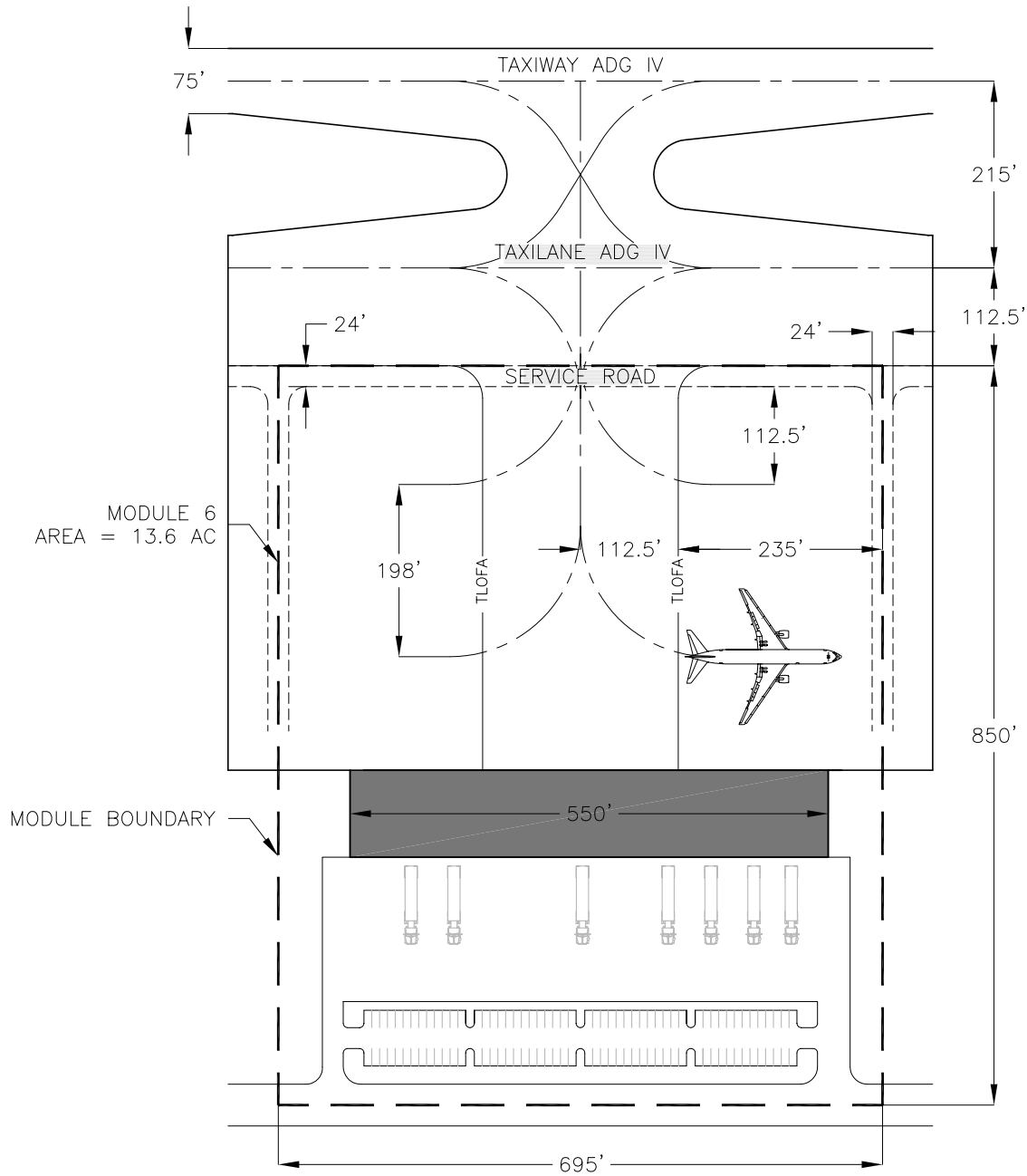
While some air cargo activities are currently experienced at Cecil Field, the airport offers immense potential as a major air cargo facility. Relative to other airports in the region, Cecil Field is in close proximity to the interstate system and offers plenty of airfield capacity to ensure efficient operations. The airfield also offers a 12,500 ft runway facility that can support nearly every type of aircraft operation.

Similar to the module concept discussed in **Section 5.6.1**, an air cargo development concept or “module” has been identified for consideration and is shown in **Exhibit 5-24**. The module represents a development concept that can accommodate a significant number of ASG-IV aircraft and offers a shallow cargo building with truck loading bays.



LEGEND	
BUILDING CODE	DESCRIPTION
860	AASF #1 HANGAR
862	UTILITY PLANT BUILDING
865	READY MAGAZINE
869	HAZARDOUS FLAMMABLE STORAGE
873	INERT STORAGE

ARMY SUPPLY FACILITY - EXHIBIT 5-23



LEGEND	
	HANGARS
	SERVICE ROAD
	ACCESS ROAD
	BOEING 767-300

NOTE:
TLOFA = TAXILANE
OBJECT FREE AREA



5.8 COMMERCIAL SPACEPORT CONCEPT

In 2005, the Florida Space Authority released a *Feasibility Study of a Florida Commercial Spaceport* that assesses the feasibility and potential economic impact of establishing a commercial spaceport in Florida. This study focused on the potential of implementing a “combined site” or “split site” concept utilizing existing airport facilities due to the fact that commercial orbital and suborbital operations originating from the Kennedy Space Center (KSC), the Cape Canaveral Air Force Station (CCAFS), or other existing military installations do not appear to be feasible for political, regulatory, and administrative reasons.

Instead of supervision from NASA or the U.S. Department of Defense, a facility located on a non-federal site would likely ease many regulatory burdens as operations would be limited to coordination with the FAA and relevant local government or airport authority. Providers of commercial orbital and suborbital vehicles have indicated a desire to operate away from the perceived burdensome regulations associated with operations on a federal range.

The report notes that as the licensing authority, “FAA is inherently supportive of commercial spaceport activities, and perceives that part of its commercial space mandate is to assist and support such activities to the extent possible. The FAA also broadly supports states that promote their own space programs as these programs are viewed as a general benefit to the nation.”

Specific runway requirements necessary to accommodate a range of orbital and suborbital vehicles that may utilize the existing infrastructure at Cecil Field should be considered based on the airport’s wide range of suitable facilities available to meet the demands of this new, but growing, industry.

Based on interviews and information collected from launch vehicle developers, government/military officials, and key members of the space community, the study indicates a high level of support for a Florida commercial spaceport, provided that such a facility offered competitive pricing, sufficient assurance of launch schedules, and other factors. As a result, infrastructure costs are a primary consideration in evaluating potential sites and concepts.

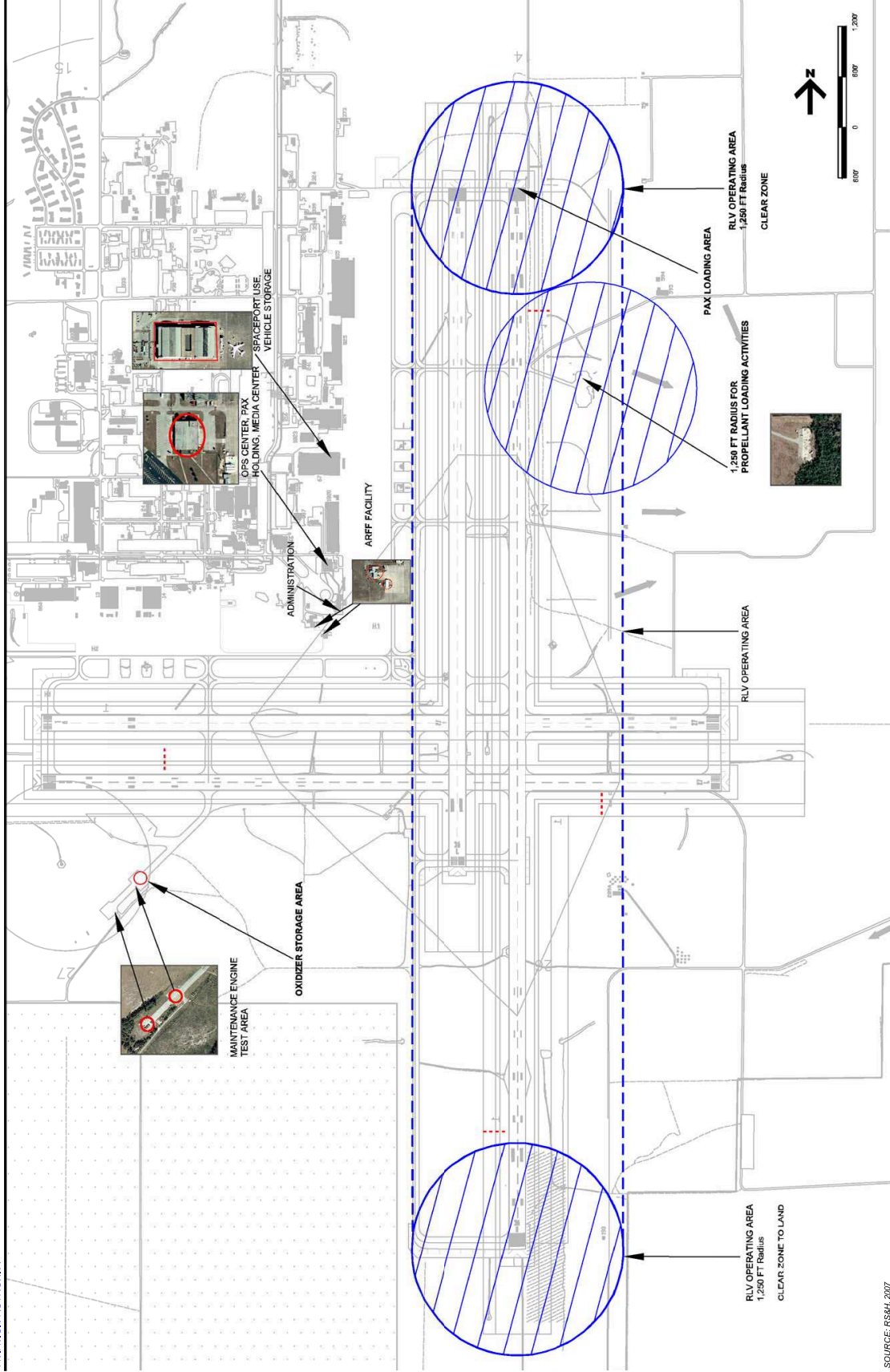
Although a “combined site” could be constructed independent from an existing airport, the costs associated with new runways and other facilities were

estimated to be as much as 10-15 times the costs associated with utilizing existing airport infrastructure. Existing ground infrastructure, including hangars and fuel storage/delivery supplies, may be available at Cecil Field at a cost lower than that required for a new site. In addition, operational risks and timetables to operability would be reduced with a “split site” concept. JAA has identified Building 880, Building 860, and Building 1846, and potentially others as possible facilities for operational control center, passenger processing, and storage for payload. Further, the seldom used loading pavement area and paved taxiway in the southwest quadrant would provide existing pavement facilities to effectively serve for accommodating fuel loading and engine test activities related to launch vehicles. **Exhibit 5-25** depicts a potential improvement strategy that accommodates future commercial spaceport facilities.

Initially, 3 vehicle types were under consideration at Cecil Field, the X-, Y- and Z-type. The Y-type has been eliminated due to its vertical launch profile. It would launch as a rocket and the noise levels may exceed the tolerance in the surrounding community and the airspace around Cecil Field would need to be closed during departure. The X- and Z-type vehicles both depart as any other aircraft with turbojet engines. The X-type would depart with normal turbojet engines and maneuver out over the ocean. Once the vehicle reaches a certain location and altitude over the ocean, the turbojet engines would be turned off and the rocket engines ignited. Upon completion of the mission, the vehicle would return to a specific altitude over the ocean where the turbojet engines would be re-started. The vehicle would then be piloted back to Cecil Field as an aircraft.

The Z-type vehicle would take off piggy-backed to a piloted turbojet-powered aircraft that would leave Cecil Field in the same manner as any other aircraft. The carrier aircraft would also maneuver over the ocean in the same manner that any aircraft would. After the carrier aircraft has reached the launch location and altitude over the ocean, the vehicle would be released from the carrier aircraft. Rocket engines on the vehicle would be fired as the carrier aircraft pulls away. The carrier aircraft would return to Cecil Field as a piloted, fully powered aircraft. The launch vehicle would climb until all propellants are consumed. It would then glide and descend unpowered, but piloted, maneuverable and in contact with the ATCT to a landing at Cecil Field.

In general, the Spaceport Concept will use hangars, buildings and pavement areas which are not currently being utilized by Cecil Field.



SOURCE: RSSM, 2007

FUTURE COMMERCIAL SPACEPORT ACTIVITIES - EXHIBIT 5-25

Any displacement would be accommodated by use of existing facilities. The proposed rocket/maintenance engine test area and fuel loading/storage area are not currently utilized by the airport. Hangar 14 is proposed for vehicle storage. This 158,000 sf hangar has 80,000 sf of available space and would provide direct access to the airfield. The ARFF and Administration buildings are currently utilized by the airport but can serve dual roles to accommodate the spaceport concept as well. Building 880 is proposed to be used for the OPS Center, Pax Holding and Media Center. This 13,000 sf building has 5,500 sf available. The oxidizer storage area is located on the corner of an existing apron located between the ARFF facility and Taxiway D. This area is not currently utilized by the airport. The weight bearing capacity of the Runways and Taxiways should be sufficient to accommodate the proposed vehicle. These aircraft weigh less than most currently operating at Cecil Field, therefore there should not be any adverse impacts to the pavement due to these vehicles.

The Feasibility Study also noted that the demand for suborbital launches is anticipated to grow steadily over the next decade, with such launches estimated at between 164 and 545 over that period. As a result, a Florida commercial spaceport concept should focus primarily on suborbital demand. It is projected that many commercial suborbital operations will be performed in aircraft-like horizontal launch vehicles. The report identified that certain characteristics among existing facilities make some potential sites more attractive than others. For facilities accommodating horizontal launch vehicles, these characteristics generally include:

- A runway measuring at least 5,000 ft in length; at least 10,000 ft x 200 ft is preferable;
- A solid runway surface in good condition;
- Current ground infrastructure;
- Existing highway, port and rail access;
- Limited noise and traffic pattern regulations (due to residential encroachment);
- Proximity to Florida’s eastern coastline for access over the Atlantic

Ocean;

- Volume of competing air traffic; and
- Proximity to potential vertical launch sites.

Cecil Field was identified as “the best airport for aircraft-like launch vehicles...” for operations in Florida based on these characteristics. **Table 3** identifies nine Florida airports that appear suitable for accommodating horizontal launch operations.

Of these nine, Cecil Field offers a current runway operating length of 12,500 ft and is the only airport with a runway width of 200 ft, preferred by most vehicle providers. With an abundance of apron pavement, existing buildings, and approximately 6,000 acres, Cecil Field offers significant opportunity to accommodate such operations and to plan for additional facilities as required.

An initial review of the anticipated facility requirements identified in the referenced *Feasibility Study of a Florida Commercial Spaceport* supports the supposition that the location of commercial spaceport

TABLE 5: POTENTIAL AIRPORT SITES FOR A COMMERCIAL SPACEPORT

Airport	Runway	Runway Dimensions (ft)	Pavement Surface Type
Jacksonville Cecil Field	18L-36R	12,500 x 200	Concrete/Asphalt
Dade-Collier Training and Transition	9-27	10,499 x 150	Asphalt
Miami Opa-Locka Airport	9L-27R	8,000 x 150	Asphalt, Grooved
Titusville Space Coast Regional	18-36	7,320 x 150	Asphalt, Grooved
St. Augustine/St. Johns County Airport	13-31	6,939 x 150	Asphalt
St. Lucie County International Airport	9-27	6,492 x 150	Asphalt
Boca Raton Airport	5-23	6,276 x 150	Asphalt, Grooved
Martin County Airport - Witham Field	12-30	5,826 x 100	Asphalt
Miami Kendall - Tamiami	9L-27R	5,001 x 150	Asphalt

Source: Figure 9, Feasibility Study of a Florida Commercial Spaceport, Futron Corporation, 2005.

at Cecil Field would not adversely impact existing or projected airport operations and the primary purpose of the airport to serve the public as a public-use general aviation airport. It is anticipated that launch operations would involve short-term and scheduled windows where airfield runways would be suspended temporarily to public operations. The duration of the suspension would depend on the amount of time needed to fuel the vehicle. As soon as the vehicle is fueled and departs, the runway will be opened. Any runway closure will be scheduled and advertised in advance to allow for any accommodations to be made. At least two weeks prior to each launch, a NOTAM will be published and the tenants of Cecil Field will be notified of the launch and the restrictions surrounding the launch. Agreements should be made regarding the protocol for these announcements between JAA and FAA. The 15 minute closure of all runways would create similar impacts as special-use airspace such as the launch of a Tomahawk Cruise Missile, Military aircraft or the space shuttle. Currently, Cecil Field routinely accommodates military events and other special events for similar and longer periods.

The affects to operations at Cecil Field due to spaceport operations should be minimal. The vehicles are powered by typical jet engines which make typical jet noise. At least two weeks prior to launch, a NOTAM will be published and the runway closure times will be short enough so that accommodations can be made for airport operations. In the event of a primary runway closure, Runway 9R/27L at 8,003 feet by 200 feet, 18R/36L at 5,930 feet by 100 feet or 9L/27R at 4,439 feet by 75 feet may be used to serve arriving and departing aircraft.

Impacts to nearby airports should also be minimal. The flight path of the vehicle will be south of the airport, then it will turn east towards the ocean to avoid any populated or sensitive areas. The vehicle will behave similar to modern aircraft while it is over land. All launches will be scheduled and advertised in accordance with agreements with the Coast-Guard, Navy and the FAA. The JAA should coordinate with the FAA to determine the best times to launch in order to minimize impacts to the community and nearby airports.

Appropriate environmental studies will be required at any location where a new commercial spaceport operation is established to assess all impacts associated with the introduction of commercial spaceport activities. Although a preliminary review indicates that the airport is well-suited for these types of operations, an Environmental Assessment has been initiated by the Jacksonville Aviation Authority (JAA) to

consider any potential impacts associated with commercial spaceport alternatives at Cecil Field.

Because the existing facilities at Cecil Field can effectively address many of the identified commercial spaceport requirements for horizontal launch vehicles without significant investment, it is recommended that the existing runway length be maintained at 12,500 ft until such time that the specific needs of a commercial spaceport alternative can be thoroughly investigated. As a minimum, a length of 10,000 ft should be preserved based on the needs identified in the previous feasibility study and the fact that the existing pavement can be maintained at relatively little cost.

Although these types of operations are not committed to Cecil Field at this time, the existing runway (12,500 ft x 200 ft) at Cecil Field appears to represent the most efficient and effective opportunity to accommodate commercial spaceport activities in the southeastern region and should be preserved for at least 5-7 years to accommodate this option. This recommendation appears to represent the most cost-effective option for the existing pavement and offers the airport the opportunity to evaluate future opportunities. The airport is only in its sixth year as a public-use facility and this option will enable the airport operations to more fully develop without introducing limitations on potential aircraft operations, including possible air cargo activities and future commercial spaceport operations.

5.9 PREFERRED DEVELOPMENT PLAN

Areas identified for development alternatives, based on cost-effective access and available development space, include: the northwest, northeast, and southeast quadrants as well as the midfield development area.

Many factors must be considered when initiating development within each of the development areas considered, particularly for those areas in which infrastructure is limited or non-existent. Some of the factors that must be evaluated include access to existing airside and landside facilities, the ability for long-term expansion, and environmental issues that exist at the development site.

The southwest quadrant of the airfield is not considered as a suitable area for future development because potential for growth in the area is limited by the airfield to the north and the conservation corridor located west and south of the airfield. Each location has advantages and disadvantages due to its unique

location relative to airfield pavements, accessibility and available space. Market trends will determine what percent of general aviation, air cargo and MRO facilities will be included in the development areas, creating flexible options.

The planned facilities in each of the preferred development areas are adequate to satisfy the minimum facility requirements for the airport as identified in this study. The following sections summarize the preferred development plan for Cecil Field.

5.9.1 Northwest Development Area

The primary objective with the northwest development area focuses on future development of general aviation, air cargo and MRO facilities located in the northwest quadrant of the airfield along Aviation Avenue. While several types of hangar facilities are shown, these can be divided into smaller corporate hangars or combined into MRO or Air Cargo facilities depending on market needs. Additionally, an objective of this area is to maximize potential FBO and apron facilities along the north side of Taxiway B. The main considerations for this area include:

- Reserve short-term MRO hangar development options
- Maximize MRO and Industrial development areas
- Provide for limited corporate hangar development along Aviation Avenue
- Reserve area for various sizes of corporate hangars northeast and northwest of Runway 18L-36R
- Provide sites for potential construction of a new FBO, along with associated apron pavement and bulk hangars along the north end of Taxiway B
- Construct new access roads and utility systems to serve the planned facilities

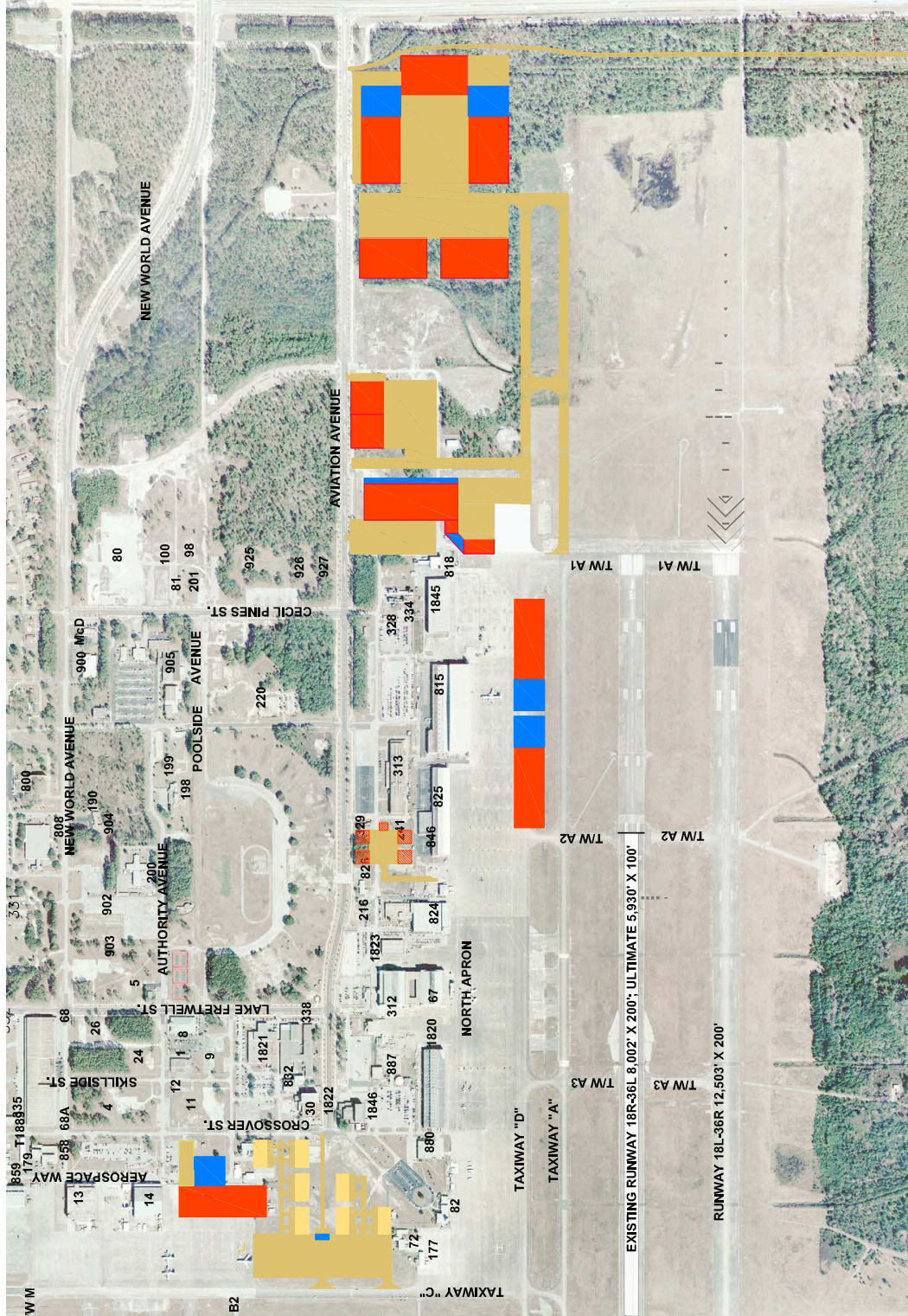
The construction of new corporate and T-hangars along the new taxiway north of Building 67 and west of Buildings 824 and 825, as well as areas along taxiway B, present the most logical options for short-term development of GA facilities. Along this new taxiway, access roads and utilities already exist to support immediate development and this area has immediate access to the airfield. Several buildings have been

recently demolished providing a large area for corporate hangar development. Available areas north of Taxiway B appear ideal for the development of additional FBO, apron, and bulk hangar facilities. These facilities will be developed in an open area located between the existing FBO, Airport Administration building, fuel farm, and electrical vault to the east and the U.S. Customs Agency apron to the west. This area provides great location for the FBO as it is visible to all but the north end of the airfield. The bulk hangars located in this area can be effectively managed by the FBO. The hangars have the ability to store multiple aircraft and be efficiently configured to suit the needs of the FBO operator. This provides great flexibility to a future FBO operator.

In addition to the hangars proposed for construction located west of Building 824 and 825, a row of various sized hangars along an extension of Taxiway A and along an extension of the proposed mid-field terminal apron could also be developed if these areas are not required for MRO development. The hangars included in this development will vary in size to store a variety of aircraft. Because no landside or airside access exists to these areas, new roads and taxiways must be developed. Roads will provide access from the hangar sites to Aviation Avenue and 103rd Street. All hangar roads and taxiway developments will remain out of the applicable safety areas and object free areas associated with both Runway 18L-36R and Runway 18R-36L. Although the proposed relocation of the end of Runway 18R should minimize concerns with approach surface penetrations, buildings shall be limited in height to ensure no penetrations of the approach surface or other FAR Part 77 imaginary surfaces.

Combinations of Sites 9B, 9C and 10 can be constructed to provide 4-7 MRO Hangars if demand is realized. Near these, access roads and utilities already exist to support immediate development and this area has immediate access to the airfield through taxiway extension projects.

The combination of the hangar, FBO, and apron developments not only meets, but exceeds the forecasted requirements of the 20-year planning period. The amount of FBO hangars to the west may be limited if MRO Hangar Site 5 is selected. A layout of the Northwest Development area is presented in **Exhibit 5-26**.



LEGEND	
PROPOSED FACILITIES	
■	PROPOSED MRO HANGAR
■	PROPOSED OFFICE SUPPORT
■	PROPOSED PAVEMENT
■	PROPOSED CORPORATE HANGAR
■	PROPOSED FBO HANGAR

5.9.2 Northeast Development Area

Because of the large amount of land that lies within the property line of Cecil Field, a large number of development alternatives are possible. Like the northwest development area, the northeast development area focuses on a combination of GA and other facilities, specifically:

- Commercial or other non-aviation related development
- Reserve most of this area for development of MRO and industrial development facilities
- Construction of bulk hangars, storage hangars, corporate hangars and T-hangars could be developed if MRO facilities do not develop as expected
- Construction of FBO facilities with an adjoining apron

These GA developments would take place on the eastern side of the proposed Runway 17-35 only if MRO development does not proceed as expected. A combination of hangars and FBO will be planned along a parallel taxiway parallel to Runway 17-35. Bulk storage hangars should be located in relatively close proximity to the FBO facilities, providing efficient access between the two facilities. This access is important as the FBO will be responsible for maneuvering aircraft and performing other duties.

Corporate hangar units should be planned for the storage of mid- to large-sized corporate jets and turboprop aircraft. Like the bulk storage hangars, the corporate hangars are typically located relatively close to the FBO because many of the tenants will request services from the FBO before or after a flight.

T-hangar units provide storage for the owners of small single and twin-engine aircraft. The areas proposed for these hangars provide for efficient and flexible layout for the initial development as well as ample space for the expansion of these facilities. Access to these facilities will be provided via an extension of the airport perimeter road which will parallel Brannan-Chaffee Road. This new road is designed to serve the new developments along the eastern edge of the airfield as well as providing local access to areas reserved for non-aviation related development.

The construction of the planned GA facilities will require a large amount of infrastructure improvements to support the development of these facilities. Access

roads, utilities, and the construction of the airside facilities will all need to be completed prior to the occupancy of any hangars, FBO, or apron. The level of funding required to support these improvements may present limitations in the short-term; however, there is extensive potential for the long-term development of the area following build-out of the more feasible properties in the northwest development area and the associated revenue generation that would follow. **Exhibit 5-27** presents the layout of the northeast development area.

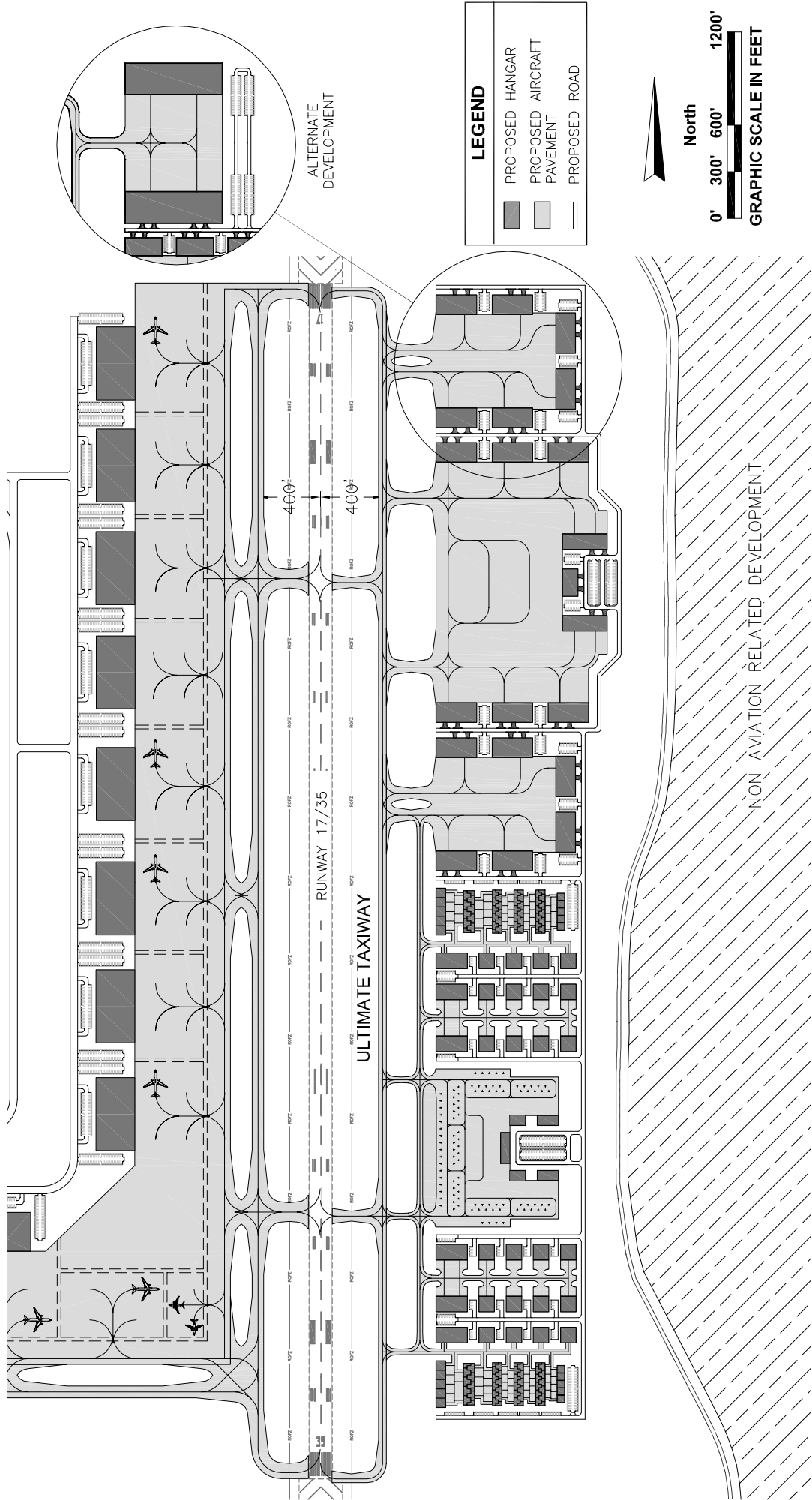
An alternative development is proposed for the north section of the Northeast Development Area, also shown in exhibit 5-26. This alternative allows for two 150,000 sf MRO / Aviation Related Manufacturing / Distribution facilities if MRO demand supports this development.

5.9.3 Southeast Development Area

In the southeastern quadrant of Cecil Field, defined by the southern end of Runway 18L-36R and the eastern end of Runway 9R-27L, limited improvements exist. Because of the large amount of area offering efficient access to the airfield facilities, a variety of GA-related improvement alternatives may be feasibly developed in this area. The focus of this area is primarily on developing hangars for recreational and corporate activity. The main features of the southeast development area include:

- Construction of a taxiway parallel east of the south portion of Runway 18L-36R
- Construction of a taxiway parallel south of the east portion of Runway 9R-27L
- Construction of corporate hangars
- Construction of bulk storage and T-hangars
- Construction of FBO facilities
- Construction of a new general aviation apron
- Construct access road for south airport entrance

The construction of a taxiway that runs parallel and east of Runway 18L-36R and a taxiway that runs parallel and south of Runway 9R-27L are essential to the effective development of the southeastern quadrant of the airfield. These taxiways are needed due to the fact that no airside access exists without them.



70 Corporate hangars are planned along the taxiways parallel to Runway 18L-36R and 9R-27L. These hangars are designed to serve large business jets and turboprops and offer efficient access to the airfield. The 76 T-hangars in the south end of this development will primarily provide storage for small single and multi-engine aircraft.

The construction of the taxiways, GA facilities, and other infrastructure to develop the southeast quadrant of the airfield will involve significant investment to initiate development. However, it represents a long-term development concept that offers a level of segregation between private aircraft owners operating single-engine and smaller multi-engine general aviation aircraft from the larger equipment associated with the airport's MRO activities and other heavy industry generally located on the north side of the airfield. The southeast quadrant offers a large amount of land available with capability for significant expansion as well as effective airside access. A layout of the southeast development area is presented in **Exhibit 5-28**.

5.9.4 Mid-Field Development Area

The mid-field development area is a mid- to long-term project that will encompass the area between Runway 18L-36R and the proposed Runway 17-35. The area is planned to be reserved for the development of aviation related commercial and industrial facilities as well as the expansion of MRO operations and corporate hangar facilities. The mid-field development area encompasses approximately 550 acres of land with a significant amount of that area having airside access to either Runway 18L-36R, Runway 9R-27L, or the future Runway 17-35.

With the amount of land and airside access available, this makes the mid-field development a key factor in expanding existing and developing new aviation related industries.

Since the demand for these types of facilities will not be known until they are realized, the plan for this area should be established in general terms to allow flexibility. However, alternatives that accommodate these types of facilities are provided in this report to provide a relative order-of-magnitude for the development potential associated with this area. Although the exact need is not known, the Airport anticipates the need for approximately 10-150,000 sf MRO hangars to be built in this area over the 20-year planning period. Mid-Field Development Alternative A, **Exhibit 5-29**, illustrates a layout which encompasses MRO, Cargo and Industrial facilities. If a large demand

for MRO hangars is realized, the Mid-Field development area could be developed to primarily meet this need. Mid-Field Development Alternative B, **Exhibit 5-30**, presents the possibility of constructing 17 MRO hangars.

5.9.5 Northeast Commercial Development Areas

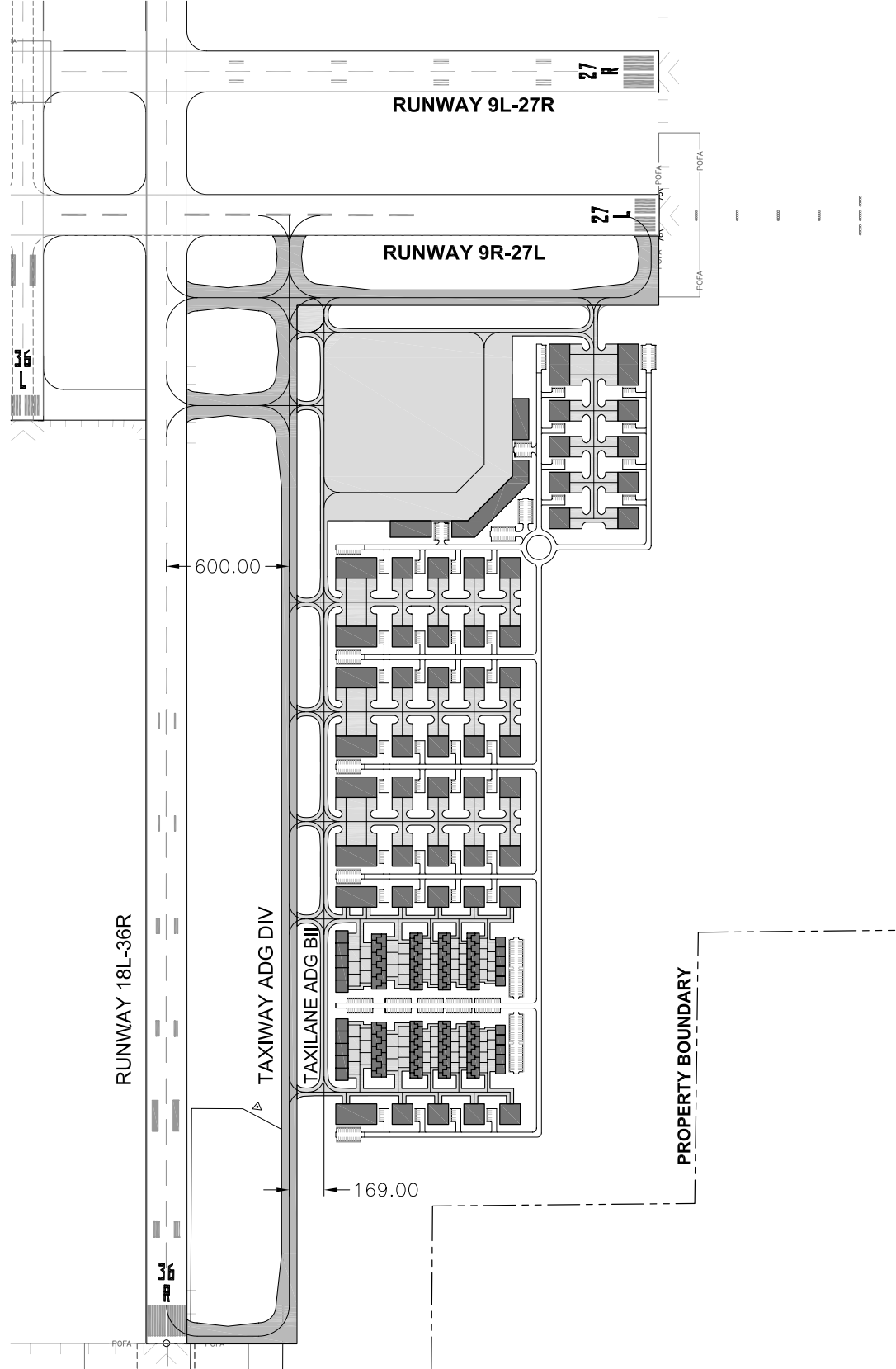
The northeast commercial development area encompasses the various portions of airport property located between Branan Field-Chaffee Road and the Northeast Development Area. This area offers no direct access to the existing airfield. It is recommended that airport management utilize these properties for the future development of airport-constructed or privately constructed commercial facilities. Revenues associated with non-aviation related facilities will serve to support airport self-sufficiency goals.

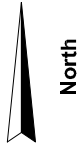
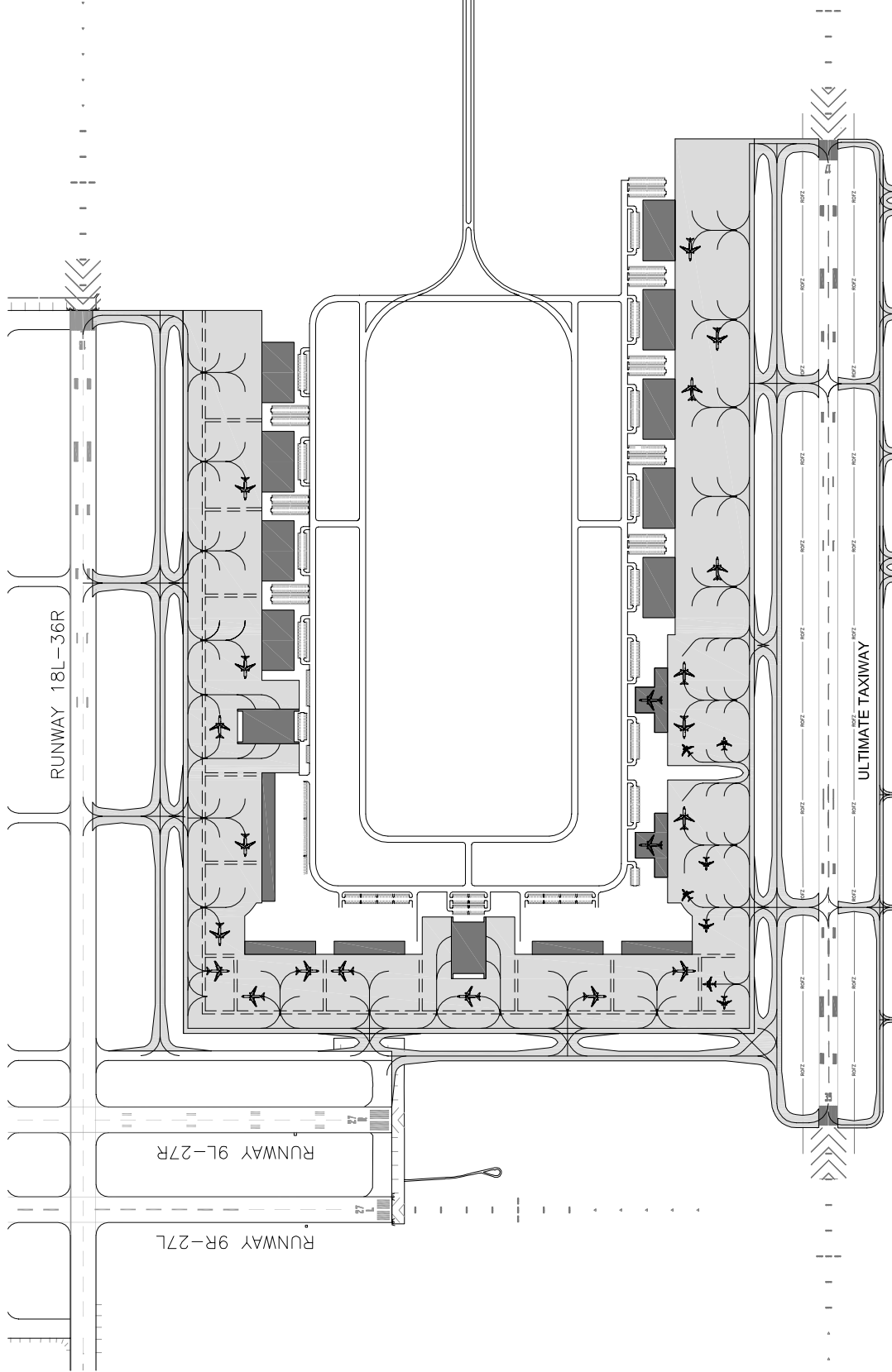
It is anticipated that the commercial development will include a variety of commercial uses, but predominantly restaurants, small retail shopping facilities, etc. Development in this area will include the relocation of the existing airport perimeter fence to facilitate public access through a few separate entrance roads connecting 103rd Street and Branan Field Chaffee Road to the proposed commercial development. An exhibit depicting the general limits of the Northeast Commercial Area is presented in **Exhibit 5-31**.

5.10 SUMMARY




Of the three development areas, the northwest area near the north end of the parallel north-south runways offers immediate airside and landside access with relatively low capital costs. This area includes landside access along the recently improved Aviation Avenue and airside access is efficiently obtained by simply extending the north end of the apron and Taxiway A. The remaining areas provide extensive properties that should accommodate the future demand for facilities far beyond the 20-year planning period.

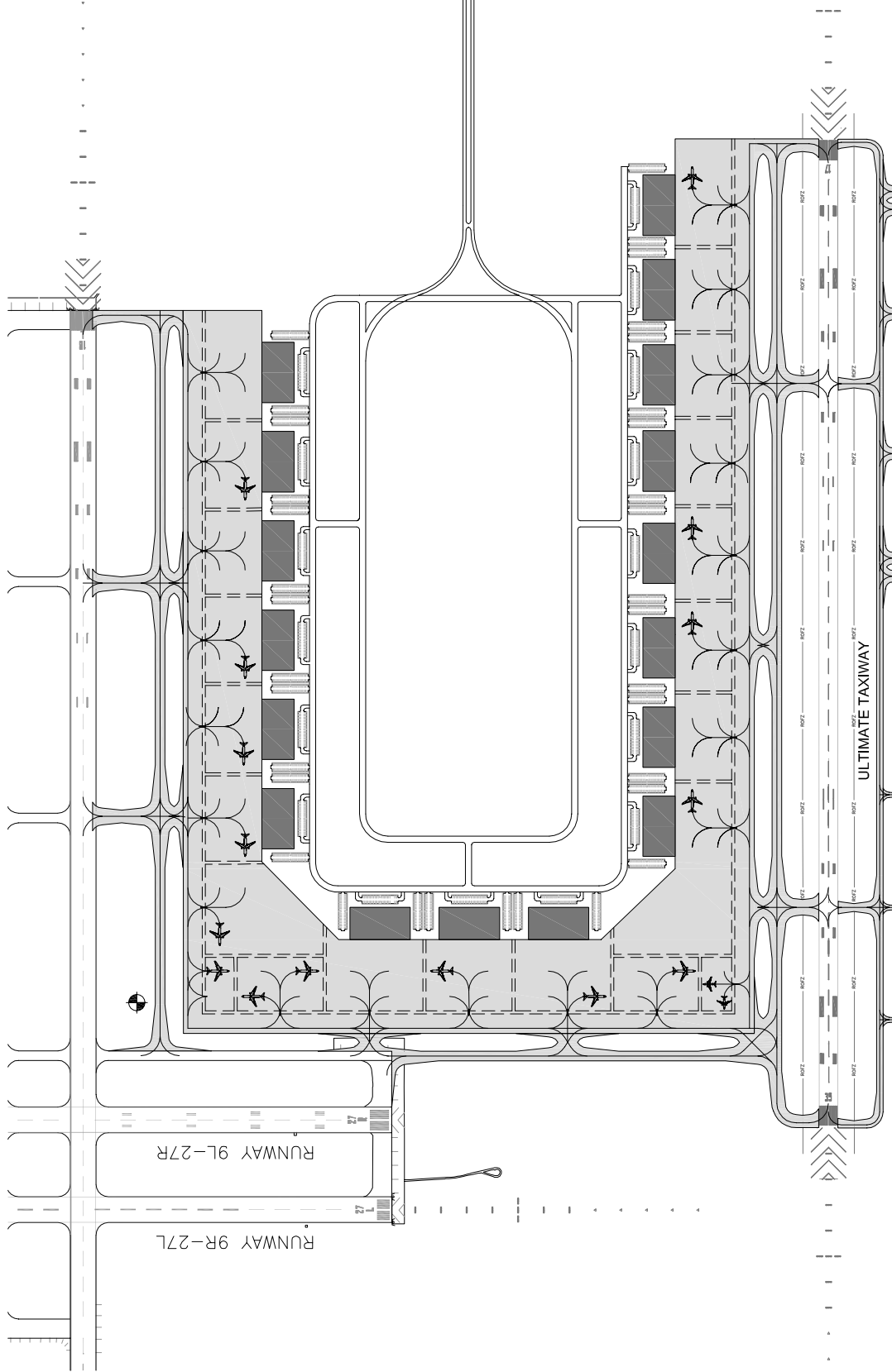
A summary of the proposed development over the 20-year planning period is presented in **Exhibit 5-32**. This exhibit provides information on the number of structures, size of the proposed structures, estimated employees per shift and total employees, and the required number of parking spaces for each development.





LEGEND

	PROPOSED HANGAR
	PROPOSED AIRCRAFT PAVEMENT
	PROPOSED ROAD



LEGEND

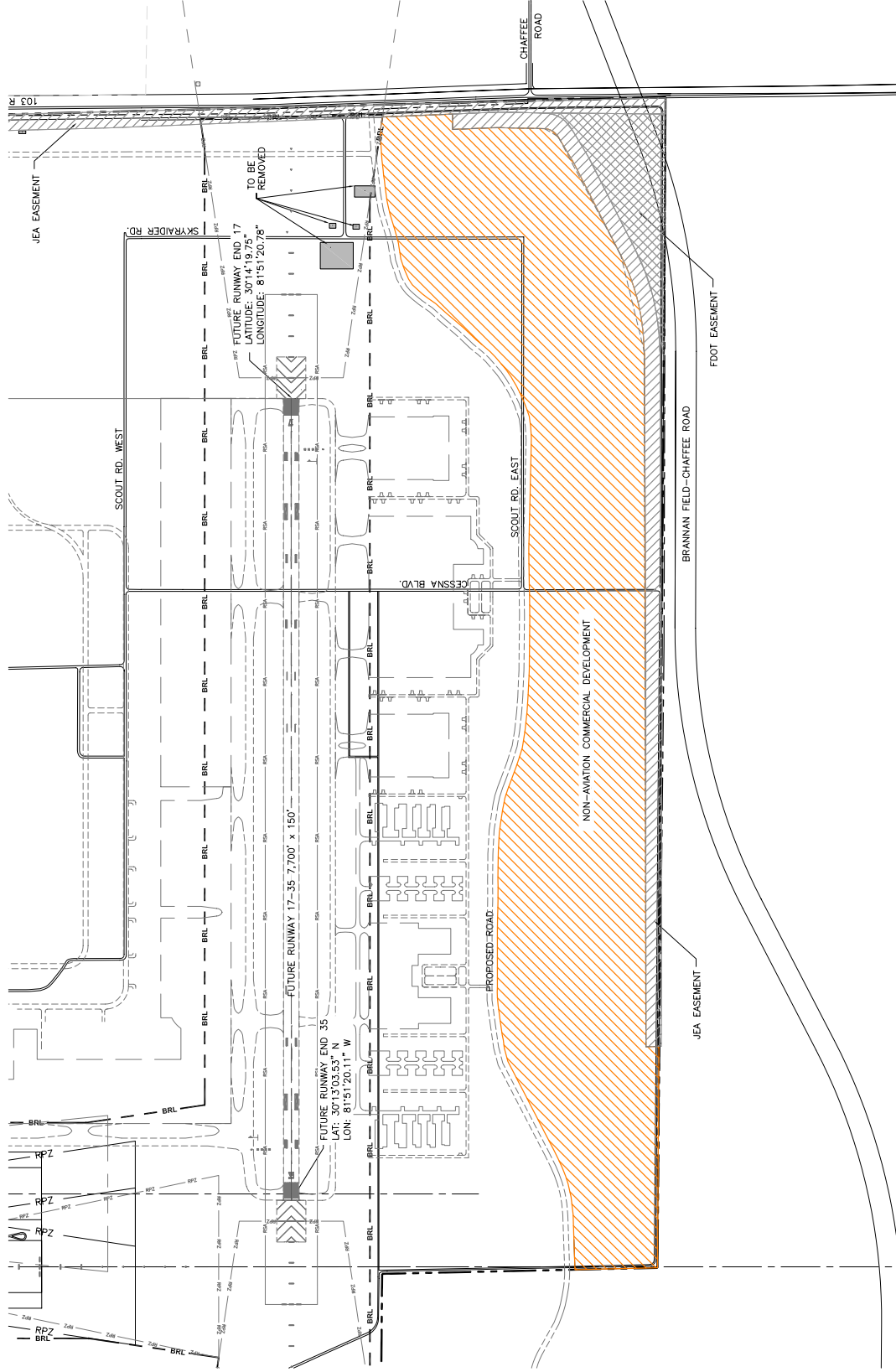
- PROPOSED HANGAR
- ▨ PROPOSED AIRCRAFT
- ▬ PROPOSED PAVEMENT
- ▬▬ PROPOSED ROAD

North

0' 400' 800' 1600'

GRAPHIC SCALE IN FEET

**CECIL FIELD
MASTER PLAN UPDATE**



NORTHEAST NON-AVIATION COMMERCIAL DEVELOPMENT AREA - EXHIBIT 5-31

**EXHIBIT 5-32:
DEVELOPMENT SUMMARY 20-YEAR PLANNING PERIOD, CECIL FIELD**

Type of Structure	No. of Structures	Area (sq/ft)	Total Structural Area (sq/ft)	Total Structural Area (Acres)	Estimated Employees per shift ¹	Total Employees	Parking (spaces) ²	Parking Area (sq/ft) ³	Parking Area (Acres)
Northwest Development Area									
MRO Hangar/Aviation Related Manufacturing	2	62,500	125,000	2.87	313	625	469	140,625	3.23
MRO Hangar/Aviation Related Manufacturing	1	257,622	257,622	5.91	644	1,288	966	289,825	6.65
MRO Hangar/Aviation Related Manufacturing	5	150,000	750,000	17.22	1,875	3,750	2,813	843,750	19.37
Development Area Total	8	470,122	1,132,622	26.00	2,832	5,663	4,247	1,274,200	29.25
Northwest Center Development Area									
GA Corporate Hangar	4	20,000	80,000	1.84	100	100	150	45,000	1.03
Development Area Total	4	20,000	80,000	1.84	100	100	150	45,000	1.03
Southwest Development Area									
FBO/GA Terminal	1	15,000	15,000	0.34	38	38	56	16,875	0.39
GA Corporate Hangar	6	20,000	120,000	2.75	150	150	225	67,500	1.55
MRO Hangar/Aviation Related Manufacturing	1	150,000	150,000	3.44	375	750	563	168,750	3.87
Development Area Total	8	185,000	285,000	6.54	563	938	844	253,125	5.81
Midfield Development Area									
MRO Hangar/Aviation Related Manufacturing	10	150,000	1,500,000	34.44	3,750	7,500	5,625	1,687,500	38.74
Development Area Total	10	150,000	1,500,000	34.44	3,750	7,500	5,625	1,687,500	38.74
Northeast Development Area									
MRO Hangar/Aviation Related Manufacturing	2	150,000	300,000	6.89	750	1,500	1,125	337,500	7.75
Development Area Total	2	150,000	300,000	6.89	750	1,500	1,125	337,500	7.75
Southeast Development Area									
GA Corporate Hangar	35	20,000	700,000	16.07	875	875	1,313	393,750	9.04
FBO/GA Terminal	1	15,000	15,000	0.34	38	38	56	16,875	0.39
Development Area Total	36	35,000	715,000	16.41	913	913	1,369	410,625	9.43
Grand Total	68	1,010,122	4,012,622	92	8,907	16,613	13,360	4,007,950	92.01
Development for each 5 yr period	17	252,531	1,003,156	23	2,227	4,153	3,340	1,001,987	23.00

**EXHIBIT 5-32 (CONT):
DEVELOPMENT SUMMARY 20-YEAR PLANNING PERIOD, CECIL FIELD**

Type of Structure	No. of Structures	Area (sq/ft)	Total Structural Area (sq/ft)	Total Structural Area (Acres)	Estimated PM Peak Hour Trips
Northeast Commercial/Retail Development Area					
Development 2006-2011		247,203	247,203	37.60	1,496.75
Development 2011-2016		326,504	326,504	41.40	2,235.27
Development 2016-2021		229,256	229,256	33.60	1,454.83
Development 2021-2026		378,776	378,776	56.80	1,855.85
Development Total		1,181,739	1,181,739	169	7,042.70

¹Number of employees per shift were estimated at a ratio of 1employee per 400 sq. ft. of structure for MRO and 800 sqft for Corporate Hgrs.

²Number of parking spaces were estimated at a ratio of 1.5 the number of employees for shift changes.

³Ones parking space was estimated at 300 sq.ft.

⁴Parking for Commercial/Retail Included in acres of development. PM Peak Hour trips calculated based on different types of included development

Type of Structure	No. of Structures	Area (sq/ft)	Total Structural Area (sq/ft)	Total Structural Area (Acres)	Estimated PM Peak Hour Trips
Beyond 20-Year Planning Horizon					
Northwest Development Area	0	0	0	0.00	
Northwest Center Development Area	0	0	0	0.00	
Southwest Development Area	0	0	0	0.00	
Midfield Development Area					
MRO Hangar/Aviation Related Manufacturing	23	150,000	3,450,000	79.20	
Northeast Development Area					
GA Corporate Hangar	6	20,000	120,000	2.75	
MRO Hangar/Aviation Related Manufacturing	9	150,000	1,350,000	30.99	
Northeast Commercial/Retail Development Area		1,494,631	1,494,631	130.60	
Grand Total	38	1,814,631	6,414,631	244	0

This information is provided for the Northwest Development Area which includes proposed Site 9C, the Northwest Center Development Area which includes the corporate hangars planned for the area north of Building 825, east of Building 824, west of Building 313 and South of Aviation Avenue, the Southwest Development Area which includes the Taxiway A Development, as well as the Mid-Field, Northeast and Southeast Development Areas. Also included is the total area of structures to be built at the Northeast Commercial Development Area along with estimated PM Peak Hour Trips associated with each phase of development. The type of structure to be developed along with the size is also included for the time beyond the 20-year planning period for each development area.

It is recommended that the JAA consider maximizing the areas along Branan Field-Chaffee Road not planned for aviation related facilities for future leases associated with approved commercial, retail or other uses. Such leases will serve as new revenue generation sources for the airport, addressing self-sufficiency goals and offsetting future infrastructure and maintenance costs for the airport.

Other issues to consider with the proposed development strategy are environmental impacts. Each of the development alternatives will likely impact wetlands. Development in the Northwest Development Area should not be affected by wetlands, but the Mid-Field, Northeast and Southeast Development Areas will be affected by wetlands. While avoidance and minimization practices should be applied in the design and permitting of the proposed facilities, it may become necessary to implement specific mitigation measures to offset unavoidable impacts. A further discussion of the environmental impacts is provided in **Chapter 6**.

The previous sections have discussed various development alternatives for future facilities at Cecil Field. Development of future facilities should typically be initiated as demand for these facilities are realized. In addition, the facilities to be constructed in the future should be based on considerations specific to the demand and may vary from the configurations and sizes of those indicated in the development plan. The preferred development plan serves as the basis for the Airport Layout Plan (ALP) set that represents a graphical representation of the airport's 20-year development strategy and accompanies this narrative.

CHAPTER 6

ENVIRONMENTAL OVERVIEW

6.1 INTRODUCTION

This section presents a summary of environmental characteristics and a basic assessment of probable environmental impacts associated with the planned airport development project at Cecil Field. The primary airport development projects within this analysis are as follows:

- Construction of Site 9B, which includes new MRO/Air Cargo/Corporate and other aircraft storage hangars;
- Construction of aviation and non-aviation commercial development areas;
- Installation of an Instrument Landing System on Runway 9R/27L;
- Construction of the new Midfield Development Area
- Construction of the new Southeast Development area;
- Construction of the new Northeast Development Area;
- Construction of taxiway and apron improvements in the Northwest Development Area;
- Construction of the new east airport access road;
- Construction of the new Runway 17/35 and parallel taxiways;
- Marketing Analysis for the Reuse and Development of NAS Cecil Field (July 1997)
- Transportation Supplement to the NAS Cecil Field Base Reuse Plan (September 1997)
- COJ Ordinance 97-1064-E (November 1997)
- Memorandum of Agreement between COJ, JPA and SJRWMD to establish Cecil Field Wetland Mitigation Plan and “Natural and Recreation Corridor” (March 1998)
- 2010 Comprehensive Plan NAS Cecil Field Transition Element (May 1998)
- COJ Ordinance 98-225-E (June 1998)
- Cecil Field Strategic Airport Master Plan (October 1998)
- Final Environmental Impact Statement, Disposal and Reuse of NAS Cecil Field (October 1998)
- COJ Resolution 1999-94-A (February 1999)
- Environmental Baseline Survey for Transfer, Jacksonville Port Authority, Volume II (August 1999)
- Avigation Easement to Jacksonville Port Authority from United States of America (September 1999)
- Quitclaim Deed for Economic Development Conveyance to COJ (October 1999)
- Approval of Vested Property Affirmation Certificate (VPAC #23631) (December 1999)
- Conceptual Forest Management Plan for Cecil Field by the Florida Department of Agriculture and Consumer Services Division of Forestry (December 1999)

To obtain the information required for the environmental analysis portion of this Master Plan Update, the following references were reviewed:

- NAS Cecil Field Final Base Reuse Plan (February 1996)
- Northeast Florida Aviation System Plan and Cecil Field Airport Feasibility Study (July 1997)

- Perpetual Easement for FDOT (January 2000)
- Cecil Field Natural and Recreational Corridor Management Plan (March 2000)
- Environmental Baseline Survey for Transfer, Economic Development Conveyance (EDC) Parcel, Volume I (May 2000)
- Quitclaim Deed for Economic for Economic Development Conveyance to COJ (September 2000)
- Cecil Field Commerce Center Business Plan (September 2000)
- Grant of Easement for Bellsouth Telecommunications (December 2000)
- Cecil Commerce Center Master Stormwater Management Plan, Volume I (March 2001)
- Stormwater Pollution Prevention Plan (Draft) for Cecil Field Airport, Jacksonville, FL. (April 2001)¹
- Cecil Commerce Center Master Stormwater Management Plan, RAI Response (July 2001)
- Cecil Commerce Center Master Stormwater Plan SJRWMD Permit #4-031-70452-1 (November 2001)
- COJ Resolution 2002-296-A (April 2002)
- COJ Resolution 2002-340-A (May 2002)
- COJ Resolution 2002-341-A (May 2002)
- COJ Resolution 2002-441-E (May 2002)
- Fish and Wildlife Service Review of Projected Plans (May 2002)
- Agreement between the DCA and the COJ regarding Cecil Commerce Center and Cecil Airport (August 2002)
- Ordinance 2002-669-E (August 2002)
- Ordinance 2002-670 (August 2002)
- Public Health Assessment, NAS Cecil Field (September 2002)
- Division of Historical Resources, Project File Number 2003-2721 (April 2003)
- EPA Superfund, Explanation of Significant Differences (October 2003)
- Grant of Easement for JEA (November 2003)
- Memorandum of Agreement Allocating U.S. Army Corp of Engineers Wetland Credits, Mitigation and Creation at Cecil Field (August 2004)
- Intergovernmental Management Agreement (September 2005)
- INM noise contour files and noise contour maps from Reynolds, Smith & Hills (January, 2006)
- Munitions Response for Site 1, Hangar 860, CH2MHILL Constructors, Inc (December 29, 2006)
- Resolution 2007-579, 2007B Series Text Amendment, City of Jacksonville 2010 Comprehensive Plan, Future Land Use Element
- First Coast Metropolitan Planning Organization, Transportation Planning, www.firstcoastmpo.com
- Official Website of the City of Jacksonville, www.coj.net
- Official Website of Clay County, www.claycountygov.com

The analysis of the environmental condition pertaining to the airport's development was written in relation to the impact categories as outlined with the FAA Airport Environmental Handbook. These categories consist of the following:

- Noise
- Compatible Land Use
- Social Impacts

¹ Updated Stormwater Pollution Plan, November 2006

- Induced Socioeconomic Impacts
- Soil and Groundwater Contamination
- Air Quality
- Water Quality
- Department of Transportation (DOT) 4(f) Lands
- Historic, Architectural, Archaeological and Cultural Resources
- Biotic Communities including Flora and Fauna
- Endangered and Threatened Species
- Wetlands
- Tree Mitigation
- Floodplains
- Coastal Zone Management Program
- Coastal Barriers
- Wild and Scenic Rivers
- Prime and Unique Farmlands
- Energy Supply and Natural Resources
- Light Emissions
- Solid Waste Impacts
- Construction Impacts

The sections on Soil and Groundwater Contamination and Tree Mitigation were not included in the FAA Airport Environmental Handbook but were included due to their relevance in this environmental overview.

6.2 NOISE

Noise is defined as “undesirable sound” and is one of the major concerns of both airport owners and airport neighbors. Various methods, known as metrics, have been developed to measure sound. Overall, sound is measured in decibels (dB). Aircraft sound levels are also measured using the A-weighted decibel scale (dBA). This noise metric was developed because it approximates how the human ear hears sound. **Exhibit 6-1** shows common noise levels on a dBA scale.

Aircraft noise, while measured in dBA, is a cumulative measurement over a 24-hour period based on annual traffic activity which is referred to as the average day-night sound level (DNL).

DNL is the equivalent sound level over a 24-hour period, except that noises occurring at night (defined as 10:00PM through 7:00AM) are artificially increased by 10 dBA. This weight reflects the fact that noise is perceived to be more bothersome to the community during these hours. This measurement is also referred to as (L_{dn}). The EPA identified DNL as the most

appropriate means of evaluating airport noise (from “Information on Levels of Environmental Noise Requisite to Protective Public Health and Welfare with an Adequate Margin of Safety,” U.S. EPA Report No. 550/9-74-004, September 1974). Most other public agencies dealing with noise exposure, including the FAA, the Department of Defense (DOD), and the Department of Housing and Urban Development (HUD), have formally adopted DNL. FAA requires that DNL be used in describing cumulative noise exposure and in identifying aircraft noise/land use compatibility issues.

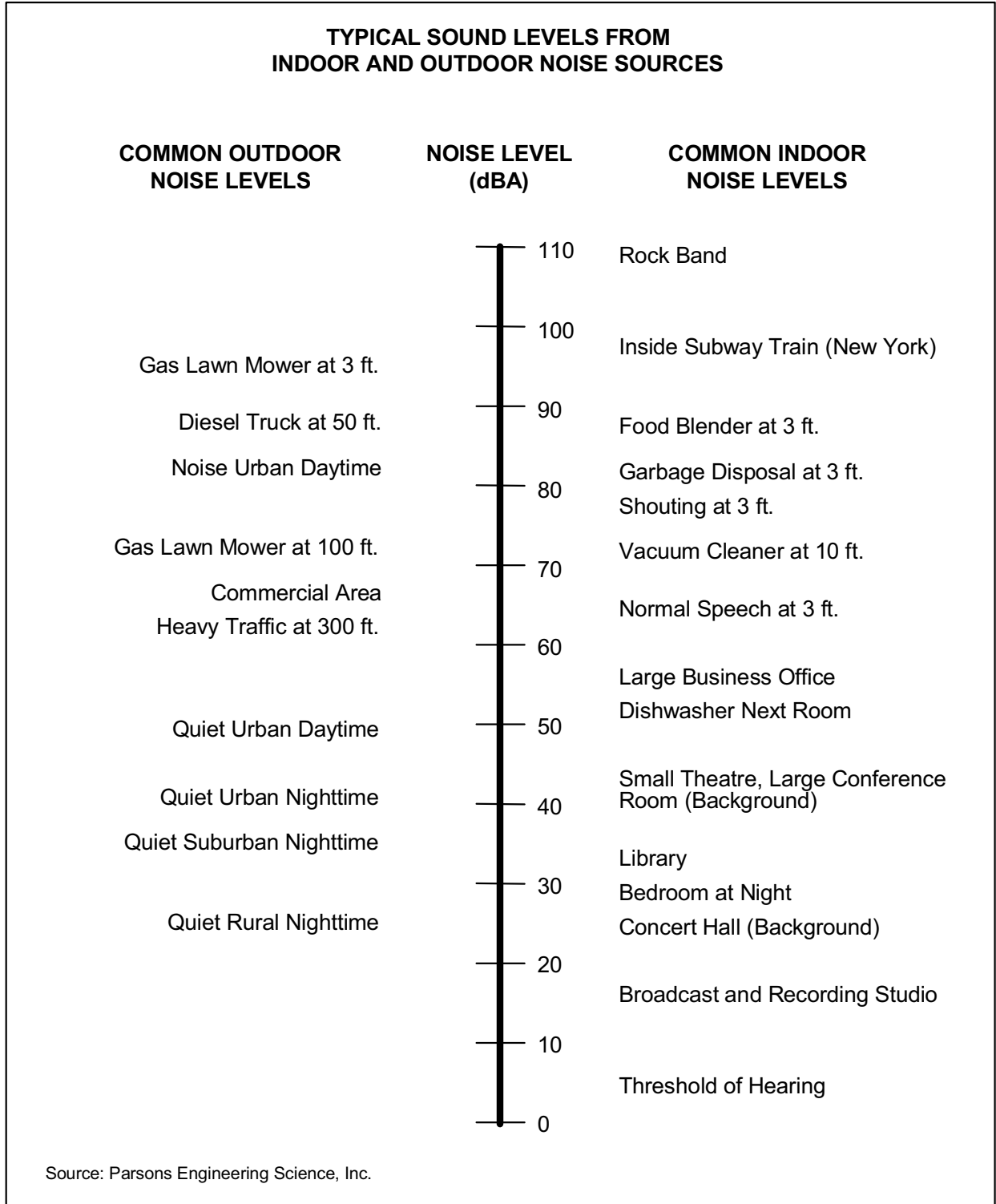
The Noise Pollution and Abatement Act of 1972 (also commonly known as the Noise Control Act of 1972) is a statute of the United States initiating a federal program of regulating noise pollution with the intent of protecting human health and minimizing annoyance of noise to the general public.

The effects of noise are seldom catastrophic, and are often only temporary; but adverse effects can be cumulative with prolonged or repeated exposure. Sleep disruption, the masking of speech and television, and the inability to enjoy one's property or leisure time, impair the quality of life. In addition, noise can interfere with the teaching and learning process, disrupt performance of certain tasks, and increase the incidence of antisocial behavior. There is some evidence that noise can adversely affect general health and well-being in the manner as chronic stress. (WHO, 1999; Passchier-Vermeer and Passchier, 2000).

A primary element in the environmental analysis of the Master Plan for Cecil Field is the development of the existing and potential noise contours over the 20-year planning period. Many processes are used to determine the noise contours including the use of existing and forecasted airport operations, change in type of aircraft that use the airport, and changes in airfield configuration. These assumptions are then used in the Federal Aviation Administration's (FAA) Integrated Noise Modeling (INM) software which generates the noise contours using these variables.

The airport operations used to determine the noise contours come from the historical operations as well as the FAA approved forecasts for the 20-year planning period that are developed in Chapter 3, Aviation Activity Forecasts.

**Exhibit 6-1:
Typical A-Weighted Noise Levels**



Additionally, the type of aircraft anticipated to use the airport is derived from Chapter 3.

Changes in the amount and the type of aircraft play a significant role in the development of the noise contours. The addition, removal, or modification of a runway, or change in the type of approach will all affect the noise contours generated for an airport. Because the airport improvement strategy for Cecil Field involves shortening the two inboard runways and constructing an additional runway to the east, the changes in the airfield configuration will significantly impact the noise contours for Cecil Field as these improvements are implemented.

The noise contours developed in the INM are important tools in long-term protection against incompatible land uses around the airport. The contours are used to formally define areas that are compatible and non-compatible with the airport generated noise based on average noise exposure. The Airport Layout Plan and this narrative report should be coordinated with the City of Jacksonville and with neighboring Clay County to ensure that existing and planned airport facilities are considered in local planning documents and that airport operational capabilities are preserved through local land use controls. The City of Jacksonville has incorporated zoning controls related to Airports and Lands Adjacent Thereto in Part 10 of the City Code. While the current code has set a community standard that allow residential development in the 65 DNL contour it does require notice to property owners and increased noise attenuation within the structure. The City and the JAA recently completed a revision to Part 10 of the COJ Zoning Code recognizing noise impacts to the 60 DNL contour and increasing enforcement of the notice provision for properties within the 60 DNL and above noise contours. This revision was enacted on March 27, 2007 under Ordinance 2006-1225-E. A summary of the Part 10 revision relating to allowable land uses for noise zones is presented in **Exhibit 6-2**.

A Rural Residential Land Use classification currently exists just south of the proposed runway. As seen on Exhibit 6-7, part of this development lies inside of the 65 DNL noise contour. The JAA needs to work with the City to reduce this type of incompatible development.

Under FAR Part 150, FAA requires that the 65, 70 and 75 DNL contours be modeled and depicted on a Noise Exposure Map (NEM). Of these three categories, the

75 DNL noise contour reflects the most severe impact, while the 65 DNL noise contour reflects the least.

Human tolerance to noise has been determined to be below 65 DNL and land areas outside the 65 DNL noise contours are considered to be compatible with airport activities. At or above 65 DNL, measures should be taken to mitigate sound to limit or eliminate interference with human activities. Residential and some business and commercial development are normally not compatible with the 65 to 75 DNL noise contour unless soundproofing or other mitigating actions are implemented. Above 75 DNL, it is recommended that the airport own or control the land through an aviation easement to ensure compatibility is maintained.

In September 1999, an aviation easement was granted to the Jacksonville Port Authority, now the JAA. This easement states that the JAA has a right of flight for the passage of aircraft in the airspace above the property illustrated in **Exhibit 6-3**. Also, with respect to the City parcel around the airport, natural growth and other obstructions will be limited to 215 feet as to comply with Federal Aviation Regulation, Part 77. Additional easements have been granted to several agencies in order to provide access to Cecil Field. On December 17, 1999, the Jacksonville Energy Authority (JEA) was granted an easement for utilities along 103rd Street. On January 13, 2000, the FDOT was granted an easement in the Northeast corner of the airport property for Branan Field Chaffee Road, presented in **Exhibit 6-4**. On December 1, 2000, Bell South was granted a 30ft by 30ft easement located approximately 100ft southeast of the intersection of Lake Fretwell Street and Aviation Avenue, illustrated in **Exhibit 6-5**. On November 14, 2003, the JEA was granted easements along the eastern transmission corridor and the Aviation Avenue utility corridor. The JEA easements are depicted in **Exhibit 6-6**.

According to the Final Environmental Impact Statement, noise from Cecil Field comes primarily from military/civilian aircraft, traffic, industrial operations, and construction and demolition services. As a public use airport, the projected 2024 noise exposure levels are expected to decrease in some areas due to the use of improved technology, known historical trends in airport operations by aircraft type and quieter civilian aircraft. However, the addition of runway 17-35 will increase the affected 65 DNL contour areas dramatically. The 2024 projected 65 DNL level extends short of Branan-Field/Chaffee Road to the east.

**Exhibit 6-2:
Allowable Land Uses for Noise Zones**

Land Use Category	Noise Zone A >70 DNL	Noise Zone B 65-69.99 DNL	Airport Notice Zone 60-64.99 DNL
<i>Residential</i>			
Single-family dwelling	X, 11	C, 1, 2	C, 1
Multi-family dwelling	X, 11	C, 1, 2	C, 1
Mobile home park	X	X	C, 1
Foster care/family care home	X	C, 1, 2	C, 1
Group care home and similar uses	X, 11	C, 1, 2	C, 1
Rooming house/boarding house	X, 11	C, 1, 2	C, 1
<i>Commercial</i>			
Retail outlets for the sale of general merchandise (including sale of food), wearing apparel and similar uses	C, 1, 2	C, 1	C, 1
Retail sales of building materials, hardware, farm equipment, new or used automobiles, mobile homes, boats and similar uses	C, 1, 2	C, 1	C, 1
Commercial parking lot	C, 1	C, 1	C, 1
Retail sale of furniture, home furnishings and similar uses	C, 1, 2	C, 1	C, 1
Service establishments such as restaurants (including drive-in restaurants), service of alcoholic beverages and similar uses	C, 1, 2	C, 1, 3	C, 1
All types of professional and business offices, personal services, professional or business including building trade contractors and similar uses	C, 1, 2	C, 1, 3	C, 1
Commercial indoor recreational or entertainment facilities	C, 1, 2	C, 1, 3	C, 1
Repair services and service garages including automobile repair, radio and television repair and similar uses	C, 1	C, 1	C, 1
Automobile service station	C, 1	C, 1	C, 1
Motel or hotel	C, 1, 2	C, 1, 2	C, 1
Radio and television broadcasting offices and studios, telephone exchange and similar uses	C, 1, 2	C, 1, 2	C, 1
Medical and other health services such as hospitals, clinics and similar uses	X, 11	C, 1, 2	C, 1
<i>Industrial</i>			
Wholesaling, warehousing storage or distribution establishments, assembling of components and similar uses	C, 1, 10	C, 1, 10	C, 1
Freight, bus, traveling, shipping or other transportation terminals	C, 1, 10	C, 1, 10	C, 1
Manufacturing of food and kindred products, apparel, textile mill products and similar uses	C, 1, 10	C, 1, 10	C, 1
Manufacturing of chemicals and allied products, petroleum refining and related activities, rubber and miscellaneous plastic products and similar uses	C, 1, 10	C, 1, 10	C, 1
Manufacturing of lumber and wood products, furniture and fixtures, paper and allied products, stone, clay and glass products, primary metal including fabrication of metal products and similar uses	C, 1, 10	C, 1, 10	C, 1
Printing, lithography, publishing or similar establishments	C, 1, 10	C, 1, 10	C, 1
Manufacturing of professional, scientific and control instruments, prosthetic appliances, dentures, eyeglasses, hearing and similar products	C, 1, 10	C, 1, 10	C, 1
<i>Public and Quasi-public Services</i>			
Cemeteries	C, 1, 5	C, 1, 5	C, 1
Churches	X, 11	C, 1, 2	C, 1
Governmental services, such as offices, fire stations, postal services and prisons	C, 1, 2	C, 1, 2	C, 1

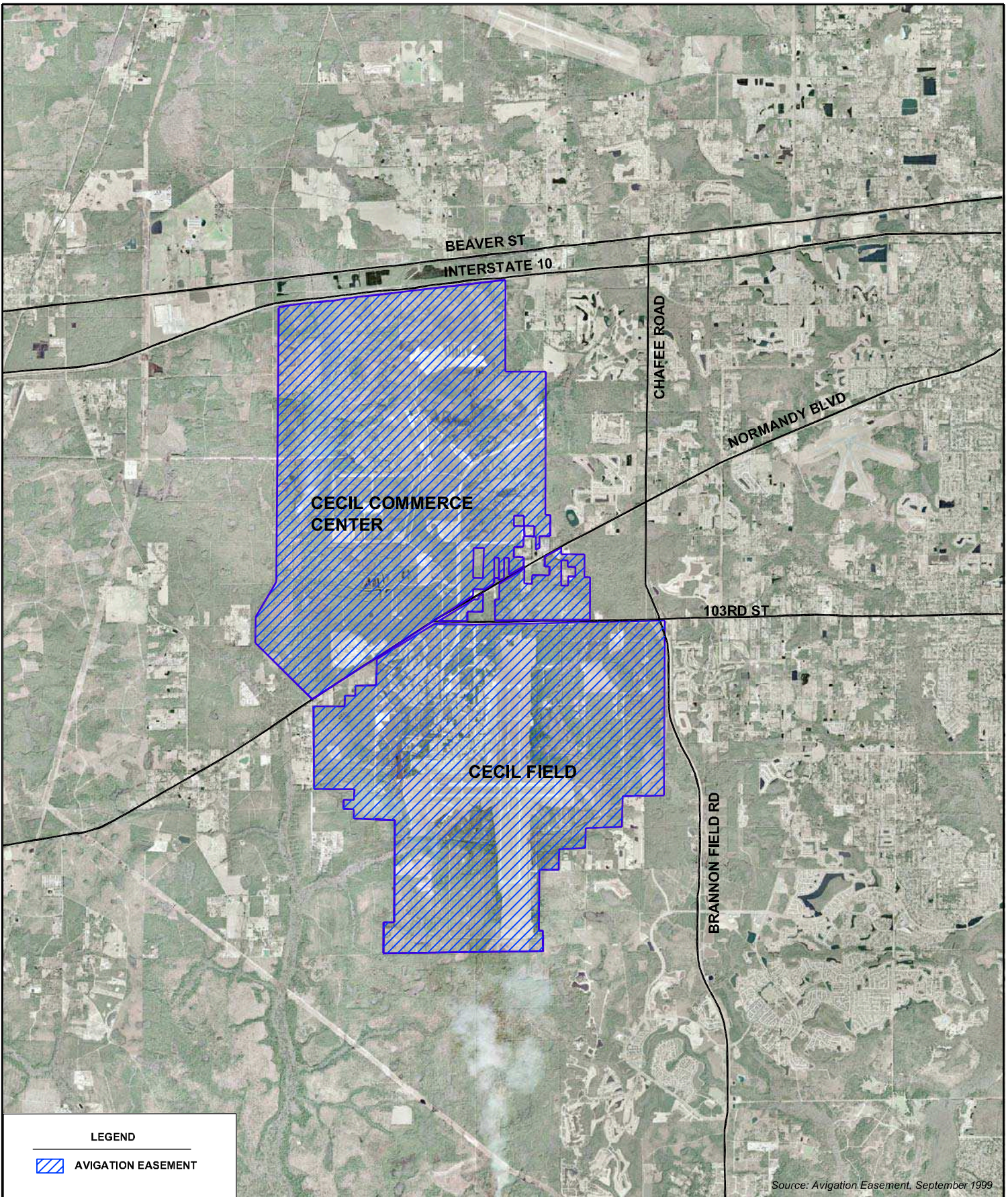
Exhibit 6-2: (CONT)
Allowable Land Uses for Noise Zones

Land Use Category	Noise Zone A >70 DNL	Noise Zone B 65-70 DNL	Noise Zone C 60-65 DNL
<i>Public and Quasi-public Services</i>			
Schools	X, 11	X, 11	C, 1, 7
Cultural activities such as libraries, museums, art galleries and similar uses	X, 11	X, 11	C, 1
Private clubs and similar uses which provide for public assembly	X, 11	C, 1, 2	C, 1
<i>Outdoor Recreation</i>			
Playgrounds, neighborhood parks	X, 11	X, 11	C, 1
Community and regional parks	X, 11	X, 11	C, 1
Nature exhibits	X, 11	X, 11	C, 1
Spectator sports, including arenas	X, 11	X, 11	C, 1
Golf courses, riding stables and similar uses	C, 1, 6	C, 1, 6	C, 1
Private camps (including day camps)	X, 11	X, 11	C, 1
Entertainment assembly, amphitheater, music shell and similar uses	X, 11	X, 11	X, 11
<i>Resource Production, Extraction and Open Land</i>			
Agriculture, including livestock grazing	C, 1, 8	C, 1, 8	C, 1
Livestock farms, animal breeding	C, 1, 8	C, 1, 8	C, 1
Agriculture-related activities	C, 1, 8	C, 1, 8	C, 1
Forestry	C, 1, 4, 8	C, 1, 4, 8	C, 1

A—Acceptable development
X – Unacceptable development
C – Conditional development, with conditions as noted:

1. Recorded Airport Notice Zone Acknowledgement applied to the parcel
2. Compatible development is conditioned on design and construction providing for an average minimum NLR of average minimum 30 dBA throughout the facility or dwelling
3. Compatible development is conditioned on design and construction providing for an average minimum NLR of average minimum 25 dBA throughout the facility or dwelling
4. Permitted only within height constraints
5. Rooms/buildings for funeral services, prayer and meditation are not permitted
6. Compatible development is conditioned on design and construction providing for an average minimum NLR of average minimum 30 dBA in the clubhouse or other interior meeting structure
7. Schools are further limited by FS 333, See Sec. 656.1009
8. Operations which attract a large concentration of birds should be excluded
9. Compatible development is conditioned on design and construction providing for a noise level reduction of average minimum 30 dBA in reception, office and employee lounge areas
10. Compatible development is conditioned on design and construction providing for a noise level reduction of average minimum 25 dBA in reception, office and employee lounge areas
11. Development permitted in Planned Unit Developments approved prior to the enactment date of this ordinance or pursuant to preliminary site development reviews in accordance with Section 656.1003 and uses or structures permitted pursuant to Section 656.1008 shall also be subject to footnote 1 and footnote 2 of this table.

Source: Ordinance 2006-1225-E



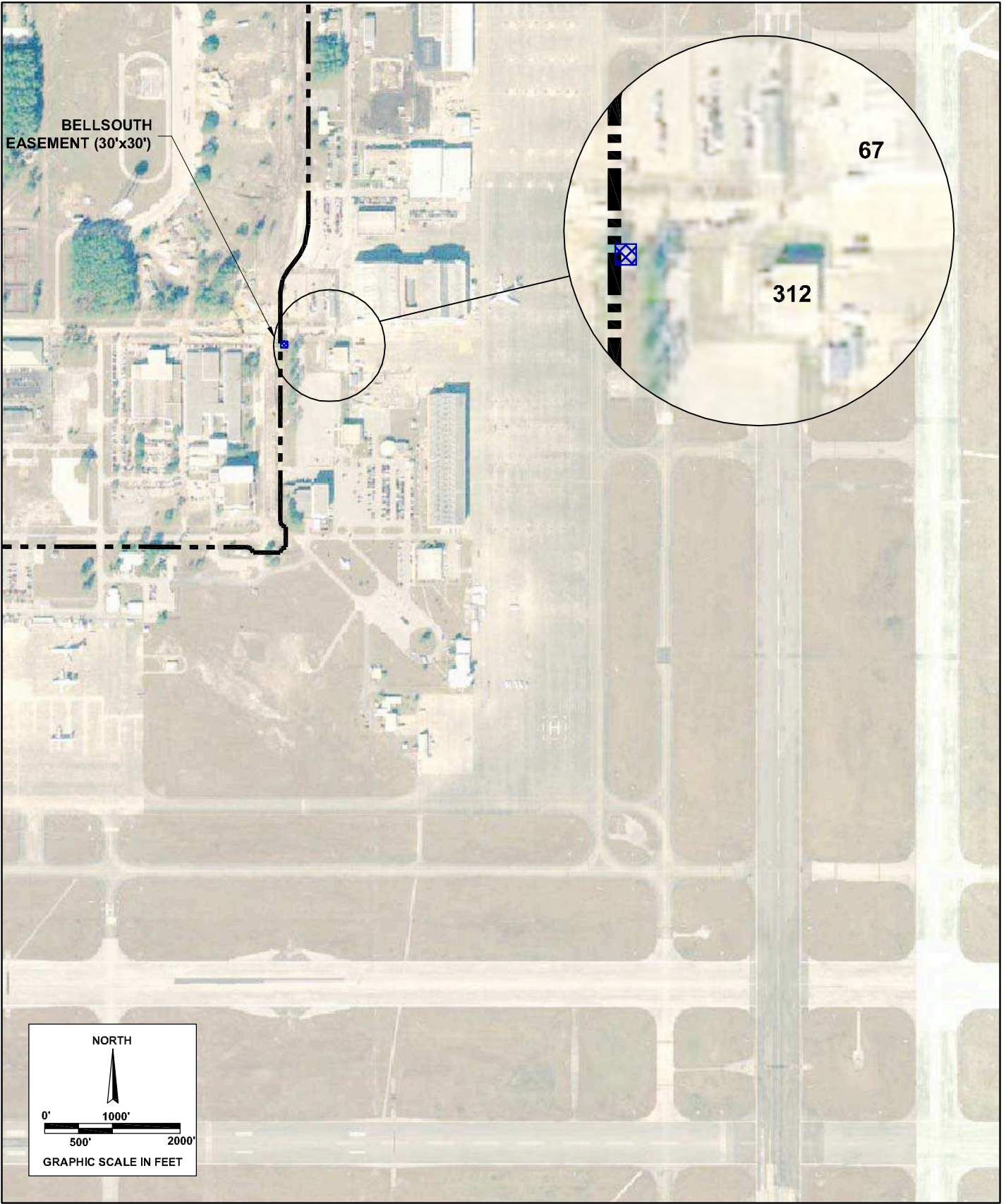
**EXHIBIT 6-3
AVIGATION EASEMENT**

CECIL FIELD AIRPORT



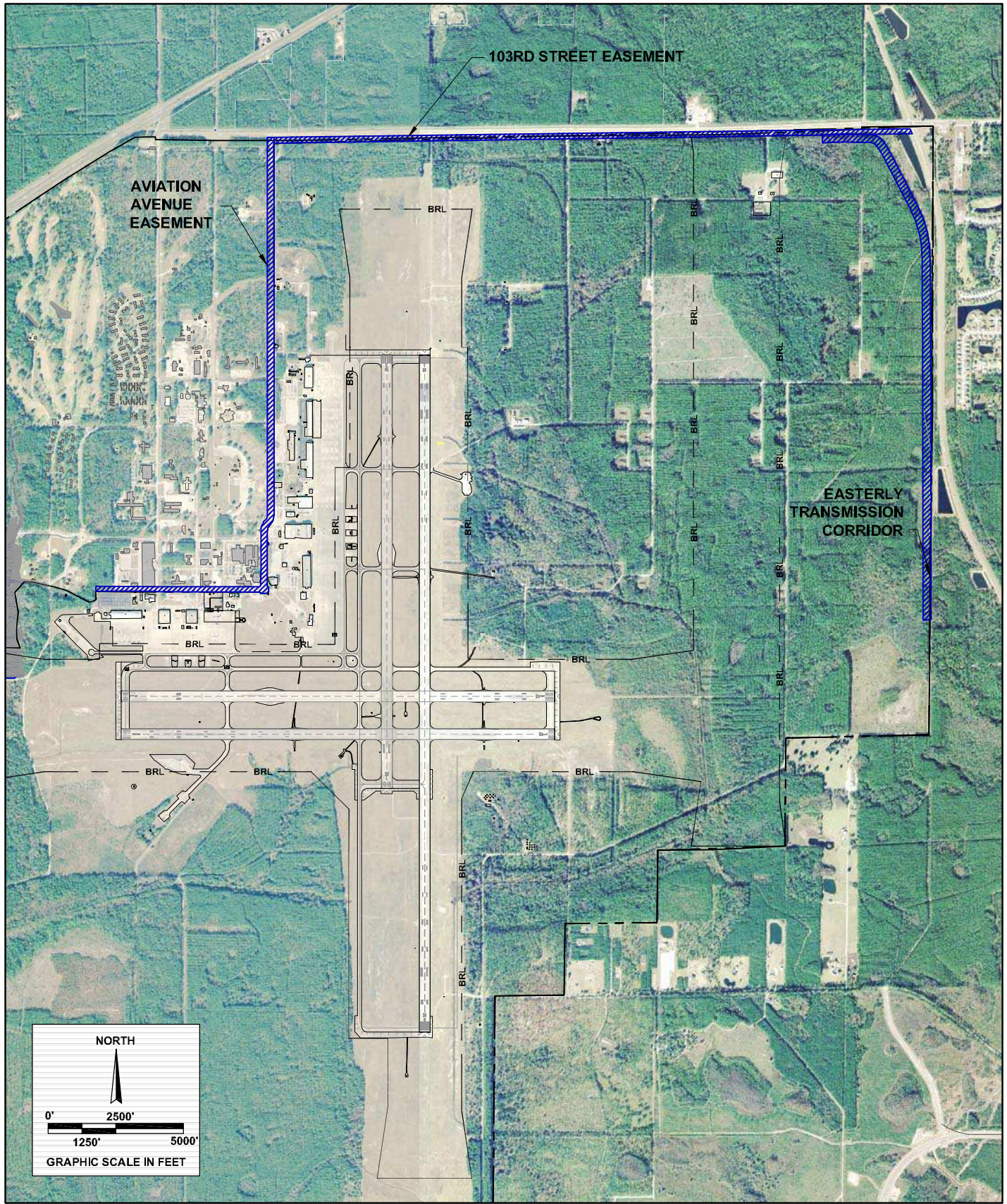
**EXHIBIT 6-4
FDOT EASEMENT**

CECIL FIELD AIRPORT



**EXHIBIT 6-5
BELLSOUTH EASEMENT**

CECIL FIELD AIRPORT



**EXHIBIT 6-6
JEA EASEMENTS**

CECIL FIELD AIRPORT

It extends past (from Runway 18-36) and short (from proposed runway 17/35) of Normandy Blvd to the north. The contour line extends about 7,000 feet west of the westernmost property line, and about 3,000 feet past the southern most property line.

The western and southern portions within the 65 DNL noise contour line extend into Recreational/Open Space and Agricultural land use. The land uses contained in the northern contour lines involve Multi Use, Light and Heavy Industrial and Rural Residential.

**Table 6-1:
Current and Projected 2024 Land Area Enclosed by 65
DNL Noise Contour Line**

Land Use Category	Area Enclosed by Current 65 DNL Line (Acres)	Area Enclosed by Projected 65 DNL Line (Acres)	Increase (Acres)
MU	-	166.23	166.23
HI	-	32.49	32.49
LI	9.92	42.52	32.60
BP	-	128.96	128.96
LDR	39.13	113.50	74.37
PBF	70.90	147.68	76.78
ROS	96.88	289.12	192.24
AGR	-	124.58	124.58
RR	28.06	324.04	295.98
CSV	46.88	60.22	13.34
Total	291.77	1,429.34	1,137.57

The eastern lines contain Low Density and Rural Residential, Conservation, and Recreation and Open Space. **Exhibit 6-7** shows the current and projected 2024 65 DNL contour lines. **Table 6-1** identifies the change in land areas affected by the projected 2024 65 DNL contour line.

6.3 COMPATIBLE LAND USE

Land Use maps are created by governing agencies to control the types of future development which are allowed in different locations. These controls are established to provide compatible land areas for the development of business districts, residential subdivisions, entertainment sectors, commercial and other development alternatives. Zoning maps are created for similar purposes but are established to control current developments. Future Land Use and Zoning must be used together to control development, which is an important factor in sustaining and developing airports. The land surrounding an airport must be compatible with airport operations. Steps must be taken by airports to ensure the surrounding lands have compatible Land Use and Zoning

classifications to avoid current and potential development issues.

Section 163.3177(6) (j), Florida Statutes requires that local comprehensive plans provide for land use compatibility around existing and planned airports. It is required by the FAA that airports and airport authorities seek compatible uses for property surrounding the airport and this can be accomplished through zoning and municipal planning efforts. **Exhibit 6-8** illustrates the current Land Use map for Cecil Field.

6.3.1 City of Jacksonville Land Use

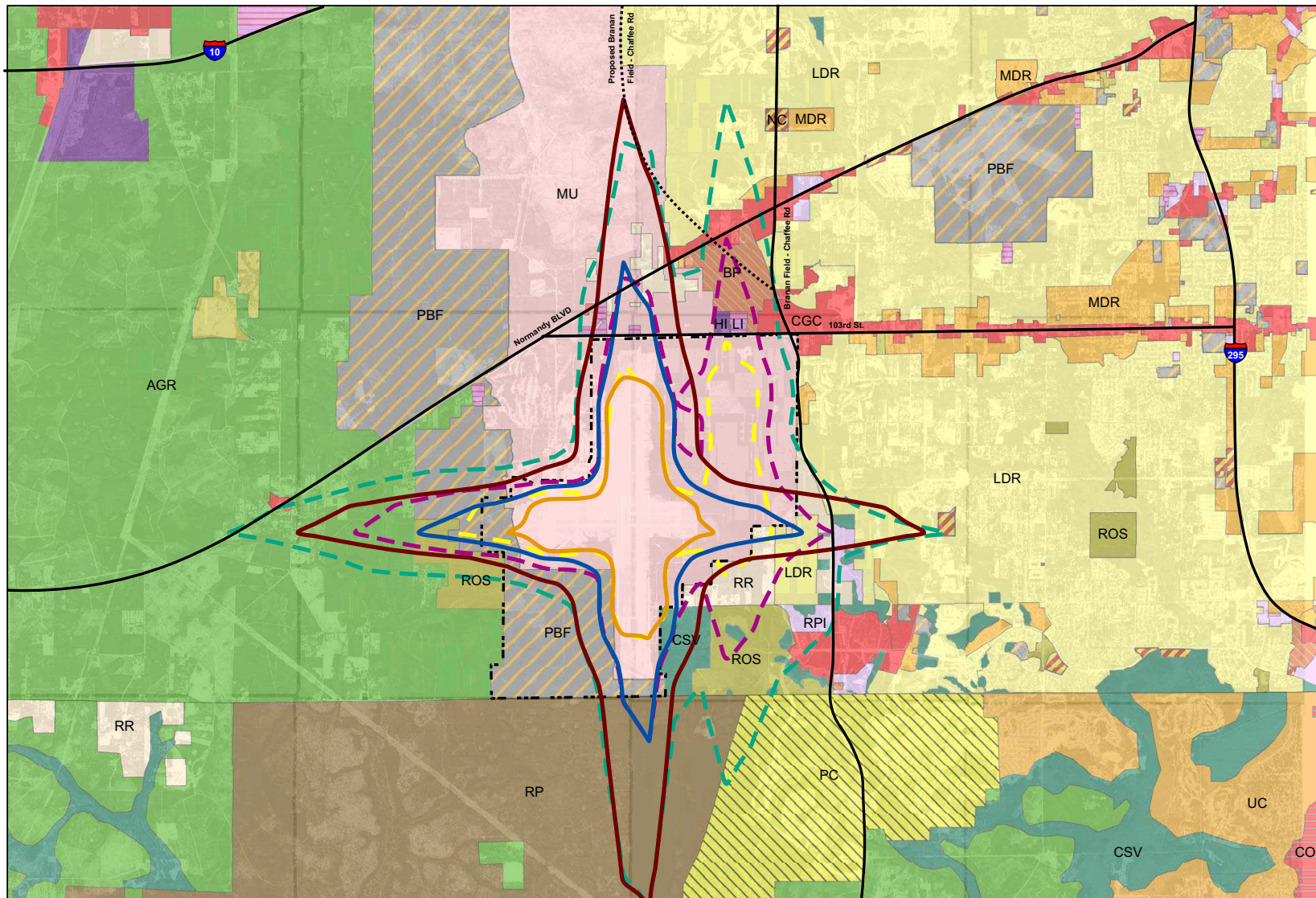
The map generated from the City of Jacksonville's Geographic Information System (JaxGIS) identifies the land surrounding Cecil Field as Multi-Use (MU). In August 2002, the City of Jacksonville enacted Ordinance 2002-669 which changed the future land use designation for approximately 10,385 acres of Cecil Field from Public Buildings and Facilities (PBF) to MU.

Additionally, Ordinance 2002-670 adopted the 2002B Series of Semi-Annual Text Amendments to the City 2010 Comprehensive Plan. This included designation of the uses within the MU land use category, which are as follows:

- Business Park (BP)
- Community/General Commercial (CGC)
- Conservation (CSV)
- Heavy Industrial (HI)
- Low Density Residential (LDR)
- Light Industrial (LI)
- Medium Density Residential (MDR)
- Neighborhood Commercial (NC)
- Public Buildings and Facilities (PBF)
- Recreation/Open Space (ROC)

Upon approval by reviewing agencies, the ALP set and this narrative should be coordinated with the Duval and Clay County planning departments and the City of Jacksonville to ensure that existing and planned airport facilities are considered in local planning documents and airport operational capabilities are preserved through local land use controls. Of particular importance is the preservation of the imaginary three-dimensional surfaces, defined by Federal Aviation Regulations Part 77 and illustrated in the ALP set, and the airport runway protection zones located at each existing and planned runway end.

CECIL FIELD MASTER PLAN UPDATE

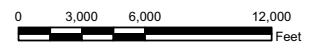


LEGEND

- Cecil Boundary_Nad83
- Current 60 DNL Noise Contour
- Future 60 DNL Noise Contour
- Current 65 DNL Noise Contour
- Future 65 DNL Noise Contour
- Current 70 DNL Noise Contour
- Future 70 DNL Noise Contour

LANDUSE

- Agriculture (AGR)
- Commercial (CO)
- Conservation (CSV)
- Planned Community (PC)
- Recreation/Preservation (RP)
- Rural Residential (RR)
- Urban Core (UC)
- Business Park (BP)
- Community/General Commercial (CGC)
- Heavy Industrial (HI)
- Low Density Residential (LDR)
- Light Industrial (LI)
- Medium Density Residential (MDR)
- Multi-Use (MU)
- Neighborhood Commercial (NC)
- Public Buildings and Facilities (PBF)
- Recreation Open Space (ROS)
- Residential Professional Institutional (RPI)
- Rural Residential (RR)



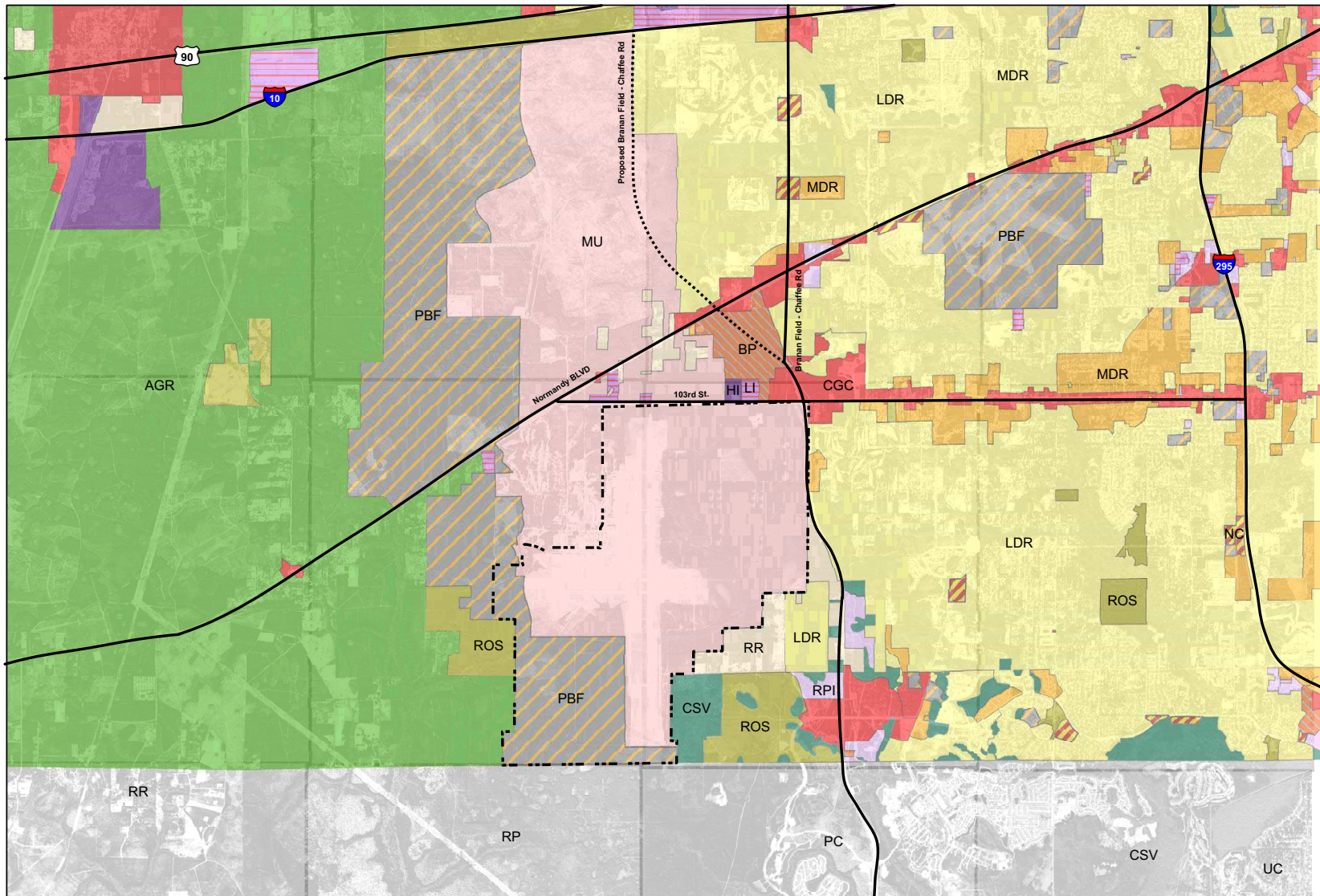
SOURCES:
 JACKSONVILLE PLANNING AND DEVELOPMENT
 DEPARTMENT, JACKSONVILLE, FL:
 JACKSONVILLE FUTURE LAND USE MAP
 JULY 2004

CLAY COUNTY PLANNING AND ZONING
 DEPARTMENT, CLAY COUNTY, FLORIDA:
 CLAY COUNTY FUTURE LAND USE MAP, 2004

FLORIDA LAND BOUNDARY INFORMATION SYSTEM:
 RASTER INFRARED IMAGES, 2004

PREPARED BY AVCON, INC. 2007

CECIL FIELD MASTER PLAN UPDATE

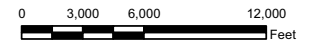


LEGEND

--- Cecil Boundary_Nad83

LANDUSE

- Agriculture (AGR)
- Commercial (CO)
- Conservation (CSV)
- Planned Community (PC)
- Recreation/Preservation (RP)
- Rural Residential (RR)
- Urban Core (UC)
- Business Park (BP)
- Community/General Commercial (CGC)
- Heavy Industrial (HI)
- Light Industrial (LI)
- Medium Density Residential (MDR)
- Multi-Use (MU)
- Neighborhood Commercial (NC)
- Public Buildings and Facilities (PBF)
- Recreation Open Space (ROS)
- Residential Professional Institutional (RPI)
- Rural Residential (RR)



SOURCES:
 JACKSONVILLE PLANNING AND DEVELOPMENT
 DEPARTMENT, JACKSONVILLE, FL:
 JACKSONVILLE FUTURE LAND USE MAP
 JULY 2007

CLAY COUNTY PLANNING AND ZONING
 DEPARTMENT, CLAY COUNTY, FLORIDA:
 CLAY COUNTY FUTURE LAND USE MAP, 2007

FLORIDA LAND BOUNDARY INFORMATION SYSTEM:
 RASTER INFRARED IMAGES, 2004

PREPARED BY AVCON, INC. 2007

Clay County is encouraged to update its codes and regulations to comply with the requirements of Chapter 333, Florida Statutes (F.S. 333) for protecting airports from incompatible development and loss of navigable airspace. Resolution 2007-579, 2007B Series Text Amendment, City of Jacksonville 2010 Comprehensive Plan, Future Land Use Element, has been adopted to protect airports and other industrial areas from incompatible land uses. The text adopted under Resolution 2007-579 is pending enactment under Ordinance 2007-1075. If Ordinance 2007-1075 is enacted by the City of Jacksonville, the text of the Future Land Use Element will be amended. This resolution states that where incompatible land uses exist in proximity to airports, the City of Jacksonville will support changes to the Future Land Use Map or rezonings to replace incompatible land uses with compatible uses. This resolution also states that the City shall update its land development regulations to ensure compatible land uses near airports and that new incompatible uses such as residential use and places of public assembly shall be limited. The City of Jacksonville recently adopted several ordinances amending Part 10, Chapter 656 of the City of Jacksonville Municipal Code to ensure compatible land use around the airport, such as Ordinance 2007-727-E and pending Ordinance 2007-1048.

Currently, the City of Jacksonville Ordinance Number 91-59-148 § 1, published as Title XVII Land Use, Section 656 Zoning Code, Part 10 Regulations Related to Airports and Adjacent Lands Thereto categorize Cecil Field as a military airport. This code has been updated in Ordinance 2006-1225-E which classifies Cecil Field as a civilian airport. The City of Jacksonville's concurrency management office looks to the Jacksonville Economic Development Commission (JEDC) for all land use control and vested trips for both the City and Airport property. For this reason, the JAA needs to continue to work with the City and JEDC concerning the improvements outlined in this Master Plan. Many changes have taken place to the land uses involving Cecil Field and a summary of these studies are illustrated in **Exhibit 6-9**.

6.3.2 City of Jacksonville Zoning

According to Ordinance 97-1064-E, the City of Jacksonville/Duval County rezoned Cecil Field from PBF-1 to PUD (Planned Unit Development) zoning in November 1997 based on the Cecil Commerce Center Business Plan. **Exhibit 6-10** illustrates the current zoning map for Cecil Field.

Ordinance 2002-670, adopted by the City in 2002, amended the COJ 2010 Comprehensive Plan to include designation of the uses within the Multi-Use Land Use category, deletion of the Cecil Field Transitional Element and incorporation of the relevant sections of the Transition Element into applicable sections of the COJ 2010 Comprehensive Plan. The Ordinance also establishes the JEDC and the JAA as local points of contact for development of their respective properties, establishes a specialized concurrency management system for Cecil Field and the Cecil Commerce Center and requires a Chapter 163 agreement between COJ, DCA and FDOT prior to implementation of the specialized concurrency management plan system.

The JAA needs to continue to work with the City to ensure that the development proposed in the Cecil Field Airport Master Plan is reflected in the Cecil Field PUD land uses, the MU zoning and the Concurrency Management System.

6.3.3 Clay County Land Use and Zoning

The southern boundary of Cecil Field lies on the county line between Duval and Clay County. The Land Use and Zoning classifications in Clay County could impact current and future development at Cecil Field. The current landuse map for Clay County is presented in **Exhibit 6-11**. A more detailed master plan of the Branan Field development is illustrated in **Exhibit 6-12**. A potential incompatible development planned in Clay County could lie within the 60 DNL noise contour, which is restricted under Ordinance 2006-1225-E. The forest/silviculture area of Oakleaf Plantation, located within the Villages of Argyle, is planned just southeast of Cecil Field and could lie within the proposed Runway 17-35 60 DNL contour line, see **Exhibit 6-13**. The JAA needs to work with the City to enact land use changes in this area in order to preserve the ability to construct this proposed runway in the future.

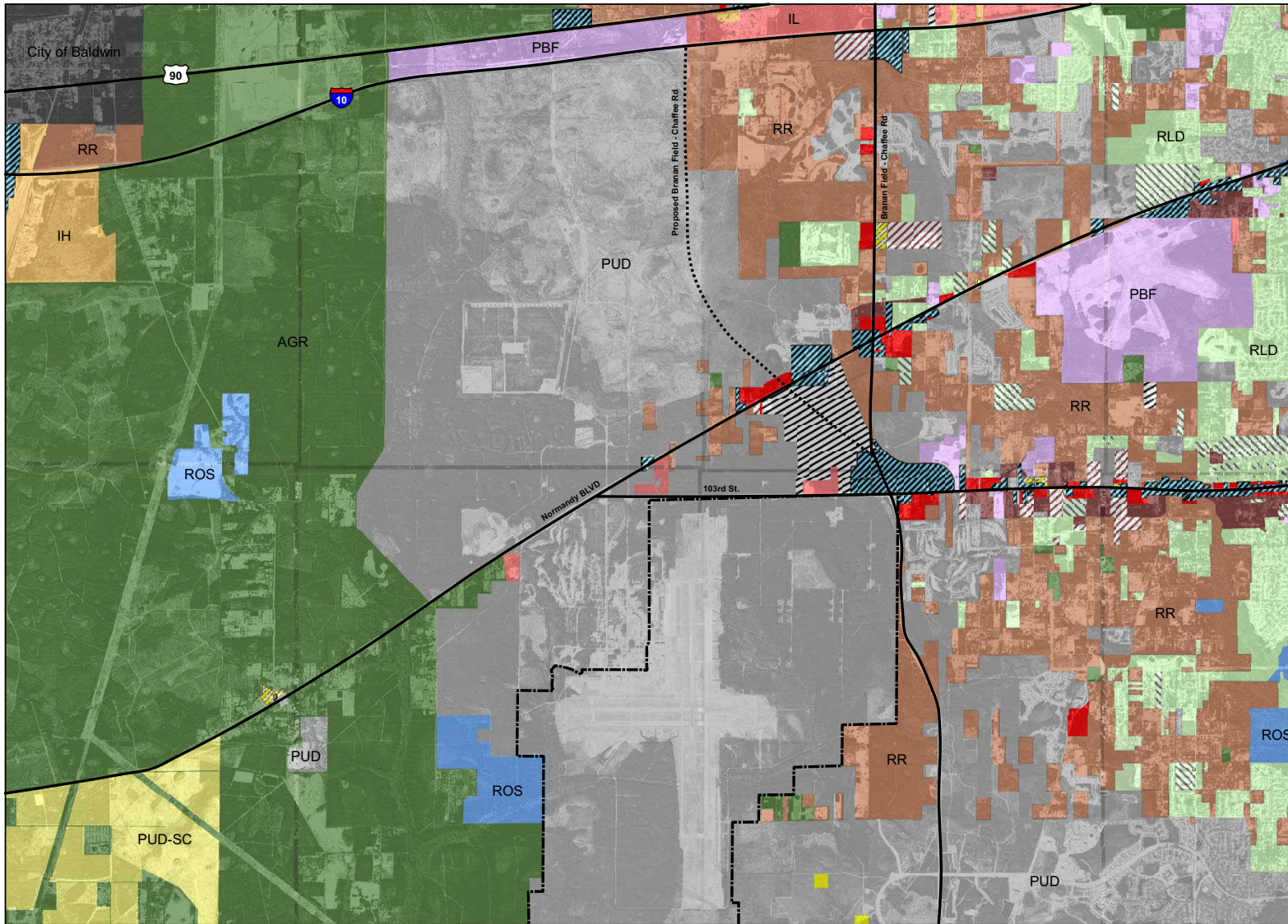
6.3.4 Cecil Field Business Plan

In 2000, the Jacksonville Economic Development Commission (JEDC), the City entity responsible for the redevelopment of the City owned property of the former NAS Cecil Field, began to develop the Cecil Commerce Center Business Plan. The Cecil Commerce Center Business Plan took the direction of the 1996 Base Reuse Plan and developed an implementation plan for the Cecil Commerce center that also intertwined land use and zoning designations that impacted the Cecil Field Airport property.

**Exhibit 6-9:
Summary of Documents Affecting Land Use Designations in Proximity to Cecil Field**

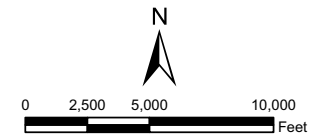
Date	Name of Document	Authored by
February 1996	NAS Cecil Field Final Base Reuse Plan	Cecil Field Base Reuse Commission
July 1997	Northeast Florida Aviation System Plan and Cecil Field Airport Feasibility Study	JAA
July 1997	Marketing Analysis for the Reuse and Development of NAS Cecil Field	JEDC
September 1997	Transportation Supplement to the NAS Cecil Field Base Reuse Plan	JEDC
November 1997	COJ Ordinance 97-1064-E	JEDC
March 1998	MOU between COJ, JPA (now JAA), and SJRWMD to establish Cecil Field Wetland Mitigation Plan and "Natural and Recreation Corridor"	
May 1998	2010 Comprehensive Plan NAS Cecil Field Transition Element	JEDC
June 1998	COJ Ordinance 98-225-E	COJ
October 1998	Final Environmental Impact Statement, Disposal and Reuse of Naval Air Station Cecil Field	US Navy
October 1998	Cecil Field Strategic Airport Master Plan - Airport Layout Plan	JPA (Now JAA)
February 1999	COJ Resolution 1999-94-A	COJ
October 1999	Quitclaim Deed of 5,750.54 acres from US Navy to JAA and lease of 330.70 acres to JAA for the Cecil Field Airport	US Navy
December 1999	Approval of Vested Property Affirmation Certificate (VPAC) #23631	COJ
May 2000	Environmental Baseline Survey for Transfer Economic Development Conveyance Parcel. Vol 1; FOST/FOSL/EBST	US Navy
September 2000	Quitclaim Deed for Economic Development Conveyance to COJ	US Navy
September 2000	Cecil Field Commerce Center Business Plan	JEDC
November 2001	Cecil Commerce Center Master Stormwater Management Plan	
April 2002	Resolution 2002-296-A	COJ
May 2002	Resolution 2002-340-A	COJ
May 2002	Resolution 2002-341-A	COJ
May 2002	Ordinance 2002-441-E	COJ
August 2002	COJ/DCA Agreement establishing a Multi-Use Land Use Category for the Cecil Commerce Center and Cecil Field Airport	COJ/DCA
August 2002	COJ Ordinance 2002-669	COJ
August 2002	COJ Ordinance 2002-670	COJ
August 2004	MOU between COJ and JAA allocating the Wetland Credits and Wetland Creation responsibilities under US Army Corp of Engineers Jacksonville District Permit # SAJ-2003-1935SJRWMD	

CECIL FIELD MASTER PLAN UPDATE

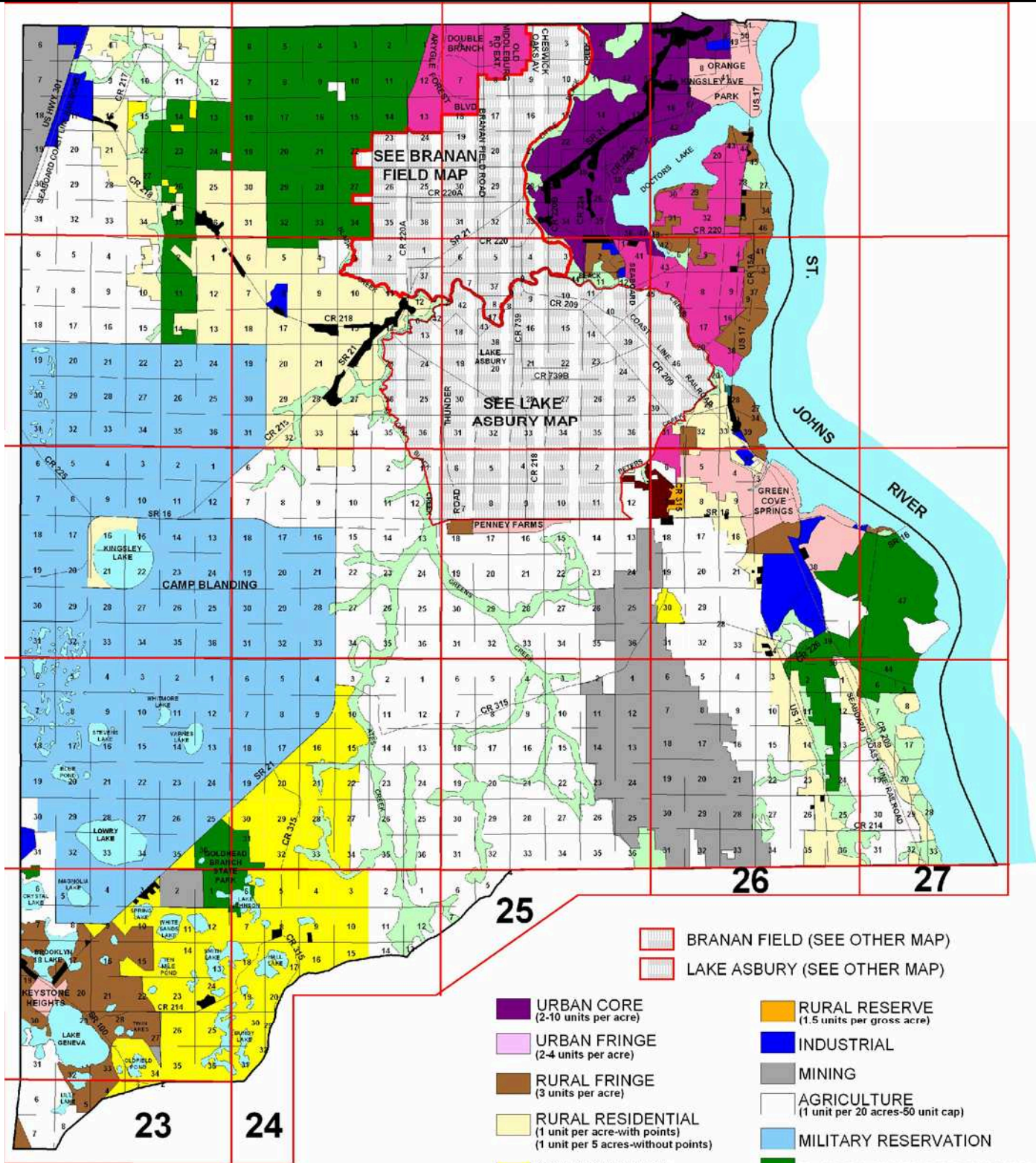


LEGEND

- Cecil Boundary_Nad83
- ZONING**
- Commercial Community General (CCG)
- Commercial Neighborhood (CN)
- Commercial Office (CO)
- Conservation (CSV)
- Industrial Business Park (IBP)
- Industrial Heavy (IH)
- Industrial Light (IL)
- Public Buildings and Facilities (PBF)
- Planned Unit Development (PUD)
- Planned Unit Development SAT (PUD-SC)
- Residential Low Density (RLD)
- Residential Low Density, Mobile Home (RLD-MH)
- Residential Medium Density (RMD)
- Residential Low Density, Mobile Home (RMD-MH)
- Recreational Open Space (ROS)
- Rural Residential (RR)
- City of Baldwin



SOURCES:
 JACKSONVILLE PLANNING AND DEVELOPMENT
 DEPARTMENT, JACKSONVILLE, FL
 JACKSONVILLE FUTURE LAND USE MAP
 JULY 2007
 FLORIDA LAND BOUNDARY INFORMATION SYSTEM:
 RASTER INFRARED IMAGES, 2007
 PREPARED BY AVCON, INC. 2007

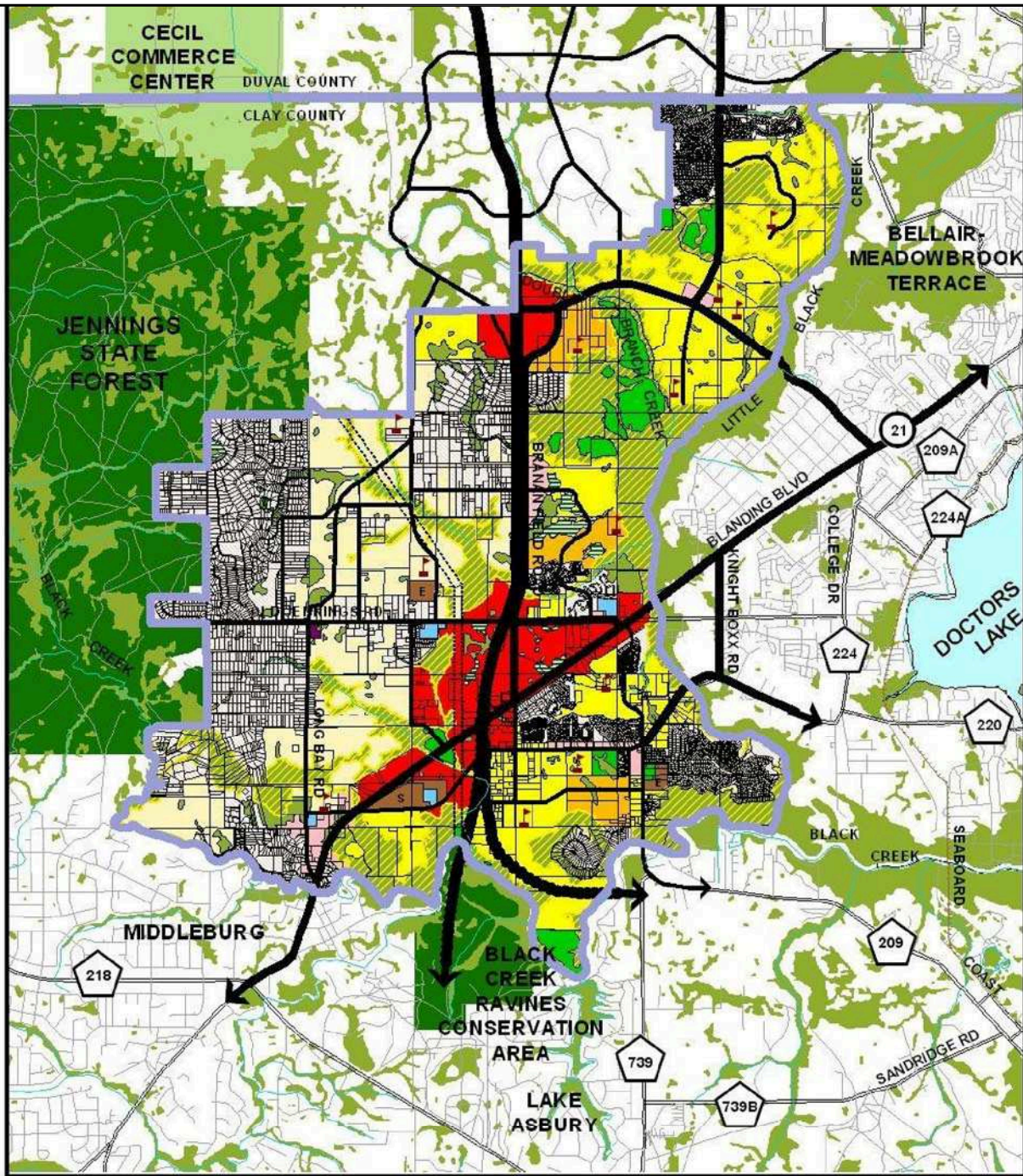


Source: Clay County Planning Department, October 2006



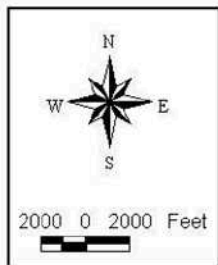
EXHIBIT 6-11 CLAY COUNTY FUTURE LAND USE MAP

CECIL FIELD AIRPORT



BRANAN FIELD MASTER PLAN

LEGEND



- Planning Area
- Powerline Corridor
- Natural Wetlands
- Degraded Wetland
- District Park
- Rural Activity Center
- Community Center
- Activity Center
- Existing Suburbs
- Master Planned Community
- Traditional Neighborhood
- Existing Elementary School Site
- Existing Senior High School Site
- Institutional
- Rural Suburbs
- PCN
- Proposed School Sites



Source: Clay County Planning Department



**EXHIBIT 6-12
BRANAN FIELD
MASTER PLAN**

CECIL FIELD AIRPORT

These uses are not always consistent with the development proposed in the JAA Cecil Field Airport Master Plan.

The Business Plan proposed a parcelization plan for the North and South development areas of Cecil Field Commerce Center (**Exhibit 6-14, 6-15, 6-16 & 6-17**). There was an additional parcelization plan that was developed for the Cecil Field Master Stormwater Plan that included the JAA airport development (**Exhibit 6-18 & 6-19**). The Cecil Field Master Storm Water Plan is discussed in the Storm Water **Section 6.8.2**.

The land uses proposed in the Cecil Commerce Center Business Plan were also used to address vested trip concurrency and future development concurrency plans. In both of these areas, Storm Water and Concurrency, the impact of the JAA Strategic Airport Master Plan was not fully factored into the analysis.

Based on the Business Plan, the City adopted several Ordinances relating to the development of the Cecil Commerce Center and the Cecil Field Airport. Ordinance 2002-669 and 2002-670 were described above. Ordinance 2002-441-E adopted an agreement between COJ and DCA signed on August 7 2002 that

concerned development at both the Cecil Commerce Center and Cecil Field Airport. **Table 6-2**, Development Potential for the Preferred Reuse of Cecil Field, was developed from multiple sources including the above ordinances and provides the permitted development potential for both the Cecil Commerce Center and the Cecil Field Airport. Several elements of the COJ/DCA agreement are still being developed, particularly concerning land uses and concurrency.

JAA must continue to work closely with the City to ensure that land uses, concurrency requirements and storm water plans support both the City development of the Cecil Commerce Center and the JAA development of the Cecil Field Airport.

6.4 SOCIAL IMPACTS

The purpose of a social impact analysis is to determine the effect of airport development on the human environment. The types of social impacts that generally result from airport development include:

- Alterations in transportation patterns
- Disruption of established communities

**Table 6-2:
Developmental Potential for the Preferred Reuse Plan**

Land Use	Area Devoted to Land Use (Acres)	Area with Constraints (Acres) ^a	Area with No Constrains (Acres)	Floor Area Ratio (FAR) ^b	Permitted Development Potential (sq. feet) ^c
Conservation	641	296	345	N/A	N/A
Forestry	2,835	1,615	1,220	N/A	N/A
Forestry/Airport Reserve	4,081	2,777	1,304	N/A	N/A
Parks and Recreation	2,943	1,332	1,611	N/A	N/A
General Aviation	1,566	1,142	421	0.70	
Aviation Related Services	445	103	342	0.60	8,938,512
Commercial	207	25	182	0.40	3,171,168
Light Industrial	3,455	1,151	2,304	0.40	40,144,896
Heavy Industrial	1,029	313	716	0.30	9,356,688
Total	17,202	8,754	8,445	N/A	61,611,264

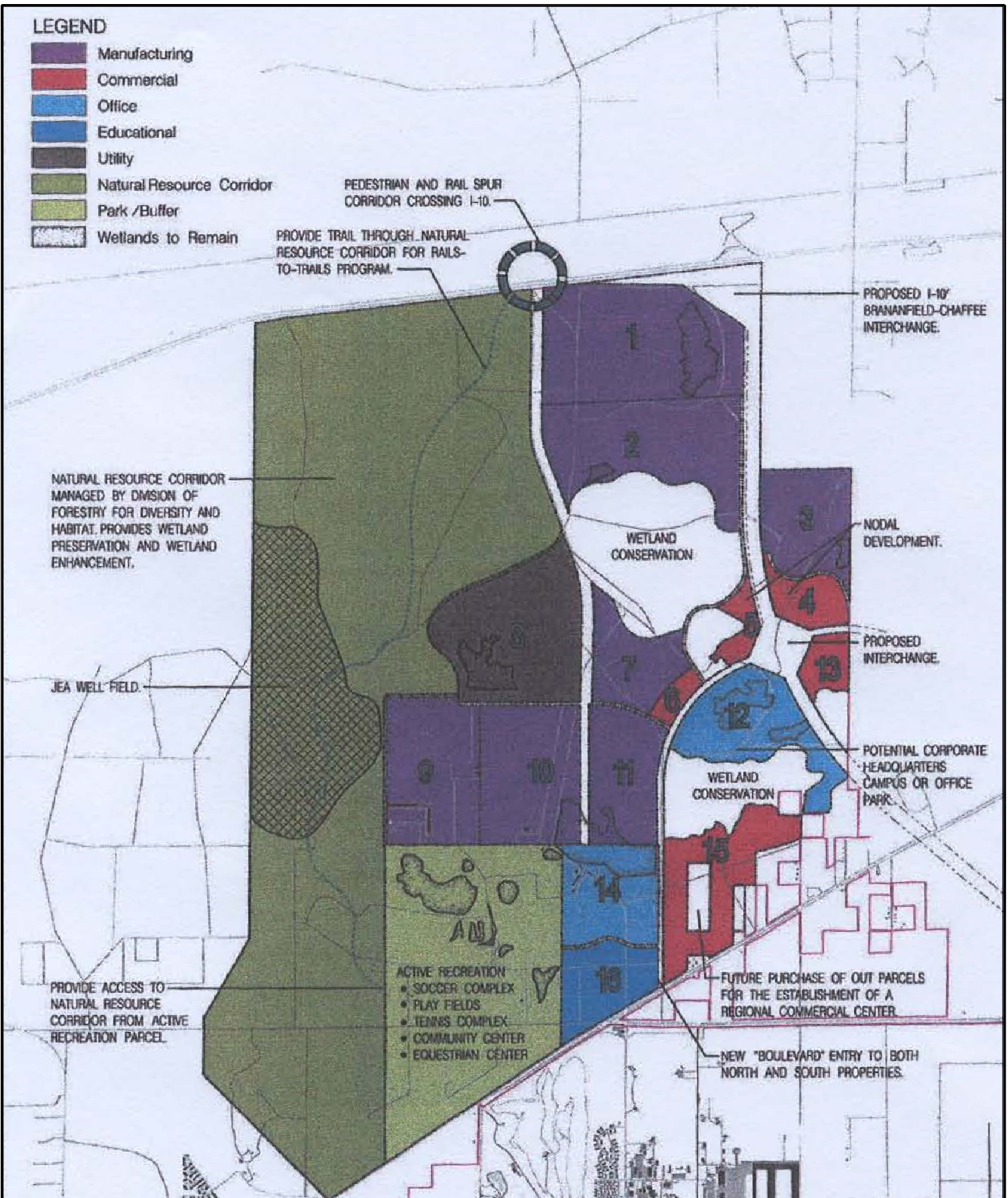
^a Land areas containing at least one of the following constraints: wetlands, floodplains, habitats of species of concern, potential archaeologically sensitive area, or environmentally contaminated areas.

^b Source: Table 1-Development Potential for the Preferred Reuse Plan. Planning and Development Department, May 2002.

^c Permitted development potential calculated by multiplying the floor area ratio by the land area with no constraints, then converted to sq. feet.

LEGEND

- Manufacturing
- Commercial
- Office
- Educational
- Utility
- Natural Resource Corridor
- Park /Buffer
- Wetlands to Remain



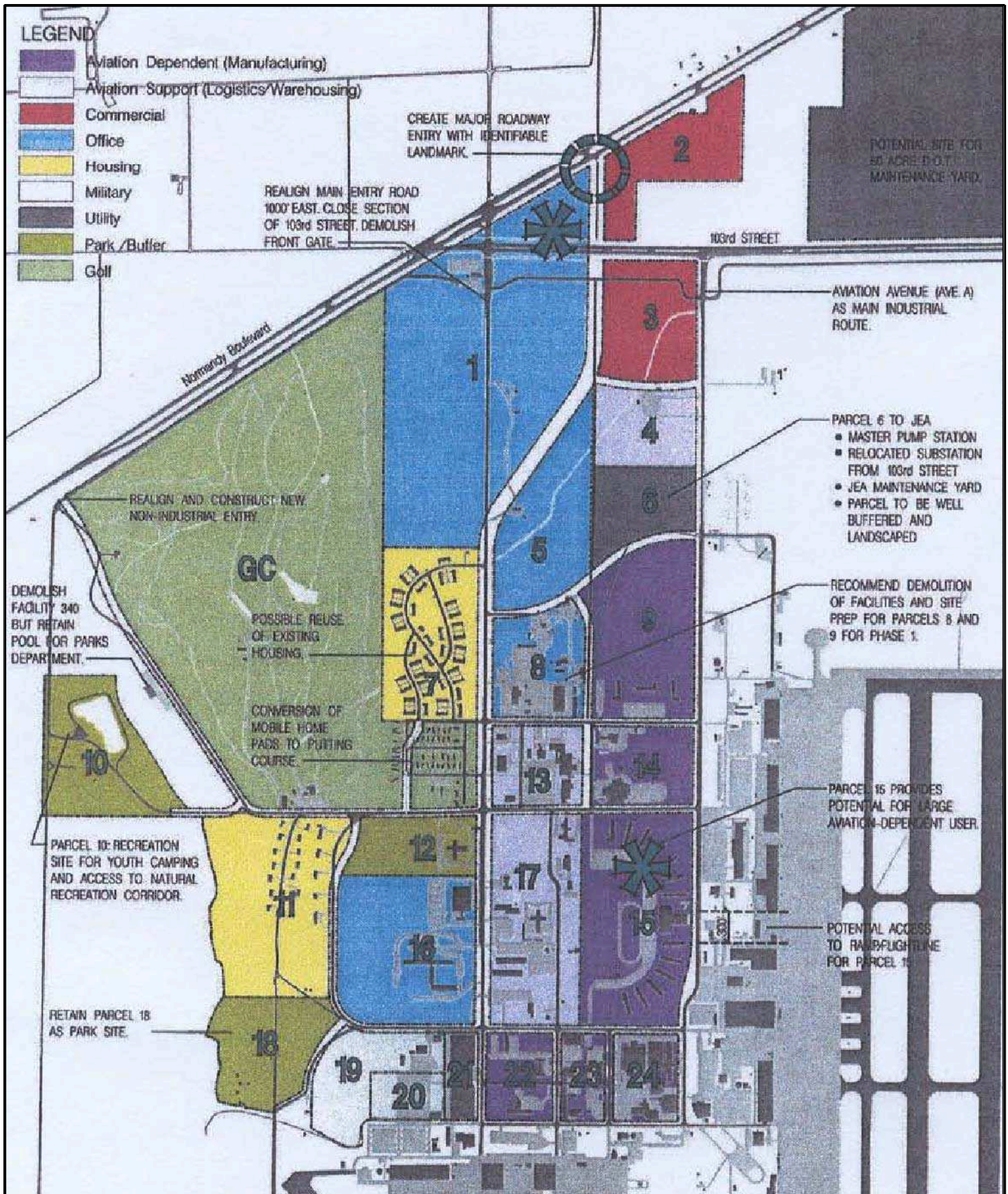
**EXHIBIT 6-14
NORTH PARCELIZATION
PLAN**

CECIL FIELD AIRPORT

**Exhibit 6-15:
Parcelization Summary for the Area North of Normandy Boulevard**

Parcel No.	Gross Acreage	Estimated Net Acreage¹	Designated Land Use	Possible User
1	435	292	Manufacturing	"Big Box" user
2	355	308	Manufacturing	"Big Box" user
3	178	130	Manufacturing	
4	70	70	Commercial	
5	37	37	Commercial	
6	22	22	Commercial	
7	148	124	Manufacturing	
8	344	263	Utility	JEA Water Treatment Plant and future power production site
9	259	221	Manufacturing	"Big Box" user
10	270	214	Manufacturing	"Big Box" user
11	193	150	Manufacturing	
12	157	107	Office	Office Park or Corporate Headquarters
13	58	51	Commercial	
14	176	110	Office	
15	138	117	Commercial	
16	130	113	Educational	FCCJ campus
-	832	0	Recreational	Jacksonville Park Parcel (Active)
-	3230	0	Recreation and Conservation	Natural and Recreation Corridor, well field and utility transmission
-	350	0	Transportation	Branon Field-Chaffee Expressway
-	850	0	Conservation	Retained Wetlands
Total	8,232	2,329		

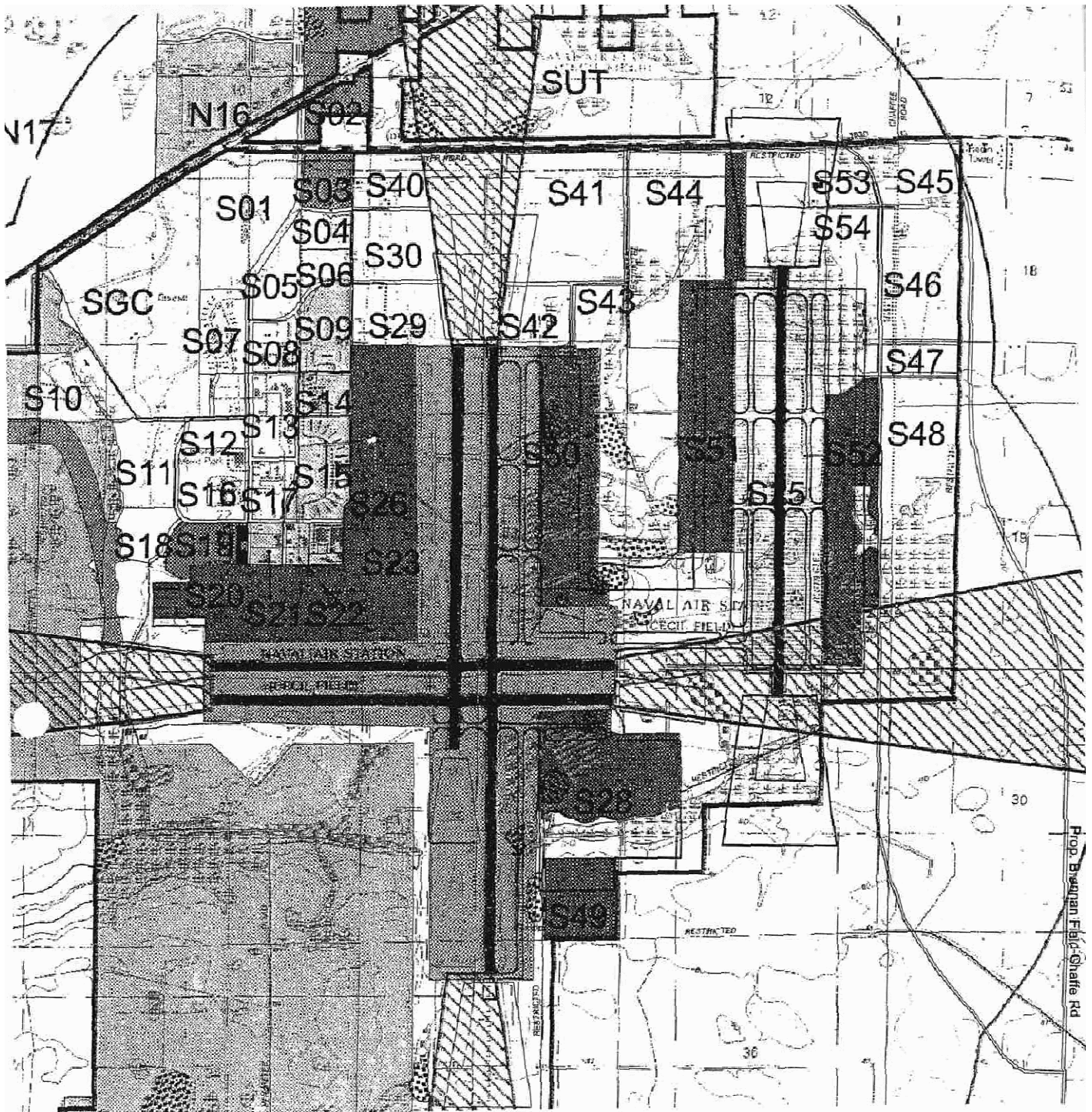
¹ Removes the acreage required for stormwater management and retained wetlands located within the parcel boundary.
Source: Cecil Commerce Center Business Plan



**Exhibit 6-17:
Parcelization Summary for the Area South of Normandy Boulevard**

Parcel No.	Gross Acreage	Estimated Net Acreage¹	Designated Land Use	Possible User
1	114	114	Office	
2	22.7	22.7	Commercial	
3	24.2	24.2	Commercial	
4	17.2	17.2	Aviation Support (Logistics/Warehousing)	
5	30.6	30.6	Office	
6	15.5	15.5	Utility	JEA Master Pump Station, Sub-station and maintenance yard
7	35.1	35.1	Residential	Internext
8	20.1	20.1	Office	
9	38	38	Aviation Dependent (Manufacturing)	
10	30.9	30.9	Recreation	Parks & Recreation and Non-profit organizations
11	46.6	46.6	Residential	
12	15.2	15.2	Recreation	
13	15.6	15.6	Aviation Support (Logistics/Warehousing)	
14	17.4	17.4	Aviation Dependent (Manufacturing)	
15	47.5	47.5	Aviation Dependent (Manufacturing)	
16	43.1	43.1	Office	
17	39	39	Aviation Support (Logistics/Warehousing)	
18	31	31	Recreation	Jacksonville Parks and Recreation
19	18.7	18.7	Aviation Dependent (Military)	
20	7.3	7.3	Aviation Dependent (Military)	Florida Army Air National Guard
21	6.2	6.2	Aviation Support (Logistics/Warehousing)	Northrop-Grumman
22	12.3	12.3	Aviation Dependent (Manufacturing)	
23	8.9	8.9	Aviation Dependent (Manufacturing)	FCCJ Aviation School
24	13.2	13.2	Aviation Dependent (Manufacturing)	NADEP
25	102	70	Utility	Florida DOT Maintenance Facility
26	235	153	Commercial	
GC	241.3	241.3	Recreation	Golf Course
	94	0	Transportation	Roadways
	184	0	Conservation Area	Wetlands
	744.6	0	Recreation and Conservation	Natural and Recreation Corridor
Total	2,271.2	1,134.6		

¹ Removes the acreage required for stormwater management and retained wetlands located within the parcel boundary.
Source: Cecil Commerce Center Business Plan



Source: COJ Master Stormwater Plan, Phase 1 Figure A-1, Camp Dresser & McKee, Inc.



**EXHIBIT 6-18
STORMWATER
PARCELIZATION MAP**

CECIL FIELD AIRPORT

Exhibit 6-19:
City of Jacksonville, Master Stormwater Management Plan
Cecil Field Phase I, South of Normandy Boulevard
Stormwater Facilities Build Out Land Use

Parcel ID	Landuse	Area (Acres)	Treatment Method	Planning Horizon (Years)	Percentage of Impervious	Number of Baffle Boxes	Number of 5000 GPM Oil and Water Separators	Number of First Flush Diversion Inlets
S01	Office	113.7	Lake Fretwell	5	90	N/A	N/A	N/A
S02	Commercial	22.7	Lake Fretwell	20	90	N/A	N/A	N/A
S03	Commercial	24.2	Lake Fretwell	5	90	N/A	N/A	N/A
S04	Logistics/ Warehousing	17.2	Lake Fretwell	5	90	N/A	N/A	N/A
S05	Office	30.6	Lake Fretwell	5	90	N/A	N/A	N/A
S06	Utility	15.5	Swales/ Lake Fretwell	20	40	N/A	N/A	N/A
S07	Housing	52.8	Lake Fretwell	20	90	N/A	N/A	N/A
S08	Office	20.1	Lake Fretwell	20	90	N/A	N/A	N/A
S09	Manufacturing	38.0	Lake Fretwell	20	90	N/A	N/A	N/A
S10	Park (Scout Camp)	30.9	Lake Fretwell	20	40	N/A	N/A	N/A
S11	Housing	46.6	Lake Fretwell	20	40	N/A	N/A	N/A
S12	Park/Buffer	15.2	Lake Fretwell	5	5	N/A	N/A	N/A
S13	Logistics/ Warehousing	32.7	Lake Fretwell	5	90	N/A	N/A	N/A
S14	Manufacturing	17.4	Lake Fretwell	20	90	N/A	N/A	N/A
S15	Manufacturing	50.3	Lake Fretwell	20	90	N/A	N/A	N/A
S16	Office	43.1	Lake Fretwell	20	90	N/A	N/A	N/A
S17	Logistics/ Warehousing	19.1	Lake Fretwell	20	90	N/A	N/A	N/A
S18	Park/Buffer	23.0	N/A	20	5	N/A	N/A	N/A
S19	Military	18.7	Lake Fretwell	20	90	N/A	N/A	N/A
S20	Military	7.3	Lake Fretwell	20	90	N/A	N/A	N/A
S21	Military	6.2	Lake Fretwell	20	90	N/A	N/A	N/A
S22	Manufacturing	12.3	Lake Fretwell	20	90	N/A	N/A	N/A
S23	Manufacturing	8.9	Lake Fretwell	20	90	N/A	N/A	N/A
S24	Manufacturing	13.2	Lake Fretwell	20	90	N/A	N/A	N/A
SGC	Park/Golf Course	223.7	Swales/ Lake Fretwell	20	20	N/A	N/A	N/A
SUT	Utility	388.1	Baffle Box or equivalent	50	40	N/A	N/A	N/A
S26	Aviation Facilities	310.6	N/A (existing facility)	5	90	N/A	N/A	N/A
S28	Aviation Facilities	124.0	First Flush Inlets, Baffle Boxes, O/W Separators	50	90	12	0	N/A
S29	Aviation Commercial	53.5	Lake Fretwell	5	90	N/A	N/A	N/A
S30	Aviation Commercial	53.4	Lake Fretwell	5	90	N/A	N/A	N/A
S40	Aviation Commercial	35.7	Lake Fretwell	5	90	N/A	N/A	N/A
S41	Aviation Commercial	129.1	First Flush Inlets, Baffle Boxes, O/W Separators	5	90	13	3	6
S42	Aviation Commercial	38.2	First Flush Inlets	5	90	4	1	2
S43	Aviation Commercial	22.2	First Flush Inlets	5	90	2	1	1
S44	Aviation Commercial	113.8	First Flush Inlets	20	90	11	3	6
S45	Aviation Commercial	39.4	First Flush Inlets	20	90	4	1	2
S46	Aviation Commercial	89.6	First Flush Inlets	20	90	9	2	5
S47	Aviation Commercial	4.8	First Flush Inlets	20	90	0	0	1
S48	Aviation Commercial	88.6	First Flush Inlets	20	90	9	2	4
S49	Aviation Facilities	54.3	First Flush Inlets	50	90	5	2	3
S50	Aviation Facilities	147.9	First Flu17sh Inlets	5	90	15	3	7
S51	Aviation Facilities	168.1	First Flush Inlets	50	90	17	4	8
S52	Aviation Facilities	122.2	First Flush Inlets	50	90	12	3	6
S53	Aviation Commercial	15.4	First Flush Inlets	50	90	2	1	1
S54	Aviation Commercial	39.4	First Flush Inlets	50	90	4	1	2
TOTAL		2,941.7				120	27	54

Source: Camp Dresser & McKee, Inc. 1/31/2000

- Relocating residencies and/or commercial businesses
- Disruption of orderly, planned development

6.4.1 Alterations in Transportation Patterns

Florida State Law, Chapter 163, Part II, Florida Statutes and Rule 9J-5.0055 requires that public facilities and services needed to support development must be available concurrently with the impacts of such development. In May 1998, the Cecil Field Transition Element states that development and/or reuse which generates up to 24,988 average daily trips will be vested in the City's Concurrency Management System. It also states that since the estimated average daily trips through 2010 is only 21,882, an amendment to the 2010 Comprehensive Plan would be required to allow development or reuse which generates more than 21,882 average daily trips (ADT's), provided, however, in no case shall development or reuse on Cecil Field be allowed which generates more than 24,988 average daily trips without being subject to the City's level of service standards.

In 2002, the City of Jacksonville and the Department of Community Affairs (DCA) agreed that prior to NAS Cecil Field's closure, it generated the equivalent of 4,785 p.m. peak hour trips (PHT) and the same amount of transportation impacts can be assumed for the redevelopment of Cecil Field.

In August 2002, an agreement was signed between the Department of Community Affairs (DCA) and the City of Jacksonville regarding Cecil Field. The DCA and the City agreed with the 1998 Cecil Field Transition Element that stated prior to Cecil Field's closure as a Navy Base, it generated the equivalent of 4,785 p.m. peak hour trips and that the City may recognize an equivalent amount of transportation impacts from redevelopment of Cecil Field as vested for concurrency requirements. This agreement states that p.m. peak hour trips will be used to determine concurrency instead of average daily trips. Additionally, due to the unique nature of the redevelopment of Cecil Field, the City will consider an amendment to the Transportation Element of the City of Jacksonville Comprehensive Plan to establish a Specialized Concurrency Management System for the impact area of Cecil Field, which shall take into consideration; the cost and number of internal roads to be constructed, the City and related agency

investment in the transportation network serving the impact area, and contributions of land and funding from the City to the FDOT for improvements to the state highway system in the impact area. This Specialized Concurrency Management System has not been established and the Airport needs to work with the City and DCA to gain concurrency for the improvements outlined in this master plan.

Currently there is no obligation to improve the roads surrounding Cecil Field due to its redevelopment as a public-use facility. According to the Agreement between the DCA and COJ regarding Cecil Commerce Center and Cecil Field, August 2002, the City is investing \$323.2 million in roadway improvement in the planning area surrounding Cecil Field.

As Cecil Field develops, average daily traffic will increase due to additional tenants, employees and customers. As this number increases, the demand on the transportation infrastructure will increase as well. Currently, several roads supporting Cecil Field are over capacity and could require future rehabilitation or improvement before additional development can proceed. A summary of the supporting road network condition is shown in **Table 6-3**. Roads which have a Level of Service (LOS) higher than a C, such as D and F, should be considered for improvement. Traffic characteristics typical of these categories are heavy congestion which creates long wait times for the travelers. Many of these roads have an LOS of F which means they have exceeded their ultimate capacities.

The City of Jacksonville has established the Concurrency Management System which is setup to collect fees from developers in order to maintain the current roadway system and improve the roads to meet increasing transportation demand due to additional development. The current fee structure is set up as follows. For non-residential, new buildings, additions, alterations and/or repairs, there is a \$15.00 fee per 1,000 enclosed square feet, up to 500,000 square feet. Over 500,000 square feet, there is a fee of \$6.00 per additional 1,000 enclosed square feet. These fees should be considerable when planning additional developments at Cecil Field.

The 2007 Florida Legislature recently passed HB7203 that was signed into law. This law amends the Florida Growth Management law to remove development associated with airport passenger terminals and concourses, air cargo facilities and hangars for

**Table 6-3:
Condition of Roadway Network Supporting Cecil Field**

Road	From-To	Percent of Total Capacity	Level of Service
103 rd	Normandy Blvd to Old Middleburg Rd	84	C
103 rd	Old Middleburg Rd South to I-295	112	F
103 rd	I-295 to Wesconnett Blvd	64	C
Chaffee Rd	Old Plank Rd to Beaver St	72	D
Chaffee Rd	Beaver St to I-10	88	D
Chaffee Rd	I-10 to Crystal Springs Rd	203	F
Chaffee Rd	Normandy Blvd to 103rd St	159	F
Chaffee Rd	Crystal Springs Rd to Normandy	200	F
I-295	Normandy Blvd to I-10	113	F
Normandy Bl	US 301 to 103rd St	188	F
Normandy Bl	Chaffee Rd to Herlong Rd	125	F
Normandy Bl	I-295 to Lane Ave	95	F
Normandy Bl	Herlong Rd to I-295	102	F
Yellow Water Rd	Normandy Blvd to Beaver St	140	F

Source: www.COJ.net

maintenance or storage of aircraft from any concurrency requirements as implemented in local comprehensive plans.

6.5 INDUCED SOCIOECONOMIC IMPACTS

The proposed development for Cecil Field is expected to result in positive socioeconomic impacts for the City of Jacksonville and its surrounding communities. According to the Regional Analysis, written by the Haas Center for Business Research and Economic Development (October 2005), since the City of Jacksonville acquired the 11,000+ acres of property,

they have dispersed in excess of \$130 million towards improvements to the infrastructure, buildings and runways.

Another factor affecting the socioeconomic condition of Cecil Field is the emergence of Jacksonville as a logistics and transportation hub. Jacksonville International Airport is located about 30 miles Northeast of Cecil Field. As mentioned in **Section 5.3.3**, in August 2005, the Jacksonville Port Authority signed a 30-year lease agreement with a large Japan-based shipping company, Mitsui O.S.K. Lines Ltd., which will allow the company to invest \$200 million to develop a 158-acre cargo terminal in Jacksonville. This project will directly connect the City of Jacksonville to an Asian shipping lane and is expected to create thousands of local jobs. It is reasonable to anticipate this major investment will involve a complex and significant distribution network from the Jacksonville area, using the local interstate and rail network to efficiently transport bulk goods that arrive by ship. There will be instances where some of these goods will require expedited delivery. With Cecil Field located only 30 miles from Jacksonville International Airport, it is also reasonable to assume that Cecil Field could receive a portion of the shipping.

With Jacksonville's role in the global shipping network increasing, the need for efficient transportation in and out of the City will increase as well. A reasonable projection of the transportation network around Jacksonville would be for the City to consider expanding the outer beltway in addition to I-295. This beltway would allow companies to ship freight around congested areas and to more efficiently deliver freight on time. A beneficial side effect of this beltway would be improved access to Cecil Field, which would also increase Cecil Field's position to receive and send cargo from Mitsui.

Economic impacts can be measured in three distinct ways:

- Direct
- Indirect
- Multiplier Impacts

Direct Impacts: Direct impacts include local spending at or near an airport by firms involved in the furnishing or procurement of aviation services. Those businesses that provide aviation services include air traffic control towers, fixed base operators, flight and

ground schools and others. Three sources typically elicit direct economic impacts:

- Payroll
- Capital Expenses
- Operating Expenses

It was noted in the previous Cecil Field Strategic Airport Master Plan that the Environmental Impact Statement (EIS) reported the Base Reuse Plan required that an excess of \$173 million be allocated on capital improvements by government and private entities. Under the 1997 Base Reuse Plan the largest expenditure, totaling an estimated \$147 million, is the development of the Branan Field-Chaffee Road from I-10 south to Route 21.

Indirect Impacts: Indirect impacts consist of any spending by visitors (i.e. hotels, restaurants, shopping, etc.) who arrive using public airports.

Multiplier Impacts: Adding direct and indirect impacts together will result in the final demand impact. However, this is not a true representation of the total economic impact of the airport. A “multiplier effect” is also added to the final demand impact to acquire the total economic impact. The multiplier effect can be utilized using the Regional Input/Output Model (RIMSII) multipliers that were developed by the US Department of Commerce. When an airport is fully developed it is expected to stimulate the economy of the local communities as well as the surrounding communities.

6.6 SOIL AND GROUNDWATER CONTAMINATION

For years, Cecil Field functioned as Navy base. During that time the fuel system at Cecil Field included a pipeline in which jet fuel was piped to NAS Cecil Field from NAS Jacksonville.

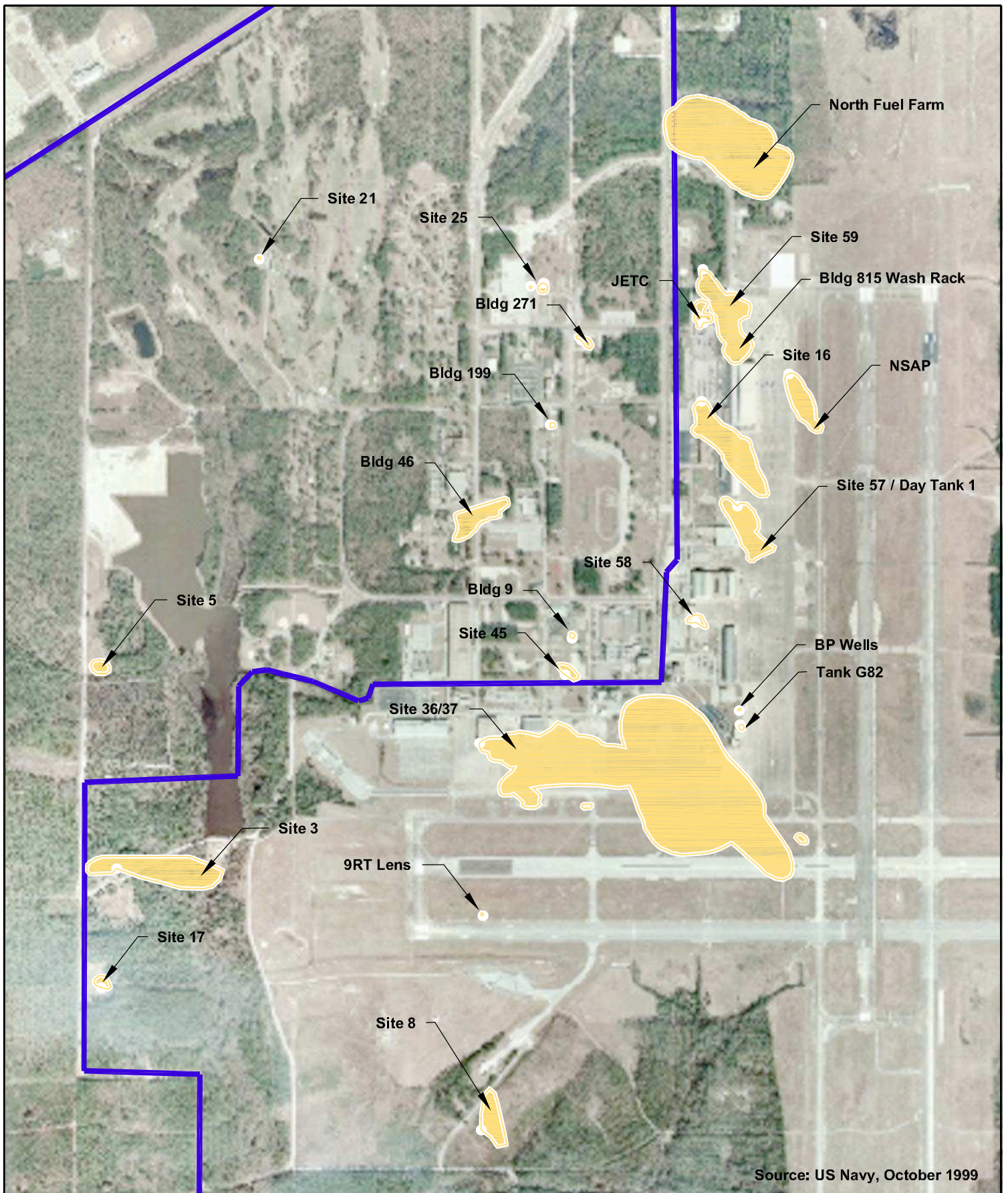
This pipeline has now been shut down by the Navy. Fuel was stored in six 60,000-gallon underground steel welded tanks, then distributed to a 210,000-gallon day tank in the airport operations area, where it was then distributed by trucks or by means of two high-speed refueling systems, oriented north/south and east/west. All previous aviation fuel storage tanks have been removed by the Navy as part of the environmental restoration program for cleanup of the base.

As a result of the presence of fuel and other contaminants, soil and groundwater contamination has

occurred on Cecil Field, which poses a potential threat to human health. The locations of known groundwater contamination by aviation fuel are shown in **Exhibit 6-20**. To study the condition of the soil and groundwater, an Environmental Baseline Study Transfer (EBST), which updated the previous Environmental Baseline Study (EBS) conducted in 1994, was performed at Cecil Field in 1998. This study analyzed approximately 150 buildings, structures or open areas to determine the environmental condition of each area. Each of the locations are rated on a scale of 1 to 6, or 7 in the case that the area requires additional information.

Category 1 refers to an area where no storage, release or disposal of hazardous substances or petroleum products has occurred, including no migration of these substances from adjacent areas. Category 6 refers to an area where storage, release, disposal and/or migration of hazardous substances or petroleum products have occurred, but required response actions have not yet been implemented. Out of these approximately 150 sites evaluated, 60 sites have a rating of 5, areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway but all required remedial actions have not yet been taken, or higher.

In September 2002, the Agency for Toxic Substances and Disease Registry (ATSDR) conducted an evaluation of Cecil Field. This study was initiated due to Cecil Field’s listing on the U.S. Environmental Protection Agency National Priorities List in 1989. At Cecil Field, 12 operable units (OU) consisting of 24 separate areas of contamination have been identified as well as other potential sources of contamination. This study reviews environmental exposures on future uses of the property and provides information on safely managing the environmental hazards for the current and future use of the property. Nine different exposure conditions were studied from which several conclusions were drawn. First, people trespassing on Site 15 may have incidental contact with contaminated soil and creeks, but this situation posed no apparent public health concern. Second, lead contained in the soil at the forest management/wildlife corridor could not be measured accurately due to the unavailability of exposure based sampling. Therefore, since the future use and remediation plans are still uncertain, Site 15 poses an indeterminate (potential) public health hazard. Third, the unexploded ordinance near Site 15 could be hazardous if digging or excavating is conducted. Lastly, lead in Yellow Water or Sal Taylor



**EXHIBIT 6-20
 GROUNDWATER
 CONTAMINATION PLUMES BY
 AVIATION FUEL**

CECIL FIELD AIRPORT

Creek, draining Site 15, is available and could accumulate in wildlife but poses no public health hazard due to the low levels of lead.

Actions have been taken to warn the public of the potential harm. The Navy increased the number of warning signs around Site 15 and the surrounding residents have been informed and educated about the condition of Site 15. The Navy modeled lead contamination in fish and predicted a very low (<0.01mg/day) average daily intake for people eating fish from this area. The EPA and Naval Facilities Engineering Command stressed to the Cecil Field Reuse Planning Committee that planning any recreational activity should avoid Site 15 and the area should be off limits to residents and regular recreational use.

On January 10, 2003, the Environmental Protection Agency (EPA) removed 16,527 acres of Cecil Field from the National Priorities List (NPL). In 1989, all of Cecil Field, approximately 17,200 acres, was included on the NPL, which is a list of facilities that the EPA determined may pose a significant threat to public health, welfare, or the environment. After examination, several sites were determined to be of no harm to people or the environment and were therefore removed from the NPL. OU 4 (Site 10), OU 5 (Site 14), OU 12 (Sites 44, 42 and the old golf course), and 16,527 acres which are not associated with an operable unit have been determined not to pose a risk to human health or the environment.

On January 17, 2005, studies were conducted, using test wells, to determine the condition of the soil and groundwater at different locations at Cecil Field. During this study, it was determined that Cecil Field contains 22 sites which in some way exceed human health criteria for soil, groundwater or both. Some categories of the contaminants are aromatics, naphthalenes, trimethylbenzenes, Polycyclic Aromatic Hydrocarbons (PAHs), collections of hydrocarbon compounds that are associated with petroleum (TRPHs), etc. Each contaminated site, depending on the type of contamination, has a list of Land Use Controls (LUC), which is a control on the activity that can occur at a specific location.

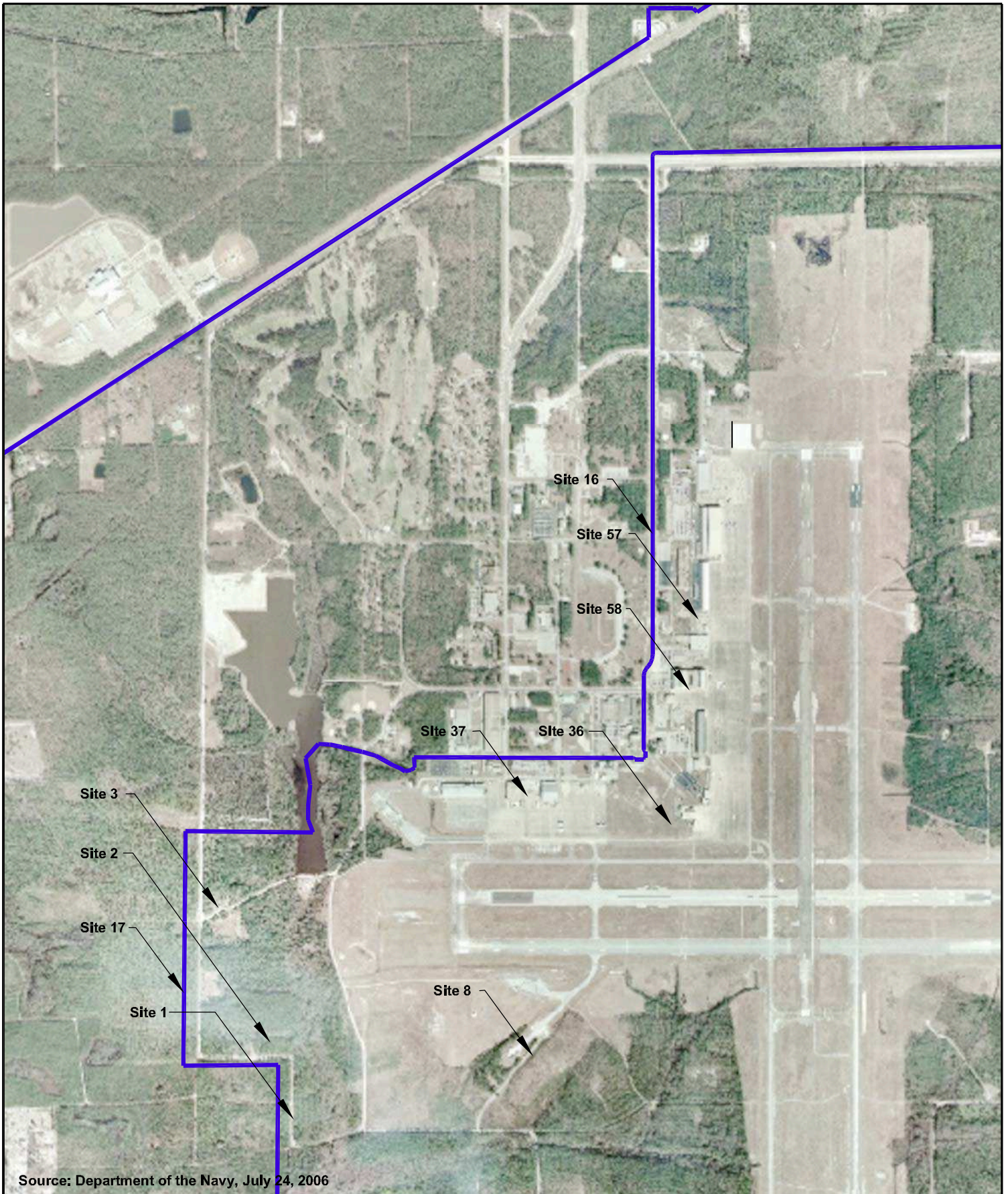
On July 2007, the Navy conducted an investigation of the sites with LUC at Cecil Field. It was determined that there are still 10 sites which pose a contamination risk, therefore the land use controls established in 2005 for these 10 sites still apply. **Exhibit 6-21**

identifies the locations of the sites with LUC and **Exhibit 6-22** presents a table summarizing the 10 sites, outlining the types of contamination and the specific LUC associated with each site. An annual LUC inspection is performed on the sites which have already been conveyed to the JAA to ensure that the LUC are maintained. The Annual Land Use Control (LUC) Compliance Certification is presented as **Exhibit 6-23**.

Currently, several areas affected by contamination are being monitored, particularly at the north end of the Northwest development area. Golder wells have been placed near building 324, **Exhibit 6-24**, which is scheduled to be demolished. **Section 5.5.3** establishes Site 9B as the preferred MRO development alternative and this site would be located in the area just north of building 324. The location of the Golder wells could restrict development of Site 9C to the south if they are still active when construction begins. Petroleum contamination at the North Fuel Farm Site is currently being remediated by air sparging and biosparging. **Exhibit 6-25** illustrates the locations of monitoring wells and both shallow and deep contamination plumes. These sites will need to be remediated before development could progress.

Due to the fuel delivery and storage systems having been limited to the Northwest development area, no groundwater contamination areas are known to exist at the locations of the proposed Mid-Field, Southeast and Northeast development areas, therefore groundwater contamination is not anticipated and should have no affect on their development.

Unexploded ordinance (UXO) and Disarded Military Munitions (DMM) have been found at Cecil Field which pose a risk to airport and construction personnel as well as could restricts future development. Two of these sites are near Building 373, located at the north end of the Northwest Development Area, and Hangar 860, located at the Southeast end of the Northwest Development area. The Building 373 area is located just north of proposed Site 9B and this contamination could restrict development. This site is undergoing a munitions response to determine the extent of UXO contamination and to remove any UXO from the site. If no ordinance or munitions are found, or if the site has been satisfactorily cleared of USO and DMM and declared safe, then the site may be available for development and construction of Site 9B will not be affected.



**EXHIBIT 6-21
KNOWN LOCATIONS WITH
LAND USE CONTROLS**

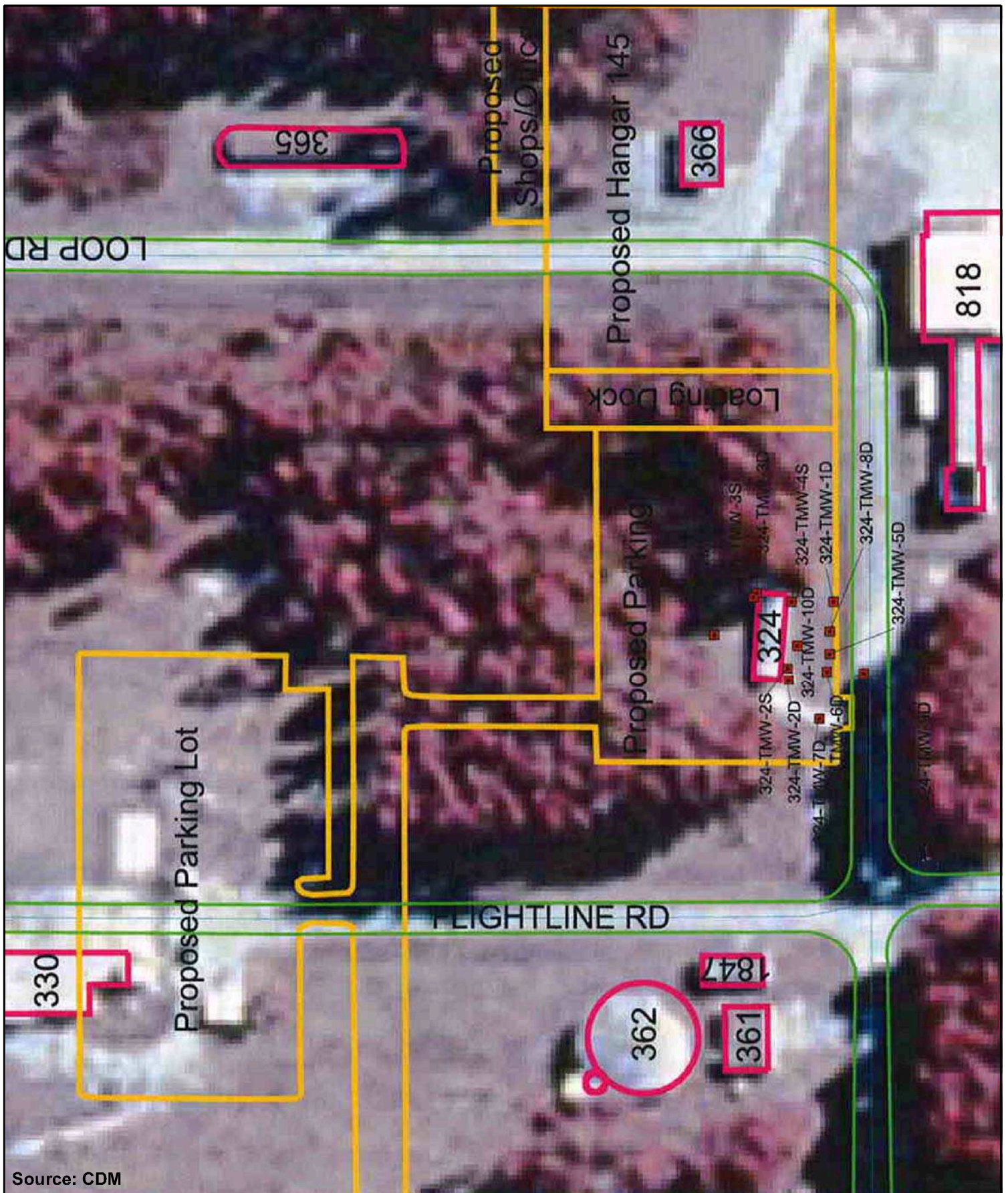
CECIL FIELD AIRPORT

**Exhibit 6-22:
Sites with Land Use Controls on Cecil Field**

Site	Contamination	Land Use Controls (LUC)
Site 1 – Inactive Landfill	3	a,b,c,d,e,f,g,h,i,j
Site 2 – Inactive Landfill	3	a,b,c,d,e,f,g,h,i,j
Site 3 - Oil and sludge disposal pit	5,6	a,b,c,d,e,f,j
Sites 8 - Bore-site Range, hazardous waste storage area and firefighting training area	1,5	d,e,f
Sites 16 - Aircraft intermediate maintenance department	5	d,e,f,k,
Sites 17 - Oil and sludge disposal Northwest Area	1,4	d,e,f
Site 36	1,5	a,b,c,d,e,f
Site 37	1,5	a,b,c,d,e,f
Site 57 – Flightline Plumes	1,5	d,e,f
Site 58 – Building 312	2	d,e,f

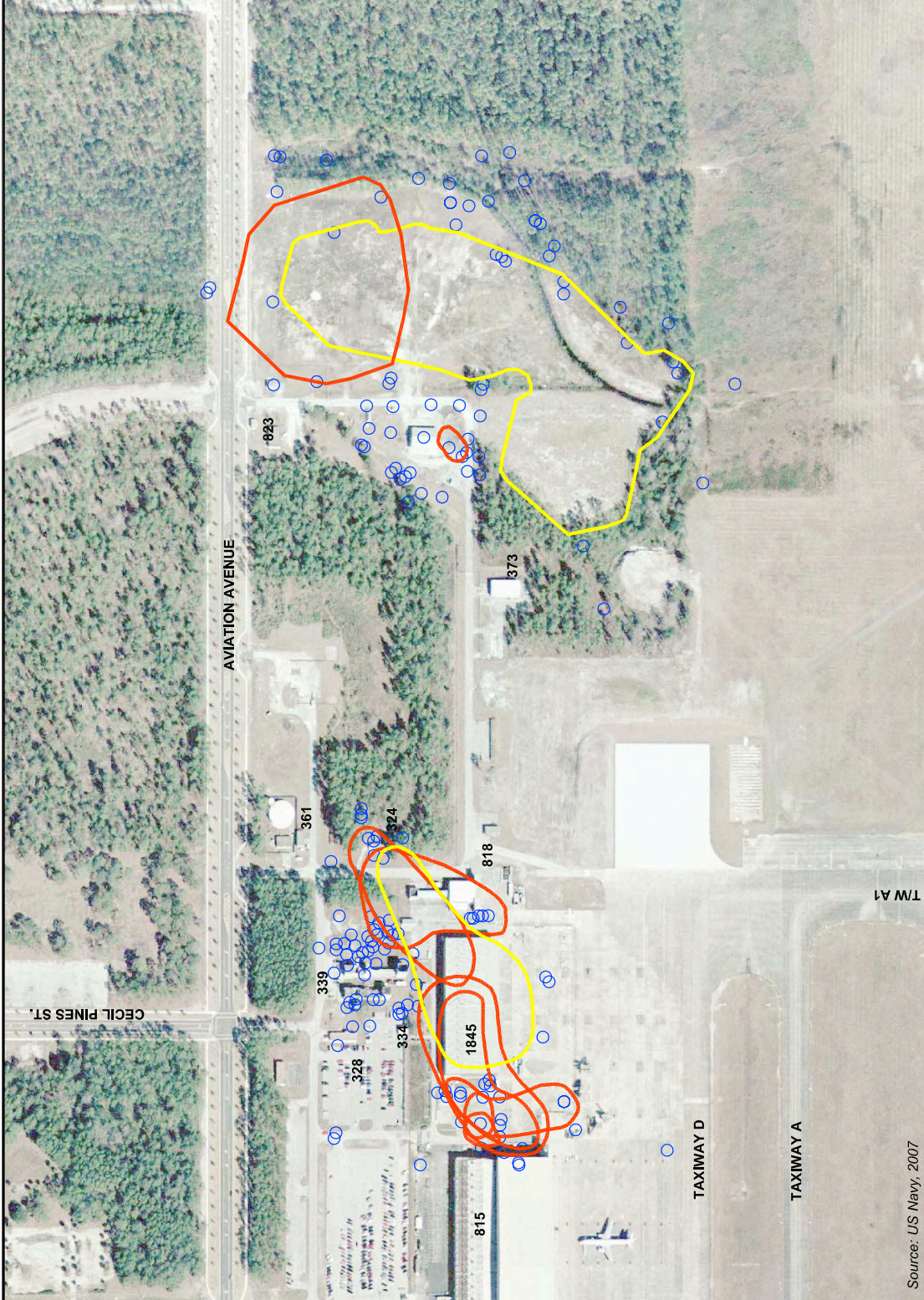
Source: Department of the Navy, July 24, 2006

1. Aromatic volatiles exceed human health criteria in groundwater
 2. Naphthalenes exceeds human health criteria in groundwater
 3. Inorganics exceeds ecological criteria in surface water/sediments
 4. Inorganics exceeds human health criteria in groundwater
 5. Chlorinated volatiles exceeds human health criteria in groundwater
 6. Chlorinated volatiles exceeds human health criteria in soil
-
- a. Land may not be used for residential use
 - b. Surface soils may not be disturbed
 - c. Subsurface soils may not be disturbed
 - d. Groundwater may not be used for human consumption
 - e. Groundwater may not be used for industrial purposes
 - f. Tampering or damaging any Navy wells or remediation systems is prohibited
 - g. Landfill concrete markers may not be disturbed
 - h. Landfill cover may not be disturbed
 - i. Adjacent wetlands may not be disturbed
 - j. Rowell creek sediments adjacent to Sites 1&2 may not be altered or disturbed
 - k. Storm sewer line to the west of Building 313 may not be breached.



**EXHIBIT 6-24
LOCATION OF GOLDER
WELLS NEAR BLDG 324**




CECIL FIELD AIRPORT



North

0' 150' 300' 600'

GRAPHIC SCALE IN FEET

LEGEND	
	SHALLOW SYSTEM/PLUME
	DEEP SYSTEM/PLUME
	MONITORING WELL

If ordinance or munitions are found near the outlying edges of the search area, then an expanded search area will need to be established and development of Site 9B will be restricted until the munitions response is complete.

The second area of known UXO contamination is located at the Southwest corner of the Northwest development area. The proposed FLARNG development is located in this area. On February 14, 2005, a tenant of Hangar 860 observed multiple munitions and explosives of concern (MEC) in an open stormwater drainage ditch located to the southwest of Hangar 860. This triggered a munitions response which covered a 20-acre area and was completed from May 22, 2006 to June 22, 2006. This search found and destroyed 21 miscellaneous impulse/signal cartridges, 7 20-millimeter projectiles, 451 JAU-22/B Cartridge Actuated Initiators and 3 MK 23 practice bombs. The first of two munitions response areas have been cleared and available for use by FLARNG. The second area is scheduled to be searched starting March 2007. The proposed FLARNG development does not extend into the second search area therefore the proposed development will not be restricted. Any additional development into the second search area will be prohibited until this area has been cleared. No UXO or DMM is known to exist at the future Mid-Field, Southeast or Northeast locations so development of these areas should not be affected.

6.7 AIR QUALITY

Air Quality Assessments for any proposed federally funded projects are required to be in compliance with the National Environmental Protection Act (NEPA), the Clean Air Act (CAA) and all other environmental regulations.

The Florida State Implementation Plan (Ch. 62-204) states that a determination must be made whether a project lies within a non-attainment area. A non-attainment area is any area that does not meet the ambient air quality. The CAA amendment of 1970, then amended again in 1990, established certain targets, standards and procedures to reduce certain human and environmental exposures to pollutants generated by industry and transportation. It is primarily the responsibility of the Environmental Protection Agency (EPA) to implement and enforce this regulation. In order to comply with the CAA and EPA requirements, Section 110 of the CAA recommends that states develop State Implementation Plans (SIP). The State of Florida established an SIP

that contains certain standards to improve air quality and prevent negative impacts on the environment as well as human health.

Cecil Field is currently under the administration of the air quality program for Duval County given by the Environmental Resource Management Department (ERMD). Duval County had been designated as an attainment area for federal air quality standards under the Clean Air Act. Since the project is within an attainment area, the EPA General Conformity Rule to implement Section 176(c) of the CAA does not apply and a conformity statement is not required. According to the Jacksonville, Florida Ozone Maintenance Plan (Redesignation Effective March 1995), Duval County has data that shows no violations of the ozone National Ambient Air Quality Standards (NAAQS) between 1987 and 1993, as well as no report of exceedance for 1994. The EPA approved an Ozone Maintenance State Implementation Plan for a request to redesignate the Duval County area from a transitional non-attainment to attainment for the pollutant ozone. Having met the maintenance plan and redesignation requirements set forth in the CAA, the approved maintenance plan then became a federally enforceable part of the State Implementation Plan.

According to the previous Cecil Field Strategic Master Plan, in April 1998, the EPA found the City of Jacksonville/Duval County had reduced nitrogen oxide and hydrocarbon emissions. This was as a result of implementing the following control measures: Reasonably Available Technology (RACT) Regulations, Stage I vapor recovery provisions and the Federal Motor Vehicle Control Program (FMVCP). Also, according to the Florida State Implementation Plan, Duval County is one of four areas that are designated as unclassifiable for the pollutant sulfur dioxide. Duval County has been a designated air quality maintenance area for particulate matter that is less than 10 microns (PM₁₀) and sulfur dioxide (SO₂) since 1995.

According to the Final Environmental Impact Statement in 1998, from pre-closure to 2010, volatile organic compound (VOC) emissions will be down 422 tons/year, NO_x will be down 250 tons/year, CO will be up 407 tons/year, and particulate matter will be up 82 tons/year. The CO increase is due to the increase in vehicle miles from commuting employees and the particulate matter increase is due to the increase in

construction, and will be drastically reduced when construction is complete.

6.8 WATER QUALITY

The objective of the Federal Water Pollution Control Act (also commonly known as the Clean Water Act) is to restore and maintain the chemical, physical and biological integrity of the nation's waters. Stormwater impacts will also be addressed and discussed below.

6.8.1 Surface and Groundwater

According to the Final Environmental Impact Statement, 1998, the redevelopment of Cecil Field will have no significant impacts on surface water or hydrology nor will it affect the availability of groundwater. The groundwater contamination listed in the soil and groundwater contamination section has a minimal affect on the Floridan Aquifer since very little groundwater recharge occurs in this area.

6.8.2 Stormwater

Cecil Commerce Center and Cecil Field consists of 17,607 acres, according to the Cecil Commerce Center Master Stormwater Management Plan (MSMP), Volume I (2001), approximately 6,000 acres was to be preserved as a Natural and Recreational Corridor. This is meant to provide a natural wildlife habitat and buffer between St. Mary's River and the Black Creek hydrologic basins. In addition, it is to improve water quality discharged from the site and provide mitigation credits for any probable impacts from development. The 641 acres located in Clay County, however, were not included within the MSMP.

The MSMP reports that the peak flood stages, flows and velocities were found for three main tributaries. They are 1) Black Creek 2) St. Mary's River and the 3) Ortega River. The smaller tributary creeks feeding Black River include 1) Sal Taylor 2) Caldwell Branch and 3) Rowell Creek. The other tributary creeks are an unnamed tributary to the St. Mary's River and an unnamed tributary to the Ortega River. An overview of the rivers and creeks near Cecil Field is shown in **Exhibit 6-26**. The coastal lowlands located in the St. John's River basin makeup the area surrounding Cecil Field. Also, according to the MSMP, the majority of the land has a slope average of 0.005 ft/ft and contains sizeable wetland depressions. The topographical information, provided by the USGS quadrangle, regarding the area north of Normandy

Table 6-4:
Impervious Surfaces by Land Use Category

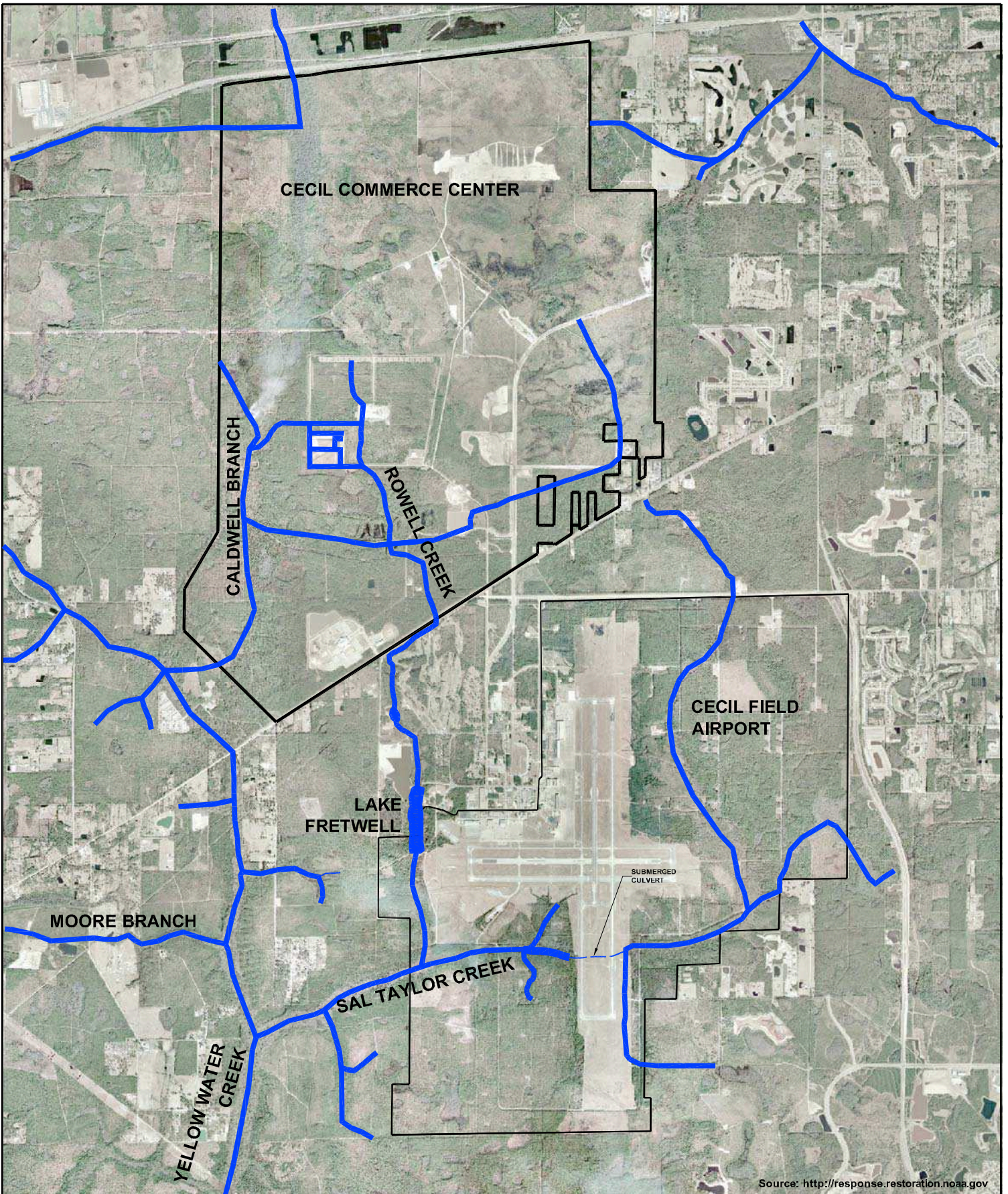
Land Use Category	Percent Impervious	Percent DCIA	Percent NDCIA	Percent Pervious
Forest, Open, & Park	5	1	4	95
Runway	99	99	0	1
Golf Courses	5	1	4	95
Low Density Residential	15	7.5	7.5	85
Yellow Water Weapon Area	35	23	12	65
High Density Residential	82.5	65	17.5	17.5
Commercial, Institutional & Light Industrial	90	81	9	10
Heavy Industrial	90	81	9	10
Wetlands	100	100	0	0
Watercourses & Waterbodies	100	100	0	0

Source: Camp Dresser & McKee, Inc. and can be found in the Cecil Commerce Center MSMP (March 2001)

Boulevard is comprised of one contour (85 feet). South of Normandy Boulevard, the elevations vary from 70 to 80 feet. However, for areas near the lower tributary, Sal Taylor Creek, the slopes increase toward Black Creek. The Natural Resource Conservation Service (NRCS) classified the soils in the Duval County Soil Survey (1978). It was shown that all the soils are consistent with the flatwoods soils that makeup the Leon-Ridgeland-Wesconnett and Pelham-Mascotte-Sapelo groups of sandy soils. The Leon-Ridgeland-Wesconnett soils are sandy throughout and deemed poorly to very poorly drained in undisturbed conditions. The latter is classified as soils that are poorly drained, sandy near the surface and loamy below. The water table within said soils is known to be relatively high therefore, the capacity of the soil storage is limited during wet periods.

In the City of Jacksonville, Florida, Cecil Commerce Center Master Stormwater Management Plan (March 2001), runoff calculations were determined through consideration of assumed impervious areas for individual hydrologic units estimated based on the land use information.

Table 6-4 lists the percent of Directly Connected Impervious Area (DCIA) and Non-DCIA (NDCIA).



**EXHIBIT 6-26
RIVER AND CREEK SYSTEMS
NEAR CECIL FIELD**

CECIL FIELD AIRPORT

The NDCIA is a representation of impervious surfaces that have a pervious buffer before discharging into the stormwater system.

According to the Cecil Field Airport Stormwater Pollution Prevention Plan (SWPP), the stormwater drainage features that affect the quantity, flow and quality of stormwater runoff are as follows:

- Structures (i.e. maintenance hangars)
- Paved Areas (i.e. runways, taxiways, parking, curbs, etc.)
- Site Drainage (i.e. ponds)
- Topographic features (i.e. swales, ditches, topographic variations)

The City and the JAA jointly executed a Cecil Field Master Stormwater Management Plan that was approved by the St. Johns Water Management District (SJRWMD) Permit # 4-031-70452-1 in November 2001. The permit included the preservation of approximately 6,000 acres as a Natural and Recreation Corridor that provided natural wildlife habitat and a buffer between the St. Mary's River to the north and the Black Creek hydrologic basin to the south. In return the SJRWMD permit and the subsequent US Corps of Engineers permit provided for certain development impacts and wetland credits for those impacts. The wetland credit issues are discussed in the Wetland **Section 6.13**.

The other main feature of the permit proposed a major expansion of Lake Fretwell that would serve both Cecil Commerce Center developments and certain Cecil Field Airport developments. Long term development of the Cecil Field mid-field and east development areas was not covered in the permit except for the wetland impacts addressed in **Section 6.13**.

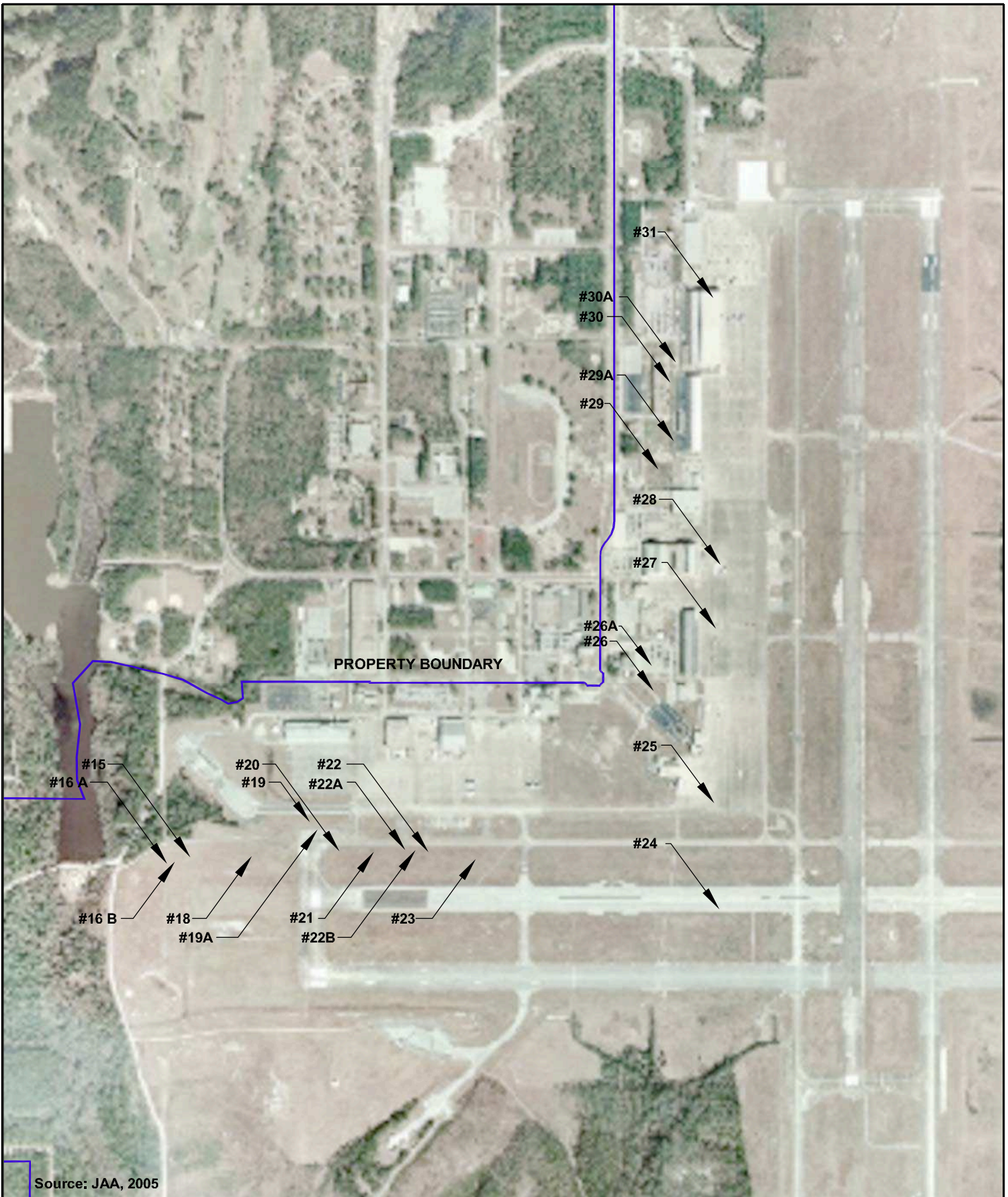
This permit is valid for 20 years from the date of issuance provided that construction of the initial phase of the system is permitted and construction undertaken within two years of the issuance of this conceptual approval permit and provided that all phases of the system are designed and built in accordance with the terms of the conceptual approval permit and that all required permits for subsequent phases are obtained. The permit authorizes a conceptual plan of development for Cecil Field. This includes 27.5 square miles of the former NAS. Also stated in this permit is that within two years of permit issuance and every two years after that, the City and JAA shall submit an

inventory of existing impervious areas and newly constructed impervious areas within the Cecil Commerce Center.

Cecil Field discharges into the North Fork of Black Creek and continues to the south. A storm sewer system serves the majority of the existing development that is located to the south. Most of the flow is then discharged using main connections. These connections vary in sizes from 48 to 84 inches. The flow is then directed to a large interconnected wetland system that is located to the east of the north-south runway. The wetland impacts are discussed in **Section 6.13**. A modification has been made in order to accommodate the increased inflow caused by the drainage being divided between Sal Taylor Creek (east) and Rowell Creek (west). The modifications include a ditch and control structures having been installed along the stream for flow control purposes. The convergence of Rowell and Sal Taylor creeks lies on the western edge of the airport boundary. The system to the south flows to Yellow Water Creek, which will discharge into the North Fork of Black Creek. It is important to note that Black Creek has had a history of flooding and the additional inflow impact should be analyzed to determine the long-term effects on Black Creek. Also, according to the SWPP, located along Sal Taylor Creek are two spill diversion ponds that are located in remote areas of the airport. These ponds are designed to contain major spills that may bypass primary containment measures.

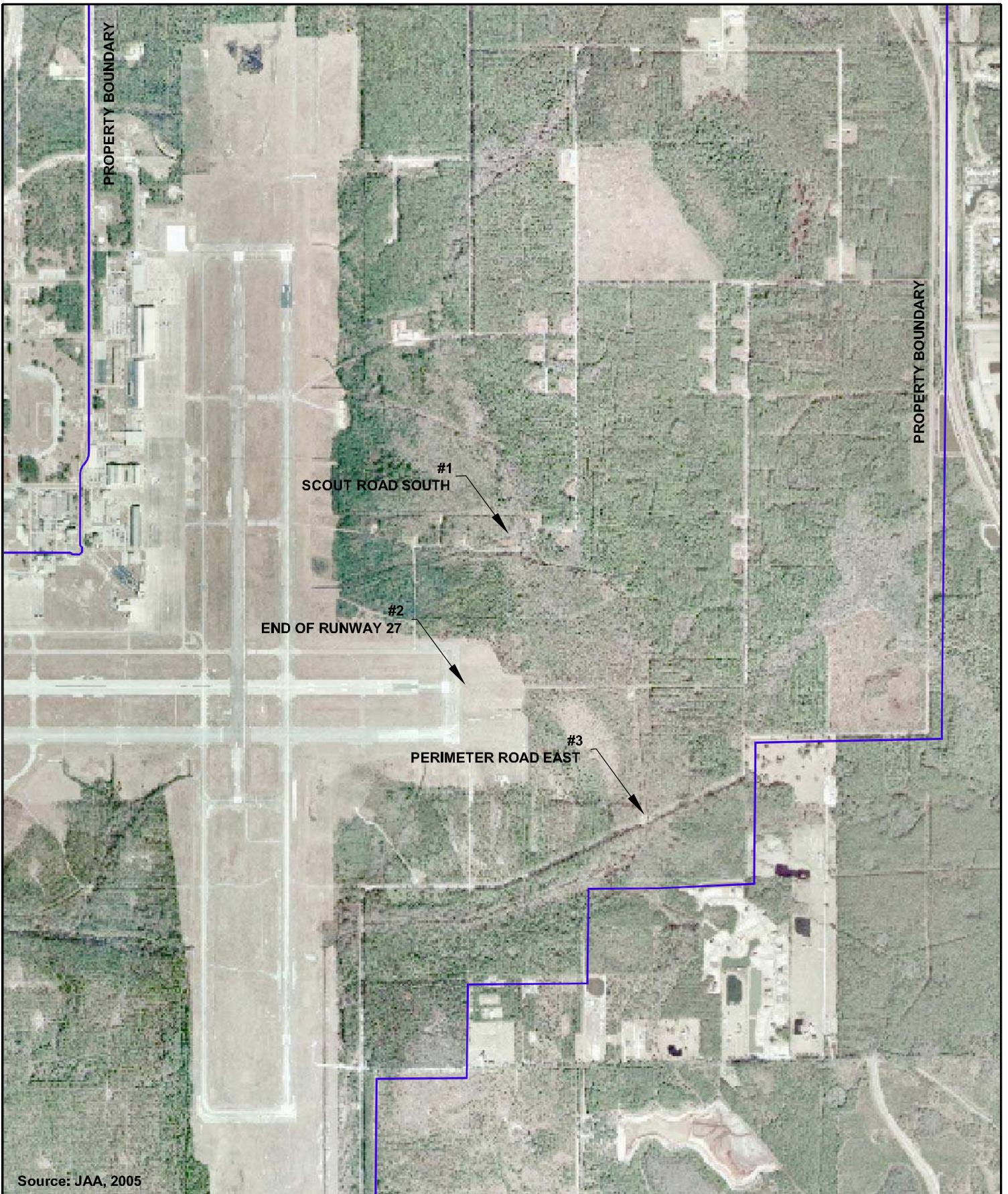
Sluice gates have been installed at Cecil Field to help control stormwater runoff. Most of these gates are located in the Northwest Development Area. **Exhibit 6-27 & 6-28** illustrate the locations of these sluice gates.

No guidelines have been set forth by the FAA for stormwater runoff treatment; however, an Advisory Circular regulates land uses to protect aircraft passenger safety. Limits on land uses that have the possibility to create fog or attract birds around airports are among the requirements that affect stormwater management. Advisory Circular (AC) 150/5200-23 *Hazardous Wildlife Attractants On or Near Airports*, specifies land uses that are likely to attract birds. It also specifies the size of the 10,000 foot buffer that is required between the runway and the hazardous land uses that attract the birds.



**EXHIBIT 6-27
SLUICE GATES**

CECIL FIELD AIRPORT



Source: JAA, 2005



**EXHIBIT 6-28
SLUICE GATES
(CONTINUED)**

CECIL FIELD AIRPORT

On November 4, 1999 a meeting was held with the FAA, the City of Jacksonville, Jacksonville Port Authority, Florida Department of Transportation, St. Johns River Water Management District, FDEP and JEDC to corroborate the location of the ponds. The fact that some birds may be attracted to dry ponds rather than wet systems was an issue that was considered within the policy. This was in accordance with the requirement to reduce the potential for fog and birds. It appears that Lake Fretwell has been expanded in accordance with FAA guidelines and now serves as storage for 2,065 acres of the southern area. In general, Sal Taylor Creek serves as stormwater runoff for the Airport property and Lake Fretwell serves as runoff for the City property.

The Branan Field-Chaffee Road project is within the 10,000 foot boundary as recommended by the FAA. The FAA Advisory Circular 150/5200-23 recommends against land use practices that attract or sustain populations of hazardous wildlife within 10,000 feet of the airport's movement areas, loading ramps or aircraft parking areas and within five statute miles of approach or departure airspace.

The City has been exploring a reevaluation of the stormwater drainage functions at Cecil Field and this may affect the stormwater planning impacts. JAA needs to work closely with the City as that may reevaluate the drainage conditions and the stormwater planning for the airport.

6.8.3 Best Management Practices (BMPs)

BMPs are defined as structural, nonstructural and managerial techniques that are recognized to be the most effective and practical means to control nonpoint source pollutants yet are compatible with the productive use of the resource to which they are applied. Potential BMPs that were noted within the Cecil Commerce Center MSMP are separated into two categories: Structural (constructed facilities) and Non-structural (regulations or ordinances).

Under structural stormwater controls are the following:

- Wet detention ponds
- Exfiltration trenches
- Shallow grassed swales
- Water quality inlets and baffle boxes
- Porous pavement
- Skimmers

Non-Structural Controls:

- Erosion and sediment control on construction sites
- Land use planning and SWPP
- Procedures
- Regulations
- Employee training
- Record keeping and reporting
- Chemical use controls
- Fertilizer application controls
- Street sweeping
- DCIA minimization
- Operation and maintenance

Swales

Natural swales provide a drainage area for stormwater that fall within permeable soils that are not limited by a high water table. They allow the water to filter and percolate into the soil and are referred to as infiltration BMPs. Florida regulations (Chapter 62-25FAC) require swales to be designed to percolate 80% of the runoff for a 3-year, 1-hour design storm within 72 hours. This requirement is only necessary if swales are the only BMP used to provide the water quality treatment. 0.25 to 0.5 inches of treatment is typical for pretreatment uses for swales.

Water Quality Inlets and Baffle Boxes

Typically installed at catch basins, water quality inlets are used to prevent sediment, oil and grease from invading storm drains and stormwater infiltration systems. Baffle boxes are then installed further downstream within the storm sewer.

Skimmers

Another method of inhibiting oil and grease from flowing into receiving water bodies is the use of oil and grease skimmers. These skimmers are designed to reserve oils and greases at the surface of the retention/detention system to grant time for them to dissipate and biodegrade.

Other BMPs include:

- Spill prevention and response (industrial land uses)
- Sweeping and scrubbing (airside land uses)
- Source controls minimizing exposure of polluting materials, reduction of direct runoff to

streams, proper chemical disposal and employee training (for all land uses)

- Retention swales (airside runways, taxiways, and golf course areas)
- Wet and dry detention and existing wetlands storage (landside land uses)

Expansion of Lake Fretwell

The regional lake system to the north and the expansion of Lake Fretwell, **Exhibit 6-29**, are examples of a regional facility approach involving wet detention with pre-treatment for land uses that have expected sources of oil and grease.

According to the Cecil Commerce Center MSMP, in order to accommodate existing and the proposed development expected to occur south of Normandy Boulevard, west of "A" Avenue and north of 9th Street, the proposed system was sized to provide for 43 days of permanent pool volume and the required storage treatment volume of 2.5 inches over the impervious area. This assumption was based on 41.4% impervious area for 2,065 acres of developed tributary area. It is important to note that the contributing golf course area, consisting of about 79 acres, can be reduced if re-graded for retention.

In order to meet FAA requirements and minimize wetland impacts, the location and shape of the proposed Lake Fretwell have been modified. The modifications include the following:

- Steep side slopes (3:1);
- In order to keep wading birds out, the depth of the pool volume for Lake Fretwell is maintained at least 7.6 feet;
- Hooks were installed on the side banks to provide the ability to install monofilaments in the case that bird activity increases;
- The design of the lake is a 5:1 length to width ratio (900 feet wide and 5000 feet long).

The alternatives for the airside land uses, on the JAA side, are between first flush diversion inlets, baffle boxes, and oil-water separators versus swales or other onsite controls that equal 0.5 inches of treatment. To achieve peak attenuation, it was recommended that

the wetlands east of the existing runway continue to be utilized.

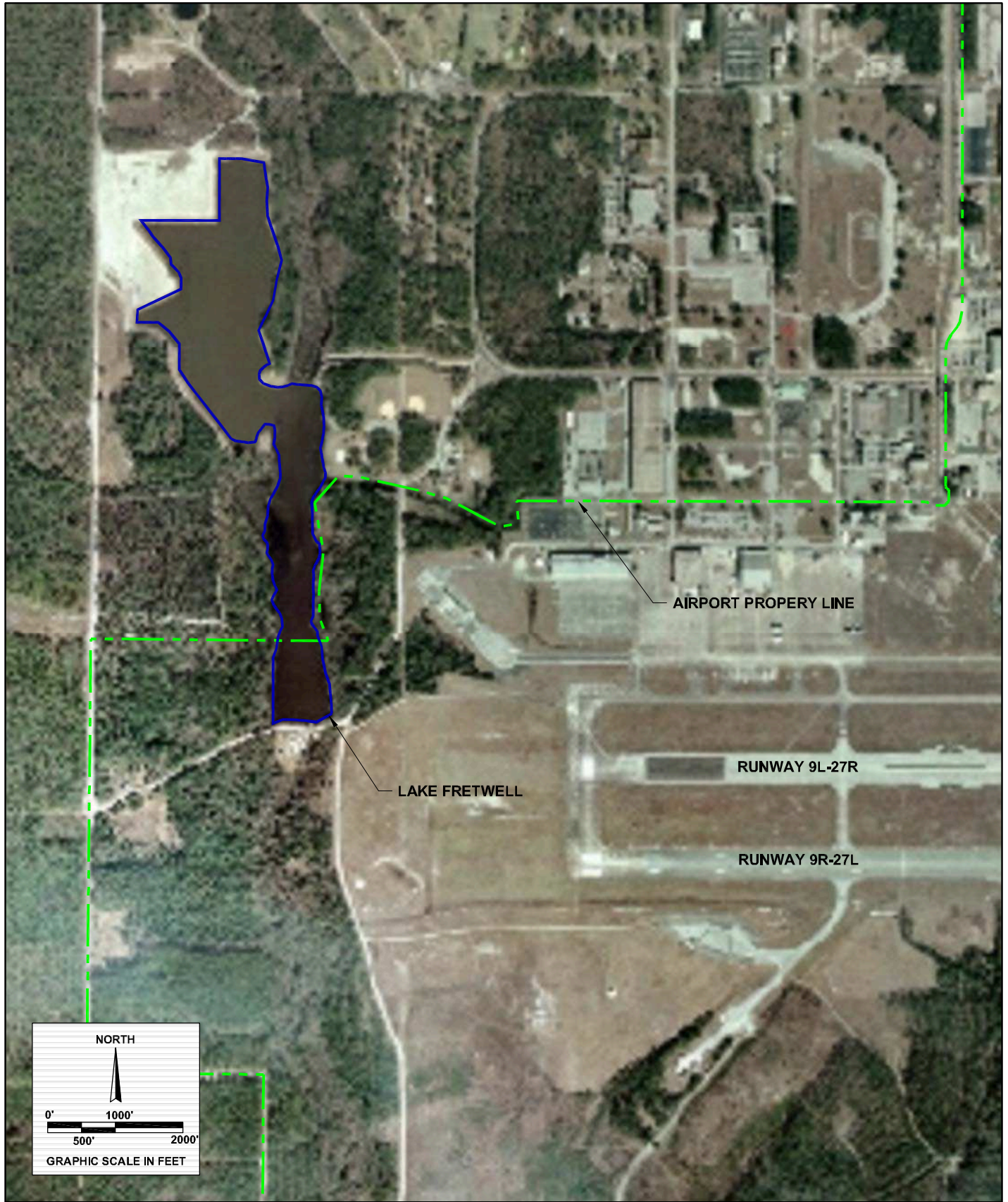
A stormwater parcelization map was created under the City of Jacksonville Master Stormwater Plan which divides the airport into stormwater parcels. This map is presented in Exhibit 6-18 and a summary of the MSMP is shown in Exhibit 6-19.

A stormwater study was conducted at the proposed site 9B area, located in the northwest corner of the airport. An excerpt from this study which presents the current and future impervious areas is illustrated in **Exhibit 6-30**. Currently, an underdrain stormwater runoff system exists near proposed Site 9B but will need to be expanded based on the additional development. This drain is located in the interior of the proposed taxiway, and approximately 200 feet northeast of the northern most endpoint of Taxiway A. Approximately 14 acres of impervious buildings, aprons and parking lots will be developed during the initial phase of construction of Site 9B.

The stormwater runoff from the added impervious areas created at the proposed Mid-Field development area will be stored and attenuated in the region within the interior loop road, as presented in Exhibit 5-26. This will consist of a dry pond per FAA requirements. The planning for the Northeast and Southeast development areas will need to consider stormwater control and treatment within their local areas in order to avoid untreated runoff into the wetlands. These two development areas contain an abundance of suitable land to provide storage and treatment for the added impervious areas. The current Master Stormwater Permit is conceptual, therefore new permit will be required during the development of each of these areas.

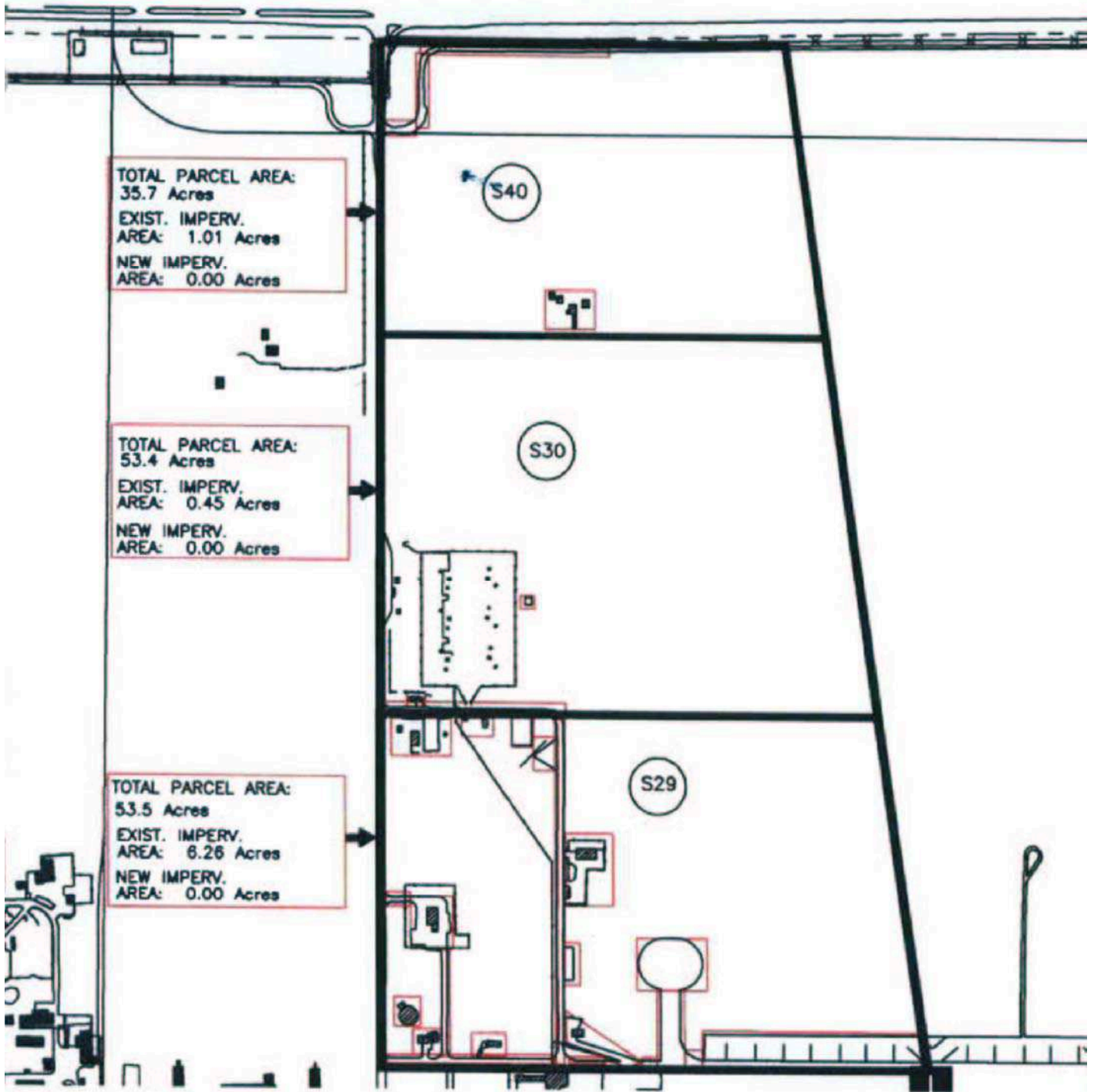
6.9 DEPARTMENT OF TRANSPORTATION (DOT) 4(F) LANDS

As stated in the original Section 4(f) legislation of 1966 and its revisions (1968 and 1983), Section 4(f) protects three basic types of resources: publicly owned public park and recreation areas, publicly owned wildlife and waterfowl refuges, and historic sites (also known as cultural resources).



**EXHIBIT 6-29
LAKE FRETWELL**

CECIL FIELD AIRPORT



Source: ERM, 2005



**EXHIBIT 6-30
 LAKE FRETWELL
 DRAINAGE PARCELS**

CECIL FIELD AIRPORT

The Florida Department of Agriculture and Consumer Services, Division of Forestry (DOF) manages several forests near Cecil Field including the Jennings State Forest. Another potential Section 4(f) area is the Pope Duval Park, see **Exhibit 6-31**. This park is located approximately five miles north of the airport.

The Jennings State Forest and Pope Duval Park are located outside of the areas of the proposed airport development and is not expected to impact the 2,200 acres of non-airport Cecil Field property in the Yellow Water area located northwest of the airport. The City of Jacksonville has developed said 2,200 acres into an equestrian center and public park.

A Gofer Tortoise Preserve is located just southeast of the airport and is located within a Conservation Land Use. Just to the east of the Gofer Tortoise Preserve is the conservation area of the Oakleaf Plantation which is also illustrated in Exhibit 6-26. These conservation areas could affect future development of the airport.

According to FAA Order 5050.4B, the significance threshold for an airport's actions on a Section 4(f) land is if the physical use of the property would be more than minimal or if the constructive use of the property substantially impairs the 4(f) property. The Order states that it must be determined whether an airport's proposed action would eliminate or severely degrade the intended use of the Section 4(f) resource.

The Gofer Tortoise Preserve and the conservation area within the Oakleaf Plantation could restrict future development at the airport, namely the construction of proposed Runway 17/35. The airport should work with the City and Clay and Duval Counties to restrict this type of development in close proximity to the airport.

6.10 HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

In August 1995, according to the Cecil Field Strategic Master Plan, a cultural resource assessment for NAS Cecil Field was administered and submitted to the Florida Division of Historical Resources. The two components that made up this assessment were as follows:

- An archaeological sensitivity assessment: This included background and documentation

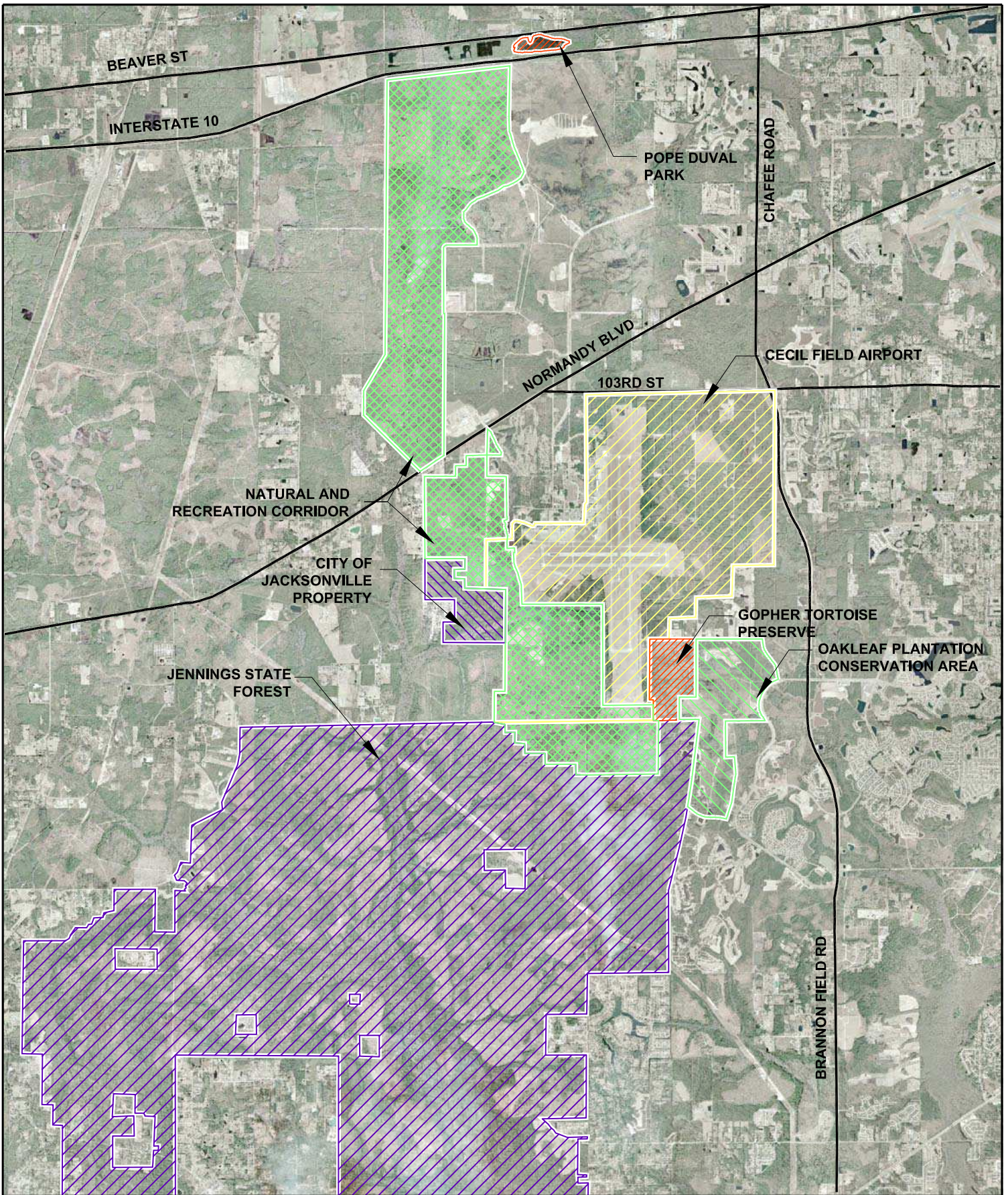
research, field investigation and, in order to identify any potential archaeological sensitive areas at the station, a model was developed.

- A comprehensive building survey: Made up of photo documentation, historic context for station development, and investigation of the eligibility for inclusion on the National Register of Historic Places (NRHP) for the station's buildings.

It was concluded in 1995 that there were no known archaeological sites to exist at NAS Cecil Field. Because a vast portion of the surface of the facility (approximately 3,900 acres) underwent an extensive disturbance through the duration of the base development, the disturbed portions are highly unlikely to contain intact archaeological resources.

However, a more recent archaeological sensitivity assessment of the station concluded that nine sites on the Cecil Field Airport property have a high probability of containing historically sensitive sites. Due to this finding, on April 30, 2003, the Division of Historical Resources (DHR) reviewed this area and informed the Jacksonville District Corps of Engineers about 16 areas within Cecil Field that are of high archaeological sensitivity, see **Exhibits 6-32** and **6-33**. The DHR assesses effects upon sensitive sites and considers alternatives to avoid or minimize adverse effects. According to the DHR, development of sites 3, 8 and 14 will have no effect on any historical properties. According to the City of Jacksonville, site 4 will be undisturbed, eliminating any possible adverse effects. However, if anything is to be done to this property, the DHR must be contacted to evaluate the site and determine if there is anything with historical significance that must be avoided. Additionally, before any land clearing or ground breaking activities occur on any of the highlighted sites, the DHR must be notified and a study must be performed to determine if this land is eligible for listing in the National Registry of Historic Places, or of other historical or architectural significance. This will help the DHR determine what actions need to be taken to preserve the site.

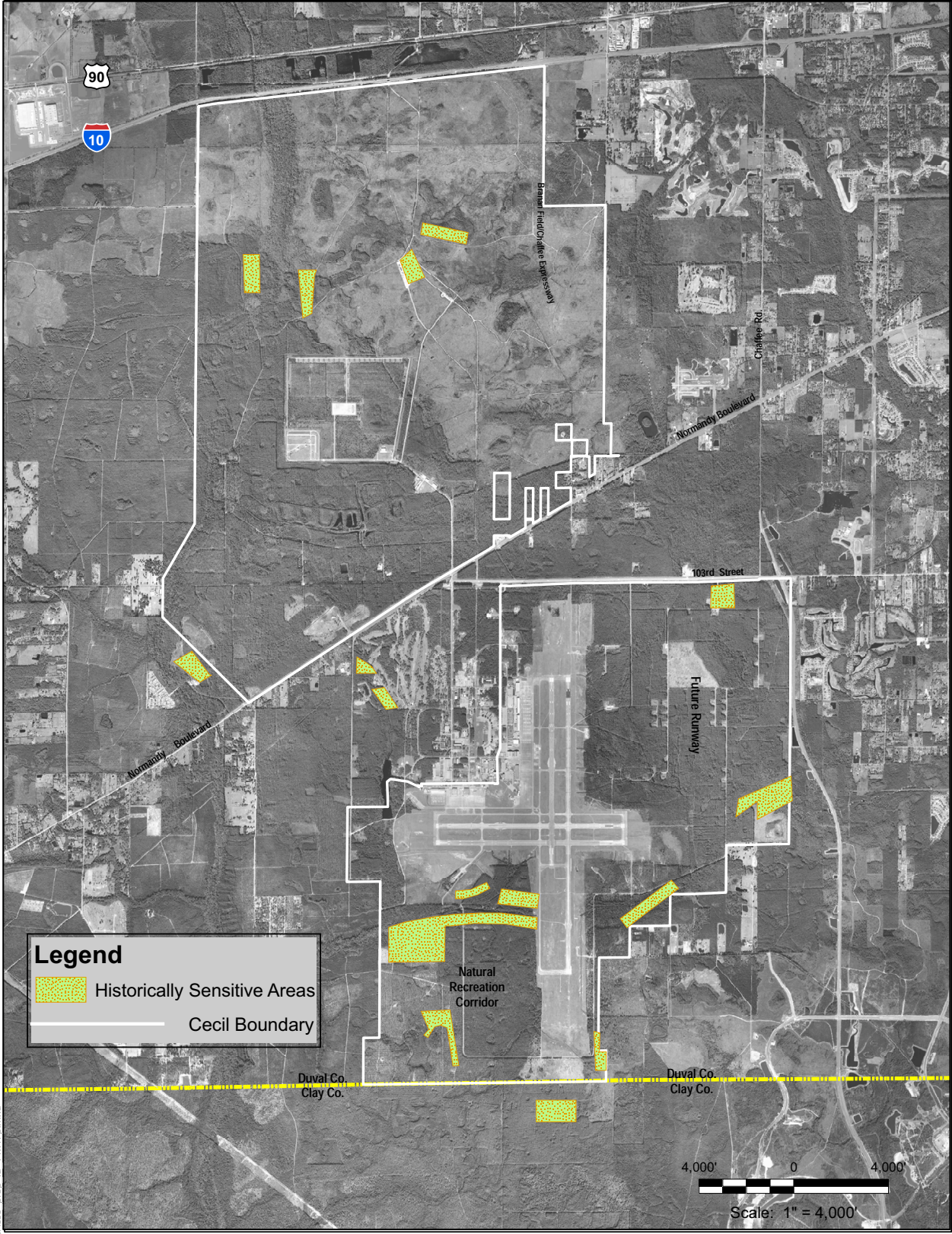
The locations of these historic sites should not create any restrictions for development of Site 9B, the Mid-Field, Northeast or Southeast development areas.



**EXHIBIT 6-31
FOREST AND PARK LANDS
SURROUNDING CECIL FIELD**

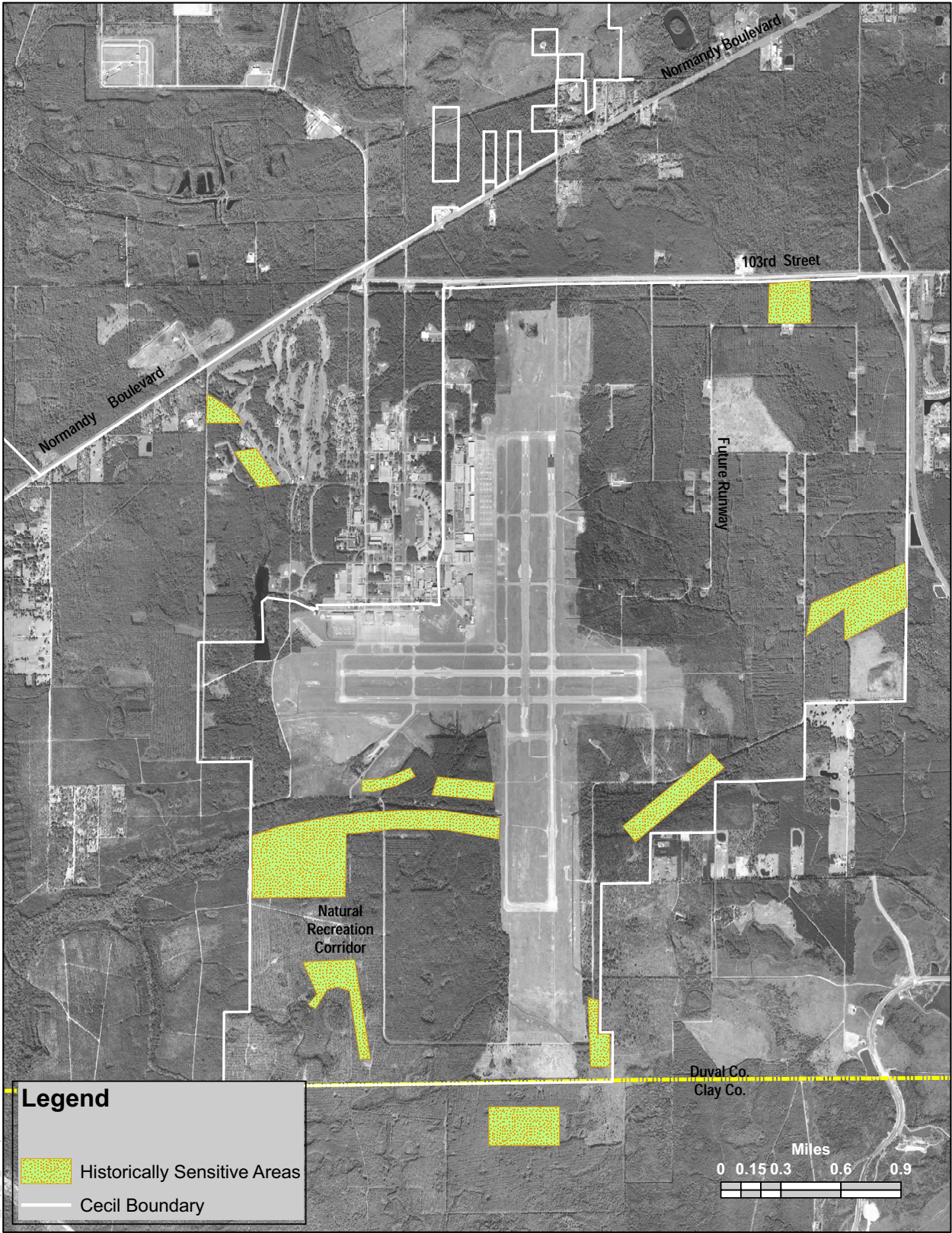
CECIL FIELD AIRPORT

**CECIL FIELD
MASTER PLAN UPDATE**



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**CECIL FIELD
MASTER PLAN UPDATE**



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Although the Northeast Development area doesn't directly impact a historically sensitive area, its proximity near one of the sites might warrant a closer investigation to determine if the site could be adversely affected by the development. Should any historic sites be discovered during any future construction, and if there is any anticipation of future adverse effects occurring, a Determination of Adverse Effect will be required as part of future environmental studies. The Criteria of Adverse Effects specified in Part 36 of the Code of Federal Regulation (CFR) Section 800.3(b) must be administered to determine any impacts to site(s).

6.11 BIOTIC COMMUNITIES INCLUDING FLORA AND FAUNA

When plants (flora) and animals (fauna) share a mutual habitat for sustenance and procreation this particular community is called a *biotic community*. The assessment for biotic impacts is determined by the level of foreseeable impacts related to the proposed development.

A number of factors must be examined in order to determine impacts to the biotic communities. They are as follows:

- Any impact to public owned wildlife or waterfowl refuge areas with federal, state, regional or local significance
- Investigate if there are any threatened or endangered species in the area of immediate impact
- Investigate if the proposed development will affect water resources such as wetlands, groundwater, diversion, deepening, controlling, dredging, or filling of any stream or body of water.

Six types of cover makeup the upland vegetation of Cecil Field:

- Pine and mixed hardwood forest
- Pine flatwoods
- Longleaf pine-turkey oak
- Shrub and brushland
- Transitional hardwoods and
- Disturbed or developed areas

Implemented in 1963, the Navy's Long Range Forest Resource has been managing the vegetation at NAS Cecil Field.

According to the Conceptual Forest Management Plan (December 1999) and the Intergovernmental Management Agreement (January 2000), a conceptual understanding had been made between the Florida Department of Agriculture and Consumer Services, the City of Jacksonville, Clay County and the JPA for the Division of Forestry to manage all forest resources at Cecil Field as one unit. The Department is the lead management agency for the conservation, protection, management, and enhancement of natural resources, specifically including forest resources within the property, which include the natural corridor and the east side commercial production forests. In addition, the area of NAS Cecil Field that lies within Clay County is to be maintained in its present state as a conservation area.

Managed by the Florida Game and Fresh Water Fish Commission and Jennings State Forest, this area would adjoin the Branan Field Mitigation Bank to create a considerable sized contiguous conservation area. This area is mostly made up of upland pine and hardwood forests.

Clearing and vegetation removal will be necessary during the proposed long-term construction of the additional north-south runway and airport developments. By removing natural habitats and fragmenting any remaining habitats, the existing vegetation and wildlife would be directly impacted. However, enforcing FAR standards to control the inclusive density of the developments would minimize impacts. In addition, planted slash pine would be the significant habitat type that would be affected. Planted slash pine is very common and widespread throughout NAS Cecil Field and northeastern Florida. Therefore, it is expected that the overall impacts to upland vegetation and wildlife will be minimal and insignificant. It is advised that field surveys be conducted for future developments in correlation with applicable federal, state and local regulations in order to determine the extent of impacts to the biotic communities after site development plans have been formed.

6.12 ENDANGERED AND THREATENED SPECIES

The original Florida endangered species list contained 23 species and was publicized in 1972. The listing was expanded shortly thereafter in 1973 to include Threatened Species and again in 1979 to include Species of Special Concern. The Florida lists are revised as needed and delegate Rules 27.003 (endangered), 68A-27.004 (threatened) and 68A-27.005 (species of special concern) Florida Wildlife Code (Title 68A, F.A.C.). As of the FY 2004-2005, as reported in the Florida Fish and Wildlife Conservation Commission, there are 118 species in total. Forty-one (41) are shown as endangered, twenty-six (26) are threatened, and fifty-one (51) are species of special concern. In order to ensure accuracy in the state listing process, the method shown in 68A-27.0012 Florida Administrative Code (FAC) is utilized. **Table 6-5** identifies the federal and state-listed species of concern.

Table 6-5: Summary of Official List of Florida’s Endangered Species, Threatened Species and Species of Special Concern

Status Designation	Fish	Amphibians/ Reptiles	Birds	Mammals	Invertebrates	Total
FWC						
Endangered	3	6	8	20	4	41
Threatened	2	10	10	4	0	26
Special Concern	10	13	18	6	4	51
Subtotal	12	29	36	30	8	118
USFWS^a						
Endangered	2	5	5	18	6	36
Threatened	1	8	5	2	4	20
XN ^b	0	0	1	0	0	1
Subtotal	3	13	11	20	10	57

^a United States Fish and Wildlife Service

^b Experimental Non-Essential

Source: Florida’s Endangered and Threatened Species Management and Conservation Plan – FY 2004-2005 Progress Report.

Black Creek is a very popular area for recreational fisheries and water-related sports, including swimming, boating, and water skiing. Recreational fisheries in the creek include those for blue crab, striped bass, and red drum. Blue crabs are also fished commercially in Black Creek and eels are fished commercially in its lower reaches near the St. Johns River. The lower St. Johns River near the confluence of Black Creek is

tidally influenced and provides estuarine habitat for many marine and estuarine species, including nursery grounds for shrimp, spotted seatrout, weakfish, spot, Atlantic croaker, and red drum.

The gopher tortoise, Sherman’s fox squirrel and Bachman’s sparrow have been previously confirmed on Cecil Field. The existences of the habitat for these species make it possible for other species to occur on Cecil Field. In order to create habitats at a variety of developmental stages, periodic harvesting and prescribed burning of selected pinelands would be necessary for the benefit of these species.

The future long-term development will have a conflicting impact on the existing habitats and individual species. For example, grading for building construction could cause mortality to gopher tortoises by occupying their burrows. Also, the development of industrial activities adjacent to future Runway 17/35 could result in a loss of suitable foraging habitat for the Southeastern American Kestrel. A significant indirect

impact, as noted in the Cecil Field Strategic Airport Master Plan, could possibly result from fragmentation of suitable habitats, especially from large developments and transportation corridors.

On May 29, 2002, the Fish and Wildlife Service responded to a 20-year permit application in order to revitalize and develop the recently closed NAS Cecil Field as a Commerce Center. The Fish and Wildlife Service evaluated the impact this project would have on the eastern indigo snake, which is a threatened species and is federally protected. This Service determined that the proposed project may affect, but is not likely to adversely affect, this species. The

Service’s biological opinion is that the future development on Cecil Field is not likely to jeopardize the continued existence of the eastern indigo snake. Due to the snake’s categorization as threatened, several terms and conditions must be met at the development site in order to avoid damage to the snake. The developers must have a protection/education plan for all construction

personnel. Only an individual who is either authorized by a section 10(a)(1)(A) permit or designated by an agent of the State of Florida by the Fish and Wildlife Conservation Commission can come into contact or remove the snake. An eastern indigo snake monitoring report must be submitted to the North Florida Field Office within 60 days of the conclusion of clearing phases.

Future developers will be required to conduct additional consultation with the United States Fish and Wildlife Service and the Florida Game and Fresh Water Fish Commission based on the presence of listed species and suitable habitats, prior to any new development. An Environmental Assessment will also be required prior to any new runway development. In addition, all new development on the airport property is subject to review and approval through the local permitting process in order to ensure consistent development with city conservation policies.

**Table 6-6:
Established CWAs Pertinent to Duval County**

Region CWA Name	County	Closure Period	Primary Taxa	Status	Managed Area
Bird Islands*	Duval	1 April to 1 Sept.	Black skimmers, oystercatchers	800 birds	2 acres
Fort George Inlet*	Duval	1 April to 1 Sept.	Royal terns, laughing gulls	2,000 nests	10 acres

Source: Florida's Endangered and Threatened Species Management and Conservation Plan – FY 2004-2005 Progress Report.

* Indicates sites that may require re-description or merit deletion from the CWA system.

6.12.1 CRITICAL WILDLIFE AREAS

The Florida Fish and Wildlife Conservation Commission established the Critical Wildlife Areas (CWAs) to protect wildlife concentrations from human disturbance during critical nesting, feeding, or resting periods (68A-19.005). As stated in the Florida Fish and Wildlife Conservation Commission, the areas are defined in establishment orders and are closed to human entry during the period of time defined within said order. The established CWAs that are pertinent to Duval County are listed in **Table 6-6**.

6.13 WETLANDS

For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are

inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas." [EPA Regulations listed at 40 CFR 230.3(t)]. Because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance, wetlands vary largely. Wetlands provide many functions that include:

- surface water storage (flood control)
- shoreline stabilization (wave damage protection/shoreline erosion control)
- stream flow maintenance (maintaining aquatic habitat and aesthetic appreciation opportunities),
- groundwater recharge (some types replenish water supplies)
- sediment removal and nutrient cycling (water quality protection)
- supporting aquatic productivity (fishing, shell fishing, and waterfowl hunting)
- production of trees (timber harvest)
- herbaceous growth (livestock grazing and haying)
- Production of peaty soils (peat harvest)
- and provision of plant and wildlife habitat (hunting, trapping, plant /wildlife /nature photography, nature observation, and aesthetics).

Destruction of wetlands can eliminate or severely minimize their intended functions and values. Drainage of wetlands prevents surface water storage and reduces their water quality enhancement function, while accelerating the flow of water downstream which may cause increased flood damages. Wetland filling can succeed in destroying vital habitats for native fish and wildlife species.

Existing wetland areas were identified using the United States Fish and Wildlife Service's (USFWS) existing National Wetland and Inventory (NWI) maps, as shown in **Exhibits 6-34, 6-35 and 6-36**. In order to accurately assess the impacts and mitigation requirements for the proposed airport development, a detailed field survey will be required to determine the affect upon the wetlands. A wetland delineation survey is recommended as part of the environmental studies for proposed Mid-Field, Southeast, Northeast and Runway 17-35 developments.

Proposed construction within the proximity of the wetlands requires a certain permitting process that involves preliminary wetlands assessments, delineation and mitigation of the wetland. Mitigation strategies may be initiated once the extent of impacted wetlands is known. Wetland mitigation involves the restoration or enhancement of existing degraded wetlands or creation of manmade wetlands. On-site wetland mitigation is preferred so as to not interfere with aircraft flight operations.

However, if off-site mitigation is the only practical solution, then the mitigation should be performed in close physical proximity and, if possible, the same watershed as the affected wetlands. The redevelopment of Cecil Field will have adverse affects on the wetlands on the eastern side of Cecil Field. Therefore, to offset the adverse affects from redevelopment, on March 13, 1998, the City of Jacksonville, the Jacksonville Port Authority, Clay County, the Department of Environmental Protection and the St. Johns River Water Management District entered into a Memorandum of Understanding to establish a Cecil Field Wetland Mitigation Plan and "Natural and Recreational Corridor". In this memorandum, all parties agreed that the land in question should be maintained as a natural corridor. It is suitable for passive resource-based public recreation, more specifically, this corridor would allow low intensity activities during day light hours, which includes biking, hiking, fishing, etc. The Corridor will be considered compensation for the adverse impact of development on the eastern side of Cecil Field. The Corridor will be available for mitigation opportunities so long as the impacts on the eastern portion and designated portions within Clay County do not exceed the mitigative value of the corridor. The Natural and Recreational Corridor is illustrated in **Exhibit 6-37**.

An additional purpose of this Corridor is to properly benefit from the unique opportunity presented by the reservation of a large parcel of land in a rapidly

developing area of Florida through careful stewardship to protect, restore, enhance and conserve the significant natural resources, including wetlands and upland forests, establish a natural wildlife area, establish a passive resource-based public recreation area, provide limited revenues through sound forestry management and to serve as environmental mitigation for proposed new and midterm impacts to jurisdictional wetland areas at Cecil Field.

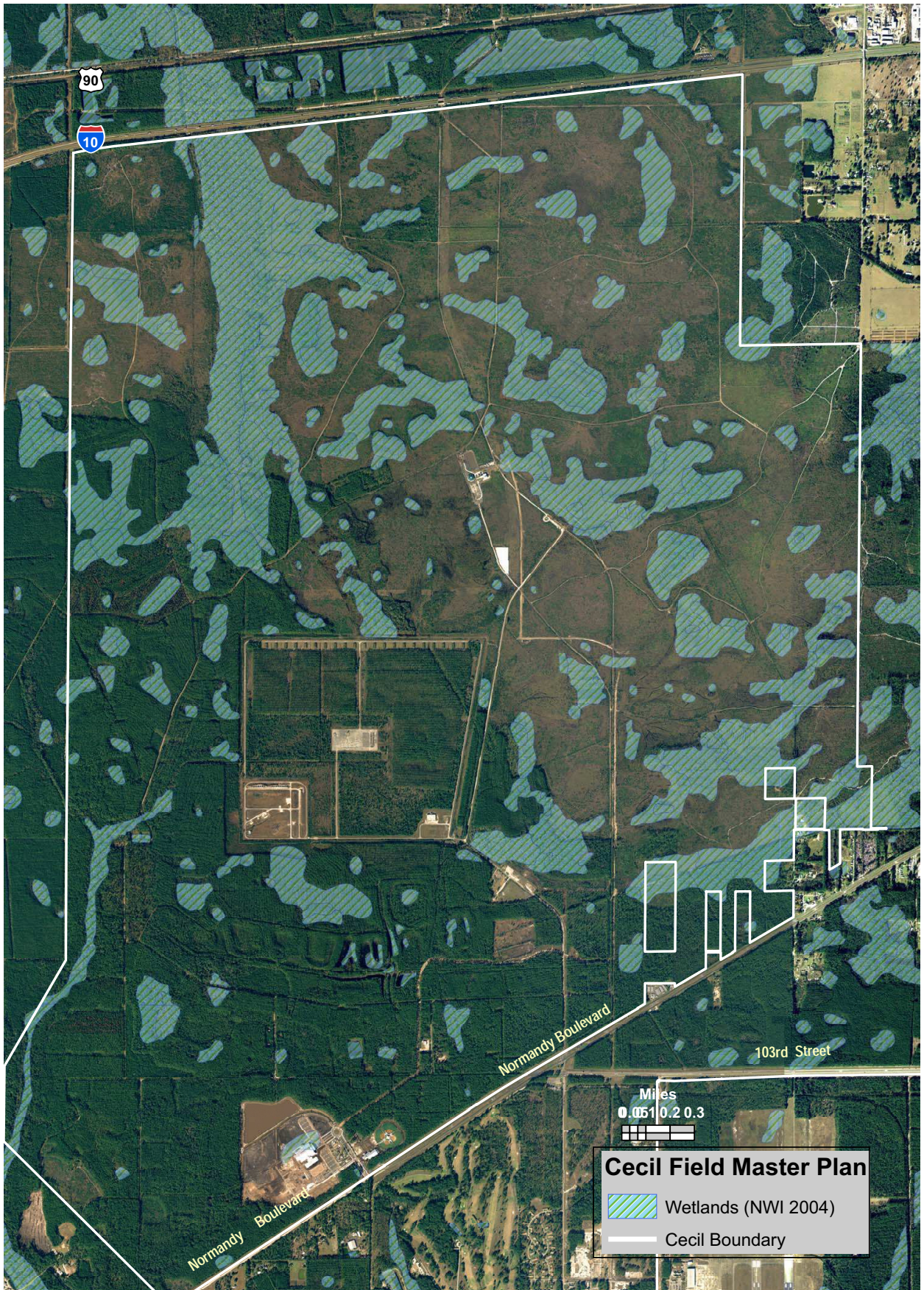
The Cecil Field Natural and Recreational Corridor Management Plan, which was revised in December 2002, states how the Corridor will be managed and taken care of. This management plan is designed to address the following: preservation of natural resources, protection of native vegetation, preservation of wetland and watershed areas, creation of wetland areas, provision of limited forestry revenues, provision of passive recreational activities for the public and provision of environmental education. The Natural Resource and Wildlife Management sections state that the vegetation, wildlife and their habitat in the corridor will be protected. The Resource Restoration, Enhancement, and Wetland Creation section lists several strategies for resource restoration, including, but not limited to, hydrologic enhancement of wetlands by eliminating ditches where possible, creation of 100+ acres of diverse contiguous and isolated wetland areas and removal of unused forest roads in wetlands and allowing these areas to naturally vegetate. A location map of the wetland creation areas is presented in **Exhibits 6-38 and 6-39**.

Resource enhancement will consist primarily of improvement of the native vegetative and wildlife communities. The Forestry Management section states that the Corridor will be managed in accordance with the Forestry Management Plan. Selective harvesting of some pine-dominated flatwood wetlands is allowed to meet the goals of improvement and enhancement. The Passive Recreational Activities section states that the recreational activities will be compatible with the protection of natural resources. The Site Development Section states that the majority of the site will remain in its natural state and that any approved recreational facilities will be placed to avoid impacts to natural resources, specifically wetlands.

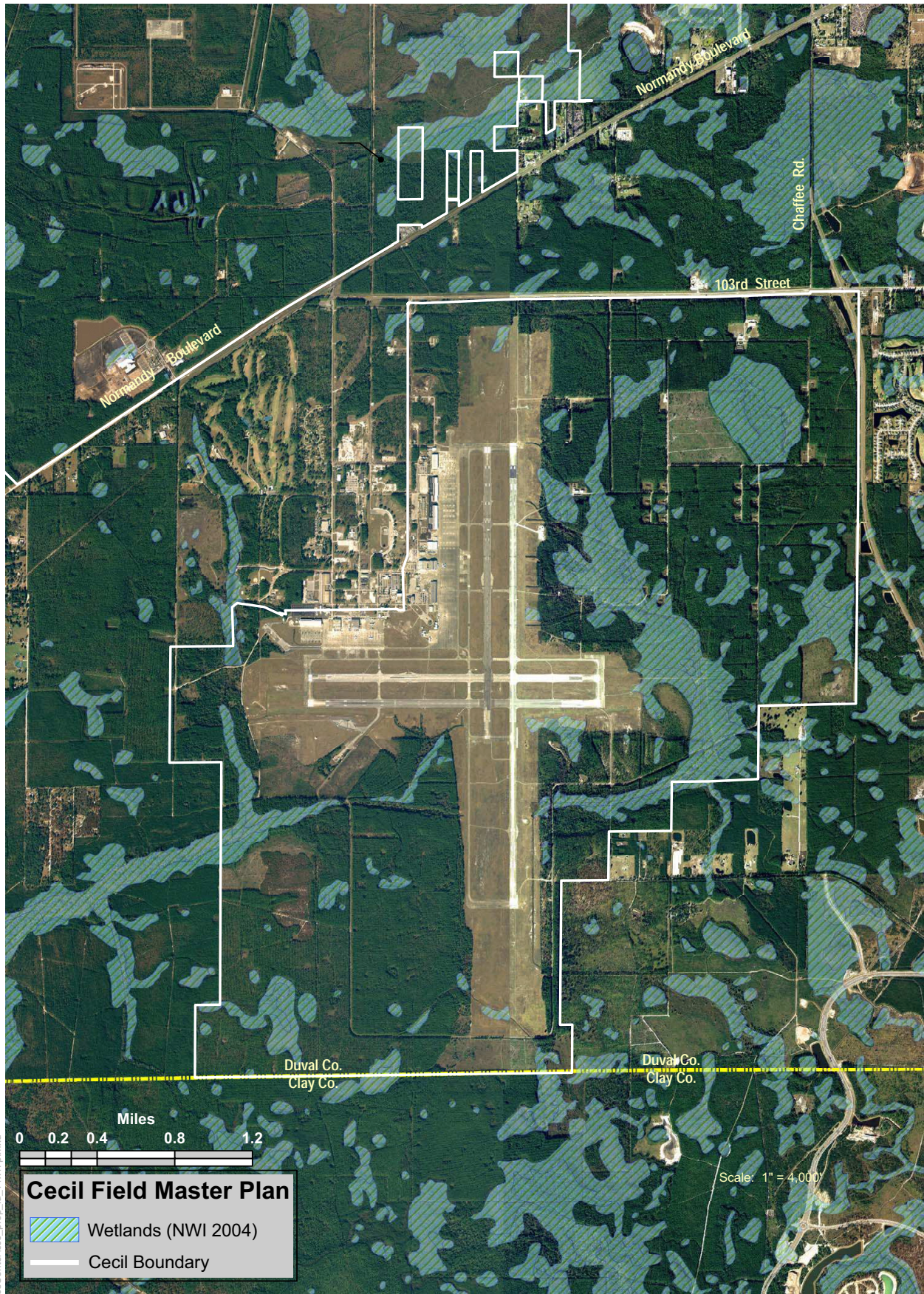
Mitigation credits were based on the value of the created Natural and Recreational Corridor.



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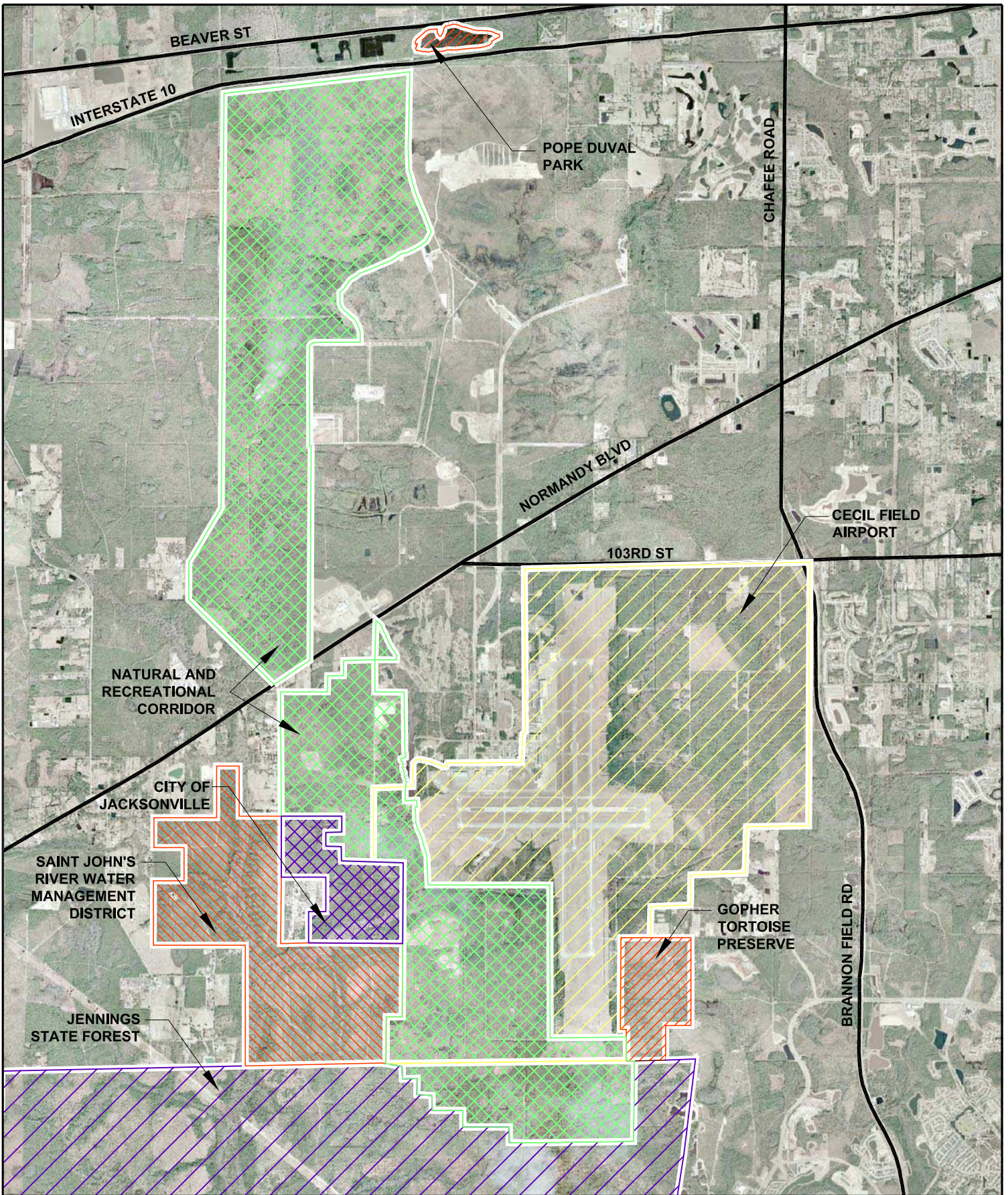
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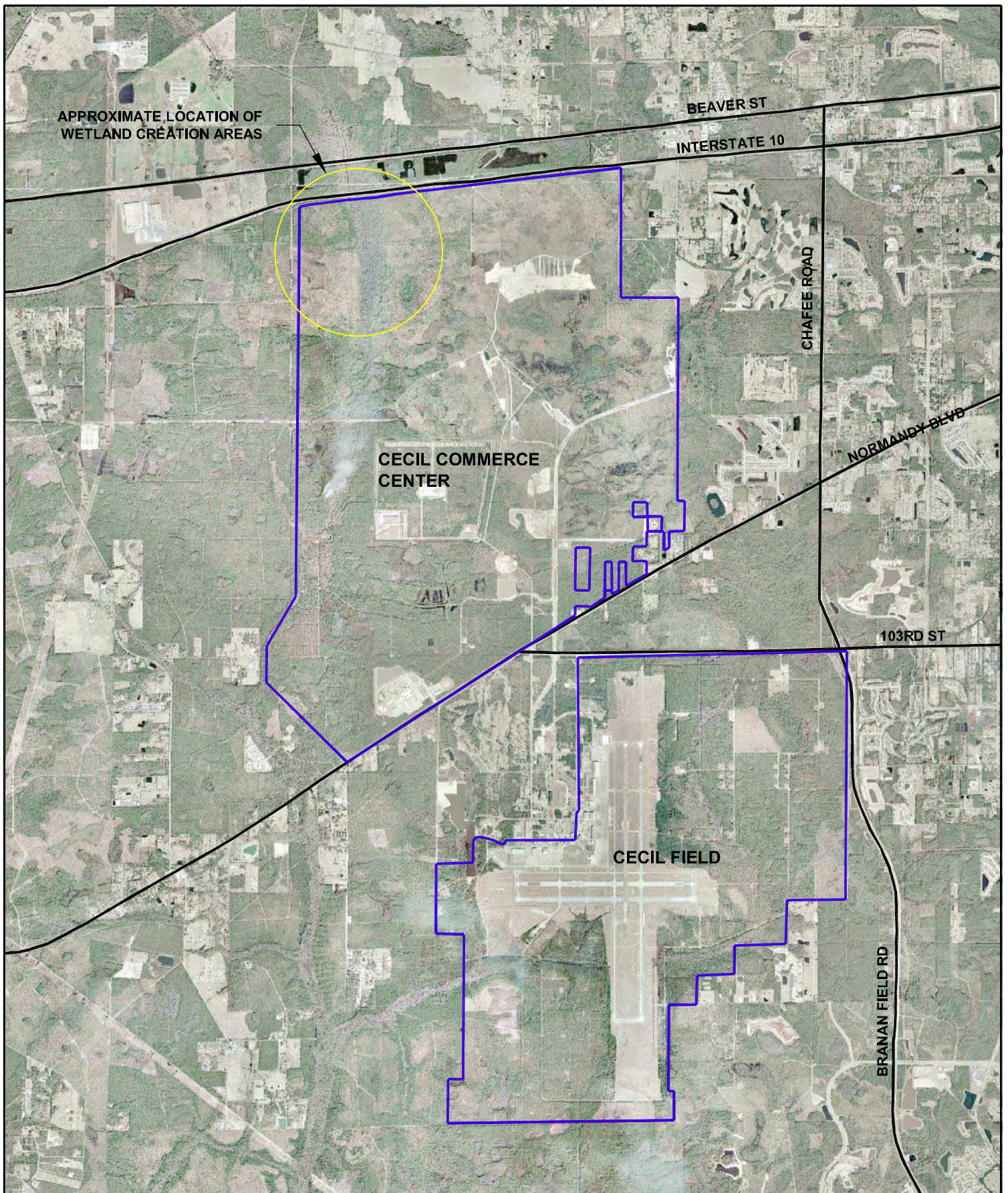
Cecil Field Master Plan

-  Wetlands (NW1 2004)
-  Cecil Boundary



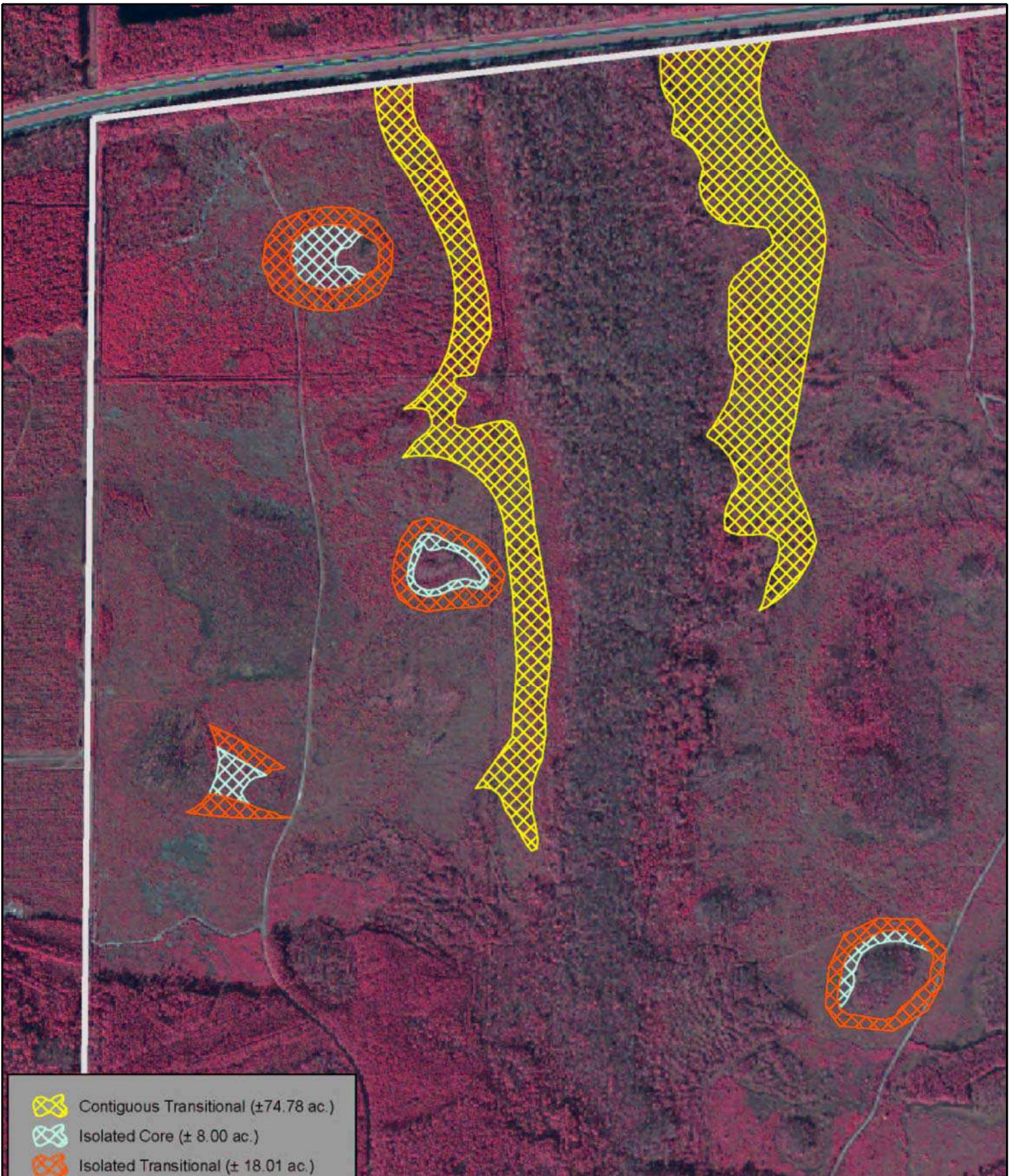
**EXHIBIT 6-37
NATURAL AND
RECREATIONAL CORRIDOR**

CECIL FIELD AIRPORT



**EXHIBIT 6-38:
LOCATION OF WETLAND
CREATION AREAS**

CECIL FIELD AIRPORT



On November 13, 2001, the St. Johns River Water Management District issued permit number 4-031-70452-1 to the City and JAA authorizing 497.06 wetland credits to be used on Cecil Field and Cecil Commerce Center. The permit indicated 157.42 acres of wetland impacts on JAA property due to development and 7.51 acres due to planned roads and 306.39 acres of wetland impacts on JEDC property due to development and 27.74 acres due to planned roads. This information is presented in **Exhibit 6-39A**.

The City and JAA negotiated an Memorandum of Agreement that developed a slightly different distribution of wetland credits than the SJRWMD permit. Of the 497.06 credits, JAA can use 127.55 credits for the development of the Airport and the City can use 369.51 credits for the Cecil Commerce Center property. Of the City's 369.51 credits, 17.4 credits should be used for the Equestrian Center, Community Center, pool, softball field, or utility corridor. Another twelve credits must be used for other development in the recreation area at the Cecil Commerce Center and 34.38 must be transferred to the JEA for development at the Cecil Commerce Center. Of the 100 acres of the required wetland creation, the City is responsible for creating 71.32 acres and JAA is responsible for 28.68 acres in the COJ property. The JAA may need to develop a mitigation plan that is wholly on JAA property. On April 29, 2002, an agreement was made between the City and JAA officially adopting the St. Johns River Water Management District permit. On that same day, in Resolution 2002-296-A, the City officially adopted the information in the MOA.

On March 23, 2004, a second permit, SAJ-2003-1935 (IP-BAL), was issued by the US Army Corps of Engineers. This permit authorizes fewer wetland credits to the City and JAA. This permit authorizes a total of 413.54 wetland credits. On April 19, 2004, a Memorandum of Agreement was signed between the City and JAA. This agreement states that of the 413.54 credits authorized by the US Army Corps of Engineers permit, the JAA can use 105.16 credits for development on the Airport property and the City can use 308.31 credits for development on the Cecil Commerce Center property. Of the 100 acres of required wetland creation, the City is responsible for 71.32 acres and JAA is responsible for 28.68 acres in the COJ property, which is the same area as in the St. Johns River Water Management District permit. On August 24, 2004, an agreement was made between the City and JAA which stated that of the City's 308.31 credits, 11.57 credits must be used for the Equestrian

Center, Community Center, pool, softball complex and utilities corridor. Additionally, 9.12 credits must be used for future development of the recreational area of the Cecil Commerce Center and 25.20 credits must be transferred to the JEA for development at the Cecil Commerce Center.

The SJRWMD permit number 4-031-70452-1 authorizes 497.06 credits and the USCOE permit number 2003-1935 (IP-BAL) authorizes 413.54 credits that are divided between JAA and COJ as indicated in **Exhibit 6-40**. The USCOE permit also provides a mitigation release schedule as listed in the same exhibit.

According to the National Wetland Inventory, 2004, the development of Site 9B should not adversely affect the wetlands, but the Mid-Field, Northeast, and Southeast areas will more than likely be impacted by wetlands. All three proposed locations for these development areas contain wetlands and wetland credits will need to be used. While JAA has the wetland credits listed above, these developments could exceed the available credits. A more in depth investigation should be conducted in these areas to more accurately determine wetland impacts before developmental plans are finalized.

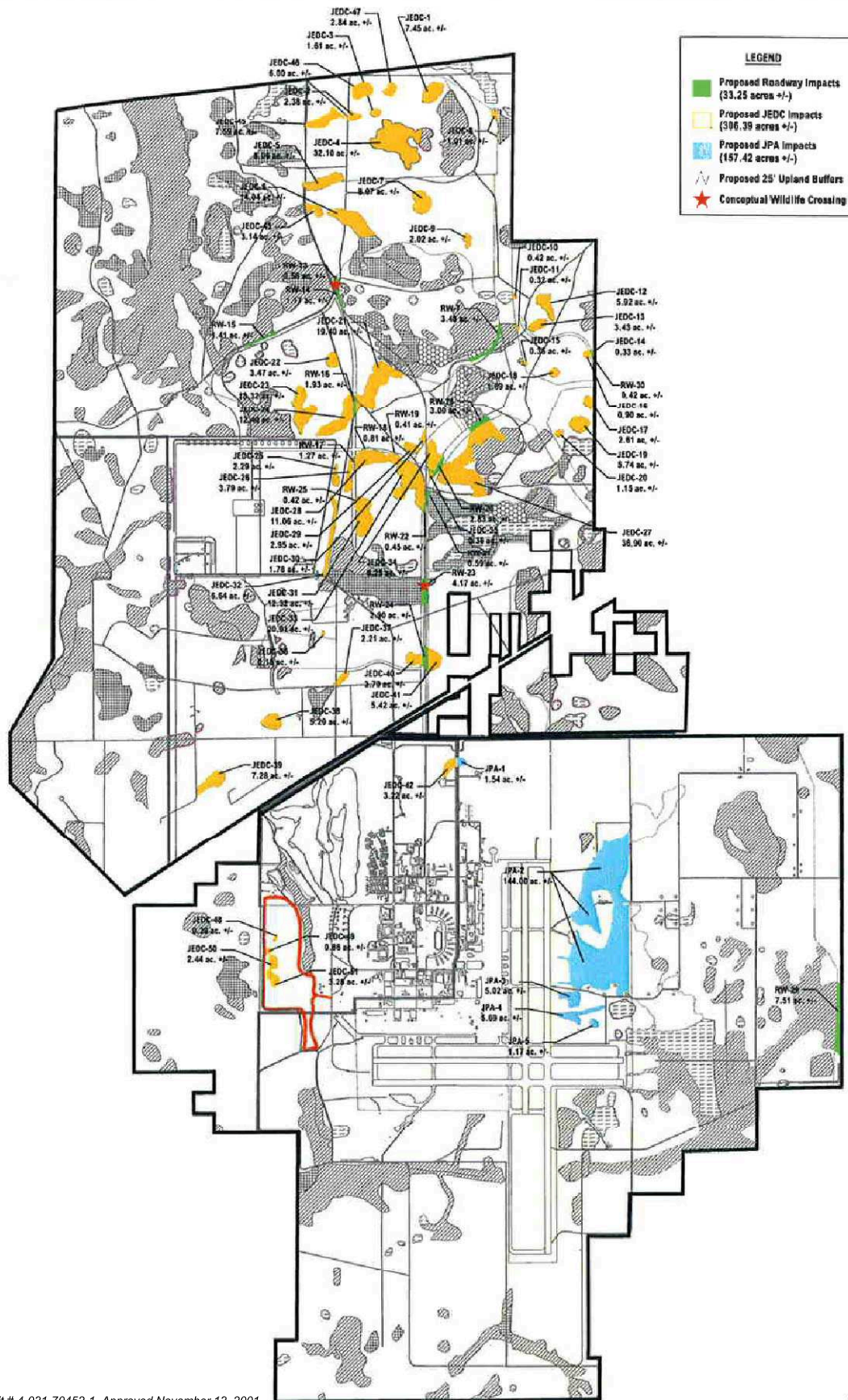
6.14 TREE MITIGATION

The City of Jacksonville maintains a tree mitigation fund. If during development, trees are removed without acceptable substitution elsewhere, fees are paid by the developer into this fund. These funds are used to create public parks, recreational areas, etc. Many trees will likely need to be removed during the development of the proposed Site 9B, Mid-Field, Southeast and Northeast development areas.

As potential mitigation against fees, a buffer of trees approximately 400 feet wide, could be reserved along the east property boundary. This buffer would start at the northern most point on the eastern boundary and run south until it reaches the Southeast development area. This buffer would run approximately 4.5 linear miles and would occupy approximately 218 acres. This buffer should not impact the preferred development plan and may assist in offsetting potential fees.

6.15 FLOODPLAINS

Along the coastal area of Florida, two classifications of floodplains (tidal and stormwater) generally exist.



Source: SJRWMD Permit # 4-031-70452-1, Approved November 13, 2001

Scale: 1"=4000'



**EXHIBIT 6-39A:
SJRWMD PERMIT
ALLOCATION OF
WETLAND IMPACTS**

CECIL FIELD AIRPORT

**Exhibit 6-40:
SJRWMD/USCOE Wetland Credits**

	SJRWMD Permit	COJ/JAA MOA	COE
Total	496.06	497.06	413.54
JAA Credits	157.4	127.55	105.16
COJ Credits	306.42	369.51	308.31
Equestrian Center		17.40	11.57
Recreation Area		12.00	9.12
JEA		34.38	25.20
Remaining COJ Credits		305.73	323.62
Roadway			
JAA	7.51		
COJ	27.74		
Wetland Creation		100.00	100.00
JAA Creation		28.68	28.68
COJ Creation		71.32	71.32

Schedule Release of USCOE Mitigation Credits

Activity	Mitigation Credits Released	City Credit	JAA Credit
Record conservation easements for 4,483.96-acre tract for the City of Jacksonville.	185.87	185.87	00
Opinion of Title letter submitted and approved on the 1,398.56-acre tract for the JAA.	27.95	0	27.95
Record mitigation easement for the 1,398.56-acre tract for the JAA.	27.95	0	27.95
Successful implementation of the 1,922-acre enhancement area (Shared)	80.50	57.41	23.09
Complete tree plantings on the 100-acre creation area (Shared)	22.82	16.28	6.54
1 year of monitoring indicating successful establishment in the creation area (Shared)	13.69	9.76	3.93
2 year of monitoring indicating successful establishment in the creation area (Shared)	13.69	9.76	3.93
3 year of monitoring indicating successful establishment in the creation area (Shared)	13.69	9.76	3.93
4 year of monitoring indicating successful establishment in the creation area (Shared)	13.69	9.76	3.93
Achievement of final success after 5 years of monitoring which indicates successful establishment in the creation area (Shared)	13.69	9.76	3.93
Total	413.54	308.38 (74.6%)	105.16 (25.4%)

SJRWMD Acreage Translation into WRAP Scores	WRAP Score Average Conversion Factor	SJRWMD Conceptual Permit Acreage	Total COE Impact Allocation
JEA Mitigation	0.73	34.38	25.10
Equestrian Center/Utility Corridor	0.76	15.22	11.57
Future Parks & Recreation Area	0.76	12.00	9.12

Note: These impact acreages are to be allocated from the City's allocated figure of 308.31 acres.

Source: Memorandum of Agreement between the City of Jacksonville and the JAA Allocating Mitigation Credits and Wetland Creation at Cecil Field Commerce Center, August 24, 2004

Tidal floodplains are the result of tide and wind generated flood stages, while stormwater floodplains are associated with rainfall. A floodplain is an area of relatively level land that is inundated from time to time. It may border a stream, lake or river, or may be a watercourse in its own right. Floodplain areas are subject to a one-percent, or greater, chance of flooding at anytime (may be inundated during a 100-year flood). The Jacksonville area has a slight elevation above sea level and relatively flat topographic land surface, and as a result of this, extensive floodplain areas exist, **Exhibit 6-41**.

The streams that encompass the most floodplain area on the airport property are Sal Taylor Creek and Rowell Creek. Three areas exist on Cecil Field which area located in a floodplain area. The first area is located on the eastern edge of the property and is mainly contained in the Conservation Corridor. The Jacksonville GIS classifies this area as "A" which means that this area is in a 100-year floodplain and will be inundated by water during a 100-year storm.

The second area is located on the southeast property boundary, south of Runway 9R-27L and east of Runway 18L-36R. A majority of this area lies within Cecil Field property while a small portion lies within the Rural Residential land use located outside of the airport property. This is classified as "AO" which corresponds to shallow flooding with average depths between 1 and 3 feet during a 100-year storm. The western edge of this area extends towards the Southeast development area but should not affect development of the proposed alternative. The third area is located just northeast of the second area and also shares the same "AO" designation. This third area is located near the Northeast development area but should not affect its development.

6.16 COASTAL ZONE MANAGEMENT PROGRAM

The Coastal Zone Management Act of 1977 was enacted to preserve, protect and minimize direct effects to the nation's coastal zones. The federal Coastal Zone Management Act, through the Federal Consistency provisions, requires that all federal activities within the state be consistent with the statutes contained in the Florida Coastal Management Program (FCMP). Local governments are also given the opportunity to determine whether these activities are consistent with their goals and policies as a result of Florida's comprehensive planning act. The goal of

the Florida Coastal Zone Management Program Act program is to coordinate local, state and federal agency activities by enforcing existing laws. The following are examples of activities that are likely to require consistency determinations:

- Federally funded activities
- Large-scale development projects or industrial expansion
- Point or non-point source discharge to surface waters

Florida's Department of Environmental Protection is responsible for the implementation of the state-wide coastal management program. The closest coastal region is located approximately 26.6 miles from Cecil Field, therefore, it is reasonable to assume that Cecil Field will have no impact on the Coastal Zone Management Program as defined above.

6.17 COASTAL BARRIERS

In order to address potential problems that could be caused by coastal barrier developments, congress passed the Coastal Barrier Resources Act (CBRA) in 1982. The CBRA restricted Federal expenditures and financial assistance, including federal flood insurance, in the Coastal Barrier Resource System.

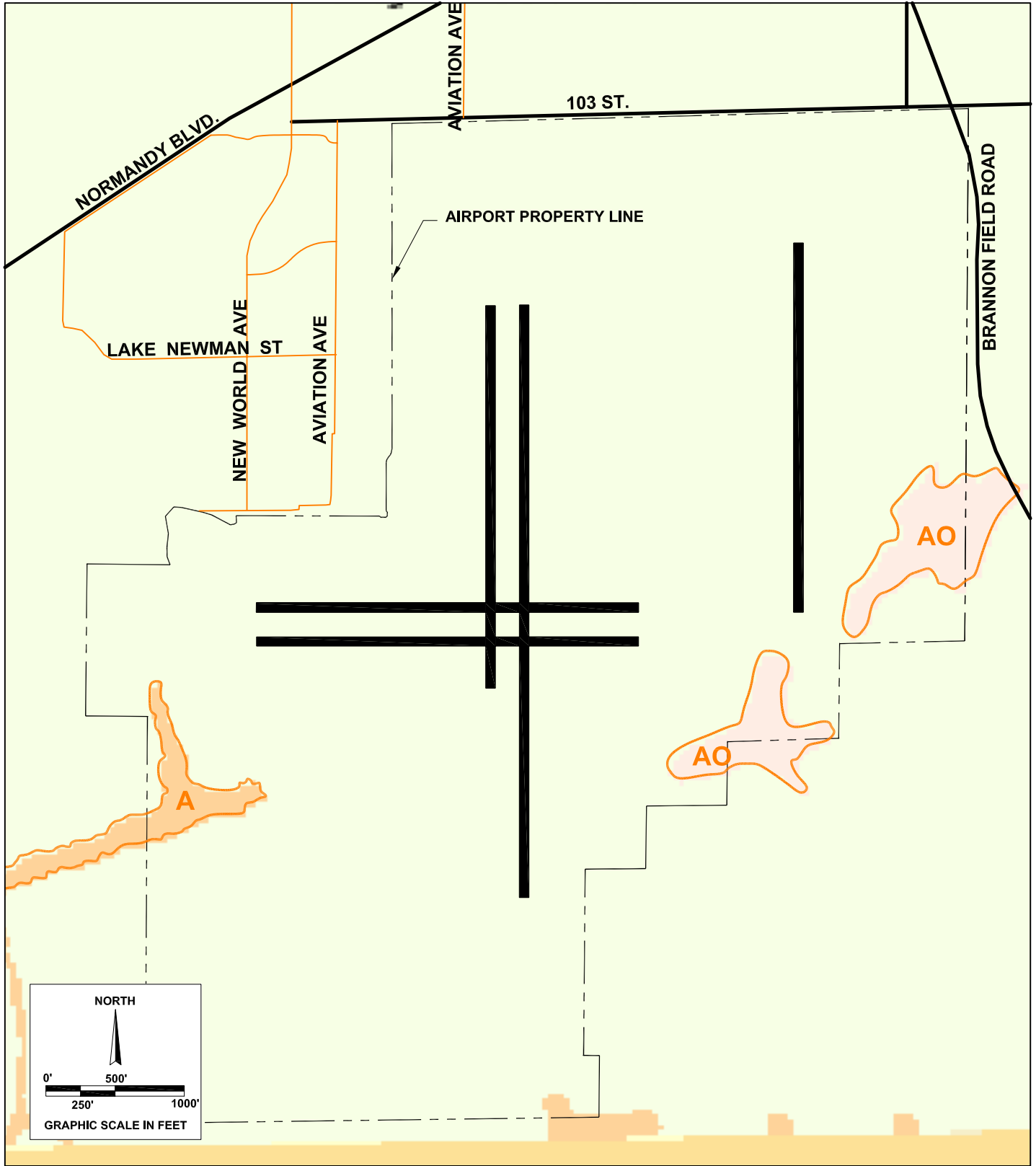
Three important goals of this Act are to:

- minimize loss of human life by discouraging development in high risk areas
- reduce wasteful expenditure of Federal resources
- protect the natural resources associated with coastal barriers

With the closest coastal region located approximately 26.6 miles from Cecil Field, it is reasonable to assume that Cecil Field is not located in an area designated for coastal barrier review.

6.18 WILD AND SCENIC RIVERS

The Wild and Scenic Rivers Act, (P.L. 90-542, as amended) describes and names those river areas that are eligible to be maintained and act as free-flowing.



**EXHIBIT 6-41
LOCATION OF FLOODPLAINS
AT CECIL FIELD**

CECIL FIELD AIRPORT

These river areas possess “outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values...” Cecil Field does not appear to contain rivers as defined above. Therefore, no impacts would be contributed to the wild and scenic rivers category.

6.19 PRIME AND UNIQUE FARMLANDS

Prime and unique farmlands consist of lands that are best suited for producing food, feed, and other types of crops. It has the soil quality and moisture supply needed to produce and sustain high yields of crops when treated and managed according to modern farming methods.

The production of timber is one of the agricultural land uses located on and in the vicinity of Cecil Field. This land use will remain in the forestry management/airport reserve area until the new parallel runway and midfield area are constructed.

6.20 ENERGY SUPPLY AND NATURAL RESOURCES

Typically two areas are of concern within airport development when regarding energy supply and natural resources. They are:

- Stationary sources (terminal building, airfield lighting, other facilities)
- Mobile sources (aircraft and automobiles)

The primary sources of increased stationary energy consumption would be due to the expansion of the airport facilities. This expansion would include the development of a midfield industrial facility and the expansion of the general aviation facilities. The primary airside energy sources would consist of the runway, taxiway and approach lighting and installation of an ILS. Mobile energy expenditure would be comprised of aircraft fuel consumption.

6.21 LIGHT EMISSIONS

Airport lighting systems are mainly located in the following areas:

- Airfield
- Apron
- Terminal

- Parking lots, and
- Access roadways.

It is important the airport is aware when an action's lighting interferes or creates annoyance among people in the vicinity of an installation. To determine if an annoyance exists, several factors must first be considered:

- Site location of lights or lighting systems
- Purpose of the light system, either pole or ground mounted, beam angle, intensity, color, flashing frequency, and other pertinent characteristics.
- Possible measures, including shielding or angular adjustments, available to lessen any annoyances.

A possible lighting project to occur at the airport includes the addition of a Medium-Intensity Approach Lighting System with Runway Alignment Indicator (MALSR) for the west end of Runway 9R-27L. Lighting projects have already taken place to the south of the Airport and this new improvement will affect areas to the west of the Airport. Agricultural and Recreational and Open Space land use categories are located in this area and neither of these two categories should be sensitive to the increased level of light. FAA Environmental Handbook Order 5050.4B states the significance threshold for light emissions as when an action's light emissions create annoyance to interfere with normal activities. If Federal, State, or local agencies, such as the FAA, City of Jacksonville, Duval or Clay Counties, determine these lighting effects contrast with existing environments and the agencies state the effect is objectionable, then an Environmental Assessment may be required and alternatives may need to be considered.

6.22 SOLID WASTE IMPACTS

Solid waste is typically affected by commercial, industrial and terminal development rather than airfield development. Projects which relate only to airfield development (runways, taxiways, etc.) do not normally result in any direct impact to solid waste collection, control, or disposal other than that associated with the construction itself. Demolition and reconstruction of the existing facilities and the construction of new facilities at Cecil Field will result in increased solid waste activity.

Landfills on or near airports are considered to be a potential impact due to a landfill's capacity to attract birds; this will possibly create strike hazards with approaching and departing aircraft. FAA Order 5200.5A, Waste Disposal On or Near Airports, provides guidance regarding the location of sanitary landfills. Within this document, it is recommended that a landfill should not be located closer than a minimum of 10,000 feet from all airport runways. Should any landfills be located closer than 10,000 feet then they shall be limited to construction debris.

The additional waste volume associated with demolition and construction should be accommodated and handled by the airport's existing sanitary sewer/refuse disposal system and through ongoing facility improvements to the local waste water treatment facilities.

6.23 CONSTRUCTION IMPACTS

Potential construction impacts include the following:

- *Noise:* Heavy construction equipment will generate noise; however, it is expected that this noise will occur only during the daylight hours. During demolition and construction of new facilities, it is expected that temporary noise impacts could possibly occur near the existing residential areas located in close proximity to a project site which may require implementation of temporary mitigation measures. Noise is an expected by-product of construction and will not produce any permanent, on-going impacts.
- *Dust:* Potential impacts of dust during construction include:
 - Reduced visibility
 - Unsightly coatings on buildings
 - Discomfort for dust-sensitive individuals

Methods for dust control can be implemented to minimize dust generation and transport. It is expected that there will be no substantial dust impacts to neighborhood residences due to their distance from the proposed projects. Dust generation and transport should not pose a significant temporary impact.

- *Air Emissions:* Air emission impacts from construction activity would occur. Construction activity will produce emissions from vehicles, equipment and other construction activity associated with the projects. A temporary increase in emissions will occur due to the presence of the constant internal combustion engines running. While these activities will produce a temporary increase of emissions, they are typical of large construction projects and will not pose any lasting negative impacts.
- *Erosion:* Some erosion and subsequent sedimentation in the vicinity of the proposed projects may likely occur due to the amount of earthwork involved. Erosion control measures required by the FAA, FDEP, St. John's River Water Management District (SJRWMD), and other agencies will be required to be incorporated into project design plans and specifications.

As is the case with dust impacts, the volume of work, duration of operations, and time of exposure are factors which determine the amount of potential erosion. The impacts of erosion will be quantified in a detailed EA/EIS for the runway development, which would then help guide the development of an erosion control plan. FAA Advisory Circular 150/5370-10A, entitled Standards for Specifying Construction of Airports provides guidance in the avoidance of adverse construction impacts.

6.24 ENVIRONMENTAL OVERVIEW SUMMARY

The preferred development plan for Cecil Field over the 20-year planning period might include some potential environmental impacts such as noise, compatible land use, soil and groundwater contamination, air quality, wetlands, water quality, historically sensitive sites, floodplains, farmlands and hazardous materials.

According to this overview, the environmental conditions affecting the proposed development plan, such as Site 9B, the Mid-Field, Southeast and Northeast Development areas should be minimal. The soil and groundwater contamination could have a small impact on the development of Site 9B but this contamination is currently under remediation and development could soon be relatively unrestricted.

Historically sensitive sites have been located at Cecil Field but are not located in areas of planned development. Wetland areas will likely be impacted by the Mid-Field, Southeast and Northeast development areas and the creation of the Natural Corridor and additional wetland areas on airport property will help mitigate these adverse impacts. A tree buffer may potentially offset the City of Jacksonville's mitigation fees for tree removal as well as add a visual barrier between off-airport and on-airport activities. Three areas of floodplains exist, one of which is primarily located in the Conservation Corridor and the other two

are not located in areas of currently planned development.

Continued study and/or coordination in a formal environmental study may be required during the preliminary design development of future airport projects. The development of Runway 17-35 will more than likely require an Environmental Impact Statement, and these studies can define more precisely the impact of development on specific areas of concern, such as wetlands, historically sensitive sites, light emissions, floodplains, etc.

CHAPTER 7

CAPITAL IMPROVEMENT PROGRAM

7.1 INTRODUCTION

The proposed airport improvements recommended in this study encompass several individual airfield, landside, and other general airport improvements necessary to accommodate the projected growth in aviation activities and to address the identified goals established for Cecil Field. This chapter presents a general order of priority for the implementation of these improvements through individual projects based on:

- The need for the identified improvement;
- Prerequisites of the respective improvements;
- Anticipated funding available for each improvement.

In addition to projecting a general schedule for the implementation sequence of these projects, this chapter also provides an opinion of the probable costs for implementing each identified project. The anticipated schedule is presented as a developmental guideline that follows a logical implementation plan based on current factors and projections. Actual project implementation should generally occur when the actual need for an improvement is realized and when funding for the improvement is available.

7.2 PROJECT PHASING

In order to clearly present the proposed priority of the future airport improvements, the proposed project schedule has been divided into three phases as follows:

- Short-Term Improvements (2007-2011)
- Mid-Term Improvements (2012-2016)
- Long-Term Improvements (2017-2026)

It must be noted that an airport's Capital Improvement Program (CIP) is a dynamic process requiring continuous maintenance in order to guide efficient

airport development. Although these three phases above estimate the general period (in calendar years) anticipated for future airport improvements, periodic re-evaluation of the schedules will be necessary to accommodate variations for the aviation forecasts and to adjust for other of the other unforeseen factors. It is also possible that other improvements not identified in this study may also be required to facilitate safe and efficient airport operations. All future improvement projects identified in this report of otherwise shall be compatible with the development strategies proposed in the most-recent version of the Airport Layout Plan (ALP) for Cecil Field.

7.3 PROBABLE DEVELOPMENT COSTS

The estimated total project costs presented for each identified airport improvement reflects a preliminary opinion of the probably implementation cost for the project, including an allowance for project mobilization costs. In addition to the estimated construction costs, anticipated fees for design, inspection, permitting, surveying, testing and administration have also been included in the overall cost estimate as applicable.

Where detailed proposals or bids are available, each opinion of probable project costs is presented in 2007 dollars and generally includes a contingency for budgeting purposes. The contingency may range from 0% to 20% based on the level of detail possible for the respective project. In instances where two or more of these projects can be funded and scheduled for implementation simultaneously, overall project costs may be reduced by avoiding a duplication of some items, such as mobilization costs, project design costs, and costs associated with other design services. For example, the construction of hangars, aprons, and parking lots for the Mid-Field Development Area have been combined into one project in order to reduce costs. However, these projects can be separated into sub-projects if desired.

A detailed environmental analysis will be required prior to implementing at least one of the identified projects to determine potential environmental and budgetary

impacts resulting from the proposed development. Some of the projects may require mitigation measures to offset impacts to environmentally-sensitive area whereas other projects may require some level of environmental remediation based on unknown conditions. Costs for extensive mitigation or remediation measures related to future airport improvement projects have not been included in the project cost estimates.

7.4 PROJECT DESCRIPTIONS

For each proposed project, a package has been assembled to assist the airport in applying for grants and other financial assistance. Most of the projects are described by a three-page package that includes basic information necessary for grant application. The first

page of each package is a narrative description of the project along with information required from the Joint Automated Capital Improvement Program (JACIP) database. This page is intended to facilitate entry of CIP projects into the JACIP system.

The second page of each package is a diagram showing the location and extent of each project along with nearby significant airport landmarks. Some projects do not have a diagram due to the type of project.

The last page of each package is a cost estimate. Cost estimates are based on approximate quantities and include professional services and contingency fees where applicable.

**20-YEAR CAPITAL IMPROVEMENT PROGRAM (2007-2026)
CECIL FIELD**

	TOTAL PROJECT COST
1 Comprehensive Planning and Environmental Planning	\$ 250,000
2 Hangar 13 Roof Rehabilitation	\$ 250,000
3 Airport Parking Rehabilitation - Phase I	\$ 682,000
4 Central Taxilane Extension	\$ 637,000
5 North Taxiway Development - Drainage and Utilities	\$ 2,145,000
6 Approach Lighting System on Runway 9R/27L	\$ 1,354,000
7 Roof Rehabilitation - Hangar 13 (Phase II), 825, 815, 1820, Buildings 595 and 504	\$ 3,247,000
8 Rehabilitate Hangar 67 Roof	\$ 1,700,000
9 Building 373, 33 and 34 Demolition	\$ 150,000
10 Building 329 Demolition	\$ 70,000
11 Parking Lot Upgrade - Phase II	\$ 598,000
12 Building 82/Terminal Rehab - Phase II	\$ 236,000
13 Buildings 324, 365 and 366 Demolition	\$ 150,000
14 New Entrance Sign	\$ 76,000
15 Site 9B Taxiway	\$ 2,478,000
16 Construct New Apron	\$ 6,494,000
17 Airport Pavement Joint Rehabilitation, Phase I	\$ 452,000
18 Building 82/Terminal Rehab - Phase IV	\$ 850,000
19 MRO Hangar Development, Northwest Area	\$ 37,645,000
20 Site 9B Hangar & Parking Lot - Phase I	\$ 36,589,000
21 Drainage Rehabilitation and Upgrade - Phase III	\$ 1,175,000
22 Airport Pavement Joint Rehabilitation, Taxiways	\$ 572,000
23 Install FAA Certified Surface Observation System	\$ 303,000
24 Airport Roadway Pavement Rehab - Phase I	\$ 1,612,000
25 Rehabilitate High Power Area, Taxiway A2	\$ 250,000
26 Wildlife Fencing	\$ 1,000,000
27 Mid-Field Area Development Roadway Access	\$ 7,498,000
28 Runway/Taxiway/Safety Area Drainage, Rehab - Phase III	\$ 1,100,000
29 Design and Construct Taxiway "D" Extension North	\$ 6,770,000
30 Site 9B Hangar, Apron & Parking Lot - Phase II	\$ 43,071,000
31 Site 9B Taxilane	\$ 481,000
32 Site 9B Hangar, Apron & Parking Lot - Phase III	\$ 26,339,000
33 Fire Suppression System, Rehab, Well Five	\$ 300,000
34 Mid-Field Storm Water Improvements	\$ 500,000
35 Mid-Field Area Development - Drainage Improvements	\$ 3,000,000
36 Mid-Field Area Development Roadway Access - Phase II, Interior Loop	\$ 9,317,000
37 Site 9B Hangar, Apron & Parking Lot - Phase IV	\$ 22,338,000
38 Cecil Field ARFF Emergency Vehicle	\$ 690,000
39 Fire Suppression Well Rehabilitation, Well Four	\$ 300,000
40 Site 9B Hangar, Apron & Parking Lot - Phase V	\$ 21,217,000
41 Airport Security Improvements - Phase I	\$ 454,000
42 Rehabilitate & Remark Taxiway Surfaces	\$ 450,000
43 Rehabilitate Bldg. 1846 and 880 Roof Replacement	\$ 402,000
44 Sluice Gate Rehab	\$ 302,000
45 Rehabilitate Building 313, Roof Replacement	\$ 300,000
46 Rejuvenation of Airport Pavement	\$ 1,021,000
47 Mid-Field Taxilane - Phase I	\$ 1,633,000
48 Mid-Field Hangar, Apron & Parking Lot - Phase I	\$ 64,147,000
49 Airport Roadway Pavement Rehab	\$ 1,148,000
50 Mid-Field Area Development - Drainage Improvements	\$ 700,000
51 Airport Master Plan Update (2012)	\$ 240,000
52 Mid-Field Parallel Taxiway - Phase I	\$ 6,204,000
53 Apron Rehabilitation	\$ 750,000
54 Mid-Field Taxilane - Phase II	\$ 1,356,000
55 Mid-Field Hangar, Apron & Parking Lot - Phase II	\$ 63,092,000
56 Fire Suppression and Fire Loop Rehabilitation (Hgr 13, 14, Fire Loop Phase VI)	\$ 2,469,000
57 Installation ILS and MALSR - Runway 9R/27L	\$ 3,660,000

**20-YEAR CAPITAL IMPROVEMENT PROGRAM (2007-2026) - continued
CECIL FIELD**

	TOTAL PROJECT COST
58 Northwest Infrastructure Improvement	\$ 1,397,000
59 Rehabilitate Terminal Road and Parking Lot	\$ 819,000
60 New Air Traffic Control Tower	\$ 4,814,000
61 Mid-Field Taxiway - Phase III	\$ 1,311,000
62 Mid-Field Hangar, Apron & Parking Lot - Phase III	\$ 63,127,000
63 Mid-Field Taxiway - Phase IV	\$ 1,311,000
64 Mid-Field Hangar, Apron & Parking Lot - Phase IV	\$ 62,906,000
65 Update Master Plan/ALP (2015)	\$ 240,000
66 Runway/Taxiway/Safety Area Drainage, Rehabilitation - Phase IV	\$ 500,000
67 Mid-Field Taxiway - Phase V	\$ 1,420,000
68 Mid-Field Hangar, Apron & Parking Lot - Phase V	\$ 40,471,000
69 Mid-Field Parallel Taxiway - Phase II	\$ 4,062,000
70 Airport Security Improvements - Phase II	\$ 1,089,000
71 Southeast Development Roadway Access	\$ 3,601,000
72 Mid-Field Taxiway - Phase VI	\$ 1,899,000
73 Mid-Field Hangar, Apron & Parking Lot - Phase VI	\$ 37,044,000
74 Mid-Field Parallel Taxiway - Phase III	\$ 2,974,000
75 Southeast Development Drainage Improvements - Phase I	\$ 500,000
76 Mid-Field Taxiway - Phase VII	\$ 3,620,000
77 Mid-Field Hangar, Apron & Parking Lot - Phase VII	\$ 33,002,000
78 Mid-Field Parallel Taxiway - Phase IV	\$ 515,000
79 Rehabilitate & Remark Runways and Taxiways	\$ 9,799,000
80 Southeast Development Utility Improvements	\$ 202,000
81 Mid-Field Taxiway - Phase VIII	\$ 1,440,000
82 Mid-Field Hangar, Apron & Parking Lot - Phase VIII	\$ 25,976,000
83 Southeast Taxiway - Phase I	\$ 481,000
84 Southeast Hangars & Apron - Phase I	\$ 19,257,000
85 Southeast Parallel Taxiway - Phase I	\$ 6,369,000
86 Southeast Access Road & Parking Lot - Phase I	\$ 1,116,000
87 Southeast Taxiway - Phase II	\$ 1,255,000
88 Southeast Hangars & Aprons - Phase II	\$ 12,853,000
89 New GA Terminal in Southeast Development Area	\$ 7,920,000
90 Southeast Access Road & Parking Lot - Phase II	\$ 700,000
91 Southeast Access Road & Parking Lot - Phase III	\$ 978,000
92 Approach Lighting System on Runway 18L/36R	\$ 1,656,000
93 Rejuvenation of Airport Pavement	\$ 1,021,000
94 Southeast Development Drainage Improvements - Phase II	\$ 1,000,000
95 Southeast Taxiway - Phase III	\$ 660,000
96 Southeast Hangars & Apron - Phase III	\$ 19,489,000
97 Southeast Taxiway - Phase IV	\$ 739,000
98 Southeast Hangar & Apron - Phase IV	\$ 19,427,000
99 Southeast Parallel Taxiway - Phase II	\$ 3,825,000
100 Airport Security Improvements - Phase III	\$ 245,000
101 Southeast Taxiway - Phase V	\$ 739,000
102 Southeast Hangar & Apron - Phase V	\$ 19,427,000
103 Southeast Parallel Taxiway - Phase III	\$ 5,939,000
104 Southeast Access Road & Parking Lot - Phase IV	\$ 913,000
105 Environmental Assessment for Runway 17/35	\$ 1,000,000
106 Southeast Taxiway - Phase VI	\$ 1,338,000
107 Southeast Hangar & Apron - Phase VI	\$ 20,860,000
108 Southeast Access Road & Parking Lot - Phase V	\$ 913,000
109 Southeast Taxiway - Phase VII	\$ 1,550,000
110 Southeast Hangar & Apron - Phase VII	\$ 20,860,000
111 Southeast Access Road & Parking Lot - Phase VI	\$ 1,006,000
112 Southeast Access Road & Parking Lot - Phase VII	\$ 1,037,000
113 Construct Runway 17/35	\$ 40,320,000
114 Approach Lighting System on Parallel Runway 17/35	\$ 1,116,000

20-YEAR CAPITAL IMPROVEMENT PROGRAM -- TOTAL \$	912,262,000
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	FAA	FDOT	LOCAL	OTHER	TOTAL
2007	\$ 6,131,500	\$ 2,021,250	\$ 2,257,250	\$ -	\$ 10,410,000
2008	\$ 5,642,750	\$ 2,061,075	\$ 1,410,175	\$ 78,828,000	\$ 87,942,000
2009	\$ 5,967,000	\$ 683,250	\$ 885,750	\$ 69,410,000	\$ 76,946,000
2010	\$ 3,506,000	\$ 1,299,750	\$ 1,269,750	\$ 37,733,000	\$ 43,808,500
2011	\$ 2,287,500	\$ 1,066,500	\$ 1,116,500	\$ 21,217,000	\$ 25,687,500
2012	\$ 5,820,000	\$ 1,582,000	\$ 1,442,000	\$ 64,147,000	\$ 72,991,000
2013	\$ 7,554,000	\$ 1,050,000	\$ 1,650,000	\$ 64,561,000	\$ 74,815,000
2014	\$ 4,485,000	\$ 985,000	\$ 985,000	\$ 63,127,000	\$ 69,582,000
2015	\$ 3,449,000	\$ 51,000	\$ 51,000	\$ 62,906,000	\$ 66,457,000
2016	\$ 3,946,000	\$ 1,062,500	\$ 1,562,500	\$ 40,471,000	\$ 47,042,000
2017	\$ 5,729,000	\$ 1,122,500	\$ 1,622,500	\$ 37,044,000	\$ 45,518,000
2018	\$ 4,404,000	\$ 115,500	\$ 115,500	\$ 33,002,000	\$ 37,637,000
2019	\$ 3,959,500	\$ 1,041,000	\$ 1,541,000	\$ 25,976,000	\$ 32,517,500
2020	\$ 4,573,000	\$ 1,091,000	\$ 1,541,000	\$ 22,848,500	\$ 30,053,500
2021	\$ 2,117,000	\$ 1,044,000	\$ 1,569,000	\$ 23,722,000	\$ 28,452,000
2022	\$ 3,604,000	\$ 1,060,000	\$ 1,560,000	\$ 38,916,000	\$ 45,140,000
2023	\$ 3,874,000	\$ 1,024,500	\$ 1,524,500	\$ 19,427,000	\$ 25,850,000
2024	\$ 2,721,000	\$ 971,500	\$ 971,500	\$ 20,860,000	\$ 25,524,000
2025	\$ 2,973,000	\$ 1,060,000	\$ 1,060,000	\$ 20,860,000	\$ 25,953,000
2026	\$ 2,560,000	\$ 1,028,000	\$ 1,528,000	\$ 34,820,000	\$ 39,936,000
Total:	\$ 85,303,250	\$ 21,420,325	\$ 25,662,925	\$ 779,875,500	\$ 912,262,000

Average/Year:	\$ 4,265,163	\$ 1,071,016	\$ 1,283,146	\$ 38,993,775	\$ 45,613,100
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*Based on identified projects meeting current eligibility requirements for each funding source. Funding program may vary based on changes in project priorities, changes in project scope or definition, changes in project limits or locations, changes in project budget, availability of funds, or other factors.

**NATIONAL PRIORITY SYSTEM - PRIORITY RATINGS
20-YEAR CAPITAL IMPROVEMENT PROGRAM (2007-2026)
CECIL FIELD - MASTER PLAN UPDATE**

PROJECT NUMBER	PROJECT DESCRIPTION	NPS Priority
1	Comprehensive Planning and Environmental Planning	58
2	Hangar 13 Roof Rehabilitation	34
3	Airport Parking Rehabilitation - Phase I	19
4	Central Taxilane Extension	61
5	North Taxiway Development - Drainage and Utilities	61
6	Approach Lighting System on Runway 9R/27L	50
7	Roof Rehabilitation - Hangars 13 (Phase 2), 825, 815, 1820, Bdgs 595 and 504	34
8	Rehabilitate Hangar 67 Roof	34
9	Building 373, 33 and 34 Demolition	34
10	Building 329 Demolition	34
11	Parking Lot Upgrade - Phase II	19
12	Building 82/Terminal Rehab - Phase III	36
13	Buildings 324, 365 and 366 Demolition	34
14	New Entrance Sign	47
15	Site 9B Taxiway	50
16	Construct New Apron	56
17	Airport Pavement Joint Rehabilitation, Phase I	72
18	Building 82/Terminal Rehab - Phase IV	36
19	MRO Hangar Development, Northwest Area	19
20	Site 9B Hangar & Parking Lot - Phase I	56
21	Drainage Rehabilitation and Upgrade - Phase III	45
22	Airport Pavement Joint Rehabilitation, Taxiways	68
23	Install FAA Certified Surface Observation System	47
24	Airport Roadway Pavement Rehab - Phase I	23
25	Rehabilitate High Power Area, Taxiway A2	62
26	Wildlife Fencing	43
27	Mid-Field Area Development Roadway Access	23
28	Runway/Taxiway/Safety Area Drainage, Rehab - Phase III	45
29	Design and Construct Taxiway "D" Extension North	50
30	Site 9B Hangar, Apron & Parking Lot - Phase II	56
31	Site 9B Taxilane	61
32	Site 9B Hangar, Apron & Parking Lot - Phase III	56
33	Fire Suppression System, Rehab, Well Five	20
34	Mid-Field Storm Water Improvements	45
35	Mid-Field Area Development - Drainage Improvements	45
36	Mid-Field Area Development Roadway Access - Phase II, Interior Loop	23
37	Site 9B Hangar, Apron & Parking Lot - Phase IV	56
38	Cecil Field ARFF Emergency Vehicle	50
39	Fire Suppression Well Rehabilitation, Well Four	20

Airport Points	Purpose		Component		Type	
	Code	Points	Code	Points	Code	Points
5	PL	8	PL	7	MS	5
5	ST	6	BD	3	MS	5
5	OT	4	OT	7	PA	1
5	CA	7	TW	8	CO	10
5	EN	8	OT	7	MT	6
5	ST	6	RW	10	VI	8
5	ST	6	BD	3	MS	5
5	ST	6	BD	3	MS	5
5	ST	6	BD	3	MS	5
5	ST	6	BD	3	MS	5
5	OT	4	OT	7	PA	1
5	ST	6	TE	1	IM	8
5	ST	6	BD	3	MS	5
5	ST	6	OT	7	SG	9
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	RE	8	TW	8	IM	8
5	ST	6	TE	1	IM	8
5	OT	4	OT	7	PA	1
5	CA	7	AP	5	CO	10
5	ST	6	OT	7	IM	8
5	RE	8	TW	8	IM	8
5	ST	6	EQ	8	WX	8
5	OT	4	GT	4	AC	7
5	RE	8	TW	8	IM	8
5	SA	10	EW	8	SE	6
5	OT	4	GT	4	AC	7
5	ST	6	OT	7	IM	8
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	BD	3	MS	5
5	ST	6	OT	7	IM	8
5	ST	6	OT	7	IM	8
5	OT	4	GT	4	AC	7
5	CA	7	AP	5	CO	10
5	ST	6	EQ	8	RF	10
5	ST	6	BD	3	MS	5

NATIONAL PRIORITY SYSTEM - PRIORITY RATINGS
20-YEAR CAPITAL IMPROVEMENT PROGRAM (2007-2026)
CECIL FIELD - MASTER PLAN UPDATE

PROJECT NUMBER	PROJECT DESCRIPTION	NPS Priority
40	Site 9B Hangar, Apron & Parking Lot - Phase V	56
41	Airport Security Improvements - Phase I	43
42	Rehabilitate & Remark Taxiway Surfaces	68
43	Rehabilitate Bldg. 1846 and 880 Roof Replacement	34
44	Sluice Gate Rehab	61
45	Rehabilitate Building 313, Roof Replacement	34
46	Rejuvenation of Airport Pavement	62
47	Mid-Field Taxilane - Phase I	61
48	Mid-Field Hangar, Apron & Parking Lot - Phase I	56
49	Airport Roadway Pavement Rehab	22
50	Mid-Field Area Development - Drainage Improvements	45
51	Airport Master Plan Update (2012)	68
52	Mid-Field Parallel Taxiway - Phase I	50
53	Apron Rehabilitation	62
54	Mid-Field Taxilane - Phase II	61
55	Mid-Field Hangar, Apron & Parking Lot - Phase II	56
56	Fire Supression and Fire Loop Rehabilitation (Hgr 13, 14, Fire Loop Phase VI)	34
57	Installation ILS and MALSR - Runway 9R/27L	48
58	Northwest Infrastructure Improvement	61
59	Rehabilitate Terminal Road and Parking Lot	22
60	New Air Traffic Control Tower	34
61	Mid-Field Taxilane - Phase III	61
62	Mid-Field Hangar, Apron & Parking Lot - Phase III	56
63	Mid-Field Taxilane - Phase IV	61
64	Mid-Field Hangar, Apron & Parking Lot - Phase IV	56
65	Update Master Plan/ALP (2015)	58
66	Runway/Taxiway/Safety Area Drainage, Rehabilitation - Phase IV	45
67	Mid-Field Taxilane - Phase V	61
68	Mid-Field Hangar, Apron & Parking Lot - Phase V	56
69	Mid-Field Parallel Taxiway - Phase II	50
70	Airport Security Improvements - Phase II	43
71	Southeast Development Roadway Access	23
72	Mid-Field Taxilane - Phase VI	61
73	Mid-Field Hangar, Apron & Parking Lot - Phase VI	56
74	Mid-Field Parallel Taxiway - Phase III	50
75	Southeast Development Drainage Improvements - Phase I	45
76	Mid-Field Taxilane - Phase VII	61
77	Mid-Field Hangar, Apron & Parking Lot - Phase VII	56
78	Mid-Field Parallel Taxiway - Phase IV	50

Airport Points	Purpose		Component		Type	
	Code	Points	Code	Points	Code	Points
5	CA	7	AP	5	CO	10
5	ST	6	EQ	8	SE	6
5	RE	8	TW	8	IM	8
5	ST	6	BD	3	MS	5
5	EN	8	OT	7	MT	6
5	ST	6	BD	3	MS	5
5	RE	8	RW	10	IM	8
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	OT	4	GT	4	SV	6
5	ST	6	OT	7	IM	8
5	PL	8	PL	7	MA	9
5	ST	6	TW	8	CO	10
5	RE	8	AP	5	IM	8
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	BD	3	MS	5
5	ST	6	RW	10	IN	7
5	CA	7	TW	8	CO	10
5	OT	4	GT	4	SV	6
5	ST	6	BD	3	MS	5
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	PL	8	PL	7	MA	9
5	ST	6	OT	7	IM	8
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	ST	6	EQ	8	SE	6
5	OT	4	GT	4	OT	7
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	ST	6	OT	7	IM	8
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10

NATIONAL PRIORITY SYSTEM - PRIORITY RATINGS
20-YEAR CAPITAL IMPROVEMENT PROGRAM (2007-2026)
CECIL FIELD - MASTER PLAN UPDATE

PROJECT NUMBER	PROJECT DESCRIPTION	NPS Priority
79	Rehabilitate & Remark Runways and Taxiways	72
80	Southeast Development Utility Improvements	20
81	Mid-Field Taxilane - Phase VIII	61
82	Mid-Field Hangar, Apron & Parking Lot - Phase VIII	56
83	Southeast Taxilane - Phase I	61
84	Southeast Hangars & Apron - Phase I	56
85	Southeast Parrallel Taxiway - Phase I	50
86	Southeast Access Road & Parking Lot - Phase I	23
87	Southeast Taxilane - Phase II	61
88	Southeast Hangars & Aprons - Phase II	56
89	New GA Terminal in Southeast Development Area	40
90	Southeast Access Road & Parking Lot - Phase II	23
91	Southeast Access Road & Parking Lot - Phase III	23
92	Approach Lighting System on Runway 18L/36R	28
93	Rejuvenation of Airport Pavement	62
94	Southeast Development Drainage Improvements - Phase II	45
95	Southeast Taxilane - Phase III	61
96	Southeast Hangars & Apron - Phase III	56
97	Southeast Taxilane - Phase IV	61
98	Southeast Hangar & Apron - Phase IV	56
99	Southeast Parallel Taxiway - Phase II	50
100	Airport Security Improvements - Phase III	43
101	Southeast Taxilane - Phase V	61
102	Southeast Hangar & Apron - Phase V	56
103	Southeast Parallel Taxiway - Phase III	50
104	Southeast Access Road & Parking Lot - Phase IV	23
105	Environmental Assessment for Runway 17/35	68
106	Southeast Taxilane - Phase VI	61
107	Southeast Hangar & Apron - Phase VI	56
108	Southeast Access Road & Parking Lot - Phase V	23
109	Southeast Taxilane - Phase VII	61
110	Southeast Hangar & Apron - Phase VII	56
111	Southeast Access Road & Parking Lot - Phase VI	23
112	Southeast Access Road & Parking Lot - Phase VII	23
113	Construct Runway 17/35	53
114	Approach Lighting System on Parallel Runway 17/35	50

Airport Points	Purpose		Component		Type	
	Code	Points	Code	Points	Code	Points
5	RE	8	RW	10	IM	8
5	OT	4	OT	7	FF	2
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	OT	4	GT	4	AC	7
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TE	1	CO	10
5	OT	4	GT	4	AC	7
5	OT	4	GT	4	AC	7
5	ST	6	RW	10	VI	8
5	RE	8	RW	10	IM	8
5	ST	6	OT	7	IM	8
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	ST	6	OT	7	IN	7
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	ST	6	TW	8	CO	10
5	OT	4	GT	4	AC	7
5	EN	8	PL	7	MA	9
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	OT	4	GT	4	AC	7
5	ST	6	TW	8	CO	10
5	CA	7	AP	5	CO	10
5	OT	4	GT	4	AC	7
5	OT	4	GT	4	AC	7
5	ST	6	RW	10	CO	10
5	ST	6	RW	10	VI	8

YEAR 2007

**YEAR 2007
SHORT-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2007**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2007 PROJECT COST	2007 FUNDING SOURCES				
			FAA	Priority*	FDOT	LOCAL	OTHER
1 Comprehensive Planning and Environmental Planning	\$ 250,000	\$ 50,000		58	\$ -	\$ 50,000	
2 Hangar 13 Roof Rehabilitation	\$ 250,000	\$ 250,000	\$ 237,500	34	\$ 6,250	\$ 6,250	
3 Airport Parking Rehabilitation - Phase I	\$ 682,000	\$ 682,000		19	\$ 341,000	\$ 341,000	
4 Central Taxi Lane Extension	\$ 637,000	\$ 637,000		61	\$ 318,500	\$ 318,500	
5 North Taxiway Development - Drainage and Utilities	\$ 2,145,000	\$ 1,210,000	\$ 1,045,000	61	\$ 27,500	\$ 137,500	
6 Approach Lighting System on Runway 9R/27L	\$ 1,354,000	\$ 1,354,000		50	\$ 677,000	\$ 677,000	
7 Roof Rehabilitation - Hangars 13 (Phase 2), 825, 815, 1820, Buildings 595 and 504	\$ 3,247,000	\$ 3,247,000	\$ 3,084,000	34	\$ 81,500	\$ 81,500	
8 Rehabilitate Hangar 67 Roof	\$ 1,700,000	\$ 1,700,000	\$ 1,615,000	34	\$ 42,500	\$ 42,500	
9 Building 373, 33 and 34 Demolition	\$ 150,000	\$ 150,000		34	\$ 75,000	\$ 75,000	
10 Building 329 Demolition	\$ 70,000	\$ 70,000		34	\$ 35,000	\$ 35,000	
11 Parking Lot Upgrade - Phase II	\$ 598,000	\$ 598,000		19	\$ 299,000	\$ 299,000	
12 Building 82/Terminal Rehab - Phase III	\$ 236,000	\$ 236,000	\$ 150,000	36	\$ 43,000	\$ 43,000	
13 Buildings 324, 365 and 366 Demolition	\$ 150,000	\$ 150,000		34	\$ 75,000	\$ 75,000	
14 New Entrance Sign	\$ 76,000	\$ 76,000		47		\$ 76,000	
TOTALS:		\$ 10,410,000	\$ 6,131,500		\$ 2,021,250	\$ 2,257,250	\$ -

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2008

**YEAR 2008
SHORT-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2008**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2008 PROJECT COST	2008 FUNDING SOURCES				
			FAA	Priority*	FDOT	LOCAL	OTHER
1 Comprehensive Planning and Environmental Planning	\$ 250,000	\$ 50,000		58		\$ 50,000	
15 Site 9B Taxiway	\$ 2,478,000	\$ 2,200,000	\$ 1,900,000	50	\$ 50,000	\$ 250,000	
16 Construct New Apron	\$ 6,494,000	\$ 6,494,000		56	\$ 950,000	\$ 950,000	\$ 4,594,000
17 Airport Pavement Joint Rehabilitation, Phase I	\$ 452,000	\$ 452,000		72	\$ 452,000		
18 Building 82/Terminal Rehab - Phase IV	\$ 850,000	\$ 850,000	\$ 807,500	36		\$ 42,500	
19 MRO Hangar Development, Northwest Area	\$ 37,645,000	\$ 37,645,000		19			\$ 37,645,000
20 Site 9B Hangar & Parking Lot - Phase I	\$ 36,589,000	\$ 36,589,000		56			\$ 36,589,000
21 Drainage Rehabilitation and Upgrade - Phase III	\$ 1,175,000	\$ 1,175,000	\$ 1,116,000	45	\$ 29,500	\$ 29,500	
22 Airport Pavement Joint Rehabilitation, Taxiways	\$ 572,000	\$ 572,000		68	\$ 572,000		
23 Install FAA Certified Surface Observation System	\$ 303,000	\$ 303,000	\$ 287,850	47	\$ 7,575	\$ 7,575	
24 Airport Roadway Pavement Rehab - Phase I	\$ 1,612,000	\$ 1,612,000	\$ 1,531,400	23		\$ 80,600	
TOTALS:		\$ 87,942,000	\$ 5,642,750		\$ 2,061,075	\$ 1,410,175	\$ 78,828,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2009

**YEAR 2009
SHORT-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2009**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2009 PROJECT COST	2009				
			FAA	Priority*	FDOT	LOCAL	OTHER
1 Comprehensive Planning and Environmental Planning	\$ 250,000	50,000		58		\$ 50,000	
5 North Taxiway Development - Drainage and Utilities	\$ 2,145,000	935,000		61	\$ 522,500	\$ 412,500	
25 Rehabilitate High Power Area, Taxiway A2	\$ 250,000	250,000	\$ 237,500	62		\$ 12,500	
26 Wildlife Fencing	\$ 1,000,000	1,000,000	\$ 950,000	43		\$ 50,000	
27 Mid-Field Area Development Roadway Access	\$ 7,498,000	2,200,000	\$ 1,900,000	23	\$ 50,000	\$ 250,000	
28 Runway/Taxiway/Safety Area Drainage, Rehab - Phase III	\$ 1,100,000	550,000	\$ 522,500	45	\$ 13,750	\$ 13,750	
29 Design and Construct Taxiway "D" Extension North	\$ 6,770,000	2,070,000	\$ 1,900,000	50	\$ 85,000	\$ 85,000	
30 Site 9B Hangar, Apron & Parking Lot - Phase II	\$ 43,071,000	43,071,000		56			\$ 43,071,000
31 Site 9B Taxiway	\$ 481,000	481,000	\$ 457,000	61	\$ 12,000	\$ 12,000	
32 Site 9B Hangar, Apron & Parking Lot - Phase III	\$ 26,339,000	26,339,000		56			\$ 26,339,000

TOTALS:

\$ 76,946,000	\$ 5,967,000	\$ 683,250	\$ 885,750	\$ 69,410,000
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*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2010

**YEAR 2010
SHORT-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2010**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2010 PROJECT COST	2010				
			FAA	Priority*	FDOT	LOCAL	OTHER
1 Comprehensive Planning and Environmental Planning	\$ 250,000	\$ 50,000		58		\$ 50,000	
15 Site 9B Taxiway	\$ 2,478,000	\$ 278,000		50	\$ 139,000	\$ 139,000	
27 Mid-Field Area Development Roadway Access	\$ 7,498,000	\$ 5,298,000		23	\$ 900,000	\$ 700,000	\$ 3,698,000
28 Runway/Taxiway/Safety Area Drainage, Rehab - Phase III	\$ 1,100,000	\$ 550,000	\$ 522,500	23	\$ 13,750	\$ 13,750	
29 Design and Construct Taxiway "D" Extension North	\$ 6,770,000	\$ 4,700,000		50			\$ 4,700,000
33 Fire Suppression System, Rehab, Well Five	\$ 300,000	\$ 300,000		20	\$ 150,000	\$ 150,000	
34 Mid-Field Storm Water Improvements	\$ 500,000	\$ 500,000	\$ 475,000	45	\$ 12,500	\$ 12,500	
35 Mid-Field Area Development - Drainage Improvements	\$ 3,000,000	\$ 787,500	\$ 712,500	45	\$ 37,500	\$ 37,500	
36 Mid-Field Area Development Roadway Access - Phase II, Interior Loop	\$ 9,317,000	\$ 8,317,000	\$ 1,140,000	23	\$ 30,000	\$ 150,000	\$ 6,997,000
37 Site 9B Hangar, Apron & Parking Lot - Phase IV	\$ 22,338,000	\$ 22,338,000		56			\$ 22,338,000
38 Cecil Field ARFF Emergency Vehicle	\$ 690,000	\$ 690,000	\$ 656,000	50	\$ 17,000	\$ 17,000	

TOTALS:

\$ 43,808,500	\$ 3,506,000	\$ 1,299,750	\$ 1,269,750	\$ 37,733,000
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*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2011

**YEAR 2011
SHORT-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2011**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2011 PROJECT COST					
			FAA	Priority*	FDOT	LOCAL	OTHER
1 Comprehensive Planning and Environmental Planning	\$ 250,000	\$ 50,000		58		\$ 50,000	
35 Mid-Field Area Development - Drainage Improvements	\$ 3,000,000	\$ 2,212,500	\$ 2,137,500	45	\$ 37,500	\$ 37,500	
39 Fire Suppression Well Rehabilitation, Well Four	\$ 300,000	\$ 300,000		20	\$ 150,000	\$ 150,000	
40 Site 9B Hangar, Apron & Parking Lot - Phase V	\$ 21,217,000	\$ 21,217,000		56			\$ 21,217,000
41 Airport Security Improvements - Phase I	\$ 454,000	\$ 454,000		43	\$ 227,000	\$ 227,000	
42 Rehabilitate & Remark Taxiway Surfaces	\$ 450,000	\$ 450,000	\$ 150,000	68	\$ 150,000	\$ 150,000	
43 Rehabilitate Bldg. 1846 and 880 Roof Replacement	\$ 402,000	\$ 402,000		34	\$ 201,000	\$ 201,000	
44 Sluice Gate Rehab	\$ 302,000	\$ 302,000		61	\$ 151,000	\$ 151,000	
45 Rehabilitate Building 313, Roof Replacement	\$ 300,000	\$ 300,000		34	\$ 150,000	\$ 150,000	
TOTALS:		\$ 25,687,500	\$ 2,287,500		\$ 1,066,500	\$ 1,116,500	\$ 21,217,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2012

**YEAR 2012
MID-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2012**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2012 PROJECT COST					
			FAA	Priority*	FDOT	LOCAL	OTHER
36 Mid-Field Area Development Roadway Access - Phase II, Interior Loop	\$ 9,317,000	\$ 1,000,000		23	\$ 570,000	\$ 430,000	
46 Rejuvenation of Airport Pavement	\$ 1,021,000	\$ 1,021,000	\$ 429,000	62	\$ 296,000	\$ 296,000	
47 Mid-Field Taxiway - Phase I	\$ 1,633,000	\$ 1,633,000	\$ 1,550,000	61	\$ 41,500	\$ 41,500	
48 Mid-Field Hangar, Apron & Parking Lot - Phase I	\$ 64,147,000	\$ 64,147,000		56			\$ 64,147,000
49 Airport Roadway Pavement Rehab	\$ 1,148,000	\$ 1,148,000		22	\$ 574,000	\$ 574,000	
50 Mid-Field Area Development - Drainage Improvements	\$ 700,000	\$ 700,000	\$ 665,000	45	\$ 17,500	\$ 17,500	
51 Airport Master Plan Update (2012)	\$ 240,000	\$ 240,000	\$ 228,000	68	\$ 6,000	\$ 6,000	
52 Mid-Field Parallel Taxiway - Phase I	\$ 6,204,000	\$ 3,102,000	\$ 2,948,000	50	\$ 77,000	\$ 77,000	
TOTALS:		\$ 72,991,000	\$ 5,820,000		\$ 1,582,000	\$ 1,442,000	\$ 64,147,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2013

**YEAR 2013
MID-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2013**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2013 PROJECT COST					
			FAA	Priority*	FDOT	LOCAL	OTHER
52 Mid-Field Parallel Taxiway - Phase I	\$ 6,204,000	\$ 3,102,000	\$ 2,948,000	50	\$ 77,000	\$ 77,000	
53 Apron Rehabilitation	\$ 750,000	\$ 750,000	\$ 600,000	62	\$ 75,000	\$ 75,000	
54 Mid-Field Taxiway - Phase II	\$ 1,356,000	\$ 1,356,000	\$ 1,289,000	61	\$ 33,500	\$ 33,500	
55 Mid-Field Hangar, Apron & Parking Lot - Phase II	\$ 63,092,000	\$ 63,092,000		56			\$ 63,092,000
56 Fire Suppression and Fire Loop Rehabilitation (Hgr 13, 14, Fire Loop Phase VI)	\$ 2,469,000	\$ 2,469,000		34	\$ 200,000	\$ 800,000	\$ 1,469,000
57 Installation ILS and MALSR - Runway 9R/27L	\$ 3,660,000	\$ 1,830,000	\$ 1,739,000	48	\$ 45,500	\$ 45,500	
58 Northwest Infrastructure Improvement	\$ 1,397,000	\$ 1,397,000	\$ 978,000	61	\$ 209,500	\$ 209,500	
59 Rehabilitate Terminal Road and Parking Lot	\$ 819,000	\$ 819,000		22	\$ 409,500	\$ 409,500	
TOTALS:		\$ 74,815,000	\$ 7,554,000		\$ 1,050,000	\$ 1,650,000	\$ 64,561,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2014

**YEAR 2014
MID-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2014**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2014 PROJECT COST					
			FAA	Priority*	FDOT	LOCAL	OTHER
57 Installation ILS and MALSR - Runway 9R/27L	\$ 3,660,000	\$ 1,830,000	\$ 1,739,000	48	\$ 45,500	\$ 45,500	
60 New Air Traffic Control Tower	\$ 4,814,000	\$ 3,314,000	\$ 1,500,000	34	\$ 907,000	\$ 907,000	
61 Mid-Field Taxiway - Phase III	\$ 1,311,000	\$ 1,311,000	\$ 1,246,000	61	\$ 32,500	\$ 32,500	
62 Mid-Field Hangar, Apron & Parking Lot - Phase III	\$ 63,127,000	\$ 63,127,000		56			\$ 63,127,000
TOTALS:		\$ 69,582,000	\$ 4,485,000		\$ 985,000	\$ 985,000	\$ 63,127,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2015

**YEAR 2015
MID-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2015**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2015 PROJECT COST						
			FAA	Priority*	FDOT	LOCAL	OTHER	
60 New Air Traffic Control Tower	\$ 4,814,000	\$ 1,500,000	\$ 1,500,000	34				
63 Mid-Field Taxiway - Phase IV	\$ 1,311,000	\$ 1,311,000	\$ 1,246,000	61	\$ 32,500	\$ 32,500		
64 Mid-Field Hangar, Apron & Parking Lot - Phase IV	\$ 62,906,000	\$ 62,906,000		56				\$ 62,906,000
65 Update Master Plan/ALP (2015)	\$ 240,000	\$ 240,000	\$ 228,000	58	\$ 6,000	\$ 6,000		
66 Runway/Taxiway/Safety Area Drainage, Rehabilitation - Phase IV	\$ 500,000	\$ 500,000	\$ 475,000	45.00	\$ 12,500	\$ 12,500		
TOTALS:		\$ 66,457,000	\$ 3,449,000		\$ 51,000	\$ 51,000		\$ 62,906,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2016

**YEAR 2016
MID-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2016**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2016 PROJECT COST						
			FAA	Priority*	FDOT	LOCAL	OTHER	
67 Mid-Field Taxiway - Phase V	\$ 1,420,000	\$ 1,420,000	\$ 1,349,000	50	\$ 35,500	\$ 35,500		
68 Mid-Field Hangar, Apron & Parking Lot - Phase V	\$ 40,471,000	\$ 40,471,000		43				\$ 40,471,000
69 Mid-Field Parallel Taxiway - Phase II	\$ 4,062,000	\$ 4,062,000	\$ 1,562,000	23	\$ 1,000,000	\$ 1,500,000		
70 Airport Security Improvements - Phase II	\$ 1,089,000	\$ 1,089,000	\$ 1,035,000		\$ 27,000	\$ 27,000		
TOTALS:		\$ 47,042,000	\$ 3,946,000		\$ 1,062,500	\$ 1,562,500		\$ 40,471,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2017
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2017

YEAR 2017

PROJECT DESCRIPTION	TOTAL PROJECT COST	2017 PROJECT COST					
			FAA	Priority*	FDOT	LOCAL	OTHER
71 Southeast Development Roadway Access	\$ 3,601,000	\$ 3,601,000	\$ 1,101,000	23	\$ 1,000,000	\$ 1,500,000	
72 Mid-Field Taxilane - Phase VI	\$ 1,899,000	\$ 1,899,000	\$ 1,804,000	61	\$ 47,500	\$ 47,500	
73 Mid-Field Hangar, Apron & Parking Lot - Phase VI	\$ 37,044,000	\$ 37,044,000		56			\$ 37,044,000
74 Mid-Field Parallel Taxiway - Phase III	\$ 2,974,000	\$ 2,974,000	\$ 2,824,000	50	\$ 75,000	\$ 75,000	

TOTALS:

\$ 45,518,000	\$ 5,729,000	\$ 1,122,500	\$ 1,622,500	\$ 37,044,000
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*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2018
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2018

YEAR 2018

PROJECT DESCRIPTION	TOTAL PROJECT COST	2018 PROJECT COST					
			FAA	Priority*	FDOT	LOCAL	OTHER
75 Southeast Development Drainage Improvements - Phase I	\$ 500,000	\$ 500,000	\$ 475,000	45	\$ 12,500	\$ 12,500	
76 Mid-Field Taxilane - Phase VII	\$ 3,620,000	\$ 3,620,000	\$ 3,439,000	61	\$ 90,500	\$ 90,500	
77 Mid-Field Hangar, Apron & Parking Lot - Phase VII	\$ 33,002,000	\$ 33,002,000		56			\$ 33,002,000
78 Mid-Field Parallel Taxiway - Phase IV	\$ 515,000	\$ 515,000	\$ 490,000	50	\$ 12,500	\$ 12,500	

TOTALS:

\$ 37,637,000	\$ 4,404,000	\$ 115,500	\$ 115,500	\$ 33,002,000
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*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2019

**YEAR 2019
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2019**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2019 PROJECT COST					
			FAA	Priority*	FDOT	LOCAL	OTHER
79 Rehabilitate & Remark Runways and Taxiways	\$ 9,799,000	\$ 4,899,500	\$ 2,399,500	72	\$ 1,000,000	\$ 1,500,000	
80 Southeast Development Utility Improvements	\$ 202,000	\$ 202,000	\$ 192,000	20	\$ 5,000	\$ 5,000	
81 Mid-Field Taxilane - Phase VIII	\$ 1,440,000	\$ 1,440,000	\$ 1,368,000	61	\$ 36,000	\$ 36,000	
82 Mid-Field Hangar, Apron & Parking Lot - Phase VIII	\$ 25,976,000	\$ 25,976,000		56			\$ 25,976,000
TOTALS:		\$ 32,517,500	\$ 3,959,500		\$ 1,041,000	\$ 1,541,000	\$ 25,976,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

**YEAR 2020
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2020**

YEAR 2020

PROJECT DESCRIPTION	TOTAL PROJECT COST	2020 PROJECT COST					
			FAA	Priority*	FDOT	LOCAL	OTHER
79 Rehabilitate & Remark Runways and Taxiways	\$ 9,799,000	\$ 4,899,500	\$ 2,058,000	72	\$ 500,000	\$ 750,000	\$ 1,591,500
83 Southeast Taxilane - Phase I	\$ 481,000	\$ 481,000	\$ 457,000	61	\$ 12,000	\$ 12,000	
84 Southeast Hangars & Apron - Phase I	\$ 19,257,000	\$ 19,257,000		56			\$ 19,257,000
85 Southeast Parrallel Taxiway - Phase I	\$ 6,369,000	\$ 4,300,000	\$ 1,500,000	50	\$ 300,000	\$ 500,000	\$ 2,000,000
86 Southeast Access Road & Parking Lot - Phase I	\$ 1,116,000	\$ 1,116,000	\$ 558,000	23	\$ 279,000	\$ 279,000	
TOTALS:		\$ 30,053,500	\$ 4,573,000		\$ 1,091,000	\$ 1,541,000	\$ 22,848,500

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2021

**YEAR 2021
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2021**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2021 PROJECT COST	2021				
			FAA	Priority*	FDOT	LOCAL	OTHER
85 Southeast Parrallel Taxiway - Phase I	\$ 6,369,000	\$ 2,069,000		50			\$ 2,069,000
87 Southeast Taxilane - Phase II	\$ 1,255,000	\$ 1,255,000	\$ 1,192,000	23	\$ 31,500	\$ 31,500	
88 Southeast Hangars & Aprons - Phase II	\$ 12,853,000	\$ 12,853,000		61			\$ 12,853,000
89 New GA Terminal in Southeast Development Area	\$ 7,920,000	\$ 7,920,000		40		\$ 300,000	\$ 7,620,000
90 Southeast Access Road & Parking Lot - Phase II	\$ 700,000	\$ 700,000		23	\$ 300,000	\$ 400,000	
91 Southeast Access Road & Parking Lot - Phase III	\$ 978,000	\$ 978,000	\$ 103,000	23	\$ 375,000	\$ 500,000	
92 Approach Lighting System on Runway 18L/36R	\$ 1,656,000	\$ 1,656,000	\$ 393,000	28	\$ 41,500	\$ 41,500	\$ 1,180,000
93 Rejuvenation of Airport Pavement	\$ 1,021,000	\$ 1,021,000	\$ 429,000	62	\$ 296,000	\$ 296,000	
TOTALS:		\$ 28,452,000	\$ 2,117,000		\$ 1,044,000	\$ 1,569,000	\$ 23,722,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

**YEAR 2022
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2022**

YEAR 2022

PROJECT DESCRIPTION	TOTAL PROJECT COST	2022 PROJECT COST	2022				
			FAA	Priority*	FDOT	LOCAL	OTHER
94 Southeast Development Drainage Improvements - Phase II	\$ 1,000,000	\$ 1,000,000	\$ 950,000	45	\$ 25,000	\$ 25,000	
95 Southeast Taxilane - Phase III	\$ 660,000	\$ 660,000	\$ 627,000	61	\$ 16,500	\$ 16,500	
96 Southeast Hangars & Apron - Phase III	\$ 19,489,000	\$ 19,489,000		56			\$ 19,489,000
97 Southeast Taxilane - Phase IV	\$ 739,000	\$ 739,000	\$ 702,000	61	\$ 18,500	\$ 18,500	
98 Southeast Hangar & Apron - Phase IV	\$ 19,427,000	\$ 19,427,000		56			\$ 19,427,000
99 Southeast Parallel Taxiway - Phase II	\$ 3,825,000	\$ 3,825,000	\$ 1,325,000	50	\$ 1,000,000	\$ 1,500,000	
TOTALS:		\$ 45,140,000	\$ 3,604,000		\$ 1,060,000	\$ 1,560,000	\$ 38,916,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2023

**YEAR 2023
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2023**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2023 PROJECT COST	2023 PROJECT COST				
			FAA	Priority*	FDOT	LOCAL	OTHER
100 Airport Security Improvements - Phase III	\$ 245,000	\$ 245,000	\$ 233,000	43	\$ 6,000	\$ 6,000	
101 Southeast Taxi lane - Phase V	\$ 739,000	\$ 739,000	\$ 702,000	61	\$ 18,500	\$ 18,500	
102 Southeast Hangar & Apron - Phase V	\$ 19,427,000	\$ 19,427,000		56			\$ 19,427,000
103 Southeast Parallel Taxiway - Phase III	\$ 5,939,000	\$ 5,439,000	\$ 2,939,000	50	\$ 1,000,000	\$ 1,500,000	
TOTALS:		\$ 25,850,000	\$ 3,874,000		\$ 1,024,500	\$ 1,524,500	\$ 19,427,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

**YEAR 2024
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2024**

YEAR 2024

PROJECT DESCRIPTION	TOTAL PROJECT COST	2024 PROJECT COST	2024 PROJECT COST				
			FAA	Priority*	FDOT	LOCAL	OTHER
103 Southeast Parallel Taxiway - Phase III	\$ 5,939,000	\$ 500,000	\$ 500,000	50			
104 Southeast Access Road & Parking Lot - Phase IV	\$ 913,000	\$ 913,000		23	\$ 456,500	\$ 456,500	
105 Environmental Assessment for Runway 17/35	\$ 1,000,000	\$ 1,000,000	\$ 950,000	68	\$ 25,000	\$ 25,000	
106 Southeast Taxi lane - Phase VI	\$ 1,338,000	\$ 1,338,000	\$ 1,271,000	61	\$ 33,500	\$ 33,500	
107 Southeast Hangar & Apron - Phase VI	\$ 20,860,000	\$ 20,860,000		56			\$ 20,860,000
108 Southeast Access Road & Parking Lot - Phase V	\$ 913,000	\$ 913,000		23	\$ 456,500	\$ 456,500	
TOTALS:		\$ 25,524,000	\$ 2,721,000		\$ 971,500	\$ 971,500	\$ 20,860,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

YEAR 2025

**YEAR 2025
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2025**

PROJECT DESCRIPTION	TOTAL PROJECT COST	2025 PROJECT COST	2025 PROJECT COST				
			FAA	Priority*	FDOT	LOCAL	OTHER
109 Southeast Taxi lane - Phase VII	\$ 1,550,000	\$ 1,550,000	\$ 1,473,000	61	\$ 38,500	\$ 38,500	
110 Southeast Hangar & Apron - Phase VII	\$ 20,860,000	\$ 20,860,000		56			\$ 20,860,000
111 Southeast Access Road & Parking Lot - Phase VI	\$ 1,006,000	\$ 1,006,000		23	\$ 503,000	\$ 503,000	
112 Southeast Access Road & Parking Lot - Phase VII	\$ 1,037,000	\$ 1,037,000		23	\$ 518,500	\$ 518,500	
113 Construct Runway 17/35	\$ 40,320,000	\$ 1,500,000	\$ 1,500,000	53			
TOTALS:		\$ 25,953,000	\$ 2,973,000		\$ 1,060,000	\$ 1,060,000	\$ 20,860,000

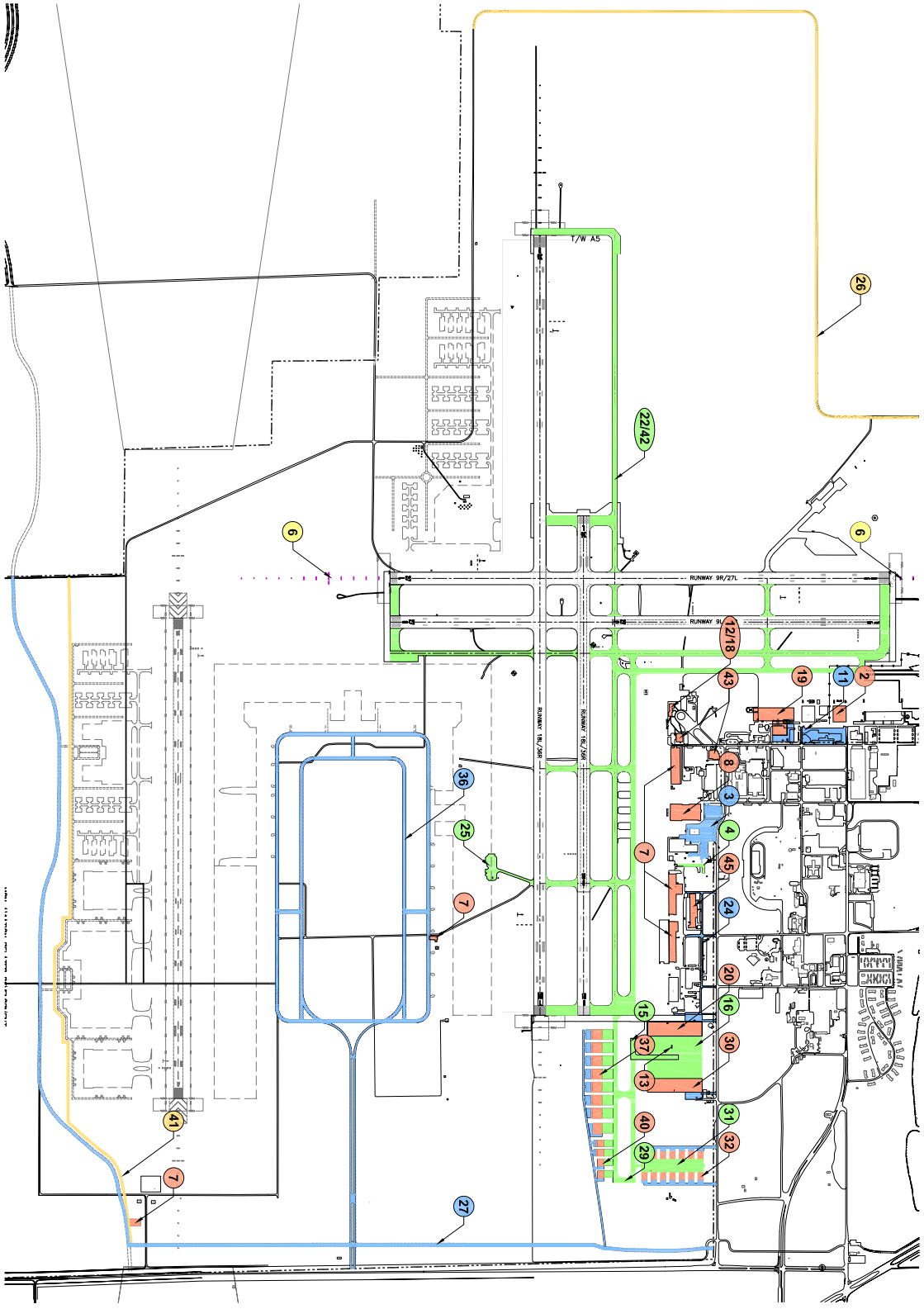
*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.

**YEAR 2026
LONG-TERM CAPITAL IMPROVEMENT PROGRAM - SUMMARY 2026**

YEAR 2026

PROJECT DESCRIPTION	TOTAL PROJECT COST	2026 PROJECT COST	2026 PROJECT COST				
			FAA	Priority*	FDOT	LOCAL	OTHER
113 Construct Runway 17/35	\$ 40,320,000	\$ 38,820,000	\$ 1,500,000	53	\$ 1,000,000	\$ 1,500,000	\$ 34,820,000
114 Approach Lighting System on Parallel Runway 17/35	\$ 1,116,000	\$ 1,116,000	\$ 1,060,000	50	\$ 28,000	\$ 28,000	
TOTALS:		\$ 39,936,000	\$ 2,560,000		\$ 1,028,000	\$ 1,528,000	\$ 34,820,000

*FAA Priority represents project priority ratings calculated using the National Priority Formula for discretionary funding.



North
NOT TO SCALE

- BUILDING/HANGAR IMPROVEMENTS
- VEHICULAR PAVEMENT IMPROVEMENTS
- AIRFIELD PAVEMENT IMPROVEMENTS
- APPROACH LIGHTING SYSTEM IMPROVEMENTS
- FENCE IMPROVEMENTS

PROJECT NUMBER	PROJECT DESCRIPTION
1	HANGAR 13 ROOF REHAB
2	AIRPORT PARKING REHAB - PHASE I
3	CENTRAL TAXILANE EXTENSION
4	APPROACH LIGHTING SYSTEM ON RW 98/27L
5	ROOF REHAB - HANGARS 13, 825, 815, 1820, 1805, 595 & 504
6	REHAB HANGAR 67 ROOF
7	BUILDING 827 TERMINAL REHAB - PHASE III
8	BUILDINGS 324, 365 AND 366 DEMOLITION
9	SITE 98 TAXILANE
10	CONSTRUCT NEW APRON
11	BUILDING 827 TERMINAL REHAB - PHASE IV
12	MRO HANGAR DEVELOPMENT - NORTHWEST AREA
13	SITE 98 HANGAR & PARKING LOT - PHASE I
14	AIRPORT PAVEMENT JOINT REHAB, TAXIWAYS PHASE I
15	AIRPORT PAVEMENT REHAB - PHASE I
16	REHAB HIGH POWER AREA, TAXIWAY A2
17	WILDLIFE FENCING
18	MID-FIELD AREA DEVELOPMENT ROADWAY ACCESS
19	DESIGN AND CONSTRUCT TAXIWAY "D"
20	EXTENSION SITE 98 HANGAR, APRON & PARKING LOT - PHASE I
21	SITE 98 TAXILANE
22	SITE 98 HANGAR, APRON & PARKING LOT - PHASE II
23	MID-FIELD AREA DEVELOPMENT ROADWAY ACCESS - PHASE II, INTERIOR LOOP
24	SITE 98 HANGAR, APRON & PARKING LOT - PHASE IV
25	SITE 98 HANGAR, APRON & PARKING LOT - PHASE V
26	AIRPORT SECURITY IMPROVEMENTS - PHASE I
27	REHAB AND REMARK TAXIWAY SURFACES
28	REHAB BUILDING 1848 AND 880 ROOF REPLACEMENT
29	REHAB BUILDING 313, ROOF REPLACEMENT

PROPOSED SHORT TERM CIP PROJECTS (2007-2011) - EXHIBIT 7-1

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT***PROJECT NO. 1**

Airport: Cecil Field	UPIN: PFL0000149
Sponsor: Jacksonville Aviation Authority	NPIAS No.: 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3*A

UPIN: PFL0000149	Airport Project ID: N/A	WPI No.: 404524-1	Sponsor Priority: N/A
Common Description: Comprehensive Planning and Environmental Planning		Candidate:	
FDOT Description 2: 8007 Aviation Systems Planning		National Priority: 58	
FDOT Description 3:			
Project Type: PLANNING: Conduct Miscellaneous Study (Pavement Maint, PCI, NPDES, etc.)			

Project Narrative:

Comprehensive Planning and Environmental Planning at Cecil Field Airport.

Project Justification:

Cecil Field is a National Superfund site. Environmental due diligence is required prior to leasing and/or constructing new facilities at the airport to establish/verify an environmental baseline for future reference. Asbestos and lead based paint abatement will be required for certain hangar and building renovations. Additional planning is required to provide information as a follow-on to the Airport Master Plan/Airport Layout Plan development.

Airport Notes:

3/17/05 No FAA or FDOT funds are requested. This project is entered to reflect local needs only.
Assumes 0% AIP-Eligibility

FDOT Notes:

4/15/04 - The funds under this project have been moved to Cecil Master Plan, (PFL0001723) as requested by JAA

FAA Notes:

3/23/04 - Not eligible, not specific

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2006	Local	\$50,000	
Year Total - 2006		\$50,000	
2007	Local	\$50,000	
Year Total - 2007		\$50,000	
2008	Local	\$50,000	
Year Total - 2008		\$50,000	
2009	Local	\$50,000	
Year Total - 2009		\$50,000	
2010	Local	\$50,000	
Year Total - 2010		\$50,000	
<u>2011</u>		\$50,000	
Year Total - 2011		\$50,000	
Project Total-State		\$0	0.00%
Project Total- Local		\$300,000	100.00%
Project Total - FAA		\$0	0.00%
Overall Project Total		\$300,000	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0004221 **Airport Project ID:** F2006-XX **WPI No.:** 409964-2 **Sponsor Priority:** 2006-7
Common Description: Hangar 13 Roof Rehabilitation **Candidate:**
FDOT Description 2: 8205 - Preservation Project **National Priority:** 34
FDOT Description 3:
Project Type: BUILDINGS: Construct/Expand/Improve/Modify/Relocate Building

Project Narrative:

This project will rehabilitate sections C,D,E,F,H and G of Hangar 13. These sections represent the lower portions (3) of hangar 13. Located on the north and south sides of the hangar. These sections represent approximately 12,544 sq. feet of perlite insulation, coal tar and gravel. The project will remove the current roofing materials, prep the sub-surfaces (as required), and replace roof flashing materials. In addition, vapor relief vents will be installed to extend the service life by 10 additional years.

Project Justification:

This project is required to preserve the hangar working spaces. A roof survey conducted in FY2002 indicated sections C through G required rehabilitation to extend the service life of the entire roof structure and if not performed would cause interior work space damage. Due to the 2005 hurricane season, the roof rehab is more pronounced.

Airport Notes:

9/27/05 JAA has requested that FDOT establish a Cecil Field Facility Upgrades Phase 2 project in 2006 using UPIN PFL 4732 and fund this project with \$163,500 in FDOT funds using FIN#409064-1. This will fund the FDOT share of UPIN 1692, 3313, 4055, 4060, 4066, 4221 and 4567. JAA expects \$2,400,000 in FAA Discretionary funding to match FDOT and JAA funding.

3/17/05 No FDOT funds are currently programmed. We will work with FDOT to reprogram funds to this project.

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2006	Local	6,250
2006	State	\$6,250
2006	FAA	\$237,500
<u>Year Total - 2006</u>		<u>\$250,000</u>

Project Total - Local	\$6,250	2.50%
Project Total - State	\$6,250	2.50%
Project Total - FAA	<u>\$237,500</u>	95.00%

Overall Project Total

\$250,000

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A

UPIN: PFL0004041 **Airport Project ID:** F2006-XX **WPI No.:** 409972-1 **Sponsor Priority:** 2006-3
Common Description: Airport Parking Rehabilitation - Phase I **Candidate:**
FDOT Description 2: **National Priority:** 19
FDOT Description 3:
Project Type: OTHER: Construct Parking Lot [Non-revenue/Non hub and MAP only]

Project Narrative:

The parking rehabilitation project will expand the parking facilities serving bldg. 824 and hangar 67 by 2,000 square feet, provide an asphalt overlay to the existing parking surface of 67,000 square feet, install code curbing, 7 lighting overhead fixtures and landscaping to comply with local code. The project will consist of minor milling, crack repairs, thin asphalt overlay (2 inches) or repair. In addition, this project will overlay the connecting road for the north end tenants parking facilities, the area is approximately 928 linear feet in length and 20 feet wide.

Project Justification:

The recent road improvement of Aviation Ave. relocated available parking. The existing lot pavement has outlived its useful life and must be brought up to city code.

Airport Notes:

9/27/05 JAA requests that FDOT reprogram \$10,000 in 2006 funds from 409972-1 Cecil Master Plan UPIN 1723 and \$90,000 from 409975-1 Cecil Facility Upgrades prequalified to Cecil Parking Rehab using FIN 409972-1. JAA also requests \$112,500 in 2007 funds from PFL0986 Cecil Hangar and \$47,500 from PFL 0985 FIN 216884-1 be reprogrammed to Cecil Parking Rehab PFL 4041.

3/17/05 This project is not currently funded by FDOT. We will work with FDOT to identify a 2006 funding source for this project.

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

2007	Local	\$341,000
2007	State	\$341,000
<u>Year Total - 2007</u>		<u>\$682,000</u>

Project Total - Local	\$341,000	50.00%
Project Total - State	\$341,000	50.00%
Project Total - FAA	<u>\$0</u>	0.00%
Overall Project Total	<u>\$682,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0004566 **Airport Project ID:** F2006-XX **WPI No.:** 409961-1 **Sponsor Priority:** 2006-2
Common Description: Central Taxilane Extension **Candidate:**
FDOT Description 2: 8222 - Construct/Extend Taxiway **National Priority:** 61
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Capacity)

Project Narrative:

This project will develop a taxilane from the Central North Aircraft Ramp area to the west landside area of the airport. The taxilane will increase the landside development area and will enable corporate hangar development. The taxilane will be designed to provide 82 feet of clearance. This provides a taxilane that meets Group CII standards and provides for G-5 aircraft. The taxilane will comprise approximately 800 linear feet of asphalt, 35 feet wide, with 14 taxi lights (stand alone system). Also included in the project will be storm water management, design, fence relocation, electrical system upgrade/install, asphalt demo and site preparation.

Project Justification:

Cecil Field requires an extension of an airside taxiway to the west to allow private corporate development of approximately (4) 100 by 100 hangars.

Airport Notes:

10/27/05 FDOT has reprogrammed the funding as requested by the JAA.

9/27/05 JAA requested that FDOT reprogram \$12,500 in 2006 funds in Craig Environmental Planning and \$50,000 from Craig Master Plan Update UPIN 409961-1 to Cecil Taxilane Extension. JAA also requests that \$237,500 in 2007 funds in 216935-1 UPIN PFL0986 be transferred to the Cecil Taxilane Extension project.

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

2007	Local	\$318,500	
2007	State	\$318,500	
2007	FAA	\$0	
<u>Year Total - 2007</u>		<u>\$637,000</u>	
Project Total - Local		\$318,500	50.00%
Project Total - State		\$318,500	50.00%
Project Total - FAA		\$0	0.00%
Overall Project Total		<u>\$637,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0000985 **Airport Project ID:** 2007-XX **WPI No.:** 216884-1 **Sponsor Priority:** 2007-2
Common Description: North Taxiway Development - Drainage & Utilities **Candidate:**
FDOT Description 2: 8010 - Airport Improvement **National Priority:** 61
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Capacity)

Project Narrative:

Construct utilities and drainage infrastructure for Site 9B development area identified in the 2006 Airport Master Plan. This project will enable the expansion of the airfield to increase hangar construction and capacity.

Project Justification:

The first of many projects to be programmed over a ten year period to develop the North & Midfield area development, according to the Cecil Field Master Plan. Utilities and Drainage must be considered to support the additional hangar development.

Airport Notes:

10/27/05 FDOT has reprogrammed FDOT funds as requested

9/27/2005 The Cecil Field Airport manager has reprioritized the funding for this project to meet projected FAA and JAA funding. JAA requests the \$82,500 of the programmed 2007 funds be reprogrammed with \$47,500 to Cecil Parking Lot (PFL 4041) FIN 409972-1, \$25,000 to Cecil Parking Phase 2 (PFL 0989) FIN 216973-1 and \$10,000 to a JAA box.

Airport Manager Note, August 18, 2006: The title of the project was modified to address the extension of taxiway Delta in the North Area. This location will allow for sufficient development needed in the near future, funding remains the same and is deemed sufficient to complete the project.

Assumes 100% AIP-Eligibility

Common Description changed from "North Taxiway Development" to "North Taxiway Development - Drainage & Utilities".

FDOT Notes:

This project has been approved for FY 07/07 year.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2007	Local	\$137,500	
2007	State	\$27,500	
2007	FAA	\$1,045,000	
<u>Year Total - 2007</u>		<u>\$1,210,000</u>	
2009	Local	\$412,500	
2009	State	\$522,500	
<u>Year Total - 2009</u>		<u>\$1,100,000</u>	
Project Total- Local		\$550,000	25.64%
Project Total- State		\$550,000	25.64%
Project Total- FAA		<u>\$1,045,000</u>	48.72%
Overall Project Total		<u>\$2,145,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: ZZC329 **Airport Project ID:** F2007-XX **WPI No.:** 216975-1 **Sponsor Priority:** 2007-3
Common Description: Approach Lighting System on Runway 9R/27L **Candidate:**
FDOT Description 2: **National Priority:** 50
FDOT Description 3:
Project Type: RUNWAYS: Install Runway Vertical/Visual Guidance System (PAPI/VASI/REIL/ALS)

Project Narrative:

This project will install an approach lighting system on runway 9R/27L.

Project Justification:

This project is necessary to re-establish the VOR approach per the Airport Master Plan.

Airport Notes:

10/25/05 FDOT has reprogrammed funding as requested and moved \$55,000 to a JAA Box. JAA needs to keep track of JAA Box Funds.
 9/27/05 Cecil Field Manager has reviewed project and has reprioritized it to project #5. It will require FAA justification submitted for FAA funding to be developed in the Master Plan review.
 3/17/05 FDOT 2007 funding is programmed under FIN 216975-1 for \$75,000. FAA will participate only if Cecil continues in the MAP program.
 Assumes 100% AIP-Eligibility

FDOT Notes:

This project has been approved for our FY 06/07 year.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2007	Local	\$677,000
2007	State	\$677,000
2007	FAA	\$0
<u>Year Total - 2007</u>		<u>\$1,354,000</u>

Project Total - Local	\$677,000	50.00%
Project Total - State	\$677,000	50.00%
Project Total - FAA	\$0	0.00%
Overall Project Total	<u>\$1,354,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032

Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0000988 **Airport Project ID:** F2007-XX **WPI No.:** 216972-1 **Sponsor Priority:** 2007-1

Common Description: Roof Rehabilitation - Hangars 13 (Phase II), 825, 815, **Candidate:**
1820, Buildings 595 and 504

FDOT Description 2: 8205 - Aviation Preservation Project **National Priority:** 34

FDOT Description 3:

Project Type: BUILDINGS: Construct/Expand/Improve/Modify/Relocate T-Hangars

Project Narrative:

Structural repairs and roof replacements

Project Justification:

Continued airport safety and infrastructure development

Airport Notes:

10/27/05 FDOT has reprogrammed the 2007 funds as requested.

9/27/05 The Cecil Field Manager has determined that Hangar 13 (Phase II), 815, and building 504 are the highest priority roofs requiring rehab. JAA expects 2007 MAP Funding for this project. JAA requests that \$25,000 be reprogrammed to PFL0989, FIN# 216973-1 Cecil Parking Upgrades, Phase 2.

3/17/05 This project programmed under FIN 216972-1 in FY2007 for \$75,000. FAA participation will only be available if Cecil continues in the MAP program.

9/25/05 This project description has changed to rehab Building 504, hangar 815 and 825 roofs vice 880, 1846 and hangar 1820.

3/8/06 This will also include Hangar 67 west end, Hangar 815 and 504 will be roof rehabs with 67 and 825 roof replacement.

8/18/2006 Airport Manager note, With Hangar 67 West side being fully funded in FY2006 program, Hangar 1820 and Building 595 are added to the program, no additional funding is requested, current requested amounts should be sufficient to complete all requested roof rehabs. Assumes 0% AIP-Eligibility

FDOT Notes:

Need project justification and details on the project.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2007	Local	\$81,500	
2007	State	\$81,500	
2007	FAA - Discretionary	\$3,084,000	
<u>Year Total - 2007</u>		<u>\$3,247,000</u>	
Project Total - Local		\$81,500	2.51%
Project Total - State		\$81,500	2.51%
Project Total - FAA		<u>\$3,084,000</u>	94.98%
Overall Project Total		<u>\$3,247,000</u>	

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No: 3250.3A	
UPIN: PFL0001692	Airport Project ID: F2006-02	WPI No.: 409964-3	Sponsor Priority: 2006-5
Common Description: Rehabilitate Hangar 67 Roof			Candidate:
FDOT Description 2: 8205 - Preservation Project			National Priority: 34
FDOT Description 3:			
Project Type:	BUILDINGS: Construct/Expand/Improve/Modify/Relocate T-Hangars		

Project Narrative:

Roof Replacement for Hangar 67 roof. This Hangar covers over 158,000 square feet of hangar space. The hangar is comprised of two barrel hangars with a common center section. Each barrel Hangar is comprised of roll and shingle type roofing materials. The section center is asphalt base with gravel. This project will remove shingles and materials on both east and west barrel sections and replace with new roofing materials/shingles. The center section will be evaluated for partial rehabilitation. All of the approximately 1,200 linear feet of drip edge and structure flashing will be replaced.

Project Justification:

Upgrades to existing facilities and infrastructure are necessary to bring the airport up to appropriate standards. This facility is in need of roof replacement. In FY2004, Hangar 67 received an exterior improvement project with minor roof repairs. During the construction of the project, the JAA determined the roof needed extensive repairs and would require removal and replacement of both the east and west barrels of the hangar roof. The flat center section of the roof is considered in average condition, but will be surveyed for service life. This project is MAP eligible.

Airport Notes:

10/27/05 UPIN:4732 still not funded by FDOT. Funds have been moved to Craig UPIN:CRG610 instead of Cecil UPIN:4732. Need to move the 2006 FDOT funds of \$163,500 to Cecil UPIN:4732.

09/27/05 JAA has requested that FDOT establish a Cecil Field Facility Upgrades Phase 2 project in 2006 using UPIN 4732 and fund this project with \$163,500 in FDOT funds using FIN#409964-1. This will fund the FDOT share of UPIN 1692, 3313, 4055, 4060, 4066 AND 4567. JAA expects \$2,400,000 in FAA Discretionary funds to match FDOT and JAA funding.

3/16/05 FDOT funds are not currently programmed. The JAA will work to reprogram funds to cover this project.

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2007	Local	\$42,500	
2007	State	42,500	
2007	FAA - Discretionary	1,615,000	
Year Total - 2018		\$1,700,000	
Project Total - State		\$42,500	2.50%
Project Total - Local		\$42,500	2.50%
Project Total - FAA		\$1,615,000	95.00%
Overall Project Total		\$1,700,000	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: ZZC328 **Airport Project ID:** F2007-XX **WPI No.:** 216972-2 **Sponsor Priority:** 2007-5
Common Description: Building 373, 33 and 34 Demolition **Candidate:**
FDOT Description 2: 8010 - Airport Improvements **National Priority:** 34
FDOT Description 3:
Project Type: BUILDINGS: Modify Building Project Description No.: BU012

Project Narrative:

This project will demo buildings that have outlived their useful life. The project will include demo design, lead base paint testing, asbestos testing, demolition of structure and slab (373 & 33) and removal.

Project Justification:

These buildings have outlived their useful life and need to be demolished for future development.

Airport Notes:

Assumes 0% AIP-Eligibility.

10/27/05 FDOT has reprogrammed the funds as requested but has not assigned a FIN# to this project. Request FIN# 216988-1 be assigned to the project from ZZC331.

3/10/06 Building numbers have changed to meet current demo schedule/plan and consider Embraer site/north area, they are 323, 324, 365 and 366.

9/27/05 JAA requests \$37,500 be reprogrammed from ZZC331 FIN# 216988-1 Cecil Mid-Field Drainage

3/17/05 This project was changed from the Fuel Farm Expansion to Building Demo. Funding of \$40,000 is requested in FY2007. This project is not currently funded.

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2007	Local	\$75,000
2007	State	\$75,000
2007	FAA	\$0
<u>Year Total - 2007</u>		<u>\$150,000</u>

Project Total - Local	\$75,000	50.00%
Project Total - State	\$75,000	50.00%
Project Total - FAA	\$0	0.00%
Overall Project Total	<u>\$150,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0004066 **Airport Project ID:** F2006-02 **WPI No.:** 409964-1 **Sponsor Priority:** 2006-1
Common Description: Building 329 Demolition **Candidate:**
FDOT Description 2: 8205 - Preservation Project **National Priority: 34**
FDOT Description 3:
Project Type: BUILDINGS: Modify Building

Project Narrative:

This project will demolish building 329. The project will remove the metal covered, wood framed 4,200 square foot storage building. Electrical, water, sewage service will be terminated but accesses will be capped in place for future development needs. The slab foundation will be removed and the restored pervious area will be credited towards future development, with the St. John's River Water Management District.

Project Justification:

Building has outlived its useful life and area is needed for aviation related development.

Airport Notes:

9/27/05 JAA has requested that FDOT establish a Cecil Field Facility Upgrades Phase 2 project in 2006 using UPIN PFL4732 and fund this project with \$163,500 in FDOT funds using FIN#409964-1. This will fund the FDOT share of UPIN 1692, 3313, 4055, 4060, 4064, 4066, 4221, and 4567. JAA does not expect FAA to participate in funding this sub project.

3/17/05 No FDOT funds are currently programmed. JAA will work with FDOT to reprogram funds to this project.

FDOT Notes:

FAA Notes:

Assumes 0% AIP eligibility

Airport Sponsor Reques:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2007	Local	\$35,000	
2007	State	\$35,000	
2007	FAA	\$0	
<u>Year Total - 2007</u>		<u>\$70,000</u>	
Project Total - Local		\$35,000	50.00%
Project Total - State		\$35,000	50.00%
Project Total - JAA		\$0	0.00%
Overall Project Total		<u>\$70,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0000989 **Airport Project ID:** F2007-XX **WPI No.:** 216973-1 **Sponsor Priority:** 2007-4
Common Description: Parking Lot Upgrade - Phase II **Candidate:**
FDOT Description 2: 0206 - Parking Facility **National Priority:** 19
FDOT Description 3:
Project Type: OTHER: Rehabilitate Parking Lot [Non-revenue/Non-hub and MAP only]

Project Narrative:

Facilities and Infrastructure Upgrades. This project will rehab the parking lots that support hangar 13 and 14. Parking lot size is approximately 32,000 square feet. The project will install the required curbing, landscaping, irrigation and rehabilitate 8 parking lot lights to comply with local code. In addition, this project will selectively mill, repair and overlay the 32,000 square feet of asphalt.

Project Justification:

Upgrades to existing facilities and infrastructure are necessary to bring the airport up to appropriate standards. Existing pavement has outlived its useful life and requires rehabilitation.

Airport Notes:

10/27/05 FDOT has reprogrammed the FY2007 funds as requested. The 2009 funds appear to have been reprogrammed to UPIN 1724 but no FIN# was assigned to that project.

9/27/05 JAA requests that an additional \$50,000 in FDOT funds be added to this project for 2007. The additional \$50,000 should be reprogrammed as \$25,000 from PFL 0988, FIN 216972-1 Cecil Field Roofs and \$25,000 from PFL 0985 Cecil Field North/Mid Field Development.

3/17/05 JAA is still requesting the \$1,000,000 in 2009 funds in this WPI# be transferred to UPIN 1724, Midfield Roadway. The 2007 funds will be used for this UPIN 989, Parking Lot Upgrades.
Assumes 0% AIP-Eligibility

FDOT Notes:

This project has been approved for our FY 06/07 year but you need to be more detailed on the project description.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2007	Local	\$299,000	
2007	State	\$299,000	
<u>Year Total - 2007</u>		<u>\$600,000</u>	
Project Total - Local		\$299,000	50.00%
Project Total - State		\$299,000	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$598,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0004060 **Airport Project ID:** F2007-XX **WPI No.:** **Sponsor Priority:** 2007-1
Common Description: Building 82/Terminal Rehabilitation - Phase III **Candidate:**
FDOT Description 2: **National Priority:** 36
FDOT Description 3:
Project Type: TERMINAL DEVELOPMENT: Rehab Terminal Building (Standards)

Project Narrative:

This project is the last of a three phase project. This phase will design, evaluate and reconstruct the remaining terminal structure areas. The project will include evaluation, installation of tower wiring runs and cabling, controller counters, rehab the third floor bathroom, removal and replacement of abandoned third floor HVAC system ducting, rehab of entry and stairwell. The project will include testing for asbestos and lead based paint. This project is MAP eligible.

Project Justification:

The current building is 55 years old. While some of the equipment is new, the facility is in need of rehabilitation.

Airport Notes:

9/27/05 JAA has requested that FDOT establish a Cecil Field Facility Upgrades Phase 2 project in 2006 using UPIN PFL 4732 and fund this project with \$163,500 in FDOT funds using FIN#409064-1. This will fund the FDOT share of UPIN 1692, 3313, 4055, 4060, 4066, 4221 and 4567. JAA expects \$2,400,000 in FAA Descretionary funding to match FDOT and JAA funding.

3/17/05 No FDOT funds are currently programmed. After we know what 2006 FAA funds will be, we will work with FDOT to reprogram funds to this project.

Assumes 50% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2007	Local	\$43,000	
2007	State	\$43,000	
2007	FAA	\$150,000	
<u>Year Total - 2007</u>		<u>\$236,000</u>	
Project Total - Local		\$43,000	18.22%
Project Total - State		\$43,000	18.22%
Project Total - FAA		<u>\$150,000</u>	63.56%
Overall Project Total		<u>\$236,000</u>	

Airport: Cecil Field	UPIN:
Sponsor: Jacksonville Aviation Authority	NPIAS No.: 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3*A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Buildings 324, 365 and 366 Demolition			Candidate:
FDOT Description 2: 8010 - Airport Improvements			National Priority: 34
FDOT Description 3:			
Project Type: BUILDINGS: Modify Building			

Project Narrative:

This project will demolish buildings that have outlived their useful life. The project will include demolition design, lead base paint testing, asbestos testing, demolition of structure and slab removal.

Project Justification:

These buildings have outlived their useful live and need to be demolished for future development.

Airport Notes:

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2007	Local	\$75,000	
2007	State	\$75,000	
<u>Year Total - 2007</u>		<u>\$150,000</u>	
Project Total - Local		\$75,000	50.00%
Project Total - State		\$75,000	50.00%
Project Total - FAA		<u>\$0</u>	
Overall Project Total		<u>\$150,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: New Entrance Sign **Candidate:**
FDOT Description 2: **National Priority: 47**
FDOT Description 3:
Project Type: OTHER: Improve Airport Appearance

Project Narrative:

This project will design and install a new entrance sign at the main entrance.

Project Justification:

Public preception is an important tool in marketing and a new entrance sign will facilitate a positive image for the airport. The old entrance sign has outlived its useful life.

Airport Notes:

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2007	Local	\$76,000
2007	State	\$0
<u>Year Total - 2007</u>		<u>\$76,000</u>

Project Total- Local	\$76,000	100.00%
Project Total- State	\$0	0.00%
Project Total-FAA	\$0	0.00%
Overall Project Total	<u>\$76,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Site 9B Taxiway **Candidate:**
FDOT Description 2: Site 9B Taxiway **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 4,585 SY taxiway to the north of the northwest development area. This taxiway will provide access to the future MRO hangars planned for Site 9B.

Project Justification:

Taxiway access is required to support the MRO hangars planned for construction at Site 9B. These hangars are required to meet MRO hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility
 Common Description changed from "Parallel Taxiway Construction Phase 1" to "Site 9B Taxiway"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2008	Local	\$250,000	
2008	State	\$50,000	
2008	FAA	\$1,900,000	
<u>Year Total - 2008</u>		<u>\$2,200,000</u>	
2010	Local	\$139,000	
2010	State	\$139,000	
2010	FAA Other	\$0	
<u>Year Total - 2010</u>		<u>\$278,000</u>	
Project Total - Local		\$389,000	15.70%
Project Total - State		\$189,000	7.63%
Project Total - FAA		<u>\$1,900,000</u>	76.67%
Overall Project Total		<u>\$2,478,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: ZZC334 **Airport Project ID:** F2008-01 **WPI No.:** 216967-3 **Sponsor Priority:** 2008-0
Common Description: Construct New Apron **Candidate:**
FDOT Description 2: **National Priority:** 56
FDOT Description 3:
Project Type: APRON: Construct Apron (Capacity)

Project Narrative:

Construct a 29,300 SY MRO apron to increase the apron capacity at Cecil Field. This project is MAP eligible.

Project Justification:

New apron construction is required for aviation development

Airport Notes:

8/14/06 This project is being combined with ZZC338. JAA is requesting that FIN number 216967-3 be reprogrammed to UPIN4055. JAA also requests \$452,000 in FY2008 funding in this grant be moved to UPIN4055 and the remaining \$498,000 be reprogrammed to UPIN ZZC338.

10/25/05 FDOT only programmed \$950,000 of the requested 2008 funding. JAA will review the project next year during preparation of the 2008 budget.

3/17/05 FDOT has programmed \$950,000 for this project in 2008. This project will require additional funding. As part of the super fund cleanup, the Navy is currently remediating this grassed area. This area previously used as an underground fueling operation is no longer necessary or required for any current or future operations once the Navy completes the remediation.

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2008	Local	\$950,000
2008	State	\$950,000
2008	FAA	\$0
2008	Other	\$4,594,000
<u>Year Total - 2008</u>		<u>\$6,494,000</u>

Project Total - Local	\$950,000	14.63%
Project Total - State	\$950,000	14.63%
Project Total - FAA	\$0	0.00%
Project Total - Other	<u>\$4,594,000</u>	70.74%
Overall Project Total	<u>\$6,494,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0004055 **Airport Project ID:** F2006-XX **WPI No.:** 404523-1 **Sponsor Priority:** 2006-6
Common Description: Airport Pavement Joint Rehabilitation, Phase I **Candidate:**
FDOT Description 2: 8205 - Preservation Project **National Priority:** 72
FDOT Description 3:
Project Type: RUNWAYS: Rehabilitate Runway

Project Narrative:

This project is the first of a two phase project (Phase I in FY2006 and Phase II in FY2007). Phase 1/FY2006 will design and construct repairs and replace joint sealant on Runway 36R/18L and Taxiway Alpha. The total amount of linear distance is estimated at 75,000 feet. The remaining Taxiways (Taxiway Bravo, B1 through B3, Taxiway Charlie and Delta) will be constructed in FY2007. For FAA purposes, Phase I will support the first 8,300' by 150' wide portion of the runway.

Project Justification:

The runways seal joints at Cecil Field were neglected by the US Navy and require immediate attention to maintain runway and taxiway service life. This project will not replace all joints, but will evaluate need and critical areas will be replaced. This project not only covers the concrete sections, but also asphalt joints.

Airport Notes:

8/14/2006 FAA participation is 95% of \$418, 972.13 (approximately 31% of the project) or \$398,024 of the total 1,370,975.40 project value. JAA requests FDOT provide a new JPA with \$23,000 in FY 2006 funding and \$452,000 in FDOT FY2008 funding from 216967-3. JAA will match this with \$475,000 in JAA FY2006 funding and \$22,951 in additional JAA funding for design work already undertaken without FDOT funds. The FDOT funds requested include \$22,400 in contingency to match FAA and JAA share of any project change orders.

JAA requests that FDOT change the description from 216967-3 to the Airport Pavement Joint Rehab and reprogram the remaining FY2008 funding of \$475,000 to 216967-2 UPIN ZCC338

3/17/05 No FDOT funds are currently programmed. JAA will work with FDOT to reprogram funds to this project.

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2008	Local	\$0
2008	State	\$452,000
2008	FAA	\$0
<u>Year Total - 2008</u>		<u>\$452,000</u>

Project Total - Local	\$0	0.00%
Project Total - State	\$452,000	100.00%
Project Total - FAA	\$0	0.00%
Overall Project Total	<u>\$452,000</u>	

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No:	3250.3A

UPIN: PFL0006102	Airport Project ID: F2008-06	WPI No.:	Sponsor Priority: 2008-0
Common Description: Building 82/Terminal Rehabilitation - Phase IV			Candidate:
FDOT Description 2:			National Priority: 36
FDOT Description 3:			
Project Type:	TERMINAL DEVELOPMENT: Rehabilitate Terminal Building (Standards)		

Project Narrative:

Terminal phase IV will continue to work designated in FY2006 and re-bid in FY2007 under a base bid with four add alternatives. This work will include the renovation of the 4th floor restroom (unisex/controller room tower equipment room (4th floor) and the tower cab rehabilitation. The majority of the work will be to modify and add Federal Inspection Station work areas to Cecil Field.

Project Justification:

The tower facilities require renovation. Both 4th floor rooms and the tower have not been improved for appx 55 years. Space requirements are an issue in the tower cab. Under the FAA/FVA contract tower agreement, the JAA is responsible for the facility. In addition, Cecil Field and Craig Airports are increasing the number of international flights, to meet this need and to move GA international flights from JIA, this project will modify correct terminal spaces at Cecil Field to accomodate a small FIS station.

Airport Notes:

2/12/07 Added FIS section, Airport Manager
Assumes 100% AIP eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2008	Local	\$42,500	
2008	State	0	
2008	FAA	150,000	
2008	FAA - Discretionary	657,500	
<u>Year Total - 2008</u>		<u>\$850,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$42,500	5.00%
Project Total - FAA		<u>\$807,500</u>	95.00%
Overall Project Total		<u>\$850,000</u>	

Airport: Cecil Field	UPIN: PFL0000986
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3A

UPIN: PFL0000986 **Airport Project ID:** F2008-XX **WPI No.:** 216935-1 **Sponsor Priority:** 2008
Common Description: MRO Hangar Development, Northwest Area **Candidate:**
FDOT Description 2: 8243 Hangars Construction **National Priority:** 19
FDOT Description 3:
Project Type: BUILDINGS: Construct/Expand/Improve/Modify/Relocate T-Hangers

Project Narrative:

A Maintenance, Repair and Overhaul hangar, office and parking lot will be built East of Hangar 14, West of the ATC Tower and North of Runway 9L.

Project Justification:

Additional hangars at Cecil Field will be needed in order to promote long term growth of aviation maintenance, repair and overhaul activities at the airport. The design and construction of additional hangars and/or expanding existing hangars to accommodate larger aircraft will provide those facilities necessary for new tenants, thereby spurring economic development of the local area and providing increased airport operating revenue.

Airport Notes:

10/27/05 FDOT has reprogrammed the 2007 funds as requested.

9/27/05 The Cecil Field Airport Manager has reprioritized this project and expects the project to be funded with private investment. No FAA or FDOT funds are programmed. JAA requested the \$237,500 in 2007 FDOT funds be reprogrammed to PFL 4566, Cecil Central Taxilane and \$112,500 be reprogrammed to PFL 4041 Cecil Parking Rehab.

3/17/05 JAA will work with private developers to fund hangar development at Cecil Field. No FAA funding is expected.

Assumes 0% AIP-Eligibility

Common Description changed from "Hangar Design and Construction" to "MRO Hangar Development, Northwest Area"

FDOT Notes:

FAA Notes:

This project has been approved for out FY 06/07 year. I don't think the FAA will participate in this project.

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2008	Other	\$37,645,000
<u>Year Total - 2008</u>		<u>37,645,000</u>

Project Total - State	\$0	0.00%
Project Total - Local	\$0	0.00%
Project Total - FAA	\$0	0.00%
	<u>\$37,645,000</u>	100.00%
Overall Project Total	<u>\$37,645,000</u>	

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No: 3250.3A	

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Site 9B Hangar & Parking Lot - Phase I			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

Cecil Field has reached its capacity for maintenance, restoration and overhaul (MRO) capabilities and will be needing additional MRO hangars and aprons. This project will design and construct one 143,000 SF MRO hangar with one 50,000 SF office, one 37,200 SF apron for a 767 design aircraft, and one 8,500 SY parking lot.

Project Justification:

These improvements are required to meet demand.

Airport Notes:

Assumes 0% AIP-Eligibility. The general taxilane makes up approximately 20% of the proposed apron, and the apron project is approximately 10% of the overall project.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2008	Local	\$0	
2008	State	\$0	
2008	FAA	\$0	
2008	Other	\$ 36,589,000	
Year Total - 2008		\$36,589,000	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		\$36,589,000	100.00%
Overall Project Total		\$36,589,000	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0001196 **Airport Project ID:** F2004-01 **WPI No.:** **Sponsor Priority:** 2005-2
Common Description: Drainage Rehabilitation and Upgrade - Phase III **Candidate:**
FDOT Description 2: **National Priority:** 45
FDOT Description 3:
Project Type: OTHER: Improve Airport Drainage

Project Narrative:

This project includes an inventory, analysis and visual condition survey of the Airfield Drainage System located in the AOA at Cecil Field Airport, complete in 2004. It also includes the design and construction for the rehab and replacement of approximately 78,000 linear feet of drainage pipe inventory and approximately 225 airfield structures and associated pavement.

Project Justification:

The Airfield Drainage structures have outlived their useful life and require rehabilitation.

Airport Notes:

9/27/05 UPIN 1196 and UPIN 3309 have been combined into one project. FAA has funded the project in FY2005. FDOT funding is included in FIN 404523-3 which is funding UPIN 1196/3309, UPIN 3130 and UPIN 2407.

1/15/05 FAA did not have enough MAP to fund project in 2004. Project deferred to FY2005. This is the #2 MAP priority for FY2005. FDOT funding is included under UPIN# PFL3130, Utility Improvements, FIN 404523-3.
 Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2008	Local	\$29,500
2008	State	\$29,500
2008	FAA	\$1,116,000
Year Total - 2008		<u>\$1,175,000</u>

Project Total - Local	\$29,500	2.51%
Project Total - State	\$29,500	2.51%
Project Total - FAA	<u>\$1,116,000</u>	94.98%
Overall Project Total	<u>\$1,175,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0004756 **Airport Project ID:** 0 **WPI No.:** **Sponsor Priority:** 0
Common Description: Airport Pavement Joint Rehabilitation, Taxiways **Candidate:**
FDOT Description 2: **National Priority:** 68
FDOT Description 3:
Project Type: TAXIWAYS: Rehabilitate Taxiway

Project Narrative:

This project is the second of a two phase project (Phase 1 in FY2006 and Phase 2 in FY2008). Phase 1 in FY2008). Phase 1/FY2008 will redesign and construct repairs and replace joint sealant on Runway 36R/18L and Taxiway Alpha. The total amount of linear distance is estimated at 75,000 feet. The remaining Taxiways (Taxiway Bravo, B1 through B3, Taxiway Charlie and Delta) will be constructed in FY2008. The total amount of linear distance is estimated at 55,000 feet.

Project Justification:

The runways seal joints at Cecil Field were neglected by the U.S. Navy and require attention to maintain runway and taxiway service life. This project will not replace all joints, but will evaluate need and critical areas will be replaced. This project not only covers the concrete sections, but also asphalt joints.

Airport Notes:

Entered 11/18/2005 by Airport Manager.
Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2008	Local	\$0	
2008	State	\$572,000	
2008	FAA	\$0	
<u>Year Total - 2008</u>		<u>\$572,000</u>	
Project Total - Local		\$0	0.00%
Project Total - State		\$572,000	100.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$572,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0004064 **Airport Project ID:** F2008-XX **WPI No.:** **Sponsor Priority:** 2008
Common Description: Install FAA Certified Surface Observation System **Candidate:**
FDOT Description 2: **National Priority:** 47
FDOT Description 3:
Project Type: EQUIPMENT: Install Weather Reporting Equipment (AWOS)

Project Narrative:

This project will remove and replace the current U.S. Navy ASOS system. The existing (old Navy) system is not certified by the FAA the National Weather Service and can not be used as a stand alone airport weather system. The equipment constantly becomes inoperative and parts for the system are difficult to receive. The new system will provide visibility, temperature, dew point, a decelometer, thunderstorm information and wind speed/direction.

Project Justification:

The current system has outlived its useful life and must be replaced.

Airport Notes:

9/27/05 JAA has requested that FDOT establish a Cecil Field Facility Upgrades Phase 2 project in 2006 using UPIN 4732 and fund this project with \$163,500 in FDOT funds using FIN#409964-1. This will fund the FDOT share of UPIN 1692, 3313, 4055, 4060, 4066, 4221 and 4567. JAA expects \$2,400,000 in FAA Discretionary funding to match FDOT and JAA funding.

3/17/05 No FDOT funds are currently programmed. After we know what 2006 FAA funds will be, we will work with FDOT to reprogram funds to this project.

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2008	Local	\$7,575	
2008	State	\$7,575	
2008	FAA	\$287,850	
<u>Year Total - 2008</u>		<u>\$303,000</u>	
Project Total - Local		\$7,575	2.50%
Project Total - State		\$7,575	2.50%
Project Total - FAA		<u>\$287,850</u>	95.00%
Overall Project Total		<u>\$303,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0004755 **Airport Project ID:** F2009-X **WPI No.:** **Sponsor Priority:** 3
Common Description: Roadway Pavement Rehab - Phase I **Candidate:**
FDOT Description 2: **National Priority:** 23
FDOT Description 3:
Project Type: GROUND TRANSPORTATION: Rehabilitate Access Road (Other)

Project Narrative:

This project will design and construct roadway improvements to Flightline Road, Skymaster Road, Cecil Pines Road and Speicher Drive. The road rehabilitation will include a 2 inch asphalt overlay and marking of the four 20 feet and approximately 1 mile of access roads with four intersections. This project will also evaluate the roadway light fixtures.

Project Justification:

In FY2004/5 Aviation Avenue, the secondary main entrance into the airport was constructed. The service/access roads leading from this road to the airport tenants in the north section utilize the listed roads. These roads were constructed of asphalt approximately 34 years ago and according to records have never been improved. In order to maintain access for the tenants, customers and airport operators, the roads require rehabilitation.

Airport Notes:

3/9/06 Due to funding this project has been moved to FY2009.
 Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2008	Local	\$80,600
2008	State	\$0
2008	FAA - Discretionary	\$1,531,400
<u>Year Total - 2008</u>		<u>\$1,612,000</u>

Project Total - Local	\$80,600	5.00%
Project Total- State	\$0	0.00%
Project Total - FAA	<u>\$1,531,400</u>	95.00%
Overall Project Total	<u>\$1,612,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032

Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0006113 **Airport Project ID:** 2009-XX **WPI No.:** **Sponsor Priority:** 5

Common Description: Rehabilitate High Power Area, TWY A2 **Candidate:**

FDOT Description 2: **National Priority:** 62

FDOT Description 3:

Project Type: APRON: Rehabilitate Apron

Project Narrative:

This project will rehabilitate the aircraft the aircraft high power area at A2 taxiway. The project will remove and replace joint seal, medal jet deflection blast shields and install a certified center tie-down.

Project Justification:

Due to the operational procedures at Cecil Field, this area serves as a safe area where aircraft can perform a high power engine turn without affecting other aircraft operations and mitigates the noise levels produced by operations (JDBS) and location.

Airport Notes:

Assume 1% AIP-Eligible. The FAA supported taxilane makes up approximately 23% of the apron, and the apron project makes up approximately 5% of the overall project.

Assumes 0% AIP eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2009	Local	\$12,500
2009	State	\$0
2009	FAA	\$237,500
<u>Year Total - 2009</u>		<u>\$250,000</u>

Project Total - Local	\$12,500	5.00%
Project Total - State	\$0	0.00%
Project Total - FAA	<u>\$237,500</u>	95.00%
Overall Project Total	<u>\$250,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0006117 **Airport Project ID:** 2009-XX **WPI No.:** **Sponsor Priority:** 4
Common Description: Wildlife Fencing **Candidate:**
FDOT Description 2: **National Priority:** 43
FDOT Description 3:
Project Type: EQUIPMENT: Install Perimeter Fencing [Not Req'd by Part 107]

Project Narrative:

This project will install wildlife fencing on the airfield. The fencing will be constructed of standard wildlife fencing with a linear distance of appx 4.5 miles of fencing.

Project Justification:

Cecil Field is surrounded by over 3,000 acres undisturbed land owned by the authority on the airside of the airport. This fencing would isolate the wildlife away from the airport.

Airport Notes:

Entered by Airport Manager, 2/12/07
 Assume 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2009	Local	\$50,000	
2009	State	\$0	
2009	FAA	\$950,000	
<u>Year Total - 2021</u>		<u>\$1,000,000</u>	
Project Total - Local		\$50,000	5.00%
Project Total - State		\$0	0.00%
Project Total - FAA		<u>\$950,000</u>	95.00%
Overall Project Total		<u>\$1,000,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0001859 **Airport Project ID:** F2010-XX **WPI No.:** 410883-2 **Sponsor Priority:** 2010-4
Common Description: Mid-Field Area Development Roadway Access **Candidate:**
FDOT Description 2: 8266 - Construct/Extend Airport Road **National Priority:** 23
FDOT Description 3:
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)

Project Narrative:

This project will design and construct 28,000 linear feet of access road which will connect Site 9B with the Mid-Field Development Area and provide access to and from the southeast area of the airport.

Project Justification:

Roadway access is required for the Mid-Field Development Area. The current transportation system providing access to this area is insufficient to support the future use of this area.

Airport Notes:

3/17/05 Additional FDOT funding will be required for drainage (UPIN 1857) and utilities (UPIN 1858) associated with this project.

Assumes 0% AIP-Eligibility.

Common Description changed from "Mid-Field Development - Roadway Access Phase 2" to "Mid-Field Area Development Roadway Access"

FDOT Notes:

10/11/04 Project added to the FY10 work program as requested by JAA.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2009	Local	\$250,000
2009	State	\$50,000
2009	FAA - Discretionary	\$1,900,000
<u>Year Total - 2009</u>		<u>\$2,200,000</u>
2010	Local	\$700,000
2010	State	\$900,000
2010	FAA	\$0
2010	Other	\$3,698,000
<u>Year Total - 2010</u>		<u>\$5,298,000</u>

Project Total - Local	\$950,000	12.67%
Project Total- State	\$950,000	12.67%
Project Total - FAA	\$1,900,000	25.34%
Project Total - Other	\$3,698,000	49.32%
Overall Project Total	<u>\$7,498,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0003689 **Airport Project ID:** F2007-XX **WPI No.:** 409973-1 **Sponsor Priority:** 2007-1
Common Description: Runway/Taxiway/Safety Area Drainage Rehabilitation - Phase III **Candidate:**
FDOT Description 2: **National Priority:** 45
FDOT Description 3:
Project Type: OTHER: Improve Airport Drainage

Project Narrative:

This is phase 3 of a multi-year Drainage Project. The project has been defined by the Airport Drainage Condition Survey conducted in FY 2004 (phase 1). Construction of the project began in 2005. In FY 2006, Phase 3 will continue drainage improvements at Cecil Field, in particular the phase is expected to replace approximately 10,000 linear feet of pipe and 10 airfield drain points.

Project Justification:

The current airfield drainage system is 60 years old with several sections under airfield pavements that are failing.

Airport Notes:

10/27/05 FDOT has reduced funding to \$50,000 for 2006.

9/27/05 JAA requested that the FDOT fund \$50,000 of this project now and hold \$200,000 if a JAA box until FAA funding is determined. JAA will need the additional funds if FAA funding is limited. We will know FAA funding in April or May 2006.

3/17/05 JAA has programmed several projects to use FIN 409973-1. If we receive FAA funds we will reprogram the funds to several other UPIN # in the 2006 year.

Assumes 100% AIP-Eligibility

FDOT Notes:

4/15/04 Move F.P. 409973-1 and its \$250,000 FY 2006 funds into this UPIN as requested by JAA.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2009	Local	\$13,750	
2009	State	\$13,750	
2009	FAA	\$522,500	
<u>Year Total - 2009</u>		<u>\$550,000</u>	
2010	Local	\$13,750	
2010	State	\$13,750	
2010	FAA	\$522,500	
<u>Year Total - 2010</u>		<u>\$550,000</u>	
Project Total - Local		\$27,500	2.50%
Project Total - State		\$27,500	2.50%
Project Total - FAA		<u>\$1,045,000</u>	95.00%
Overall Project Total		<u>\$1,100,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Design and Construct Taxiway "D" Extension North **Candidate:**
FDOT Description 2: **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct the second phase of the Site 9B taxiway, located to the north of the northwest development area. This 42,100 SY taxiway will provide access to the future corporate hangars planned for Site 9B.

Project Justification:

Taxiway access is required to support the corporate hangars planned for construction at Site 9B. These hangars are required to meet corporate hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2009	Local	\$85,000
2009	State	\$85,000
2009	FAA	\$150,000
2009	FAA - Discretionary	\$1,750,000
<u>Year Total - 2009</u>		<u>\$2,070,000</u>
2010	Local	\$0
2010	State	\$0
2010	FAA	\$0
2010	Other	\$4,700,000
<u>Year Total - 2010</u>		<u>\$4,700,000</u>

Project Total - Local	\$85,000	1.26%
Project Total - State	\$85,000	1.26%
Project Total - FAA	\$1,900,000	28.06%
Project Total - Other	<u>\$4,700,000</u>	69.42%
Overall Project Total	<u>\$6,770,000</u>	

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No:	3250.3A
UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description:	Site 9B Hangar, Apron & Parking Lot - Phase II		Candidate:
FDOT Description 2:	8243 Hangars Construction		National Priority: 56
FDOT Description 3:	8222 Construct/Extend Taxiway		
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

Cecil Field has reached its capacity for maintenance, restoration and overhaul (MRO) capabilities and will be needing additional MRO hangars and aprons. This project will design and construct one 143,000 SF MRO hangar with one 50,000 SF office, one 29,300 SF apron for a 767 design aircraft, and one 8,500 SY parking lot.

Project Justification:

These improvements are required to meet demand.

Airport Notes:

Assumes 0% AIP-Eligibility

Common Description changed from "Hangar Development" to "Site 9B Hangar, Apron & Parking Lot - Phase II"

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2009	Local	\$0	
2009	State	0	
2009	FAA	0	
2009	Other	43,071,000	
<u>Year Total - 2009</u>		<u>\$43,071,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$43,071,000</u>	100.00%
Overall Project Total		<u>\$43,071,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Site 9B Taxilane **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 4,000 SY taxilane for the Site 9B Hangar, Apron & Parking Lot - Phase II. This 35-foot wide taxilane will provide access to the future corporate hangars planned for Site 9B.

Project Justification:

Taxilane access is required to support the corporate hangars planned for construction at Site 9B. These hangars are required to meet corporate hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2009	Local	\$12,000
2009	State	\$12,000
2009	FAA Other	\$457,000
<u>Year Total - 2009</u>		<u>\$481,000</u>

Project Total - Local	\$12,000	2.49%
Project Total - State	\$12,000	2.49%
Project Total - FAA	<u>\$457,000</u>	95.01%
Overall Project Total	<u>\$481,000</u>	

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No: 3250.3A	

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Site 9B Hangar, Apron & Parking Lot - Phase III			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 14, 13,000 SF and 1, 35,000 SF Corporate hangars with 31,500 SY of aprons, as well as 13,600 SY of access roads and parking lots.

Project Justification:

These improvements are required to meet future corporate hangar demand.

Airport Notes:

Assume 0% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2009	Local	\$0	
2009	State	0	
2009	FAA	0	
2009	Other	26,339,000	
<u>Year Total - 2009</u>		<u>\$0</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$26,339,000</u>	100.00%
Overall Project Total		<u>\$26,339,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0006122 **Airport Project ID:** 2010-XX **WPI No.:** **Sponsor Priority:** 4
Common Description: Fire Supression System, Rehabilitation, Well Five **Candidate:**
FDOT Description 2: **National Priority:** 20
FDOT Description 3:
Project Type: OTHER: Repair Utilities

Project Narrative:

This project will rehabilitate will number 5 by re-drilling and installing 5-inch well pipe at 1,000 feet deep.

Project Justification:

Two wells supply fire supression water to 1847 tank and pumps. This system serves the north/south hangar complex and will be extended to service the east/west hangars.

Airport Notes:

Added as a project 2/12/2007
Assumes 0% AIP

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2010	Local	\$150,000	
2010	State	\$150,000	
2010	FAA	\$0	
<u>Year Total - 2010</u>		<u>\$300,000</u>	
Project Total - Local		\$150,000	50.00%
Project Total - State		\$150,000	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$300,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: ZZC615 **Airport Project ID:** F2008-XX **WPI No.:** **Sponsor Priority:** 2008-4
Common Description: Mid-Field Storm Water Improvements **Candidate:**
FDOT Description 2: 9915 - Drainage Improvements **National Priority:** 45
FDOT Description 3:
Project Type: OTHER: Improve Airport Drainage

Project Narrative:

This project will design and construct Mid-Field storm water improvements.

Project Justification:

The Airport Master Plan/Airport Layout Plan for Cecil Field called for additional development of the airport. As part of the permitting process for additional development and to remain in compliance with the local/state Comprehensive Plan Amendment, storm water improvements are required in the area east of runway 18L/36R (midfield area).

Airport Notes:

3/17/05 This project is not funded by FDOT at this time. Will work to reprogram funds as this project develops.

Assumes 100% AIP-Eligibility.

FDOT Notes:

The Department has this project in our work program for FY 05/06.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2010	Local	\$12,500
2010	State	\$12,500
2010	FAA	\$475,000
<u>Year Total - 2010</u>		<u>\$500,000</u>

Project Total - Local	\$12,500	2.50%
Project Total - State	\$12,500	2.50%
Project Total - FAA	<u>\$475,000</u>	95.00%
Overall Project Total	<u>\$500,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0001857 **Airport Project ID:** F2009-XX **WPI No.:** **Sponsor Priority:** 2009-1
Common Description: Mid-Field Area Development - Drainage Improvements **Candidate:**
FDOT Description 2: 8010 - Airport Improvement **National Priority:** 45
FDOT Description 3:
Project Type: OTHER: Improve Airport Drainage

Project Narrative:

To improve Midfield Area drainage problems prior to construction of hangars

Project Justification:

There must be proper drainage infrastructure prior to hangar construction in the Midfield Area.

Airport Notes:

3/16/05 - No FDOT funds have been programmed for this project. Will work with FDOT to identify additional funding as this project moves forward.

Assumes 100% Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2010	Local	\$37,500	
2010	State	\$37,500	
2010	FAA	\$712,500	
<u>Year Total - 2010</u>		<u>\$787,500</u>	
2011	Local	\$37,500	
2011	State	\$37,500	
2011	FAA	\$2,137,500	
<u>Year Total - 2011</u>		<u>\$2,212,500</u>	
Project Total - Local		\$75,000	2.50%
Project Total - State		\$75,000	2.50%
Project Total - FAA		<u>\$2,850,000</u>	95.00%
Overall Project Total		<u>\$3,000,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0001724 **Airport Project ID:** F2009-XX **WPI No.:** 216973-2 **Sponsor Priority:** 2009-2
Common Description: Mid-Field Area Development Roadway Access - Phase II, Interior Loop **Candidate:**
FDOT Description 2: 8010 - Airport Improvement **National Priority:** 23
FDOT Description 3:
Project Type: GROUND TRANSPORTATION: Construct Service Road (Other)

Project Narrative:

This project will design and construct an access road of approximately 28,000 feet in length and two lanes wide

Project Justification:

The access road currently being used by Airport Staff and contractors is barely adequate for use by security and maintenance personnel and equipment. Development and expansions depicted in the ALP and communicated through local business necessitate the need for major improvement and modifications. This road will provide necessary access to the Mid-Field Development.

Airport Notes:

10/27/05 The funding section of this UPIN show that FDOT has moved the 2009 funding to this UPIN but no grant # was assigned. Please assign FIN# to this UPIN.

3/17/05 JAA requests the FDOT reprogram the \$1,000,000 in 2009 funds in UPIN 989, FIN 216973-1, into this UPIN (PFL 1724), using a new FIN#. This will allow us to close 216973-1 when Parking Lot Upgrades are completed in 2007.

Assumes 0% AIP-Eligibility.

Common Description changed from "Midfield Area Development - Roadway" to "Mid-Field Area Development Roadway Access - Phase II, Interior Loop"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2010	Local	150,000	
2010	State	\$30,000	
2010	FAA - Discretionary	\$1,140,000	
2010	Other	\$6,997,000	
<u>Year Total - 2010</u>		<u>\$8,317,000</u>	
2012	Local	430,000	
2012	State	\$570,000	
2012	FAA	\$0	
<u>Year Total - 2012</u>		<u>\$1,000,000</u>	
Project Total - Local		\$580,000	6.23%
Project Total - State		\$600,000	6.44%
Project Total - FAA		\$1,140,000	12.24%
Project Total - Other		\$6,997,000	75.10%
Overall Project Total		<u>\$9,317,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority

NPIAS No.: 12-0032

Sponsor ID: 1204

Airport ID: VQQ

Site No: 3250.3A

UPIN:

Airport Project ID:

WPI No.:

Sponsor Priority:

Common Description: Site 9B Hangar, Apron & Parking Lot - Phase IV

Candidate:

FDOT Description 2: 8243 Hangars Construction

National Priority: 56

FDOT Description 3: 8266 - Construct/Extend Airport Road

Project Type: BUILDINGS: Construct Building

APRONS: Construct Aprons

OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]

Project Narrative:

This project will design and construct 5, 27,000 SF Corporate hangars with 14,200 SY of aprons. Additionally, this project will design and construct 14,600 SY of access road and parking lots to provide access to Site 9B phases IV and V.

Project Justification:

These improvements are required to meet future corporate hangar demand.

Airport Notes:

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2010	Local	\$0	
2010	State	\$0	
2010	FAA	\$0	
2010	Other	\$22,338,000	
<u>Year Total - 2010</u>		<u>\$0</u>	
Project Total- Local		\$0	0.00%
Project Total- State		\$0	0.00%
Project Total- FAA		\$0	0.00%
Project Total- Other		<u>\$22,338,000</u>	100.00%
Overall Project Total		<u>\$22,338,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0003401 **Airport Project ID:** F2010-XX **WPI No.:** **Sponsor Priority:** 2010-2
Common Description: Cecil Field ARFF Emergency Vehicle **Candidate:**
FDOT Description 2: **National Priority:** 50
FDOT Description 3:
Project Type: EQUIPMENT: Acquire Aircraft Rescue & Fire Fighting Vehicle [Not by part 139]

Project Narrative:

The project will purchase a new Aircraft Rescue and Fire Fighting (ARFF) vehicle. The vehicle will replace JAX 17 and will be required to have 3,000 gallons of H₂O with 450 pounds of AFFF concentrate with induction mixing.

Project Justification:

Current ARFF equipment is aged and will need replacing. The new truck/equipment will service

Airport Notes:

3/16/05 Airport manager has revised and set priority.
Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2011	Local	\$17,000
2011	State	\$17,000
2011	FAA	\$656,000
2011	FAA - Discretionary	
<u>Year Total - 2011</u>		<u>\$690,000</u>

Project Total - Local	\$17,000	2.46%
Project Total - State	\$17,000	2.46%
Project Total - FAA	<u>\$656,000</u>	95.07%
 Overall Project Total	 <u>\$690,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0006121 **Airport Project ID:** 2011-XX **WPI No.:** **Sponsor Priority:** 4
Common Description: Fire Supression Well Rehabilitation, Well Four **Candidate:**
FDOT Description 2: **National Priority:** 20
FDOT Description 3:
Project Type: OTHER: Repair Utilities

Project Narrative:

This project will rehabilitate will number 4 by re-drilling and installing 5-inch well pipe at 1,000 feet deep.

Project Justification:

Two wells supply fire supression water to 1847 tank and pumps which serves 5 major hangrs.

Airport Notes:

Added as a project 2/12/2007
Assumes 0% AIP

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2011	Local	\$150,000	
2011	State	\$150,000	
2011	FAA	\$0	
<u>Year Total - 2011</u>		<u>\$300,000</u>	
Project Total - Local		\$150,000	50.00%
Project Total - State		\$150,000	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$300,000</u>	

Airport: Cecil Field	UPIN:
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Site 9B Hangar, Apron & Parking Lot - Phase V			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 3, 27,000 SF and 4, 12,000 SF Corporate hangars with 15,200 SY of aprons and 5,600 SY of parking lots.

Project Justification:

These improvements are required to meet future corporate hangar demand.

Airport Notes:

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2011	Local	\$0	
2011	State	\$0	
2011	FAA	\$0	
2011	Other	\$21,217,000	
<u>Year Total - 2011</u>		<u>\$21,217,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
		<u>\$21,217,000</u>	100.00%
Overall Project Total		<u>\$21,217,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032

Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0004068 **Airport Project ID:** F2011-X **WPI No.:** **Sponsor Priority:** 2011-6

Common Description: Airport Security Improvements - Phase I **Candidate:**

FDOT Description 2: **National Priority:** 43

FDOT Description 3:

Project Type: EQUIPMENT: Install Perimeter Fencing [Not reqd by Part 107]

Project Narrative:

This project is Phase I of III to improve airport security. This project will install approximately 12,000 LF of fence around the Northeast Development Area.

Project Justification:

Fencing is required to ensure safety and security of the general public. The fencing remaining from the U.S. Navy is in complete need of replacement.

Airport Notes:

3/17/05 This is the #6 priority for FDOT 2011 funds.

Assumes 100% AIP-Eligibility

Common Description changed from "Airport Security, Fencing Rehabilitation, Phase 2" to "Airport Security Improvements - Phase I"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2011	Local	\$227,000
2011	State	\$227,000
2011	FAA	\$0
<u>Year Total - 2011</u>		<u>\$454,000</u>

Project Total- Local	\$227,000	50.00%
Project Total- State	\$227,000	50.00%
Project Total-FAA	<u>\$0</u>	0.00%
Overall Project Total	<u>\$454,000</u>	

Project Type:

PROJECT NO. 42

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority

NPIAS No. 12-0032

Sponsor ID: 1204

Airport ID: VQQ

Site No: 3250.3A

UPIN: PFL0004145 **Airport Project ID:** F2011-XX **WPI No.:**

Sponsor Priority: 2011-2

Common Description: Rehabilitate & Remark Taxiway Surfaces

Candidate:

FDOT Description 2:

National Priority: 68

FDOT Description 3:

Project Type: TAXIWAYS: Rehabilitate Taxiway

Project Narrative:

This project will rehab & re-mark Taxiways A, A1-A5, B, B1-B3, Charlie and Delta with approved FAA specification paint.

Project Justification:

Previous marking rehab was conducted in FY2005 and will reach marking life span by 2011. Remarkings will ensure safe airport and aviation operations.

Airport Notes:

3/17/05 This is the #2 priority for 2011 FDOT funds.

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2011	Local	\$150,000
2011	State	\$150,000
2011	FAA - Discretionary	\$150,000
<u>Year Total - 2011</u>		<u>\$450,000</u>

Project Total - Local \$150,000 33.33%

Project Total - State \$150,000 33.33%

Project Total - FAA \$150,000 33.33%

Overall Project Total **\$450,000**

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT*

PROJECT NO. 43

Airport: Cecil Field	UPIN: PFL0004067
Sponsor: Jacksonville Aviation Authority	NPIAS No.: 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3*A

UPIN: PFL0004067	Airport Project ID: F2011-XX	WPI No.:	Sponsor Priority: 2001-4
Common Description: Rehabilitate Bldg. 1846 and 880 Roof Replacement			Candidate:
FDOT Description 2:			National Priority: 34
FDOT Description 3:			
Project Type: BUILDINGS: Construct/Expand/Improve/Modify/Relocate Building			

Project Narrative:

This project will rehabilitate 37,000 SF of building 1846 and 16,000 SF of building 880's roof.

Project Justification:

The current roofs will be 27 and 32 years old respectively on FY2011 and will be past the expected service life. Bldg 1846 has had minor repairs conducted in FY2003, but the repairs were not sufficient enough to extend the service life.

Airport Notes:

3/17/05 This is the #4 priority for FDOT 2011 finds.

9/28/05 This project has been modified. Hangar 825 Roof Rehab, UPIN0988 has been moved forward to FY2007. These two bldgs were listed in previous JACIP years but, were deferred to FY2011 due to their current conditions, repairs and the state of hangar 825 roof.

Assumes 0% AIP-Eligibility

FDOT Notes:

4/15/04 - The funds under this project have been moved to Cecil Master Plan, (PFL0001723) as requested by JAA

FAA Notes:

3/23/04 - Not eligible, not specific

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2011	Local	\$201,000	
2011	State	\$201,000	
<u>Year Total - 2011</u>		<u>\$402,000</u>	
Project Total - Local		\$201,000	50.00%
Project Total - State		\$201,000	50.00%
Project Total - FAA		<u>\$0</u>	
Overall Project Total		<u>\$402,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0004069 **Airport Project ID:** F2011-XX **WPI No.:** **Sponsor Priority:** 2011-5
Common Description: Sluice Gate Rehabilitation **Candidate:**
FDOT Description 2: **National Priority:** 19
FDOT Description 3:
Project Type: OTHER: Environmental Mitigation

Project Narrative:

This project will remove and replace the six sluice gates that protect the St. Johns River basin streams including the tributaries that are on airport property; Yellow Water Creek and Sal Taylor Creek from petro-based material/fluids from entering the echo system.

Project Justification:

Currently, the system is near service life and are being maintained to operate, however, by 2011, the system will have long outlived it's service life and will need to be replaced.

Airport Notes:

3/16/05 This is the #5 priority for FDOT 2011 funding.
 Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2011	Local	\$151,000	
2011	State	\$151,000	
2011	FAA	\$0	
<u>Year Total - 2011</u>		<u>\$302,000</u>	
Project Total - Local		\$151,000	50.00%
Project Total - State		\$151,000	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$302,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0004102 **Airport Project ID:** F2011-XX **WPI No.:** **Sponsor Priority:** 2011-3
Common Description: Rehabilitate Building 313, Roof Rehabilitation **Candidate:**
FDOT Description 2: **National Priority:** 34
FDOT Description 3:
Project Type: BUILDINGS: Rehabilitate Building

Project Narrative:

This project will remove sections of building 313's roof, approximately 15,000 sq. feet, and overlay the entire roof of 51,966 sq. feet.

Project Justification:

In FY2011, building 313 roof will be 28 years old and will require replacement and repairs. In FY2005, minor roof repairs to approximately 1,000 sq. feet, pitch pockets and flashing are being constructed to extend the service life to FY2011.

Airport Notes:

3/17/05 This is the #3 priority for FDOT funds in 2011.
Assumes 0% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2011	Local	\$150,000	
2011	State	\$150,000	
<u>Year Total - 2011</u>		<u>\$300,000</u>	
Project Total- Local		\$150,000	50.00%
Project Total- State		\$150,000	50.00%
Project Total- FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$300,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0003375 **Airport Project ID:** F2005-03 **WPI No.:** **Sponsor Priority:** 2005-7
Common Description: Rejuvenation of Airport Pavements **Candidate:**
FDOT Description 2: **National Priority:** 62
FDOT Description 3:
Project Type: RUNWAYS: Rehabilitate Runway

Project Narrative:

This project will rejuvenate and remark all runways and supporting taxiways.

Project Justification:

This project is necessary to maintain the airfield pavements and to provide adequate airport markings for the airfield operators.

Airport Notes:

10/27/05 JAA will request additional discussion with FDOT on this project. Additional funding and scope changes requested on FIN 216967-1 UPIN 3308.

Prior Dated Note: This project will mark all FAA approved Runway and Taxiway surfaces. Additional FDOT funds will be requested to mark the airside facilities not approved for FAA support. FDOT funds are currently not programmed. We will work with FDOT to reprogram funds from closed FDOT grants to this project.

Assumes 42% AIP-Eligibility, the FAA supported Runway surface area is approximately 42% of the proposed runway configuration.

Common Description changed from "Rehabilitate & Re-Mark Runway 18R/36L, 9R/27L and 9L/27R" to "Rejuvenation of Airfield Pavements"

FDOT Notes:

FAA Notes:

3/23/04 Not eligible R/Ws

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2012	Local	\$296,000	
2012	State	\$296,000	
2012	FAA	\$429,000	
<u>Year Total - 2012</u>		<u>\$1,021,000</u>	
Project Total - Local		\$296,000	28.99%
Project Total - State		\$296,000	28.99%
Project Total - FAA		<u>\$429,000</u>	42.02%
Overall Project Total		<u>\$1,021,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Taxilane - Phase I **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 7,100 SY taxilane for the Mid-Field Hangar, Apron & Parking Lot - Phase I project. This 75-foot wide taxilane will provide access to the future MRO hangars planned for Mid-Field development area.

Project Justification:

Taxilane access is required to support the MRO hangars planned for construction at the Mid-Field development area. These hangars are required to meet MRO hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2012	Local	\$41,500	
2012	State	\$41,500	
2012	FAA - Discretionary	\$1,550,000	
<u>Year Total - 2012</u>		<u>\$1,633,000</u>	
Project Total - Local		\$41,500	2.54%
Project Total - State		\$41,500	2.54%
Project Total - FAA		<u>\$1,550,000</u>	94.92%
Overall Project Total		<u>\$1,633,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0001858 **Airport Project ID:** F2012-XX **WPI No.:** **Sponsor Priority:** 2012-1
Common Description: Mid-Field Hangar, Apron & Parking Lot - Phase I **Candidate:**
FDOT Description 2: 8243 Hangars Construction **National Priority:** 56
FDOT Description 3: 8222 Construct/Extend Taxiway
Project Type: BUILDINGS: Construct Buildings

Project Narrative:

This project will design and construct 1, 264,000 SF MRO hangar and 1, 55,000 SY apron, as well as 6,200 SY of parking lots.

Project Justification:

New hangars and aprons are needed to meet projected demands for MRO facilities.

Airport Notes:

3/17/05 No FDOT funds have been programmed for this project. Will work with FDOT to identify additional funding as project moves forward.

08/14/06 This is the Number One (1) Priority for year 2012 funding.
Assumes 0% AIP-Eligibility.

Common Description changed from "Midfield Area Development" to "Mid-Field Hangar, Apron & Parking Lot - Phase I"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2012	Local	\$0	
2012	State	\$0	
2012	FAA	\$0	
2012	Other	\$64,147,000	
<u>Year Total - 2012</u>		<u>\$64,147,000</u>	
Project Total - Local		\$0	0.00%
Project Total - State		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$64,147,000</u>	100.00%
Overall Project Total		<u>\$64,147,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032

Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0001729 **Airport Project ID:** F2012-XX **WPI No.:** **Sponsor Priority:** 2012-3

Common Description: Airport Roadway Pavement Rehabilitation

Candidate:

FDOT Description 2:

National Priority: 22

FDOT Description 3:

Project Type: GROUND TRANSPORTATION: Rehab Service Road (Other)

Project Narrative:

Airport Pavement Rehab/Reconstruction/Marking includes pavement improvements throughout airport landside area. This project will mill, provide crack repair, some sub-surface repair, drainage area repair (4), asphalt overlay (2 inches) and remarking for 3,335 linear feet by 24 feet wide roadway (Aerospace Way), Authority and Cargo Bay.

Project Justification:

Little pavement work was done by the Navy over the past six years at Cecil Field. Pavement markings are for the most part faded and many do not comply with civilian standards. Pavement is deteriorated and cracked in many places and is in need or repair.

Airport Notes:

9/27/05 Deferred. 3/17/05 No FDOT funding has been programmed for this project. We will work with FDOT to identify additional funding for this project. This project has been deferred to FY 2012.

Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2012	Local	\$574,000	
2012	State	\$574,000	
<u>Year Total - 2012</u>		\$1,148,000	
Project Total - Local		\$574,000	50.00%
Project Total - State		\$574,000	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$1,148,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: ZZC331 **Airport Project ID:** F2007-XX **WPI No.:** 216988-1 **Sponsor Priority:** 2012-2
Common Description: Mid-Field Area Development - Drainage Improvement **Candidate:**
FDOT Description 2: **National Priority:** 45
FDOT Description 3:
Project Type: OTHER: Improve Airport Drainage

Project Narrative:

Improve airport drainage, erosion control and storm water retention to implement the Airport Master Plan Development Concepts.

Project Justification:

Drainage Improvements must be constructed to allow for new development.

Airport Notes:

10/25/05 FDOT has reprogrammed funds as requested. \$10,000 was reprogrammed to a JAA Box. JAA needs to keep track of JAA Box Funds.

9/27/05 Cecil Field Airport Manager has reprioritized this project to an outyear. JAA requests the \$70,000 in 2007 funds be reprogrammed as \$35,000 to ZZC328 Cecil Building Demo and \$25,000 to Craig UPIN PFL1888 and \$10,000 to JAA Box.

3/17/05 FDOT funding is programmed under FIN 216988-1 in FY2007 FOR \$70,000. FAA will participate only if Cecil Field continues in the MAP program.

Assumes 100% AIP-Eligibility.

FDOT Notes:

This project has been approved for our FY 06/07 year.

FAA Notes:

Phase 2 must be broken-out into separate projects.

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2012	Local	\$17,500	
2012	State	\$17,500	
2012	FAA	\$665,000	
<u>Year Total - 2012</u>		<u>\$700,000</u>	
Project Total - Local		\$17,500	2.50%
Project Total - State		\$17,500	2.50%
Project Total - FAA		<u>\$665,000</u>	95.00%
Overall Project Total		<u>\$700,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032

Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A

UPIN: PFL0004148 **Airport Project ID:** F2012-XX **WPI No.:** **Sponsor Priority:** 2012-4

Common Description: Airport Master Plan Update (2012) **Candidate:**

FDOT Description 2: **National Priority:** 68

FDOT Description 3:

Project Type: PLANNING: Update Airport Master Plan Study

Project Narrative:

This project will update the airport master plan update

Project Justification:

The FAA requires an updated airport master plan every five years.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2012	Local	\$6,000	
2012	State	\$6,000	
2012	FAA - Discretionary	\$228,000	
<u>Year Total - 2012</u>		<u>\$240,000</u>	
Project Total - Local		\$6,000	2.50%
Project Total - State		\$6,000	2.50%
Project Total - FAA		<u>\$228,000</u>	95.00%
Overall Project Total		<u>\$240,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Parallel Taxiway - Phase I **Candidate:**
FDOT Description 2: Mid-Field Parallel Taxiway - Phase I **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

The first of four phases will construct 3,400 linear feet of taxiway with two stubouts, the second will construct 2,600 linear feet with one stubout, the third will construct 1,800 linear feet, and the fourth will construct one stubout to Taxiway B. This project will involve approx 40,000 SY of Taxiway.

Project Justification:

The MRO and Cargo Hangars located at the Mid-Field Development Area must have access to the Runways. This 75-foot wide taxiway would provide access to RW 18R/36L and Taxiway B.

Airport Notes:

Assumes 100% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2012	Local	\$77,000
2012	State	\$77,000
2012	FAA	\$1,474,000
2012	FAA - Discretionary	\$1,474,000
<u>Year Total - 2012</u>		<u>\$3,102,000</u>
2013	Local	\$77,000
2013	State	\$77,000
2013	FAA	\$1,474,000
	FAA - Discretionary	\$1,474,000
<u>Year Total - 2013</u>		<u>\$3,102,000</u>

Project Total - Local	\$154,000	2.48%
Project Total - State	\$154,000	2.48%
Project Total - FAA	<u>\$5,896,000</u>	95.04%
Overall Project Total	<u>\$6,204,000</u>	

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No:	3250.3A

UPIN: ZZC339	Airport Project ID: F2013-XX	WPI No.:	Sponsor Priority: 2013-X
Common Description: Apron Rehabilitation			Candidate:
FDOT Description 2: 8216 Runway Lighting Installation			National Priority: 62
FDOT Description 3:			
Project Type:	APRON: Rehabilitate Apron		

Project Narrative:

This project will rehabilitate the public ramp areas at Cecil Field. Specifically, they will remove the old navy markings and plates, rehab seals, tie-downs and some surface rehab.

Project Justification:

Without this project, a severe delay would escalate cost with a complete pavement reconstruction.

Airport Notes:

3/17/05 Manager to identify runway and update description.
 2/17/05 Project changed from parallel lighting system to apron rehab.
 Assumes 0% AIP eligibility

FDOT Notes:

Need project justification and better project description

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2013	Local	\$75,000	
2013	State	75,000	
2013	FAA - Discretionary	600,000	
<u>Year Total - 2013</u>		<u>\$750,000</u>	
Project Total - State		\$75,000	10.00%
Project Total - Local		\$75,000	10.00%
Project Total - FAA		<u>\$600,000</u>	80.00%
Overall Project Total		<u>\$750,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Taxilane - Phase II **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 5,800 SY taxilane for the Mid-Field Hangar, Apron & Parking Lot - Phase II project. This 75-foot wide taxilane will provide access to the future MRO hangars planned for the Mid-Field development area.

Project Justification:

Taxilane access is required to support the MRO hangars planned for construction at Site 9B. These hangars are required to meet MRO hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2013	Local	\$33,500	
2013	State	\$33,500	
2013	FAA - Discretionary	\$1,289,000	
<u>Year Total - 2013</u>		<u>\$1,356,000</u>	
Project Total - Local		\$33,500	2.47%
Project Total - State		\$33,500	2.47%
Project Total - FAA		<u>\$1,289,000</u>	95.06%
Overall Project Total		<u>\$1,356,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority

NPIAS No. 12-0032

Sponsor ID: 1204

Airport ID: VQQ

Site No: 3250.3A

UPIN: PFL0001867 **Airport Project ID:** F2013-XX **WPI No.:**

Sponsor Priority: 2013

Common Description: Mid-Field Hangar, Apron and Parking Lots - Phase II

Candidate:

FDOT Description 2: 8243 Hangars Construction

National Priority: 56

FDOT Description 3: 8222 Construct/Extend Taxiway

Project Type: BUILDINGS: Construct Building

APRON: Construct Apron

OTHER: Construct Parking Lot [non revenue producing-non hub/MAP]

Project Narrative:

This is Phase II of VIII to design and construct the Mid-Field hangars and aprons. Phase II will design and construct 1, 264,000 SF MRO hangar with 1, 47,000 SY apron, as well as 9,400 sy of parking lots in the Mid-Field development area.

Project Justification:

MRO Midfield Hangars are required to support the continued demand for hangar space at Cecil Field.

Airport Notes:

3/17/05 Manager to define hangar need and review cost.

Assumes 0% AIP-Eligibility.

Common Description changed from "Construct Midfield Apron for New Hangars" to "Mid-Field Hangar, Apron and Parking Lots - Phase II"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2013	Local	\$0	
2013	State	\$0	
2013	FAA	\$0	
2013	Other	\$63,092,000	
<u>Year Total - 2013</u>		<u>\$63,092,000</u>	
Project Total - Local		\$0	0.00%
Project Total - State		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$63,092,000</u>	100.00%
Overall Project Total		<u>\$63,092,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0004766 **Airport Project ID:** F2013-XX **WPI No.:** **Sponsor Priority:** 2
Common Description: Fire Supression and Fire Loop Rehabilitation (Hgr 13, 14, Fire Loop Phase VI) **Candidate:**
FDOT Description 2: **National Priority:** 34
FDOT Description 3:
Project Type: BUILDINGS: Improve Buildings, OTHER: Improve Utilities

Project Narrative:

This project will renovate the existing dry deluge fire system. The current system is circa 1940's and does not meet NFPA or any fire protection code. This project will remove the current under pressured 50psi (JEA) system into the rehabilitated and newly constructed fire service water system (1826/1847). In Addition, AFFF tanks and induction lines, all interior piping, valves and hangar pumps will be removed and replaced. This project will complete the Fireloop series of projects. Phase 6 will tie in fire water services from the two water holding tanks (750,000 gallons) and pumping system to hangar 13 and 14 completing the entire airport (minus FLARNG) hangars with to code fire suppression capabilities. The system will continue a 14 inch, 150psi water line from the end of the fire loop line (1826) to hangar 13 and 14. In addition, this project will make the final connection to both hangars.

Project Justification:

The current system was installed in 1941. The system was evaluated in FY2005 and it was determined that the sprinkler heads needed to be replaced/upgraded and plan for outyear projects to provide adequate water supply and remove the potable water supply, which are required to meet local, State and National Code. In addition, this project is one of several separate projects to rehabilitate the hangar. As for fire protection projects for hangar 13, in FY2006 the sprinkler heads are scheduled to be replaced and in FY2003 completed a project that rehabilitated the alarm systems in the offices, shops and hangar.

Fireloop projects 1 through 5 rehabilitated the line, replaced fireloop lines, improved holding tanks, fire pumps, engines, jockey pumps, two supporting wells and equipment and several other related items. This system was installed by the Navy under several different contracts and years and has reached it's life expectancy. With this rehabilitation, the system, with appropriate maintenance should last another 40 years. This would bring each hangar (13&14) in code with water psi and AFFF capabilities.

Airport Notes:

Project added 11/22/2005 by Airport Manager,
 Assumes 0% AIP-Eligibility
 Common Description changed from "Hangar 13 Fire Suppression System Renovations",
 "Hangar 14 Fire Supression Rehabilitation" and "Fire Loop Phase VI" to "Fire Supression and
 Fire Loop Rehab (Hgr 13, 14, Fire Loop Phase VI)"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2013	Local	\$800,000

2013	State	\$200,000
2013	FAA	\$0
2013	Other	\$1,469,000
<u>Year Total - 2013</u>		<u>\$1,000,000</u>

Project Total - State	\$200,000	8.10%
Project Total - Local	\$800,000	32.40%
Project Total - FAA	\$0	0.00%
Project Total - Other	<u>\$1,469,000</u>	59.50%
Overall Project Total	<u>\$2,469,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0001695 **Airport Project ID:** F2013-XX **WPI No.:** **Sponsor Priority:** 2013-X
Common Description: Installation ILS and MALSR - Runway 9R/27L **Candidate:**
FDOT Description 2: **National Priority:** 48
FDOT Description 3:
Project Type: RUNWAYS: Install Instrument Approach Aid

Project Narrative:

This project will install a Cat. One ILS and MALSR on Runway 9R/27L.

Project Justification:

The existing airfield electrical equipment and facilities at Cecil Field are in various stages of general disrepair and obsolescence. The majority of the facilities are original installations from the early to mid-1950's. Many of the facilities were installed to meet the specific requirements of the U.S. Navy, the previous owner and operator of the facility. As a result of the specific operational arena, the facilities are largely incompatible with public use and civilian operations. The ILS will offer additional IMC/IFR approach services to Cecil Field.

Airport Notes:

3/17/05 Project deferred to 2013.

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2013	Local	\$45,500	
2013	State	\$45,500	
2013	FAA	\$1,739,000	
<u>Year Total - 2013</u>		<u>\$1,830,000</u>	
2014	Local	\$45,500	
2014	State	\$45,500	
2014	FAA	\$1,739,000	
<u>Year Total - 2014</u>		<u>\$1,830,000</u>	
Project Total - Local		\$91,000	2.49%
Project Total - State		\$91,000	2.49%
Project Total - FAA		<u>\$3,478,000</u>	95.03%
Overall Project Total		<u>\$3,660,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032

Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0003400 **Airport Project ID:** F2013-XX **WPI No.:** **Sponsor Priority:** 2013-X

Common Description: Northwest Infrastructure Improvement **Candidate:**

FDOT Description 2: **National Priority:** 61

FDOT Description 3:

Project Type: TAXIWAYS: Construct Taxilane
GROUND TRANSPORTATION: Construct Access Road

Project Narrative:

This project will design and construct two taxilanes and one access road to provide airside and landside access to future hangar development.

Project Justification:

Additional bulk, corporate and T-hangars are necessary to meet projected aviation demand. This infrastructure improvement project will prepare for future hangar development.

Airport Notes:

3/17/05 Airport Management to review Hangar Development to determine year and priority Assumes 70% AIP-Eligibility. The FAA supported taxilanes make up approximately 70% of the overall project.

Common Description changed from "Cecil Field Hangar Development" and " T-Hangar Construction" to "Northwest Infrastructure Improvement"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2013	Local	\$209,500	
2013	State	\$209,500	
2013	FAA - Discretionary	\$978,000	
<u>Year Total - 2013</u>		<u>\$1,397,000</u>	
Project Total - Local		\$209,500	15.00%
Project Total - State		\$209,500	15.00%
Project Total - FAA		<u>\$978,000</u>	70.01%
Overall Project Total		<u>\$1,397,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: PFL0005623 **Airport Project ID:** 2013 **WPI No.:** **Sponsor Priority:** XX
Common Description: Rehabilitate Terminal Road and Parking Lot **Candidate:**
FDOT Description 2: **National Priority:** 22
FDOT Description 3:
Project Type: GROUND TRANSPORTATION: Rehabilitate Service Road (Other)

Project Narrative:

This project will repair cracks, come milling, overlay and seal the terminal road, Aeronautical Circle and terminal parking lot. The parking lot is approximately 75,000 sq. feet and the road is approximately 1/4 mile (circular drive).

Project Justification:

The current lot and road were sealed by the airport in 2004 to extend the service life. However, due to age and use, the road and lot will require rehabilitation

Airport Notes:

3/10/2006 Entered in as new project by airport manager.
Assumes 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2013	Local	\$409,500	
2013	State	\$409,500	
<u>Year Total - 2013</u>		<u>\$819,000</u>	
Project Total - Local		\$409,500	50.00%
Project Total - State		\$409,500	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$819,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority

NPIAS No. 12-0032

Sponsor ID: 1204

Airport ID: VQQ

Site No: 3250.3A

UPIN: PFL0004070 **Airport Project ID:** F2011-XX **WPI No.:**

Sponsor Priority: 2011-8

Common Description: New Air Traffic Control Tower

Candidate:

FDOT Description 2:

National Priority: 34

FDOT Description 3:

Project Type: BUILDINGS: Construct/Expand/Improve/Modify/Relocate Air Traffic Control Facilities

Project Narrative:

This project will design the new Air Traffic Control Tower with a 2,500 SY parking lot.

Project Justification:

The current tower was constructed in the late 1950's and is located on the fourth floor of building 82/terminal. The tower does not meet local code and with future expansion, several airfield areas will not be visible to the controllers. As indicated in the approved Airport Master Plan, the new tower location will be near the center of the airport.

Airport Notes:

3/17/05 #8 Priority for FDOT funding.

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2014	Local	\$907,000	
2014	State	\$907,000	
2014	FAA	\$1,500,000	
<u>Year Total - 2014</u>		<u>\$3,314,000</u>	
2015	Local	\$0	
2015	State	\$0	
2015	FAA - Discretionary	\$1,500,000	
<u>Year Total - 2015</u>		<u>\$1,500,000</u>	
Project Total - Local		\$907,000	18.84%
Project Total - State		\$907,000	18.84%
Project Total - FAA		\$3,000,000	62.32%
Overall Project Total		<u>\$4,814,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Taxilane - Phase III **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 5,600 SY taxilane for the Mid-Field Hangar, Apron & Parking Lot - Phase III project. This 75-foot wide taxilane will provide access to the future MRO hangars planned for Mid-Field development area.

Project Justification:

Taxilane access is required to support the MRO hangars planned for construction at the Mid-Field development area. These hangars are required to meet MRO hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2014	Local	\$32,500	
2014	State	\$32,500	
2014	FAA - Discretionary	\$1,246,000	
<u>Year Total - 2014</u>		<u>\$1,311,000</u>	
Project Total - Local		\$32,500	2.48%
Project Total - State		\$32,500	2.48%
Project Total - FAA		<u>\$1,246,000</u>	95.04%
Overall Project Total		<u>\$1,311,000</u>	

Airport: Cecil Field	UPIN:
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Mid-Field Hangar, Apron & Parking Lot - Phase III			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 1, 264,000 SF MRO hangar with a 47,000 SY apron, as well as 9,400 SY of parking lots.

Project Justification:

These improvements are required to meet future MRO facility demand.

Airport Notes:

Assumes 0% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2014	Local	\$0	
2014	State	\$0	
2014	FAA	\$0	
2014	Other	\$63,127,000	
<u>Year Total - 2014</u>		<u>\$0</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$63,127,000</u>	100.00%
Overall Project Total		<u>\$63,127,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Taxilane - Phase IV **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 5,600 SY taxilane for the Mid-Field Hangar, Apron & Parking Lot - Phase IV project. This 75-foot wide taxilane will provide access to the future MRO hangars planned for Mid-Field development area.

Project Justification:

Taxilane access is required to support the MRO hangars planned for construction at the Mid-Field development area. These hangars are required to meet MRO hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2015	Local	\$32,500	
2015	State	\$32,500	
2015	FAA	\$1,246,000	
<u>Year Total - 2015</u>		<u>\$1,311,000</u>	
Project Total - Local		\$32,500	2.48%
Project Total - State		\$32,500	2.48%
Project Total - FAA		<u>\$1,246,000</u>	95.04%
Overall Project Total		<u>\$1,311,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT*

PROJECT NO. 64

Airport: Cecil Field

UPIN:

Sponsor: Jacksonville Aviation Authority

NPIAS No. 12-0032

Sponsor ID: 1204

Airport ID: VQQ

Site No: 3250.3A

UPIN:

Airport Project ID:

WPI No.:

Sponsor Priority:

Common Description: Mid-Field Hangar, Apron & Parking Lots - Phase IV

Candidate:

FDOT Description 2: 8243 Hangars Construction

National Priority: 56

FDOT Description 3: 8222 Construct/Extend Taxiway

Project Type: BUILDINGS: Construct Building

APRONS: Construct Aprons

OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]

Project Narrative:

This project will design and construct 1, 264,000 SF MRO hangar with a 47,000 SY apron, as well as 6,200 SY of parking lots.

Project Justification:

These improvements are required to meet future MRO facility demand.

Airport Notes:

Assumes 0% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2015	Local	\$0	
2015	State	0	
2015	FAA	0	
2015	Other	62,906,000	
<u>Year Total - 2015</u>		<u>\$62,906,000</u>	
Project Total - State			0.00%
Project Total - Local			0.00%
Project Total - FAA			0.00%
Project Total - Other		<u>\$62,906,000</u>	100.00%
Overall Project Total		<u>\$62,906,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT*

PROJECT NO. 65

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A

UPIN: PFL0001865 **Airport Project ID:** F2015-XX **WPI No.:** **Sponsor Priority:** 2015-2
Common Description: Update Master Plan / ALP (2015) **Candidate:**
FDOT Description 2: **National Priority:** 58
FDOT Description 3:
Project Type: PLANNING: Update Airport Master Plan Study

Project Narrative:

Update Master Plan/ALP

Project Justification:

Conduct study/update of Master Plan/ALP to ensure Cecil Field infrastructure is in consonance with emerging industry requirements. Previous update programmed for FY2006.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2015	Local	\$6,000
2015	State	\$6,000
2015	FAA	\$228,000
<u>Year Total - 2012</u>		<u>\$240,000</u>

Project Total - Local	\$6,000	2.50%
Project Total - State	\$6,000	2.50%
Project Total - FAA	<u>\$228,000</u>	95.00%
Overall Project Total	<u>\$240,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority

NPIAS No. 12-0032

Sponsor ID: 1204

Airport ID: VQQ

Site No: 3250.3A

UPIN: PFL0003690 **Airport Project ID:** F2008-XX **WPI No.:**

Sponsor Priority: 2008-2

Common Description: Runway/Taxiway/Safety Area Drainage Rehabilitation - Phase IV **Candidate:**

FDOT Description 2:

National Priority: 45

FDOT Description 3:

Project Type: OTHER: Improve Airport Drainage

Project Narrative:

This is Phase 4 of a multi-year Drainage Project. The JAA completed an Airport Drainage Condition Survey in FY2004. This project will complete the drainage rehabilitation project designed (Phase 1) in FY2004, phase 2 in FY2005 and Phase 3 in FY2006. Phase 4 is expected to rehabilitate the 7 drainage outflows along the east side of runway 18L/36R, 1 north of 36R in the RPZ and 3 outflow areas on the south side of Runway 9R/27L. The rehabilitation will recondition the outflows, remove and replace the fabform and rock stabilization forms and replace approximately 1,500 linear feet of drainage pipe.

Project Justification:

The current airfield drainage system is 60 years old with several sections under airfield pavements that are failing.

Airport Notes:

3/16/05 This project is currently unfunded by the FDOT. Will work to reprogram additional funds as project develops.

Assume 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2015	Local	\$12,500	
2015	State	\$12,500	
2015	FAA Discretionary	\$475,000	
<u>Year Total - 2015</u>		<u>\$500,000</u>	
Project Total - Local		\$12,500	2.50%
Project Total - State		\$12,500	2.50%
Project Total - FAA		<u>\$475,000</u>	95.00%
Overall Project Total		<u>\$500,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Taxilane - Phase V **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 6,100 SY taxilane for the Mid-Field Hangar, Apron & Parking Lot - Phase V project. This 75-foot wide taxilane will provide access to the future MRO hangars planned for Mid-Field development area.

Project Justification:

Taxilane access is required to support the MRO hangars planned for construction at the Mid-Field development area. These hangars are required to meet MRO hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2016	Local	\$35,500	
2016	State	\$35,500	
2016	FAA - Discretionary	\$1,349,000	
<u>Year Total - 2016</u>		<u>\$1,420,000</u>	
Project Total - Local		\$35,500	2.50%
Project Total - State		\$35,500	2.50%
Project Total - FAA		<u>\$1,349,000</u>	95.00%
Overall Project Total		<u>\$1,420,000</u>	

Airport: Cecil Field	UPIN:
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description:	Mid-Field Hangar, Apron & Parking Lots - Phase V		Candidate:
FDOT Description 2:	8243 Hangars Construction		National Priority: 56
FDOT Description 3:	8222 Construct/Extend Taxiway		
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 1, 130,000 SF MRO hangar with a 60,000 SY apron, as well as 3,700 SY of parking lots.

Project Justification:

These improvements are required to meet future MRO facility demand.

Airport Notes:

Assumes 0% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2016	Local	\$0	
2016	State	\$0	
2016	FAA	\$0	
2016	Other	\$41,471,000	
<u>Year Total - 2016</u>		<u>\$41,471,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$41,471,000</u>	100.00%
Overall Project Total		<u>\$41,471,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Parallel Taxiway - Phase II **Candidate:**
FDOT Description 2: Mid-Field Parallel Taxiway - Phase II **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

The first of four phases will construct 3,400 linear feet of taxiway with two stubouts, the second will construct 2,600 linear feet with one stubout, the third will construct 1,800 linear feet, and the fourth will construct one stubout to Taxiway B. This project will involve approx 28,000 SY of Taxiway.

Project Justification:

The MRO and Cargo Hangars located at the Mid-Field Development Area must have access to the Runways. This 75-foot wide taxiway would provide access to RW 18R/36L and Taxiway B.

Airport Notes:

Assumes 100% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2016	Local	\$1,500,000	
2016	State	\$1,000,000	
2016	FAA	\$500,000	
2016	FAA - Discretionary	\$1,062,000	
<u>Year Total - 2016</u>		<u>\$4,062,000</u>	
Project Total - Local		\$1,500,000	36.93%
Project Total - State		\$1,000,000	24.62%
Project Total - FAA		<u>\$1,562,000</u>	38.45%
Overall Project Total		<u>\$4,062,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0001869 **Airport Project ID:** F2016-XX **WPI No.:** **Sponsor Priority:** 2016-X
Common Description: Airport Security Improvements - Phase II **Candidate:**
FDOT Description 2: **National Priority:** 43
FDOT Description 3:
Project Type: EQUIPMENT: Install Perimeter Fencing [Not reqd by part 107]

Project Narrative:

This project will design and construct approximately 33,000 LF of security fencing around the South quadrant of the airport.

Project Justification:

The airport boundary needs to be clearly identified and security fencing needs to be installed to improve safety.

Airport Notes:

Assumes 100% AIP-Eligibility
 Common Description changed from "Airport Perimeter/Security Fencing" to "Airport Security Improvements - Phase II"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2016	Local	\$27,000
2016	State	\$27,000
2016	FAA	\$1,035,000
<u>Year Total - 2016</u>		<u>\$1,089,000</u>

Project Total - Local	\$27,000	2.48%
Project Total - State	\$27,000	2.48%
Project Total - FAA	<u>\$1,035,000</u>	95.04%
Overall Project Total	<u>\$1,089,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: ZZC346 **Airport Project ID:** F2014-XX **WPI No.:** **Sponsor Priority:** 2014X
Common Description: Southeast Development Roadway Access **Candidate:**
FDOT Description 2: 8266 - Construct/Extend Airport Road **National Priority:** 23
FDOT Description 3:
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)

Project Narrative:

This project will provide roadway access to the Southeast Development Area from the Mid-Field Development Area. This access road will consist of two lanes and 21,000 LF.

Project Justification:

This project is required to meet forecast demand

Airport Notes:

3/17/05 Manager to Update
 Common Description changed from "Southside GA Development - Roadway Access" to "Southeast Development Roadway Access"

FDOT Notes:

FAA Notes:

Assumes 0% AIP-Eligibility

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2017	Local	\$1,500,000	
2017	State	\$1,000,000	
2017	FAA - Discretionary	\$1,101,000	
<u>Year Total - 2017</u>		<u>\$3,601,000</u>	
Project Total - Local		\$1,500,000	41.66%
Project Total - State		\$1,000,000	27.77%
Project Total - FAA		<u>\$1,101,000</u>	30.57%
Overall Project Total		<u>\$3,601,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Taxilane - Phase VI **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 8,300 SY taxilane for the Mid-Field Hangar, Apron & Parking Lot - Phase VI project. This 75-foot wide taxilane will provide access to the future Cargo hangars planned for Mid-Field development area.

Project Justification:

Taxilane access is required to support the Cargo hangars planned for construction at the Mid-Field development area. These hangars are required to meet Cargo hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2017	Local	\$47,500	
2017	State	\$47,500	
2017	FAA - Discretionary	\$1,804,000	
<u>Year Total - 2017</u>		<u>\$1,899,000</u>	
Project Total - Local		\$47,500	2.50%
Project Total - State		\$47,500	2.50%
Project Total - FAA		<u>\$1,804,000</u>	95.00%
Overall Project Total		<u>\$1,899,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT***PROJECT NO. 73**

Airport:	Cecil Field	UPIN:		
Sponsor:	Jacksonville Aviation Authority	NPIAS No.:	12-0032	
Sponsor ID:	1204	Airport ID:	VQQ	Site No: 3250.3A
UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:	
Common Description:	Mid-Field Hangar, Apron & Parking Lots - Phase VI		Candidate:	
FDOT Description 2:	8243 Hangars Construction		National Priority: 56	
FDOT Description 3:	8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building			
	APRONS: Construct Aprons			
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]			

Project Narrative:

This project will design and construct 1, 100,000 SF Cargo hangar with a 67,000 SY apron, as well as 27,500 SY of parking lots.

Project Justification:

These improvements are required to meet future Cargo facility demand.

Airport Notes:

Assumes 0% AIP-Eligibility.

FDOT Notes:**FAA Notes:****Airport Sponsor Request**

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2017	Local	\$0	
2017	State	\$0	
2017	FAA	\$0	
2017	Other	\$37,044,000	
<u>Year Total - 2017</u>		<u>\$0</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$37,044,000</u>	
Overall Project Total		<u>\$37,044,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Parallel Taxiway - Phase III **Candidate:**
FDOT Description 2: Mid-Field Parallel Taxiway - Phase III **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

The first of four phases will construct 3,400 linear feet of taxiway with two stubouts, the second will construct 2,600 linear feet with one stubout, the third will construct 1,800 linear feet, and the fourth will construct one stubout to Taxiway B. This project will involve approx 19,200 SY of

Project Justification:

The MRO and Cargo Hangars located at the Mid-Field Development Area must have access to the Runways. This 75-foot wide taxiway would provide access to RW 18R/36L and Taxiway B.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2017	Local	\$75,000
2017	State	\$75,000
2017	FAA	\$1,500,000
2017	FAA - Discretionary	\$1,324,000
<u>Year Total - 2017</u>		<u>\$2,974,000</u>

Project Total - Local	\$75,000	2.52%
Project Total - State	\$75,000	2.52%
Project Total - FAA	<u>\$2,824,000</u>	94.96%
Overall Project Total	<u>\$2,974,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: ZZC344 **Airport Project ID:** F2014-XX **WPI No.:** **Sponsor Priority:** 2014-X
Common Description: Southeast Development Drainage Improvements - Phase I **Candidate:**
FDOT Description 2: 8010 - Airport Improvement **National Priority:** 45
FDOT Description 3:
Project Type: OTHER: Improve Airport Drainage

Project Narrative:

This project will design and construct drainage improvement structures in the Southeast Development Area.

Project Justification:

Required to meet forecast demand

Airport Notes:

3/17/05 needs updating

Assumes 100% AIP-Eligibility

Common Description changed from "Southside GA Development - Drainage Improvements" to "Southeast Development Drainage Improvements - Phase I"

FDOT Notes:

Need project justification and better project description

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2018	Local	\$12,500	
2018	State	\$12,500	
2018	FAA	\$475,000	
<u>Year Total - 2018</u>		<u>\$500,000</u>	
Project Total - Local		\$12,500	2.50%
Project Total - State		\$12,500	2.50%
Project Total - FAA		<u>\$475,000</u>	95.00%
Overall Project Total		<u>\$500,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Taxilane - Phase VII **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 16,500 SY taxilane for the Mid-Field Hangar, Apron & Parking Lot - Phase VII project. This 75-foot wide taxilane will provide access to the future Cargo hangars planned for Mid-Field development area.

Project Justification:

Taxilane access is required to support the Cargo hangars planned for construction at the Mid-Field development area. These hangars are required to meet Cargo hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2018	Local	\$90,500
2018	State	\$90,500
2018	FAA	\$1,000,000
2018	FAA - Discretionary	\$2,439,000
<u>Year Total - 2018</u>		<u>\$3,620,000</u>

Project Total - Local	\$90,500	2.50%
Project Total - State	\$90,500	2.50%
Project Total - FAA	<u>\$3,439,000</u>	95.00%
Overall Project Total	<u>\$3,620,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT***PROJECT NO. 77**

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No:	3250.3A
UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Mid-Field Hangar, Apron & Parking Lots - Phase VII			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 1, 55,000 SF Cargo hangar with a 95,000 SY apron, as well as 20,500 SY of parking lots.

Project Justification:

These improvements are required to meet future Cargo facility demand.

Airport Notes:

Assumes 0% AIP-Eligibility.

FDOT Notes:**FAA Notes:****Airport Sponsor Request**

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2018	Local	\$0	
2018	State	\$0	
2018	FAA	\$0	
2018	Other	\$33,002,000	
<u>Year Total - 2018</u>		<u>\$0</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		\$33,002,000	100.00%
Overall Project Total		<u>\$33,002,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Parallel Taxiway - Phase IV **Candidate:**
FDOT Description 2: Mid-Field Parallel Taxiway - Phase IV **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

The first of four phases will construct 3,400 linear feet of taxiway with two stubouts, the second will construct 2,600 linear feet with one stubout, the third will construct 1,800 linear feet, and the fourth will construct one stubout to Taxiway B. This project will involve approx 5,000 SY of Taxiway.

Project Justification:

The MRO and Cargo Hangars located at the Mid-Field Development Area must have access to the Runways. This 75-foot wide taxiway would provide access to Taxiway B.

Airport Notes:

Assumes 100% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2018	Local	\$12,500
2018	State	\$12,500
2018	FAA	\$490,000
<u>Year Total - 2018</u>		<u>\$515,000</u>

Project Total - Local	\$12,500	2.43%
Project Total - State	\$12,500	2.43%
Project Total - FAA	<u>\$490,000</u>	95.15%
Overall Project Total	<u>\$515,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0004071 **Airport Project ID:** F2011-XX **WPI No.:** **Sponsor Priority:** 2011-1
Common Description: Rehabilitate and Remark Runways and Taxiways **Candidate:**
FDOT Description 2: **National Priority:** 72
FDOT Description 3:
Project Type: RUNWAYS: Rehabilitate Runway

Project Narrative:

This project will mill and overlay all runways and supporting taxiways and provide concrete and crack repair. Additionally, this project will remark all runway and taxiway surfaces.

Project Justification:

The runways and taxiways will need to be overhauled. This project is necessary to provide safe and effective airfield pavements. Airfield pavements will also need to be rehabilitated to meet FAA guideline:

Airport Notes:

3/17/05 This is the #1 priority for FDOT 2011 funds.

8/14/06 This project still remains #1 priority for FDOT 2011 funds.

Assumes 42% AIP-Eligibility, the surface area of the proposed FAA supported runways are approximate 42% of the proposed runway configuration.

FDOT Notes:

FAA Notes:

4/05/05 ineligible R/Ws

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2019	Local	\$1,500,000
2019	State	\$1,000,000
2019	FAA	\$1,000,000
2019	FAA - Discretionary	\$1,399,500
<u>Year Total - 2019</u>		<u>\$4,899,500</u>
2020	Local	\$750,000
2020	State	\$500,000
2020	FAA - Discretionary	\$2,058,000
2020	Other	\$1,591,500
<u>Year Total - 2020</u>		<u>\$4,899,500</u>

Project Total - Local	\$2,250,000	22.96%
Project Total - State	\$1,500,000	15.31%
Project Total - JAA	\$4,457,500	45.49%
Project Total - Other	\$1,591,500	16.24%
 Overall Project Total	 <u>\$9,799,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: ZZC345 **Airport Project ID:** F2014-XX **WPI No.:** **Sponsor Priority:** 2014-X
Common Description: Southeast Development Utility Improvements **Candidate:**
FDOT Description 2: 8287 - Const/Relocate Utility Systems **National Priority:** 20
FDOT Description 3:
Project Type: OTHER: Construct Utilities [MAP]

Project Narrative:

This project will design and construct utility improvements in the Southeast Development Area.

Project Justification:

These improvements area required to meet forecast demand.

Airport Notes:

3/17/05 Needs Updating
 Assumes 100% AIP-Eligibility
 Common Description changed from "Southside GA Development - Utilities" to "Southeast Development Utility Improvements"

FDOT Notes:

Need project justification and details on the project.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2019	Local	\$5,000	
2019	State	\$5,000	
2019	FAA	\$192,000	
<u>Year Total - 2019</u>		<u>\$202,000</u>	
Project Total - Local		\$5,000	2.36%
Project Total - State		\$5,000	2.36%
Project Total - FAA		<u>\$202,000</u>	95.28%
Overall Project Total		<u>\$212,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Mid-Field Taxilane - Phase VIII **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 6,300 SY taxilane for the Mid-Field Hangar, Apron & Parking Lot - Phase VIII project. This 75-foot wide taxilane will provide access to the future Cargo hangars planned for Mid-Field development area.

Project Justification:

Taxilane access is required to support the Cargo hangars planned for construction at the Mid-Field development area. These hangars are required to meet Cargo hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2019	Local	\$36,000
2019	State	\$36,000
2019	FAA	\$500,000
2019	FAA - Discretionary	\$868,000
<u>Year Total - 2019</u>		<u>\$1,440,000</u>

Project Total - Local	\$36,000	2.50%
Project Total - State	\$36,000	2.50%
Project Total - FAA	<u>\$1,368,000</u>	95.00%
Overall Project Total	<u>\$1,440,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT***PROJECT NO. 82**

Airport: Cecil Field	UPIN:
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description:	Mid-Field Hangar, Apron & Parking Lot - Phase VIII		Candidate:
FDOT Description 2:	8243 Hangars Construction		National Priority: 56
FDOT Description 3:	8222 Construct/Extend Taxiway		
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 1, 55,000 SF Cargo hangar with a 52,000 SY apron, as well as 29,500 SY of parking lots.

Project Justification:

These improvements are required to meet future Cargo facility demand.

Airport Notes:

Assumes 0% AIP-Eligibility.

FDOT Notes:**FAA Notes:****Airport Sponsor Request**

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2019	Local	\$0	
2019	State	\$0	
2019	FAA	\$0	
2019	Other	\$25,976,000	
<u>Year Total - 2019</u>		<u>\$25,976,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$25,976,000</u>	100.00%
Overall Project Total		<u>\$25,976,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Taxilane - Phase I **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 4,100 SY taxilane for the Southeast Hangar & Apron - Phase I project. This 35-foot wide taxilane will provide access to the future corporate hangars planned for the Southeast development area.

Project Justification:

Taxilane access is required to support the corporate hangars planned for construction at the Southeast development area. These hangars are required to meet corporate hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2020	Local	\$12,000	
2020	State	\$12,000	
2020	FAA - Discretionary	\$457,000	
<u>Year Total - 2020</u>		<u>\$481,000</u>	
Project Total - Local		\$12,000	2.49%
Project Total - State		\$12,000	2.49%
Project Total - FAA		<u>\$457,000</u>	95.01%
Overall Project Total		<u>\$481,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032

Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0001868 **Airport Project ID:** F2016-XX **WPI No.:** **Sponsor Priority:** 2016-X

Common Description: Southeast Hangars & Apron - Phase I **Candidate:**

FDOT Description 2: **National Priority:** 56

FDOT Description 3:

Project Type: BUILDINGS: Construct Building
 APRON: Construct Apron
 OTHER: Construct Parking Lot [non revenue producing-non hub/MAP]

Project Narrative:

This project is Phase I of VII to design and construct Hangars and Aprons in the southeast development area. This phase will construct 2, 20,000 SF and 8, 10,000 SF Corporate Hangars, as well as 18,000 SY of apron.

Project Justification:

These hangars and aprons are required to meet future demand for corporate hangars at Cecil Field.

Airport Notes:

Assume 0% AIP-Eligible.

Common Description changed from "Construct Southside GA Corporate Hangars" and "Eastside Development - Aprons/Taxiways" to "Southeast Hangar & Apron - Phase I"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2020	Local	\$0
2020	State	\$0
2020	FAA	\$0
2020	Other	\$19,257,000
<u>Year Total - 2020</u>		<u>\$19,257,000</u>

Project Total - Local	\$0	0.00%
Project Total - State	\$0	0.00%
Project Total - FAA	\$0	0.00%
Project Total - Other	\$19,257,000	100.00%
Overall Project Total	<u>\$19,257,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT*

PROJECT NO. 85

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Parallel Taxiway - Phase I **Candidate:**
FDOT Description 2: Southeast Parallel Taxiway - Phase I **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will design and construct a 45,000 SY Taxiway providing access to Runway 9R-27L and 18L-36R.

Project Justification:

To facilitate growth (such as hangars) on the southeast side of the airfield, a new parallel taxiway must be designed and constructed. This project is separated into 3 phases.

Airport Notes:

Assume 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2020	Local	\$500,000
2020	State	\$300,000
2020	FAA	\$1,500,000
2020	Other	\$2,000,000
<u>Year Total - 2020</u>		<u>\$4,300,000</u>
2021	Local	\$0
2021	State	\$0
2021	FAA	\$0
2021	Other	\$2,069,000
<u>Year Total - 2021</u>		<u>\$2,069,000</u>

Project Total - Local	\$500,000	7.85%
Project Total - State	\$300,000	4.71%
Project Total - FAA	\$1,500,000	23.55%
Project Total - Other	<u>\$4,069,000</u>	63.89%
Overall Project Total	<u>\$6,369,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Access Road & Parking Lot - Phase I **Candidate:**
FDOT Description 2: 0206 - Parking Facility **National Priority: 23**
FDOT Description 3: 8266 - Construct/Extend Airport Road
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)
 OTHER: Parking Lot [Non-revenue producing, non hub/MAP]

Project Narrative:

This project (Phase I) will design and construct 6,400 SY of access road and 3,500 SY of parking lot to provide access and parking for the future corporate hangar development in the southeast development area.

Project Justification:

Transportation access and parking is required to support the future corporate hangar development at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2020	Local	\$279,000	
2020	State	\$279,000	
2020	FAA - Discretionary	\$558,000	
<u>Year Total - 2020</u>		<u>\$1,116,000</u>	
Project Total - Local		\$279,000	25.00%
Project Total - State		\$279,000	25.00%
Project Total - FAA		<u>\$558,000</u>	50.00%
Overall Project Total		<u>\$1,116,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Taxilane - Phase II **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 11,000 SY taxilane for the Southeast Hangar & Apron - Phase II project. This 35-foot wide taxilane will provide access to the future FBO hangars and apron planned for the Southeast development area.

Project Justification:

Taxilane access is required to support the FBO hangars and apron planned for construction at the Southeast development area. These hangars are required to meet FBO hangar and apron demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2021	Local	\$31,500	
2021	State	\$31,500	
2021	FAA	\$1,192,000	
<u>Year Total - 2021</u>		<u>\$1,255,000</u>	
Project Total - Local		\$31,500	2.51%
Project Total - State		\$31,500	2.51%
Project Total - FAA		<u>\$1,192,000</u>	94.98%
Overall Project Total		<u>\$1,255,000</u>	

Airport: Cecil Field	UPIN:
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Southeast Hangars & Apron - Phase II			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 2, 15,000 SF Hangars with a 85,000 SY apron.

Project Justification:

These improvements are required to meet future FBO facility demand at the southeast development area.

Airport Notes:

Assumes 0% AIP-Eligibility.

Common Description changed from "Construct Air Cargo Building in Southeast Development Area" and "Southside GA Development - Apron/Taxiways" to "Southeast Hangar & Apron - Phase II"

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2021	Local	\$0	
2021	State	\$0	
2021	FAA	\$0	
2021	Other	\$12,853,000	
<u>Year Total - 2021</u>		<u>\$12,853,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$12,853,000	100.00%
Overall Project Total		<u>\$12,853,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority

NPIAS No. 12-0032

Sponsor ID: 1204

Airport ID: VQQ

Site No: 3250.3A

UPIN: PFL0001870 **Airport Project ID:** F2017-XX **WPI No.:**

Sponsor Priority: 2017X

Common Description: New GA Terminal in Southeast Development Area

Candidate:

FDOT Description 2:

National Priority: 40

FDOT Description 3:

Project Type: TERMINAL DEVELOPMENT: Construct Terminal Building

Project Narrative:

This project will construct a new 27,500 SF GA Terminal in the Southeast Development Area

Project Justification:

A new GA Terminal will be required to support the Corporate and T-Hangar growth in the Southeast Development Area.

Airport Notes:

Assume 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2021	Local	\$300,000	
2021	State	\$0	
2021	FAA	\$0	
2021	Other	\$7,620,000	
Year Total - 2021		<u>\$7,920,000</u>	
Project Total - Local		\$300,000	3.79%
Project Total - State		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$7,620,000</u>	96.21%
Overall Project Total		<u>\$7,920,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No.:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Access Road & Parking Lot - Phase II **Candidate:**
FDOT Description 2: 0206 - Parking Facility **National Priority: 23**
FDOT Description 3: 8266 - Construct/Extend Airport Road
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)
 OTHER: Parking Lot [Non-revenue producing, non hub/MAP]

Project Narrative:

This project (Phase II) will design and construct 1,300 SY of access road and 5,000 SY of parking lot to provide access and parking for the future FBO hangar development in the southeast development area.

Project Justification:

Transportation access and parking is required to support the future FBO hangar development at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2021	Local	\$300,000	
2021	State	\$400,000	
<u>Year Total - 2021</u>		<u>\$700,000</u>	
Project Total - Local		\$300,000	42.86%
Project Total - State		\$400,000	57.14%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$700,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Access Road & Parking Lot - Phase III **Candidate:**
FDOT Description 2: 0206 - Parking Facility **National Priority: 23**
FDOT Description 3: 8266 - Construct/Extend Airport Road
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)
 OTHER: Parking Lot [Non-revenue producing, non hub/MAP]

Project Narrative:

This project (Phase III) will design and construct 4,500 SY of access road and 5,300 SY of parking lot to provide access and parking for the future Corporate hangar development in the southeast development area.

Project Justification:

Transportation access and parking is required to support the future Corporate hangar development at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2021	Local	\$500,000	
2021	State	\$375,000	
2021	FAA - Discretionary	\$103,000	
<u>Year Total - 2021</u>		<u>\$978,000</u>	
Project Total - Local		\$500,000	51.12%
Project Total - State		\$375,000	38.34%
Project Total - FAA		<u>\$103,000</u>	10.53%
Overall Project Total		<u>\$978,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0001873 **Airport Project ID:** F2021-XX **WPI No.:** **Sponsor Priority:** 2021-X
Common Description: Approach Lighting System on Runway 18L/36R **Candidate:**
FDOT Description 2: **National Priority:** 28
FDOT Description 3:
Project Type: RUNWAYS: Install Runway Vertical/Visual Guidance System (PAPI/VASI/REIL/ALS/etc)

Project Narrative:

This project will install an Approach Lighting System on Runway 18L/36R.

Project Justification:

Runway 18L/36R requires an Approach Lighting System.

Airport Notes:

3/17/05 Manager to clarify description and runway number.

Assumes 100% AIP-Eligibility

Common Description changed from "Approach Lighting System on Parallel Runway" to "Approach Lighting System on Runway 18L/36R"

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2021	Local	\$41,500
2021	State	\$41,500
2021	FAA	\$393,000
2021	Other	\$1,180,000
<u>Year Total - 2021</u>		<u>\$1,656,000</u>

Project Total - Local	\$41,500	2.51%
Project Total - State	\$41,500	2.51%
Project Total - FAA	\$393,000	23.73%
Project Total - Other	<u>\$1,180,000</u>	71.26%
Overall Project Total	<u>\$1,656,000</u>	

Airport: Cecil Field

Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032

Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: PFL0003375 **Airport Project ID:** F2005-03 **WPI No.:** **Sponsor Priority:** 2005-7

Common Description: Rejuvenation of Airport Pavement **Candidate:**

FDOT Description 2: **National Priority:** 62

FDOT Description 3:

Project Type: RUNWAYS: Rehabilitate Runway

Project Narrative:

This project will rejuvenate and remark all runways and all supporting taxiways.

Project Justification:

This project is necessary to maintain the airfield pavements, to comply with FAA codes and to provide adequate airport markings for the airfield operators.

Airport Notes:

10/27/05 JAA will request additional discussion with FDOT on this project. Additional funding and scope changes requested on FIN 216967-1 UPIN 3308.

Prior Dated Note: This project will mark all FAA approved Runway and Taxiway surfaces. Additional FDOT funds will be requested to mark the airside facilities not approved for FAA support. FDOT funds are currently not programmed. We will work with FDOT to reprogram funds from closed FDOT grants to this project.

Assumes 42% AIP-Eligibility, the surface area of the proposed FAA supported runways are approximately 42% of the proposed runway configuration.

FDOT Notes:

FAA Notes:

3/23/04 Not eligible R/Ws

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2021	Local	\$296,000	
2021	State	\$296,000	
2021	FAA - Discretionary	\$429,000	
<u>Year Total - 2021</u>		<u>\$1,021,000</u>	
Project Total - Local		\$296,000	28.99%
Project Total - State		\$296,000	28.99%
Project Total - FAA		<u>\$429,000</u>	42.02%
Overall Project Total		<u>\$1,021,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: ZZC340 **Airport Project ID:** F2018-XX **WPI No.:** **Sponsor Priority:** 2018-X
Common Description: Southeast Development Drainage Improvements - **Candidate:**
Phase II
FDOT Description 2: 8010 - Airport Improvement **National Priority:** 45
FDOT Description 3:
Project Type: OTHER: Improve Airport Drainage

Project Narrative:

This project will design and install drainage improvement structures in the Southeast Development Area.

Project Justification:

Required to meet demand forecast

Airport Notes:

3/17/05 Airport Manager will review and improve description.

Assumes 100% AIP-Eligibility

Common Description changed from "Eastside Development - Drainage Improvements" to "Southeast Development - Drainage Improvements"

FDOT Notes:

Need project justification and better project description.

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2022	Local	\$25,000	
2022	State	\$25,000	
2022	FAA	\$950,000	
<u>Year Total - 2022</u>		<u>\$1,000,000</u>	
Project Total - Local		\$25,000	2.50%
Project Total - State		\$25,000	2.50%
Project Total - FAA		<u>\$950,000</u>	95.00%
Overall Project Total		<u>\$1,000,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Taxilane - Phase III **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 5,500 SY taxilane for the Southeast Hangar & Apron - Phase III project. This 35-foot wide taxilane will provide access to the future corporate hangars planned for the Southeast development area.

Project Justification:

Taxilane access is required to support the corporate hangars planned for construction at the Southeast development area. These hangars are required to meet corporate hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2022	Local	\$16,500	
2022	State	\$16,500	
2022	FAA - Discretionary	\$627,000	
<u>Year Total - 2022</u>		<u>\$660,000</u>	
Project Total - Local		\$16,500	2.50%
Project Total - State		\$16,500	2.50%
Project Total - FAA		<u>\$627,000</u>	95.00%
Overall Project Total		<u>\$660,000</u>	

Airport: Cecil Field	UPIN:
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Southeast Hangars & Apron - Phase III			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 2, 20,000 SF and 8, 10,000 SF Corporate Hangars with 20,000 SY of aprons.

Project Justification:

These improvements are required to meet future Corporate hangar demand at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligible.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2022	Local	\$0	
2022	State	\$0	
2022	FAA	\$0	
2022	Other	\$19,489,000	
<u>Year Total - 2022</u>		<u>\$19,489,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		\$19,489,000	100.00%
Overall Project Total		<u>\$19,489,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Taxilane - Phase IV **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 6,200 SY taxilane for the Southeast Hangar & Apron - Phase IV project. This 35-foot wide taxilane will provide access to the future corporate hangars planned for the Southeast development area.

Project Justification:

Taxilane access is required to support the corporate hangars planned for construction at the Southeast development area. These hangars are required to meet corporate hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2022	Local	\$18,500	
2022	State	\$18,500	
2022	FAA - Discretionary	\$702,000	
<u>Year Total - 2022</u>		<u>\$739,000</u>	
Project Total - Local		\$18,500	2.50%
Project Total - State		\$18,500	2.50%
Project Total - FAA		<u>\$702,000</u>	94.99%
Overall Project Total		<u>\$739,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT***PROJECT NO. 98**

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No:	3250.3A
UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Southeast Hangar & Apron - Phase IV			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 2, 20,000 SF and 8, 10,000 SF Corporate Hangars with 20,000 SY of aprons.

Project Justification:

These improvements are required to meet future Corporate hangar demand at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligible.

FDOT Notes:**FAA Notes:****Airport Sponsor Request**

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2022	Local	\$0	
2022	State	0	
2022	FAA	0	
2022	Other	19,427,000	
<u>Year Total - 2022</u>		<u>\$19,427,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$19,427,000</u>	100.00%
Overall Project Total		<u>\$19,427,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Parallel Taxiway - Phase II **Candidate:**
FDOT Description 2: Southeast Parallel Taxiway - Phase II **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will design and construct a 27,000 SY Taxiway providing access to Runway 9R-27L and 18L-36R.

Project Justification:

To facilitate growth (such as hangars) on the southeast side of the airfield, a new parallel taxiway must be designed and constructed. This project is separated into 3 development phases. Phase II will construct 27,000 SY of this taxiway.

Airport Notes:

Assumes 100% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2022	Local	\$1,500,000
2022	State	\$1,000,000
2022	FAA	\$525,000
2022	FAA - Discretionary	\$800,000
<u>Year Total - 2022</u>		<u>\$3,825,000</u>

Project Total - Local	\$1,500,000	39.22%
Project Total - State	\$1,000,000	26.14%
Project Total - FAA	<u>\$1,325,000</u>	34.64%
Overall Project Total	<u>\$3,825,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0001869 **Airport Project ID:** F2016-XX **WPI No.:** **Sponsor Priority:** 2016-X
Common Description: Airport Security Improvements - Phase III **Candidate:**
FDOT Description 2: **National Priority:** 43
FDOT Description 3:
Project Type: EQUIPMENT: Install Perimeter Fencing [Not reqd by part 107]

Project Narrative:

This project will design and construct new security fencing in the North Area of the Airport.

Project Justification:

Ongoing construction to meet customer demand will require additional fencing to provide security and to define property.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2023	Local	\$6,000
2023	State	\$6,000
2023	FAA	\$233,000
<u>Year Total - 2023</u>		<u>\$245,000</u>

Project Total - Local	\$6,000	2.45%
Project Total - State	\$6,000	2.45%
Project Total - FAA	<u>\$233,000</u>	95.10%
Overall Project Total	<u>\$245,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Taxilane - Phase V **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 6,200 SY taxilane for the Southeast Hangar & Apron - Phase V project. This 35-foot wide taxilane will provide access to the future corporate hangars planned for the Southeast development area.

Project Justification:

Taxilane access is required to support the corporate hangars planned for construction at the Southeast development area. These hangars are required to meet corporate hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2023	Local	\$18,500	
2023	State	\$18,500	
2023	FAA - Discretionary	\$702,000	
<u>Year Total - 2023</u>		<u>\$739,000</u>	
Project Total - Local		\$18,500	2.50%
Project Total - State		\$18,500	2.50%
Project Total - FAA		<u>\$702,000</u>	94.99%
Overall Project Total		<u>\$739,000</u>	

Airport: Cecil Field	UPIN:		
Sponsor: Jacksonville Aviation Authority	NPIAS No.: 12-0032		
Sponsor ID: 1204	Airport ID: VQQ	Site No.: 3250.3A	

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Southeast Hangar & Apron - Phase V			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 2, 20,000 SF and 8, 10,000 SF Corporate Hangars with 20,000 SY of aprons.

Project Justification:

These improvements are required to meet future Corporate hangar demand at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligible.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2023	Local	\$0	
2023	State	\$0	
2023	FAA	\$0	
2023	Other	\$19,427,000	
<u>Year Total - 2023</u>		<u>\$0</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		<u>\$19,427,000</u>	100.00%
Overall Project Total		<u>\$19,427,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT*

PROJECT NO. 103

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Parallel Taxiway - Phase III **Candidate:**
FDOT Description 2: Southeast Parallel Taxiway - Phase III **National Priority: 50**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will design and construct a 41,700 SY Taxiway providing access to Runway 9R-27L and 18L-36R.

Project Justification:

To facilitate growth (such as hangars) on the southeast side of the airfield, a new parallel taxiway must be designed and constructed. This project is separated into 3 development phases. Phase III will construct 41,700 SY of this taxiway.

Airport Notes:

Assume 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2023	Local	\$1,500,000	
2023	State	\$1,000,000	
2023	FAA	\$1,000,000	
2023	FAA - Discretionary	\$1,939,000	
<u>Year Total - 2023</u>		<u>\$5,439,000</u>	
2024	Local	\$0	
2024	State	\$0	
2024	FAA	\$500,000	
<u>Year Total - 2024</u>		<u>\$500,000</u>	
Project Total - Local		\$1,500,000	25.26%
Project Total - State		\$1,000,000	16.84%
Project Total - FAA		<u>\$3,439,000</u>	57.91%
Overall Project Total		<u>\$5,939,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Access Road & Parking Lot - Phase IV **Candidate:**
FDOT Description 2: 0206 - Parking Facility **National Priority: 23**
FDOT Description 3: 8266 - Construct/Extend Airport Road
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)
 OTHER: Parking Lot [Non-revenue producing, non hub/MAP]

Project Narrative:

This project (Phase IV) will design and construct 3,700 SY of access road and 4,750 SY of parking lot to provide access and parking for the future Corporate hangar development in the southeast development area.

Project Justification:

Transportation access and parking is required to support the future Corporate hangar development at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2024	Local	\$456,500	
2024	State	\$456,500	
<u>Year Total - 2024</u>		<u>\$913,000</u>	
Project Total - Local		\$456,500	50.00%
Project Total - State		\$456,500	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$913,000</u>	

JACIP- AIRPORT PROJECT DETAIL REPORT *DRAFT*

PROJECT NO. 105

Airport: Cecil Field **UPIN:** PFL0000149
Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3*A

UPIN: PFL0000149 **Airport Project ID:** N/A **WPI No.:** 404524-1 **Sponsor Priority:** N/A
Common Description: Environmental Assessment for Runway 17/35 **Candidate:**
FDOT Description 2: 8007 Aviation Systems Planning **National Priority:** 68
FDOT Description 3:
Project Type: PLANNING: Conduct Environmental Assessment

Project Narrative:

This project will conduct an environmental assessment for Runway 17/35.

Project Justification:

The construction of Runway 17/35 may adversely impact the environment at Cecil Field and the surrounding areas. An Environmental Assessment may be necessary before construction can begin.

Airport Notes:

3/17/05 No FAA or FDOT funds are requested. This project is entered to reflect local needs only.
 Assumes 100% AIP-Eligibility

FDOT Notes:

4/15/04 - The funds under this project have been moved to Cecil Master Plan, (PFL0001723) as requested by JAA

FAA Notes:

3/23/04 - Not eligible, not specific

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2024	Local	\$25,000
2024	State	\$25,000
2024	FAA	\$950,000
<u>Year Total - 2024</u>		<u>\$1,000,000</u>

Project Total - State	\$25,000	2.50%
Project Total - Local	\$25,000	2.50%
Project Total - FAA	<u>\$950,000</u>	95.00%

Overall Project Total **\$1,000,000**

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Taxilane - Phase VI **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 12,000 SY taxilane for the Southeast Hangar & Apron - Phase VI project. This taxilane will provide access to the future corporate and T-hangars planned for the Southeast development area.

Project Justification:

Taxilane access is required to support the corporate and T-hangars planned for construction at the Southeast development area. These hangars are required to meet corporate and T-hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2024	Local	\$33,500	
2024	State	\$33,500	
2024	FAA	\$1,271,000	
<u>Year Total - 2024</u>		<u>\$1,338,000</u>	
Project Total - Local		\$33,500	2.50%
Project Total - State		\$33,500	2.50%
Project Total - FAA		<u>\$1,271,000</u>	94.99%
Overall Project Total		<u>\$1,338,000</u>	

Airport: Cecil Field	UPIN:
Sponsor: Jacksonville Aviation Authority	NPIAS No. 12-0032
Sponsor ID: 1204	Airport ID: VQQ Site No: 3250.3A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Southeast Hangar & Apron - Phase VI			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 1, 20,000 SF, 4, 10,000 SF, 5, 3,600 SF, 5, 2,300 SF, and 38 T-Hangars totalling 69,000 SF. This project will also design and construct 30,000 SY of aprons.

Project Justification:

These improvements are required to meet future Corporate hangar demand at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2024	Local	\$0	
2024	State	\$0	
2024	FAA	\$0	
2024	Other	\$20,860,000	
<u>Year Total - 2024</u>		<u>\$20,860,000</u>	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		<u>\$20,860,000</u>	<u>100.00%</u>
Overall Project Total		<u>\$20,860,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Access Road & Parking Lot - Phase V **Candidate:**
FDOT Description 2: 0206 - Parking Facility **National Priority: 23**
FDOT Description 3: 8266 - Construct/Extend Airport Road
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)
 OTHER: Parking Lot [Non-revenue producing, non hub/MAP]

Project Narrative:

This project (Phase V) will design and construct 3,700 SY of access road and 4,750 SY of parking lot to provide access and parking for the future Corporate hangar development in the southeast development area.

Project Justification:

Transportation access and parking is required to support the future Corporate hangar development at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2024	Local	\$456,500	
2024	State	\$456,500	
<u>Year Total - 2024</u>		<u>\$913,000</u>	
Project Total - Local		\$456,500	50.00%
Project Total - State		\$456,500	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$913,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Taxilane - Phase VII **Candidate:**
FDOT Description 2: **National Priority: 61**
FDOT Description 3:
Project Type: TAXIWAYS: Construct Taxiway (Standards)

Project Narrative:

This project will construct a 14,000 SY taxilane for the Southeast Hangar & Apron - Phase VII project. This taxilane will provide access to the future corporate and T-hangars planned for the Southeast development area.

Project Justification:

Taxilane access is required to support the corporate and T-hangars planned for construction at the Southeast development area. These hangars are required to meet corporate and T-hangar demand.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2025	Local	\$38,500
2025	State	\$38,500
2025	FAA	\$1,473,000
<u>Year Total - 2025</u>		<u>\$1,550,000</u>

Project Total - Local	\$38,500	2.48%
Project Total - State	\$38,500	2.48%
Project Total - FAA	<u>\$1,473,000</u>	95.03%
Overall Project Total	<u>\$1,550,000</u>	

Airport: Cecil Field	UPIN:	
Sponsor: Jacksonville Aviation Authority	NPIAS No.: 12-0032	
Sponsor ID: 1204	Airport ID: VQQ	Site No: 3250.3A

UPIN:	Airport Project ID:	WPI No.:	Sponsor Priority:
Common Description: Southeast Hangar & Apron - Phase VII			Candidate:
FDOT Description 2: 8243 Hangars Construction			National Priority: 56
FDOT Description 3: 8222 Construct/Extend Taxiway			
Project Type:	BUILDINGS: Construct Building		
	APRONS: Construct Aprons		
	OTHER: Construct Parking Lot [non-revenue producing, non hub/MAP]		

Project Narrative:

This project will design and construct 1, 20,000 SF, 4, 10,000 SF, 5, 3,600 SF, 5, 2,300 SF, and 69,000 SF of T-Hangars totalling 69,000 SF. This project will also design and construct 30,000 SY of aprons.

Project Justification:

These improvements are required to meet future Corporate hangar demand at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility.

FDOT Notes:

FAA Notes:

Airport Sponsor Request

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2025	Local	\$0	
2025	State	\$0	
2025	FAA	\$0	
2025	Other	\$20,860,000	
<u>Year Total - 2025</u>		\$0	
Project Total - State		\$0	0.00%
Project Total - Local		\$0	0.00%
Project Total - FAA		\$0	0.00%
Project Total - Other		\$20,860,000	100.00%
Overall Project Total		<u>\$20,860,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A

UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Access Road & Parking Lot - Phase VI **Candidate:**
FDOT Description 2: 0206 - Parking Facility **National Priority: 23**
FDOT Description 3: 8266 - Construct/Extend Airport Road
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)
 OTHER: Parking Lot [Non-revenue producing, non hub/MAP]

Project Narrative:

This project (Phase VI) will design and construct 3,500 SY of access road and 6,200 SY of parking lot to provide access and parking for the future Corporate hangar development in the southeast development area.

Project Justification:

Transportation access and parking is required to support the future Corporate hangar development at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2025	Local	\$503,000	
2025	State	\$503,000	
<u>Year Total - 2025</u>		<u>\$1,006,000</u>	
Project Total - Local		\$503,000	50.00%
Project Total - State		\$503,000	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$1,006,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ **Site No:** 3250.3A
UPIN: **Airport Project ID:** **WPI No.:** **Sponsor Priority:**
Common Description: Southeast Access Road & Parking Lot - Phase VII **Candidate:**
FDOT Description 2: 0206 - Parking Facility **National Priority: 23**
FDOT Description 3: 8266 - Construct/Extend Airport Road
Project Type: GROUND TRANSPORTATION: Construct Access Road (Other)
 OTHER: Parking Lot [Non-revenue producing, non hub/MAP]

Project Narrative:

This project (Phase VII) will design and construct 3,900 SY of access road and 6,500 SY of parking lot to provide access and parking for the future Corporate hangar development in the southeast development area.

Project Justification:

Transportation access and parking is required to support the future Corporate hangar development at the southeast development area.

Airport Notes:

Assume 0% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2025	Local	\$518,500	
2025	State	\$518,500	
<u>Year Total - 2025</u>		<u>\$1,037,000</u>	
Project Total - Local		\$518,500	50.00%
Project Total - State		\$518,500	50.00%
Project Total - FAA		<u>\$0</u>	0.00%
Overall Project Total		<u>\$1,037,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: PFL0001872 **Airport Project ID:** F2020-XX **WPI No.:** **Sponsor Priority:** 2020X
Common Description: Construct Runway 17/35 **Candidate:**
FDOT Description 2: **National Priority:** 53
FDOT Description 3:
Project Type: RUNWAYS: Construct Runway (Standards)

Project Narrative:

Construct Runway 17-35 on eastside of Cecil Field

Project Justification:

Forecasts indicate airport traffic demand may require the construction of a parallel runway.

Airport Notes:

Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>
2025	Local	\$0
2025	State	\$0
2025	FAA Discretionary	\$1,000,000
2025	FAA	\$500,000
<u>Year Total - 2025</u>		<u>\$1,500,000</u>
2026	Local	\$1,500,000
2026	State	\$1,000,000
2026	FAA Discretionary	\$1,000,000
2026	FAA	\$500,000
2026	Other	\$34,820,000
<u>Year Total - 2026</u>		<u>\$38,820,000</u>

Project Total - Local	\$1,500,000	3.72%
Project Total - State	\$1,000,000	2.48%
Project Total - FAA	\$3,000,000	7.44%
Project Total - Other	\$34,820,000	86.36%
Overall Project Total	<u>\$40,320,000</u>	

Airport: Cecil Field
Sponsor: Jacksonville Aviation Authority **NPIAS No.:** 12-0032
Sponsor ID: 1204 **Airport ID:** VQQ Site No: 3250.3A
UPIN: ZZC339 **Airport Project ID:** F2013-XX **WPI No.:** **Sponsor Priority:** 2013-X
Common Description: Approach Lighting System on Parallel Runway 17/35 **Candidate:**
FDOT Description 2: 8216 Runway Lighting Installation **National Priority: 50**
FDOT Description 3:
Project Type: RUNWAYS: Install Runway Vertical/Visual Guidance System (PAPI/VASI/REIL/ALS/etc)

Project Narrative:

This project will install an Approach Lighting System on Parallel Runway 17/35

Project Justification:

Runway 17/35 requires an approach lighting system to meet forecast demand.

Airport Notes:

3/17/05 Manager to identify runway and update description
 Assumes 100% AIP-Eligibility

FDOT Notes:

FAA Notes:

Airport Sponsor Request:

<u>Sponsor Year</u>	<u>Source</u>	<u>Amount</u>	
2026	Local	\$28,000	
2026	State	\$28,000	
<u>2026</u>	FAA	\$1,060,000	
<u>Year Total - 2026</u>		<u>\$1,116,000</u>	
Project Total - Local		\$28,000	2.51%
Project Total - State		\$28,000	2.51%
Project Total - FAA		<u>\$1,060,000</u>	94.98%
Overall Project Total		<u>\$1,116,000</u>	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 1: Comprehensive Planning and Environmental Planning

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR COMPREHENSIVE PLANNING	1	LS	\$ 175,000.00	\$ 175,000.00	
2		ALLOWANCE FOR ENVIRONMENTAL PLANNING	1	LS	\$ 125,000.00	\$ 125,000.00	
						Approximate Total Services Cost ==>	\$ 300,000.00
						USE ==>	\$ 300,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 2: Hangar 13 Roof Rehabilitation

Approx. Roof Area:	12,544 SF
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR ROOF REHABILITATION	1	LS	\$ 250,000.00	\$ 250,000.00	
						Approximate Total Rehabilitation Cost ==>	\$ <u>250,000.00</u>
						USE ==>	\$ 250,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 3: Airport Parking Rehabilitation - Phase I

Approx. pavement area:	9,500 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 40,000.00	\$ 40,000.00	
2		EXISTING ASPHALT PAVEMENT MILLING	9,100	SY	\$ 6.00	\$ 54,600.00	
3		MAINTENANCE OF TRAFFIC	1	LS	\$ 15,000.00	\$ 15,000.00	
4		SUBBASE COURSE	550	SY	\$ 6.00	\$ 3,300.00	
5		BASE COURSE	500	SY	\$ 13.00	\$ 6,500.00	
6		BITUMINOUS SURFACE COURSE (2 IN)	750	TON	\$ 65.00	\$ 48,750.00	
7		BITUMINOUS TACK COAT	1,820	GAL	\$ 2.00	\$ 3,640.00	
8		BITUMINOUS PRIME COAT	200	GAL	\$ 2.00	\$ 400.00	
9		PAVEMENT MARKINGS	1	LS	\$ 20,000.00	\$ 20,000.00	
10		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 60,000.00	\$ 60,000.00	
11		VEHICULAR SIGNAGE	1	LS	\$ 8,000.00	\$ 8,000.00	
12		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 40,000.00	\$ 40,000.00	
13		ALLOWANCE FOR CURB/GUTTER IMPROVEMENTS	1	LS	\$ 20,000.00	\$ 20,000.00	
14		ALLOWANCE FOR LANDSCAPE/IRRIGATION	1	LS	\$ 40,000.00	\$ 40,000.00	
15		ALLOWANCE FOR UTILITY MODIFICATIONS	1	LS	\$ 60,000.00	\$ 60,000.00	
16		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 20,000.00	\$ 20,000.00	

Approximate Total Construction Cost ==> \$ 440,190.00

SURVEYING & DESIGN TESTING @ 5%: \$ 22,009.50
ENGINEERING @ 12%: \$ 52,822.80
INSPECTION & TESTING @ 10%: \$ 44,019.00
AIRPORT ADMINISTRATION @ 2%: \$ 8,803.80

Approximate Total Services Cost ==> \$ 127,655.10

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 567,845.10
ADD 20% CONTINGENCY ==> \$ 113,569.02
\$ 681,414.12

USE ==> \$ 682,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07

file: Short-term
 2003.037.05

AVCON Project:

Project No. 4:		Central Taxilane Extension	Approx. pavement area:		3,200 SY		
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 42,000.00	\$ 42,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00	
3		EMBANKMENT/EXCAVATION	1,000	CY	\$ 4.50	\$ 4,500.00	
4		SUBBASE COURSE	3,500	SY	\$ 5.00	\$ 17,500.00	
5		BASE COURSE	3,300	SY	\$ 20.00	\$ 66,000.00	
6		BITUMINOUS SURFACE COURSE (4 IN)	700	TON	\$ 135.00	\$ 94,500.00	
7		BITUMINOUS PRIME COAT	1,600	GAL	\$ 3.00	\$ 4,800.00	
8		BITUMINOUS TACK COAT	640	GAL	\$ 3.00	\$ 1,920.00	
9		PAVEMENT MARKINGS	2,400	SF	\$ 1.50	\$ 3,600.00	
10		SHOULDER GRADING	1	LS	\$ 15,000.00	\$ 15,000.00	
11		SODDING	1,000	SY	\$ 3.50	\$ 3,500.00	
12		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
13		ALLOWANCE FOR TAXIWAY LIGHTING	1	LS	\$ 20,000.00	\$ 20,000.00	
14		ALLOWANCE FOR AIRFIELD SIGNAGE	1	LS	\$ 15,000.00	\$ 15,000.00	
15		5 KV CABLE	20,000	LF	\$ 1.25	\$ 25,000.00	
16		NO. 6 COPPER COUNTERPOISE	10,000	LF	\$ 0.85	\$ 8,500.00	
17		DUCT, CONCRETE ENCASED	1,000	LF	\$ 35.00	\$ 35,000.00	
18		DUCT, DIRECT BURIED	9,000	LF	\$ 5.00	\$ 45,000.00	
19		FENCE MODIFICATION	100	LF	\$ 13.00	\$ 1,300.00	

Approximate Total Construction Cost ==> \$ 421,120.00
 SURVEYING & DESIGN TESTING @ 5%: \$ 21,056.00
 ENGINEERING @ 12%: \$ 50,534.40
 INSPECTION & TESTING @ 8%: \$ 33,689.60
 AIRPORT ADMINISTRATION @ 1%: \$ 4,211.20

Approximate Total Services Cost ==> \$ 109,491.20

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 530,611.20
 ADD 20% CONTINGENCY ==> \$ 106,122.24
 \$ 636,733.44

USE ==> \$ 637,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 5: North Taxiway Development - Drainage and Utilities

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR UTILITIES/DRAINAGE IMPROVEMENTS	1	LS	\$ 1,715,000.00	\$ 1,715,000.00	
							Approximate Total Construction Cost ==> \$ 1,715,000.00
							PERMITTING & PROFESSIONAL SERVICES @ 25%: \$ 428,750.00
							Approximate Total Services Cost ==> <u>\$ 428,750.00</u>
							USE ==> \$ 2,145,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 AVCON Project: 2003.037.05

Project No. 6: Approach Lighting System on Runway 9R/27L

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 86,000.00	\$ 86,000.00	
2		ALLOWANCE FOR APPROACH LIGHTING IMPROVEMENTS	1	LS	\$ 810,000.00	\$ 810,000.00	
3		FAA COORDINATION	1	LS	\$ 38,000.00	\$ 38,000.00	
Approximate Total Construction Cost ==>							\$ 934,000.00
SURVEYING @ 5%:							\$ 46,700.00
ENGINEERING @ 12%:							\$ 112,080.00
CONSTRUCTION ADMINISTRATION @ 8%:							\$ 74,720.00
AIRPORT ADMINISTRATION @ 1%:							\$ 9,340.00
Approximate Total Services Cost ==>							\$ 242,840.00
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 1,176,840.00
ADD 15% CONTINGENCY ==>							\$ 176,526.00
							\$ 1,353,366.00
USE ==>							\$ 1,354,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 7: Roof Rehabilitation - Hangars 13 (Phase II), 825, 815, 1820, Bldgs 595 & 504

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR HANGAR 13 ROOF REHABILITATION	1	LS	\$ 919,601.00	\$ 919,601.00	
2		ALLOWANCE FOR HANGAR 815 & 504 ROOF REHABILITATION	1	LS	\$ 534,616.00	\$ 534,616.00	
3		ALLOWANCE FOR HANGAR 825 ROOF REHABILITATION	1	LS	\$ 778,892.00	\$ 778,892.00	
4		ALLOWANCE FOR HANGAR 1820 AND BLDG 595 ROOF REHAB	1	LS	\$ 1,013,574.00	\$ 1,013,574.00	

Approximate Total Construction Cost ==> \$ 3,246,683.00

USE ==> \$ 3,247,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 8: Rehabilitate Hangar 67 Roof

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR ROOF REHABILITATION	1	LS	\$ 1,700,000.00	\$ 1,700,000.00	
						Approximate Total Rehabilitation Cost ==>	<u>\$ 1,700,000.00</u>
						USE ==>	\$ 1,700,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 9: Building 373, 33 and 34 Demolition

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR BUILDING DEMOLITION	1	LS	\$ 150,000.00	\$ 150,000.00	

Approximate Total Demolition Cost ==> \$ 150,000.00

USE ==> \$ 150,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 10: Building 329 Demolition

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR BUILDING DEMOLITION	1	LS	\$ 70,000.00	\$ 70,000.00	
						Approximate Total Demolition Cost ==>	\$ 70,000.00
						USE ==>	\$ 70,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 11: Parking Lot Upgrade - Phase I

Approx. pavement area:	3,600 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 40,000.00	\$ 40,000.00	
2		ASPHALT PAVEMENT MILLING	3,600	SY	\$ 6.00	\$ 21,600.00	
3		MAINTENANCE OF TRAFFIC	1	LS	\$ 15,000.00	\$ 15,000.00	
4		BITUMINOUS SURFACE COURSE (2 IN)	396	TON	\$ 135.00	\$ 53,460.00	
5		BITUMINOUS TACK COAT	720	GAL	\$ 3.00	\$ 2,160.00	
6		SHOULDER GRADING	1	LS	\$ 25,000.00	\$ 25,000.00	
7		PAVEMENT MARKINGS/REFLECTORS	1	LS	\$ 10,000.00	\$ 10,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
9		VEHICULAR SIGNAGE	1	LS	\$ 4,000.00	\$ 4,000.00	
10		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 30,000.00	\$ 30,000.00	
11		ALLOWANCE FOR CURB/GUTTER IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
12		ALLOWANCE FOR LANDSCAPING/IRRIGATION	1	LS	\$ 40,000.00	\$ 40,000.00	
13		ALLOWANCE FOR UTILITY MODIFICATIONS	1	LS	\$ 50,000.00	\$ 50,000.00	
14		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 15,000.00	\$ 15,000.00	

Approximate Total Construction Cost ==> \$ 386,220.00

SURVEYING & DESIGN TESTING @ 5%: \$ 19,311.00
ENGINEERING @ 12%: \$ 46,346.40
INSPECTION & TESTING @ 10%: \$ 38,622.00
AIRPORT ADMINISTRATION @ 2%: \$ 7,724.40

Approximate Total Services Cost ==> \$ 112,003.80

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **498,223.80**
ADD 20% CONTINGENCY ==> \$ 99,644.76
\$ **597,868.56**

USE ==> \$ 598,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 12: Bldg 82/Terminal Rehabilitation - Phase III

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR BLDG 82/TERMINAL REHABILITATION	1	LS	\$ 236,000.00	\$ 236,000.00	

Approximate Total Rehabilitation Cost ==> \$ 236,000.00

USE ==> \$ 236,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 13: Bldg 324, 365 and 366 Demolition

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		DEMOLITION OF BLDG 324, 365 AND 366	1	LS	\$ 125,000.00	\$125,000.00	
					Approximate Total Services Cost ==>	\$	125,000.00
					PRELIMINARY ESTIMATE OF PROJECT COST ==>	\$	125,000.00
					ADD 20% CONTINGENCY ==>	\$	25,000.00
						\$	<u>150,000.00</u>
					USE ==>	\$	150,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 14: New Entrance Sign

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ENTRANCE SIGN	1	LS	\$ 50,000.00		
2		INSTALLATION	1	LS	\$ 8,000.00		
3		LANDSCAPING	1	LS	\$ 10,000.00		
Approximate Total Construction Cost ==>							\$ 68,000.00
DESIGN @ 12%: \$ 8,160.00							
Approximate Total Services Cost ==>							\$ <u>8,160.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ <u>76,160.00</u>
USE ==>							\$ 76,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 15:	Site 9B Taxiway	Approx. Pavement Area	10,100 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 160,000.00	\$ 160,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 40,000.00	\$ 40,000.00	
3		CLEARING AND GRUBBING	4	AC	\$ 3,000.00	\$ 12,000.00	
4		EMBANKMENT/EXCAVATION	3,000	CY	\$ 7.00	\$ 21,000.00	
5		SUBBASE COURSE	10,900	SY	\$ 5.00	\$ 54,500.00	
6		BASE COURSE	10,500	SY	\$ 15.00	\$ 157,500.00	
7		PCC TAXIWAY	10,100	SY	\$ 100.00	\$ 1,010,000.00	
8		PAVEMENT MARKINGS	1	LS	\$ 15,000.00	\$ 15,000.00	
9		SODDING	1,100	SY	\$ 3.50	\$ 3,850.00	
10		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 100,000.00	\$ 100,000.00	
11		ALLOWANCE FOR TAXIWAY EDGE LIGHTING	1	LS	\$ 50,000.00	\$ 50,000.00	
12		ALLOWANCE FOR AIRFIELD GUIDANCE SIGNS	1	LS	\$ 15,000.00	\$ 15,000.00	

Approximate Total Construction Cost ==> \$1,638,850.00

SURVEYING & DESIGN TESTING @ 5%: \$ 81,942.50
ENGINEERING @ 12%: \$ 196,662.00
INSPECTION & TESTING @ 8%: \$ 131,108.00
AIRPORT ADMINISTRATION @ 1%: \$ 16,388.50

Approximate Total Services Cost ==> \$ 426,101.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$2,064,951.00**
ADD 20% CONTINGENCY ==> \$ 412,990.20
\$2,477,941.20

USE ==> \$2,478,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07

file: Short-term
2003.037.05

AVCON Project:

Project No. 16: Construct New Apron Approx. pavement area: 29,300 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 68,000.00	\$ 68,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 50,000.00	\$ 50,000.00	
3		CLEARING AND GRUBBING	7	AC	\$ 3,000.00	\$ 21,000.00	
4		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
5		EMBANKMENT/EXCAVATION	10,000	CY	\$ 7.00	\$ 70,000.00	
6		SODDING	750	SY	\$ 3.50	\$ 2,625.00	
7		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 150,000.00	\$ 150,000.00	
8		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 120,000.00	\$ 120,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 25,000.00	\$ 25,000.00	
10		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 100,000.00	\$ 100,000.00	
11		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 50,000.00	\$ 50,000.00	
12		MAINTENANCE OF TRAFFIC	1	LS	\$ 10,000.00	\$ 10,000.00	
13		FENCE INSTALLATION	500	LF	\$ 25.00	\$ 12,500.00	\$ 749,125.00
MRO Apron @ 29,300 SY							
14		SUBBASE COURSE	31,700	SY	\$ 5.00	\$ 158,500.00	
15		BASE COURSE	30,500	SY	\$ 15.00	\$ 457,500.00	
16		PCC APRON	29,300	SY	\$ 100.00	\$ 2,930,000.00	\$ 3,546,000.00

Approximate Total Construction Cost ==> \$ 4,295,125.00

SURVEYING & DESIGN TESTING @ 5%: \$ 214,756.25
ENGINEERING @ 12%: \$ 515,415.00
INSPECTION & TESTING @ 8%: \$ 343,610.00
AIRPORT ADMINISTRATION @ 1%: \$ 42,951.25

Approximate Total Services Cost ==> \$ 1,116,732.50

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 5,411,857.50
ADD 20% CONTINGENCY ==> \$ 1,082,371.50
\$ 6,494,229.00

USE ==> \$ 6,494,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 17: Airport Pavement Joint Rehabilitation, Phase I

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR JOINT REHABILITATION	1	LS	\$ 452,000.00	\$ 452,000.00	
							Approximate Total Rehabilitation Cost ==> <u>\$ 452,000.00</u>
							USE ==> \$ 452,000.00

NOTES:

1. EXTENT OF REHABILITATION TO BE DETERMINED; PROJECT MAY VARY BASED ON PROJECT REQUIREMENTS AND PAVEMENT CONDITIONS.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 18: Bldg 82/Terminal Rehabilitation - Phase IV

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR BLDG 82/TERMINAL REHABILITATION	1	LS	\$ 850,000.00	\$ 850,000.00	

Approximate Total Rehabilitation Cost ==> \$ 850,000.00

USE ==> \$ 850,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05
AVCON Project:

Project No. 19: MRO Hangar Development, Northwest Area

Approx. Hangar Area:	200,000 SF
Approx. Parking Lot Area:	6,100 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 2,300,000.00	\$ 2,300,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 21,000.00	\$ 21,000.00	
3		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 10,000.00	\$ 10,000.00	
5		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 10,000.00	\$ 10,000.00	
6		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
7		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 20,000.00	\$ 20,000.00	
8		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 8,000.00	\$ 8,000.00	
9		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 35,000.00	\$ 35,000.00	
10		ALLOWANCE FOR PAVEMENT MARKINGS	1	LS	\$ 15,000.00	\$ 15,000.00	
11		ALLOWANCE FOR VEHICLE SIGNAGE	1	LS	\$ 6,000.00	\$ 6,000.00	
Hangars							
12		BUILDING CONSTRUCTION (MAINTENANCE)	150,000	SF	\$ 110.00	\$16,500,000.00	
13		BUILDING CONSTRUCTION (OFFICE)	50,000	SF	\$ 135.00	\$ 6,750,000.00	
Parking Lot @ 6,100 SY							
14		EXISTING PAVEMENT MILLING	2,400	SY	\$ 6.00	\$ 14,400.00	
15		SUBBASE COURSE	4,000	SY	\$ 5.00	\$ 20,000.00	
16		BASE COURSE	3,800	SY	\$ 20.00	\$ 76,000.00	
17		BITUMINOUS SURFACE COURSE (2 IN)	670	TON	\$ 135.00	\$ 90,450.00	
18		BITUMINOUS PRIME COAT	1,850	GAL	\$ 3.00	\$ 5,550.00	
19		BITUMINOUS TACK COAT	480	GAL	\$ 3.00	\$ 1,440.00	

Approximate Total Construction Cost ==> \$ 25,925,840.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 AVCON Project: 2003.037.05

Project No. 19: MRO Hangar Development, Northwest Area

Approx. Hangar Area:	200,000	SF
Approx. Parking Lot Area:	6,100	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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SURVEYING & DESIGN TESTING @ 3%: \$ 777,775.20
 ENGINEERING @ 12%: \$ 3,111,100.80
 INSPECTION & TESTING @ 5%: \$ 1,296,292.00
 AIRPORT ADMINISTRATION @ 1%: \$ 259,258.40

Approximate Total Services Cost ==> \$ 5,444,426.40

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **31,370,266.40**

ADD 20% CONTINGENCY ==> \$ 6,274,053.28

\$ 37,644,319.68

USE ==> \$ 37,645,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 AVCON Project: 2003.037.05

Project No. 20: Site 9B Hangar & Parking Lot - Phase I

Approx. Hangar & Office Area:	193,000 SF
Approx Parking Lot Area:	8,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 123,000.00	\$ 123,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 50,000.00	\$ 50,000.00	
3		CLEARING AND GRUBBING	8	AC	\$ 3,000.00	\$ 24,000.00	
4		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
5		EMBANKMENT/EXCAVATION	10,000	CY	\$ 7.00	\$ 70,000.00	
6		SODDING	750	SY	\$ 3.50	\$ 2,625.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 20,000.00	\$ 20,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 600,000.00	\$ 600,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 25,000.00	\$ 25,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 100,000.00	\$ 100,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 8,000.00	\$ 8,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 8,000.00	\$ 8,000.00	
14		FENCE INSTALLATION	2,000	LF	\$ 25.00	\$ 50,000.00	
Hangars @ 193,000 SF							
15		BUILDING CONSTRUCTION (MAINTENANCE)	143,000	SF	\$ 110.00	\$15,730,000.00	
16		BUILDING CONSTRUCTION (OFFICE)	50,000	SF	\$ 135.00	\$ 6,750,000.00	
17		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 20: Site 9B Hangar & Parking Lot - Phase I

Approx. Hangar & Office Area:	193,000	SF
Approx Parking Lot Area:	8,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lot @ 8,500 SY							
21		SUBBASE COURSE	9,000	SY	\$ 5.00	\$ 45,000.00	
22		BASE COURSE	8,850	SY	\$ 20.00	\$ 177,000.00	
23		BITUMINOUS SURFACE COURSE (2 IN)	940	TON	\$ 135.00	\$ 126,900.00	
24		BITUMINOUS PRIME COAT	4,250	GAL	\$ 3.00	\$ 12,750.00	
25		PAVEMENT MARKINGS	1	LS	\$ 7,000.00	\$ 7,000.00	

Approximate Total Construction Cost ==> \$ 25,199,275.00

SURVEYING & DESIGN TESTING @ 3%: \$ 755,978.25
ENGINEERING @ 12%: \$ 3,023,913.00
INSPECTION & TESTING @ 5%: \$ 1,259,963.75
AIRPORT ADMINISTRATION @ 1%: \$ 251,992.75

Approximate Total Services Cost ==> \$ 5,291,847.75

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 30,491,122.75**
ADD 20% CONTINGENCY ==> \$ 6,098,224.55
\$ 36,589,347.30

USE ==> \$ 36,589,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 21: Drainage Rehabilitation and Upgrade - Phase III

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR STRUCTURAL/DRAINAGE IMPROVEMENTS	1	LS	\$ 940,000.00		
							Approximate Total Construction Cost ==> \$ 940,000.00
							PERMITTING AND PROFESSIONAL SERVICES @ 25%: \$ 235,000.00
							Approximate Services Cost ==> <u>\$ 1,175,000.00</u>
							USE ==> \$ 1,175,000.00

Notes

1. BUDGET PROVIDES ALLOWANCE FOR INSTALLATION OF STRUCTURES (I.E. WEIRS, INLETS, PIPES, ETC.) INCLUDED IN APPROVED ENVIRONMENTAL RESOURCES PERMIT. PROJECT BUDGET MAY VARY BASED ON REQUIREMENTS.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 22: Airport Pavement Joint Rehabilitation, Taxiways

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR JOINT REHABILITATION	1	LS	\$ 400,000.00	\$ 400,000.00	
Approximate Total Construction Cost ==>							\$ 400,000.00
SURVEYING & DESIGN TESTING @ 3%:							\$ 12,000.00
ENGINEERING @ 10%:							\$ 40,000.00
INSPECTION & TESTING @ 5%:							\$ 20,000.00
AIRPORT ADMINISTRATION @ 1%:							\$ 4,000.00
Approximate Total Services Cost ==>							<u>\$ 76,000.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 476,000.00
ADD 20% CONTINGENCY ==>							<u>\$ 95,200.00</u>
							<u>\$ 571,200.00</u>
USE ==>							\$ 572,000.00

NOTES:

1. INCLUDES REHABILITATION OF AIRFIELD TAXIWAYS AND APRONS; EXTENT OF REHABILITATION TO BE DETERMINED; PROJECT MAY VARY BASED ON PROJECT REQUIREMENTS AND PAVEMENT CONDITIONS.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05
AVCON Project:

Project No. 23: Install FAA Certified Surface Observation System

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		INSTALLATION OF NEW AWOS	1	LS	\$ 210,000.00		
					Approximate Total Construction Cost ==>	\$	210,000.00
					PROFESSIONAL SERVICES @ 20%:	\$ 42,000.00	
					Approximate Total Services Cost ==>	\$	42,000.00
					PRELIMINARY ESTIMATE OF PROJECT COST ==>	\$	252,000.00
					ADD 20% CONTINGENCY ==>	\$	50,400.00
						\$	302,400.00
					USE ==>	\$	303,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 AVCON Project: 2003.037.05

Project No. 24: Airport Roadway Pavement Rehab - Phase I

Approx. Pavement Area:	14,300 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 92,000.00	\$ 92,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 40,000.00	\$ 40,000.00	
3		ASPHALT PAVEMENT MILLING	14,300	SY	\$ 6.00	\$ 85,800.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 30,000.00	\$ 30,000.00	
5		BITUMINOUS SURFACE COURSE (2 IN)	1,600	TON	\$ 65.00	\$ 104,000.00	
6		BITUNIMOUS TACK COAT	3,000	GAL	\$ 2.00	\$ 6,000.00	
7		PAVEMENT MARKINGS/REFLECTORS	1	LS	\$ 40,000.00	\$ 40,000.00	
8		SHOULDER GRADING	1	LS	\$ 20,000.00	\$ 20,000.00	
9		SODDING	5,000	SY	\$ 2.15	\$ 10,750.00	
10		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$200,000.00	\$ 200,000.00	
11		ALLOWANCE FOR UTILITY MODIFICATIONS	1	LS	\$150,000.00	\$ 150,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 20,000.00	\$ 20,000.00	
13		ALLOWNCE FOR CURB/GUTTER IMPROVEMENTS	1	LS	\$150,000.00	\$ 150,000.00	
14		LANDSCAPING ALLOWANCE	1	SY	\$ 15,000.00	\$ 15,000.00	
15		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
16		ALLOWANCE FOR ROADWAY LIGHT FIXTURE EVALUATIONS	1	LS	\$ 75,000.00	\$ 75,000.00	

Approximate Total Construction Cost ==> \$ 1,013,550.00

SURVEYING & DESIGN TESTING @ 5%: \$ 50,677.50
 ENGINEERING @ 15%: \$ 152,032.50
 INSPECTION & TESTING @ 10%: \$ 101,355.00
 AIRPORT ADMINISTRATION @ 2.5%: \$ 25,338.75

Approximate Total Services Cost ==> \$ 329,403.75

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 1,342,953.75**
 ADD 20% CONTINGENCY ==> \$ 268,590.75
\$ 1,611,544.50

USE ==> \$ 1,612,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 AVCON Project: 2003.037.05

Project No. 25: Rehabilitate High Power Area, Taxiway A2

Approx. Pavement Area:	9,300 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 13,500.00	\$ 13,500.00	
2		REMOVE/REPLACE JOINT SEAL	1	LS	\$120,000.00	\$ 120,000.00	
3		REMOVE MEDAL JET DEFLECTION BLAST SHIELDS	1	LS	\$ 30,000.00	\$ 30,000.00	
4		INSTALL CENTER TIE DOWN	1	LS	\$ 15,000.00	\$ 15,000.00	

Approximate Total Construction Cost ==> \$ 178,500.00

ENGINEERING @ 8%: \$ 14,280.00
 INSPECTION & TESTING @ 7%: \$ 12,495.00
 AIRPORT ADMINISTRATION @ 1.5%: \$ 2,677.50

Approximate Total Services Cost ==> \$ 29,452.50

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **207,952.50**
 ADD 20% CONTINGENCY ==> \$ 41,590.50
\$ 249,543.00

USE ==> \$ 250,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05
AVCON Project:

Project No. 26: Wildlife Fence

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		Wildlife Fence Design and Installation	25,000	LF	\$ 27.00	\$ 675,000.00	
Approximate Total Construction Cost ==>							\$ 675,000.00
SURVEYING & DESIGN TESTING @ 6%:							\$ 40,500.00
ENGINEERING @12%:							\$ 81,000.00
INSPECTION & TESTING @ 4%:							\$ 27,000.00
AIRPORT ADMINISTRATION @ 1%:							\$ 6,750.00
Approximate Total Services Cost ==>							\$ 155,250.00
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 830,250.00
ADD 20% CONTINGENCY ==>							\$ 166,050.00
							\$ 996,300.00
USE ==>							\$ 1,000,000.00

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Project No. 27: Mid-Field Area Development Roadway Access

Approx. pavement area:	75,000 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 48,000.00	\$ 48,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 100,000.00	\$ 100,000.00	
3		CLEARING AND GRUBBING	17	AC	\$ 3,000.00	\$ 51,000.00	
4		EXISTING ASPHALT PAVEMENT MILLING	10,700	SY	\$ 6.00	\$ 64,200.00	
5		MAINTENANCE OF TRAFFIC	1	LS	\$ 25,000.00	\$ 25,000.00	
6		EMBANKMENT/EXCAVATION	21,000	CY	\$ 7.00	\$ 147,000.00	
7		SUBBASE COURSE	81,000	SY	\$ 5.00	\$ 405,000.00	
8		BASE COURSE	78,000	SY	\$ 20.00	\$ 1,560,000.00	
9		BITUMINOUS SURFACE COURSE (2 IN)	8,300	TON	\$ 135.00	\$ 1,120,500.00	
10		BITUMINOUS PRIME COAT	37,500	GAL	\$ 3.00	\$ 112,500.00	
11		PAVEMENT MARKINGS	1	LS	\$ 75,000.00	\$ 75,000.00	
12		SODDING	75,000	SY	\$ 3.50	\$ 262,500.00	
13		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 300,000.00	\$ 300,000.00	
14		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 100,000.00	\$ 100,000.00	
15		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 350,000.00	\$ 350,000.00	
16		ALLOWANCE FOR FENCE/GATE IMPROVEMENTS	1	LS	\$ 100,000.00	\$ 100,000.00	
17		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 75,000.00	\$ 75,000.00	
18		VEHICULAR SIGNAGE	1	LS	\$ 20,000.00	\$ 20,000.00	
19		AVIATION AVENUE INTERSECTION MODIFICATION	1	LS	\$ 200,000.00	\$ 200,000.00	
20		ALLOWANCE FOR TRAFFIC SIGNALS	1	LS	\$ 150,000.00	\$ 150,000.00	

Approximate Total Construction Cost ==> \$ 4,915,700.00

SURVEYING & DESIGN TESTING @ 5%: \$ 245,785.00
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @12%: \$ 589,884.00
INSPECTION & TESTING @8%: \$ 393,256.00
AIRPORT ADMINISTRATION @ 2%: \$ 98,314.00

Approximate Total Services Cost ==> \$ 1,332,239.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 6,247,939.00

ADD 20% CONTINGENCY ==> \$ 1,249,587.80

\$ 7,497,526.80

NOTES:

1. POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

USE ==> \$ 7,498,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 28: Runway/Taxiway/Safety Area Drainage Rehabilitation - Phase III

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR STRUCTURAL/DRAINAGE IMPROVEMENTS	1	LS	\$ 880,000.00	\$ 880,000.00	
							Approximate Total Construction Cost ==> \$ 880,000.00
							PERMITTING AND PROFESSIONAL SERVICES @ 25%: \$ 220,000.00
							Approximate Total Services Cost ==> <u>\$ 220,000.00</u>
							USE ==> \$ 1,100,000.00

Notes

1. BUDGET PROVIDES ALLOWANCE FOR INSTALLATION OF STRUCTURES (I.E. WEIRS, INLETS, PIPES, ETC.) INCLUDED IN APPROVED ENVIRONMENTAL RESOURCES PERMIT. PROJECT BUDGET MAY VARY BASED ON REQUIREMENTS.

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Project No. 29: Design and Construct Taxiway "D" Extension North

Approx. Pavement Area	42,100 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 400,000.00	\$ 400,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 80,000.00	\$ 80,000.00	
3		CLEARING AND GRUBBING	13	AC	\$ 3,000.00	\$ 39,000.00	
4		SITE PREPARATION	47,000	SY	\$ 3.00	\$ 141,000.00	
5		EMBANKMENT/EXCAVATION	14,000	CY	\$ 7.00	\$ 98,000.00	
6		SUBBASE COURSE	45,500	SY	\$ 5.00	\$ 227,500.00	
7		BASE COURSE	44,000	SY	\$ 20.00	\$ 880,000.00	
8		BITUMOUS SURFACE COURSE (5 IN)	11,500	TON	\$ 135.00	\$ 1,552,500.00	
9		BITUMINOUS PRIME COAT	21,000	GAL	\$ 3.00	\$ 63,000.00	
10		BITUMINOUS TAC COAT	8,400	GAL	\$ 3.00	\$ 25,200.00	
11		PAVEMENT MARKINGS	1	LS	\$ 50,000.00	\$ 50,000.00	
12		SODDING	3,400	SY	\$ 3.50	\$ 11,900.00	
13		ALLOWANCE FOR DAMAGE IMPROVEMENTS	1	LS	\$ 500,000.00	\$ 500,000.00	
14		ALLOWANCE FOR TAXIWAY LIGHTING	1	LS	\$ 400,000.00	\$ 400,000.00	
15		SEEDING AND MULCHING	3	AC	\$ 3,000.00	\$ 9,000.00	

Approximate Total Construction Cost ==> \$ 4,477,100.00

SURVEYING & DESIGN TESTING @ 5%: \$ 223,855.00
 ENGINEERING @ 12%: \$ 537,252.00
 INSPECTION & TESTING @ 8%: \$ 358,168.00
 AIRPORT ADMINISTRATION @ 1%: \$ 44,771.00

Approximate Total Services Cost ==> \$ 1,164,046.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 5,641,146.00**
 ADD 20% CONTINGENCY ==> \$ 1,128,229.20
\$ 6,769,375.20

USE ==> \$ 6,770,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 30: Site 9B Hangar, Apron & Parking Lot - Phase II

Approx. Hangar & Office Area:	193,000 SF
Approx. Apron Area:	29,300 SY
Approx Parking Lot Area:	8,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 315,000.00	\$ 315,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 100,000.00	\$ 100,000.00	
3		CLEARING AND GRUBBING	17	AC	\$ 3,000.00	\$ 51,000.00	
4		SITE PREPARATION	1	LS	\$ 150,000.00	\$ 150,000.00	
5		EMBANKMENT/EXCAVATION	18,000	CY	\$ 7.00	\$ 126,000.00	
6		SODDING	12,000	SY	\$ 3.50	\$ 42,000.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 400,000.00	\$ 400,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 600,000.00	\$ 600,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 50,000.00	\$ 50,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 200,000.00	\$ 200,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 100,000.00	\$ 100,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 20,000.00	\$ 20,000.00	
14		FENCE INSTALLATION	2,000	LF	\$ 25.00	\$ 50,000.00	
Hangars @ 193,000 SF							
15		BUILDING CONSTRUCTION (MAINTENANCE)	143,000	SF	\$ 110.00	\$15,730,000.00	
16		BUILDING CONSTRUCTION (OFFICE)	50,000	SF	\$ 135.00	\$ 6,750,000.00	
17		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
MRO Apron @ 29,300 SY							
18		SUBBASE COURSE	35,000	SY	\$ 5.00	\$ 175,000.00	
19		BASE COURSE	31,000	SY	\$ 15.00	\$ 465,000.00	
20		PCC APRON	29,300	SY	\$ 100.00	\$ 2,930,000.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 30: Site 9B Hangar, Apron & Parking Lot - Phase II

Approx. Hangar & Office Area:	193,000	SF
Approx. Apron Area:	29,300	SY
Approx Parking Lot Area:	8,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lot @ 8,500 SY							
21		SUBBASE COURSE	9,000	SY	\$ 5.00	\$ 45,000.00	
22		BASE COURSE	8,850	SY	\$ 20.00	\$ 177,000.00	
23		BITUMINOUS SURFACE COURSE (2 IN)	940	TON	\$ 135.00	\$ 126,900.00	
24		BITUMINOUS PRIME COAT	4,250	GAL	\$ 3.00	\$ 12,750.00	
25		PAVEMENT MARKINGS	1	LS	\$ 7,000.00	\$ 7,000.00	

Approximate Total Construction Cost ==> \$ 29,662,650.00

SURVEYING & DESIGN TESTING @ 3%: \$ 889,879.50
ENGINEERING @ 12%: \$ 3,559,518.00
INSPECTION & TESTING @ 5%: \$ 1,483,132.50
AIRPORT ADMINISTRATION @ 1%: \$ 296,626.50

Approximate Total Services Cost ==> \$ 6,229,156.50

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 35,891,806.50**
ADD 20% CONTINGENCY ==> \$ 7,178,361.30
\$ 43,070,167.80

USE ==> \$ 43,071,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 31: **Site 9B Taxilane** Approx. pavement area: 4,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 29,000.00	\$ 29,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00	
3		EMBANKMENT/EXCAVATION	1,300	CY	\$ 4.50	\$ 5,850.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	4,200	SY	\$ 5.00	\$ 21,000.00	
6		BASE COURSE	4,100	SY	\$ 20.00	\$ 82,000.00	
7		BITUMINOUS SURFACE COURSE (4 IN)	880	TON	\$ 135.00	\$ 118,800.00	
8		BITUMINOUS PRIME COAT	2,000	GAL	\$ 3.00	\$ 6,000.00	
9		BITUMINOUS TACK COAT	800	GAL	\$ 3.00	\$ 2,400.00	
10		PAVEMENT MARKINGS	1	LS	\$ 10,000.00	\$ 10,000.00	
11		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 20,000.00	\$ 20,000.00	

Approximate Total Construction Cost ==> \$ 318,050.00

SURVEYING & DESIGN TESTING @ 5%: \$ 15,902.50
ENGINEERING @ 12%: \$ 38,166.00
INSPECTION & TESTING @ 8%: \$ 25,444.00
AIRPORT ADMINISTRATION @ 1%: \$ 3,180.50

Approximate Total Services Cost ==> \$ 82,693.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **400,743.00**
ADD 20% CONTINGENCY ==> \$ 80,148.60
\$ 480,891.60

USE ==> \$ 481,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 32: Site 9B Hangar, Apron & Parking Lot - Phase III

Approx. Hangar Area:	217,000	SF
Approx. Apron Area:	27,500	SY
Approx Parking Lot Area:	13,600	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,700,000.00	\$ 1,700,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 90,000.00	\$ 90,000.00	
3		CLEARING AND GRUBBING	17	AC	\$ 3,000.00	\$ 51,000.00	
4		SITE PREPARATION	1	LS	\$ 150,000.00	\$ 150,000.00	
5		EMBANKMENT/EXCAVATION	22,000	CY	\$ 7.00	\$ 154,000.00	
6		SODDING	13,000	SY	\$ 3.50	\$ 45,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 350,000.00	\$ 350,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 900,000.00	\$ 900,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 30,000.00	\$ 30,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 180,000.00	\$ 180,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 90,000.00	\$ 90,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 20,000.00	\$ 20,000.00	
14		FENCE INSTALLATION	3,000	LF	\$ 25.00	\$ 75,000.00	
		Corporate Hangars (14 @ 13,000 SF, 1 @ 35,000 SF)					
15		BUILDING CONSTRUCTION (CORPORATE)	143,000	SF	\$ 85.00	\$12,155,000.00	
		Corporate Aprons @ 27,500 SY					
16		SUBBASE COURSE	29,800	SY	\$ 5.00	\$ 149,000.00	
17		BASE COURSE	28,600	SY	\$ 20.00	\$ 572,000.00	
18		BITUMINOUS SURFACE COARSE (4 IN)	6,000	TON	\$ 135.00	\$ 810,000.00	

AVCON, INC.
 Estimator: V. Lewis

**PRELIMINARY ESTIMATE OF PROJECT COST
 AIRPORT MASTER PLAN UPDATE
 CECIL FIELD**

Feb-07
file: Short-term
 AVCON Project: 2003.037.05

Project No. 32: Site 9B Hangar, Apron & Parking Lot - Phase III

Approx. Hangar Area:	217,000	SF
Approx. Apron Area:	27,500	SY
Approx Parking Lot Area:	13,600	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lots and Access Roads @ 13,600 SY							
19		SUBBASE COURSE	15,000	SY	\$ 5.00	\$ 75,000.00	
20		BASE COURSE	14,000	SY	\$ 20.00	\$ 280,000.00	
21		BITUMINOUS SURFACE COURSE (2 IN)	1,500	TON	\$ 135.00	\$ 202,500.00	
22		BITUMINOUS PRIME COAT	6,800	GAL	\$ 3.00	\$ 20,400.00	
23		PAVEMENT MARKINGS	1	LS	\$ 10,000.00	\$ 10,000.00	

Approximate Total Construction Cost ==> \$ 18,139,400.00

SURVEYING & DESIGN TESTING @ 3%: \$ 544,182.00
 ENGINEERING @ 12%: \$ 2,176,728.00
 INSPECTION & TESTING @ 5%: \$ 906,970.00
 AIRPORT ADMINISTRATION @ 1%: \$ 181,394.00

Approximate Total Services Cost ==> \$ 3,809,274.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 21,948,674.00**
 ADD 20% CONTINGENCY ==> \$ 4,389,734.80
\$ 26,338,408.80

NOTES:

1. Assumes Type II Hangars with minimum clearance of 50 feet.

USE ==> \$ 26,339,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 33: Fire Supression Well Rehabilitation, Well Five

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR WELL REHABILITATION	1	LS	\$ 300,000.00	\$ 300,000.00	

Approximate Total Construction Cost ==> \$ 300,000.00

USE ==> \$ 300,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05
AVCON Project:

Project No. 34: Mid-field Stormwater Improvements

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR STRUCTURAL/DRAINAGE IMPROVEMENTS	1	LS	\$ 400,000.00	\$ 400,000.00	
							Approximate Total Construction Cost ==> \$ 400,000.00
							PERMITTING AND PROFESSIONAL SERVICES @ 25%: \$ 100,000.00
							Approximate Total Services Cost ==> \$ 100,000.00
							USE ==> \$ 500,000.00

Notes

1. BUDGET PROVIDES ALLOWANCE FOR INSTALLATION OF STRUCTURES (I.E. WEIRS, INLETS, PIPES, ETC.) INCLUDED IN APPROVED ENVIRONMENTAL RESOURCES PERMIT. PROJECT BUDGET MAY VARY BASED ON REQUIREMENTS.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 35: Mid-Field Area Development - Drainage Improvements

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR STRUCTURAL/DRAINAGE IMPROVEMENTS	1	LS	\$ 2,400,000.00	\$ 2,400,000.00	
							Approximate Total Construction Cost ==> \$ 2,400,000.00
							PERMITTING AND PROFESSIONAL SERVICES @ 25%: \$ 600,000.00
							Approximate Total Services Cost ==> <u>\$ 600,000.00</u>
Notes							
1. BUDGET PROVIDES ALLOWANCE FOR INSTALLATION OF STRUCTURES (I.E. WEIRS, INLETS, PIPES, ETC.) INCLUDED IN APPROVED ENVIRONMENTAL RESOURCES PERMIT. PROJECT BUDGET MAY VARY BASED ON REQUIREMENTS.							USE ==> \$ 3,000,000.00

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Project No. 36: Mid-field Area Development Roadway Access - Phase II, Interior Loop Approx. pavement area: 79,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 57,000.00	\$ 57,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 100,000.00	\$ 100,000.00	
3		CLEARING AND GRUBBING	20	AC	\$ 3,000.00	\$ 60,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 25,000.00	\$ 25,000.00	
5		EMBANKMENT/EXCAVATION	26,500	CY	\$ 7.00	\$ 185,500.00	
6		SUBBASE COURSE	85,500	SY	\$ 5.00	\$ 427,500.00	
7		BASE COURSE	82,000	SY	\$ 20.00	\$ 1,640,000.00	
8		BITUMINOUS SURFACE COURSE (2 IN)	8,700	TON	\$ 135.00	\$ 1,174,500.00	
9		BITUMINOUS PRIME COAT	39,500	GAL	\$ 3.00	\$ 118,500.00	
10		PAVEMENT MARKINGS	1	LS	\$ 75,000.00	\$ 75,000.00	
11		SODDING	79,000	SY	\$ 3.50	\$ 276,500.00	
12		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 750,000.00	\$ 750,000.00	
13		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 100,000.00	\$ 100,000.00	
14		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 500,000.00	\$ 500,000.00	
15		ALLOWANCE FOR FENCE/GATE IMPROVEMENTS	1	LS	\$ 100,000.00	\$ 100,000.00	
16		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 150,000.00	\$ 150,000.00	
17		VEHICULAR SIGNAGE	1	LS	\$ 20,000.00	\$ 20,000.00	
18		103RD ST INTERSECTION IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
19		ALLOWANCE FOR TRAFFIC SIGNALS	1	LS	\$ 150,000.00	\$ 150,000.00	

Approximate Total Construction Cost ==> \$ 6,109,500.00

SURVEYING & DESIGN TESTING @ 5%: \$ 305,475.00
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 12%: \$ 733,140.00
INSPECTION & TESTING @ 8%: \$ 488,760.00
AIRPORT ADMINISTRATION @ 2%: \$ 122,190.00

Approximate Total Services Cost ==> \$ 1,654,565.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **7,764,065.00**
ADD 20% CONTINGENCY ==> \$ 1,552,813.00
\$ 9,316,878.00

NOTES:

1. POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET. **USE ==> \$ 9,317,000.00**

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 37: Site 9B Hangar, Apron & Parking Lot - Phase IV

Approx. Hangar Area:	135,000	SF
Approx. Apron Area:	14,200	SY
Approx Parking Lot Area:	14,600	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,400,000.00	\$ 1,400,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		CLEARING AND GRUBBING	9	AC	\$ 3,000.00	\$ 27,000.00	
4		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
5		EMBANKMENT/EXCAVATION	11,000	CY	\$ 7.00	\$ 77,000.00	
6		SODDING	2,000	SY	\$ 3.50	\$ 7,000.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 20,000.00	\$ 20,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 600,000.00	\$ 600,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 25,000.00	\$ 25,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 125,000.00	\$ 125,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 50,000.00	\$ 50,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 10,000.00	\$ 10,000.00	
14		FENCE INSTALLATION	2,000	LF	\$ 25.00	\$ 50,000.00	
		Corporate Hangars (5 @ 27,000 SF)					
15		BUILDING CONSTRUCTION (CORPORATE)	135,000	SF	\$ 85.00	\$11,475,000.00	
		Corporate Aprons @ 14,200 SY					
16		SUBBASE COURSE	15,400	SY	\$ 5.00	\$ 77,000.00	
17		BASE COURSE	14,800	SY	\$ 20.00	\$ 296,000.00	
18		BITUMINOUS SURFACE COARSE (4 IN)	1,400	TON	\$ 135.00	\$ 189,000.00	

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 AVCON Project: 2003.037.05

Project No. 37: Site 9B Hangar, Apron & Parking Lot - Phase IV

Approx. Hangar Area:	135,000	SF
Approx. Apron Area:	14,200	SY
Approx Parking Lot Area:	14,600	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lots and Access Roads @ 14,600 SY							
19		SUBBASE COURSE	16,000	SY	\$ 5.00	\$ 80,000.00	
20		BASE COURSE	15,000	SY	\$ 20.00	\$ 300,000.00	
21		BITUMINOUS SURFACE COURSE (2 IN)	1,600	TON	\$ 135.00	\$ 216,000.00	
22		BITUMINOUS PRIME COAT	7,300	GAL	\$ 3.00	\$ 21,900.00	
23		PAVEMENT MARKINGS	1	LS	\$ 8,000.00	\$ 8,000.00	

Approximate Total Construction Cost ==> \$ 15,383,900.00

SURVEYING & DESIGN TESTING @ 3%: \$ 461,517.00
 ENGINEERING @ 12%: \$ 1,846,068.00
 INSPECTION & TESTING @ 5%: \$ 769,195.00
 AIRPORT ADMINISTRATION @ 1%: \$ 153,839.00

Approximate Total Services Cost ==> \$ 3,230,619.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 18,614,519.00**
 ADD 20% CONTINGENCY ==> \$ 3,722,903.80
\$ 22,337,422.80

NOTES:

1. Assumes Type II Hangars with minimum clearance of 50 feet.

USE ==> \$ 22,338,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 38: Cecil Field ARFF Emergency Vehicle

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		REPLACEMENT ARFF VEHICLE	1	EA	\$ 500,000.00		
2		ALLOWANCE FOR MISCELANEOUS ARFF EQUIPMENT	1	LS	\$ 75,000.00		
Approximate Total Cost ==>							<u>\$ 575,000.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 575,000.00
ADD 20% CONTINGENCY ==>							<u>\$ 115,000.00</u>
							\$ 690,000.00
USE ==>							\$ 690,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 39: Fire Supression Well Rehabilitation, Well Four

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR WELL REHABILITATION	1	LS	\$ 300,000.00	\$ 300,000.00	

Approximate Total Construction Cost ==> \$ 300,000.00

USE ==> \$ 300,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 40: Site 9B Hangar, Apron & Parking Lot - Phase V

Approx. Hangar Area:	129,000	SF
Approx. Apron Area:	15,200	SY
Approx Parking Lot Area:	5,600	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,300,000.00	\$ 1,300,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		CLEARING AND GRUBBING	9	AC	\$ 3,000.00	\$ 27,000.00	
4		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
5		EMBANKMENT/EXCAVATION	10,500	CY	\$ 7.00	\$ 73,500.00	
6		SODDING	2,000	SY	\$ 3.50	\$ 7,000.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 20,000.00	\$ 20,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 500,000.00	\$ 500,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 25,000.00	\$ 25,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 125,000.00	\$ 125,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 50,000.00	\$ 50,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 10,000.00	\$ 10,000.00	
14		FENCE INSTALLATION	2,000	LF	\$ 25.00	\$ 50,000.00	
Corporate Hangars (3 @ 27,000 SF, 4 @ 12,000 SF)							
15		BUILDING CONSTRUCTION (CORPORATE)	129,000	SF	\$ 85.00	\$10,965,000.00	
Corporate Aprons @ 15,200 SY							
16		SUBBASE COURSE	16,500	SY	\$ 5.00	\$ 82,500.00	
17		BASE COURSE	15,800	SY	\$ 20.00	\$ 316,000.00	
18		BITUMINOUS SURFACE COARSE (4 IN)	3,400	TON	\$ 135.00	\$ 459,000.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05
AVCON Project:

Project No. 40: Site 9B Hangar, Apron & Parking Lot - Phase V

Approx. Hangar Area:	129,000	SF
Approx. Apron Area:	15,200	SY
Approx Parking Lot Area:	5,600	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lots @ 5,600 SY							
19		SUBBASE COURSE	6,000	SY	\$ 5.00	\$ 30,000.00	
20		BASE COURSE	5,800	SY	\$ 20.00	\$ 116,000.00	
21		BITUMINOUS SURFACE COURSE (2 IN)	600	TON	\$ 135.00	\$ 81,000.00	
22		BITUMINOUS PRIME COAT	2,800	GAL	\$ 3.00	\$ 8,400.00	
23		PAVEMENT MARKINGS	1	LS	\$ 8,000.00	\$ 8,000.00	

Approximate Total Construction Cost ==> \$ 14,611,740.00

SURVEYING & DESIGN TESTING @ 3%: \$ 438,352.20
ENGINEERING @ 12%: \$ 1,753,408.80
INSPECTION & TESTING @ 5%: \$ 730,587.00
AIRPORT ADMINISTRATION @ 1%: \$ 146,117.40

Approximate Total Services Cost ==> \$ 3,068,465.40

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 17,680,205.40**
ADD 20% CONTINGENCY ==> \$ 3,536,041.08
\$ 21,216,246.48

NOTES:

1. Assumes Type II Hangars with minimum clearance of 50 feet.

USE ==> \$ 21,217,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05
AVCON Project:

Project No. 41: Airport Security Improvement - Phase I

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		AOA FENCE REPAIR/REPLACEMENT	12,000	LF	\$ 25.00	\$ 300,000.00	
Approximate Total Construction Cost ==>							\$ 300,000.00
SURVEYING & DESIGN TESTING @ 5%:							\$ 15,000.00
ENGINEERING @12%:							\$ 36,000.00
INSPECTION & TESTING @8%:							\$ 24,000.00
AIRPORT ADMINISTRATION @ 1%:							\$ 3,000.00
Approximate Total Services Cost ==>							\$ 78,000.00
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 378,000.00
ADD 20% CONTINGENCY ==>							\$ 75,600.00
							\$ 453,600.00
USE ==>							\$ 454,000.00

NOTE:

1. ASSUMES APPROXIMATE AVERAGE COST FOR REPAIR/REPLACEMENT OF APPROXIMATELY 12,000 LF OF AIRPORT PERIMETER FENCE.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 42: Rehabilitate & Remark Taxiway Surfaces

Approx. pavement area:	142,000 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		PCC REPAIR	3,000	SY	\$ 7.75	\$ 23,250.00	
2		JOINT REPLACEMENT	3,000	LF	\$ 2.50	\$ 7,500.00	
3		ALLOWANCE FOR PAVEMENT MARKINGS	284,000	SF	\$ 1.00	\$284,000.00	

Approximate Total Construction Cost ==> \$ 314,750.00

SURVEYING & DESIGN TESTING @ 3%: \$ 9,442.50
ENGINEERING @ 10%: \$ 31,475.00
INSPECTION & TESTING @ 5%: \$ 15,737.50
AIRPORT ADMINISTRATION @ 1%: \$ 3,147.50

Approximate Total Services Cost ==> \$ 59,802.50

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **374,552.50**
ADD 20% CONTINGENCY ==> \$ 74,910.50
\$ 449,463.00

NOTES:

- EXTENT OF TAXIWAY PAVEMENT REHABILITATION TO BE DETERMINED; PROJECT BUDGET MAY VARY BASED ON PROJECT REQUIREMENTS AND PAVEMENT CONDITIONS

\$ **450,000.00**

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05
AVCON Project:

Project No. 43: Rehabilitate Bldg 1846 and 880 Roof Replacement

Approx. Roof area:	40,000 SF
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR BLDG 1846 REHABILITATION	1	LS	\$ 175,000.00	\$ 175,000.00	
2		ALLOWANCE FOR BLDG 880 ROOF REPLACEMENT	1	LS	\$ 160,000.00	\$ 160,000.00	
Approximate Total Construction Cost ==>							\$ 335,000.00
ARCHITECTURAL DESIGN @ 15%:							\$ 50,250.00
INSPECTION & TESTING @ 5%:							\$ 16,750.00
Approximate Total Rehabilitation Cost ==>							\$ <u>67,000.00</u>
USE ==>							\$ 402,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 AVCON Project: 2003.037.05

Project No. 44: Sluice Gate Rehabilitation

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 21,000.00	\$ 21,000.00	
2		REPLACE SLUICE GATE	6	EA	\$ 30,000.00	\$ 180,000.00	
Approximate Total Construction Cost ==>							\$ 201,000.00
SURVEYING & DESIGN TESTING @ 5%:							\$ 10,050.00
ENGINEERING @ 12%:							\$ 24,120.00
INSPECTION & TESTING @ 8%:							\$ 16,080.00
AIRPORT ADMINISTRATION @ 1%:							
Approximate Total Services Cost ==>							\$ 50,250.00
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 251,250.00
ADD 20% CONTINGENCY ==>							\$ 50,250.00
USE ==>							\$ 302,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
AVCON Project: 2003.037.05

Project No. 45: Rehabilitate Building 313, Roof Replacement

Approx. Roof Area	54,000 SF
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR ROOF REPLACEMENT	1	LS	\$ 250,000.00	\$ 250,000.00	

Approximate Total Construction Cost ==> \$ 250,000.00

ARCHITECTURAL DESIGN @ 15%: \$ 37,500.00

INSPECTION & TESTING @ 5%: \$ 12,500.00

Approximate Total Services Cost ==> \$ 50,000.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 300,000.00

USE ==> \$ 300,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 46: Rejuvenation of Airport Pavement

Approx. pavement area: 560,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		REJUVENATOR	560,000	SY	\$ 1.00	\$560,000.00	
2		ALLOWANCE FOR PAVEMENT MARKINGS	1	LS	\$ 250,000.00	\$250,000.00	

Approximate Total Construction Cost ==> \$ 810,000.00

INSPECTION & TESTING @ 4%: \$ 32,400.00
AIRPORT ADMINISTRATION @ 1%: \$ 8,100.00

Approximate Total Services Cost ==> \$ 40,500.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 850,500.00**
ADD 20% CONTINGENCY ==> \$ 170,100.00
\$ 1,020,600.00

USE ==> \$ 1,021,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 47:		Mid-Field Taxilane - Phase I	Approx. pavement area: 7,100 SY				
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 90,000.00	\$ 90,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 30,000.00	\$ 30,000.00	
3		EMBANKMENT/EXCAVATION	2,400	CY	\$ 4.50	\$ 10,800.00	
4		CLEARING AND GRUBBING	2	AC	\$ 3,000.00	\$ 6,000.00	
5		SUBBASE COURSE	7,700	SY	\$ 5.00	\$ 38,500.00	
6		BASE COURSE	7,400	SY	\$ 20.00	\$ 148,000.00	
7		PCC APRON	7,100	SY	\$ 100.00	\$ 710,000.00	
8		SODDING	500	SY	\$ 3.50	\$ 1,750.00	
9		PAVEMENT MARKINGS	1	LS	\$ 20,000.00	\$ 20,000.00	
10		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 25,000.00	\$ 25,000.00	

Approximate Total Construction Cost ==> \$ 1,080,050.00

SURVEYING & DESIGN TESTING @ 5%: \$ 54,002.50
ENGINEERING @ 12%: \$ 129,606.00
INSPECTION & TESTING @ 8%: \$ 86,404.00
AIRPORT ADMINISTRATION @ 1%: \$ 10,800.50

Approximate Total Services Cost ==> \$ 280,813.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 1,360,863.00
ADD 20% CONTINGENCY ==> \$ 272,172.60
\$ 1,633,035.60

USE ==> \$ 1,633,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 48: Mid-field Hangar, Apron & Parking Lot - Phase I

Approx. Hangar Area:	264,000	SF
Approx. Apron Area:	47,900	SY
Approx. Parking Lot Area:	6,200	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 4,000,000.00	\$ 4,000,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 150,000.00	\$ 150,000.00	
3		SITE PREPARATION	1	LS	\$ 175,000.00	\$ 175,000.00	
4		CLEARING AND GRUBBING	25	AC	\$ 3,000.00	\$ 75,000.00	
5		EMBANKMENT/EXCAVATION	28,000	CY	\$ 7.00	\$ 196,000.00	
6		SODDING	17,000	SY	\$ 3.50	\$ 59,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 450,000.00	\$ 450,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 550,000.00	\$ 550,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 40,000.00	\$ 40,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 375,000.00	\$ 375,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 125,000.00	\$ 125,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 35,000.00	\$ 35,000.00	
14		FENCE CONSTRUCTION	1,500	LF	\$ 25.00	\$ 37,500.00	
MRO Hangar @ 264,000 SF							
15		MAINTENANCE HANGAR CONSTRUCTION	264,000	SF	\$ 110.00	\$ 29,040,000.00	
16		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
MRO Apron @ 47,900 SY							
17		SUBBASE COURSE	51,800	SY	\$ 5.00	\$ 259,000.00	
18		BASE COURSE	49,800	SY	\$ 15.00	\$ 747,000.00	
19		PCC APRON	47,900	SY	\$ 100.00	\$ 4,790,000.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 48: Mid-field Hangar, Apron & Parking Lot - Phase I

Approx. Hangar Area:	264,000	SF
Approx. Apron Area:	47,900	SY
Approx. Parking Lot Area:	6,200	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lots @ 6,200 SY							
20		SUBBASE COURSE	6,700	SY	\$ 5.00	\$ 33,500.00	
21		BASE COURSE	6,500	SY	\$ 20.00	\$ 130,000.00	
22		BITUMINOUS SURFACE COURSE (2 IN)	700	TON	\$ 135.00	\$ 94,500.00	
23		BITUMINOUS PRIME COAT	3,100	GAL	\$ 3.00	\$ 9,300.00	

Approximate Total Construction Cost ==> \$ 42,421,300.00

SURVEYING & DESIGN TESTING @ 5%: \$ 2,121,065.00
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 10%: \$ 4,242,130.00
INSPECTION & TESTING @ 10%: \$ 4,242,130.00
AIRPORT ADMINISTRATION @ 1%: \$ 424,213.00

Approximate Total Services Cost ==> \$ 11,034,538.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 53,455,838.00**
ADD 20% CONTINGENCY ==> \$ 10,691,167.60
\$ 64,147,005.60

NOTES:

1. POTENTIAL WETLAND MITIGATION TO BE IDENTIFIED AND IS NOT INCLUDED IN THIS ESTIMATE.

USE ==> \$ 64,147,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 49: Airport Roadway Pavement Rehabilitation

Approx. Pavement Area:	17,000 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 66,000.00	\$ 66,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 25,000.00	\$ 25,000.00	
3		ASPHALT PAVEMENT MILLING	17,000	SY	\$ 6.00	\$ 102,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 30,000.00	\$ 30,000.00	
5		BITUMINOUS SURFACE COURSE (2 IN)	1,900	TON	\$ 135.00	\$ 256,500.00	
6		BITUMINOUS TACK COAT	400	GAL	\$ 3.00	\$ 1,200.00	
7		PAVEMENT MARKINGS/REFLECTORS	1	LS	\$ 20,000.00	\$ 20,000.00	
8		SHOULDER GRADING	1	LS	\$ 20,000.00	\$ 20,000.00	
9		SODDING	6,000	SY	\$ 3.50	\$ 21,000.00	
10		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 100,000.00	\$ 100,000.00	
11		ALLOWANCE FOR UTILITY MODIFICATIONS	1	LS	\$ 30,000.00	\$ 30,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 10,000.00	\$ 10,000.00	
13		ALLOWANCE FOR CURB/GUTTER IMPROVEMENTS	1	LS	\$ 20,000.00	\$ 20,000.00	
14		LANDSCAPING ALLOWANCE	1	LS	\$ 10,000.00	\$ 10,000.00	
15		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 10,000.00	\$ 10,000.00	

Approximate Total Construction Cost ==> \$ 721,700.00

SURVEYING & DESIGN TESTING @ 5%: \$ 36,085.00
ENGINEERING @ 15%: \$ 108,255.00
INSPECTION & TESTING @ 10%: \$ 72,170.00
AIRPORT ADMINISTRATION @ 2.5%: \$ 18,042.50

Approximate Total Services Cost ==> \$ 234,552.50

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 956,252.50**
ADD 20% CONTINGENCY ==> \$ 191,250.50
\$ 1,147,503.00

USE ==> \$ 1,148,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 50: Mid-field Area Development - Drainage Improvements

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR STRUCTURAL/DRAINAGE IMPROVEMENTS	1	LS	\$ 560,000.00	\$ 560,000.00	
							Approximate Total Construction Cost ==> \$ 560,000.00
							PERMITTING AND PROFESSIONAL SERVICES @ 25%: \$ 140,000.00
							Approximate Total Services Cost ==> <u>\$ 140,000.00</u>
							USE ==> \$ 700,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 51: Airport Master Plan Update (2012)

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR MASTER PLAN UPDATE	1	LS	\$ 230,000.00		
2		ALLOWANCE FOR AGENCY COORDINATION	1	LS	\$ 5,000.00		
3		ADMINISTRATION	1	LS	\$ 5,000.00		
Approximate Total Construction Cost ==>							<u><u>\$ 240,000.00</u></u>
USE ==>							<u><u>\$ 240,000.00</u></u>

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
 file: Mid-term
 2003.037.05

AVCON Project:

Project No. 52: Mid-field Parallel Taxiway - Phase I

Approx. Pavement Area 40,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 370,000.00	\$ 370,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 80,000.00	\$ 80,000.00	
3		CLEARING AND GRUBBING	10	AC	\$ 3,000.00	\$ 30,000.00	
4		SITE PREPARATION	45,000	SY	\$ 3.00	\$ 135,000.00	
5		EMBANKMENT/EXCAVATION	13,400	CY	\$ 7.00	\$ 93,800.00	
6		SUBBASE COURSE	43,000	SY	\$ 5.00	\$ 215,000.00	
7		BASE COURSE	41,600	SY	\$ 20.00	\$ 832,000.00	
8		BITUMINOUS SURFACE COARSE (5 IN)	11,000	TON	\$ 135.00	\$ 1,485,000.00	
9		BITUMINOUS PRIME COAT	20,000	GAL	\$ 3.00	\$ 60,000.00	
10		BITUMINOUS TACK COAT	8,000	GAL	\$ 3.00	\$ 24,000.00	
11		PAVEMENT MARKINGS	1	LS	\$ 50,000.00	\$ 50,000.00	
12		SODDING	6,000	SY	\$ 3.50	\$ 21,000.00	
13		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 300,000.00	\$ 300,000.00	
14		ALLOWANCE FOR TAXIWAY LIGHTING & SIGNAGE	1	LS	\$ 400,000.00	\$ 400,000.00	
15		SEEDING AND MULCHING	1	AC	\$ 3,000.00	\$ 3,000.00	

Approximate Total Construction Cost ==> \$ 4,098,800.00

SURVEYING & DESIGN TESTING @ 5%: \$ 204,940.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$ 491,856.00
 INSPECTION & TESTING @ 8%: \$ 327,904.00
 AIRPORT ADMINISTRATION @ 1%: \$ 40,988.00

Approximate Total Services Cost ==> \$ 1,070,688.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 5,169,488.00**
 ADD 20% CONTINGENCY ==> \$ 1,033,897.60
\$ 6,203,385.60

NOTES:

1. POTENTIAL WETLAND MITIGATION COSTS NOT INCLUDED IN PROJECT BUDGET

USE ==> \$ 6,204,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 53: Apron Rehabilitation **Approx. Pavement Area: SY**

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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1		ALLOWANCE FOR APRON REHABILITATION	1	LS	\$ 750,000.00	\$ 750,000.00	
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Approximate Total Construction Cost ==> \$ 750,000.00

USE ==> \$ 750,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 54:	Mid-Field Taxilane - Phase II	Approx. pavement area:	5,800 SY				
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST

1		MOBILIZATION	1	LS	\$ 81,000.00	\$ 81,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 30,000.00	\$ 30,000.00	
3		EMBANKMENT/EXCAVATION	2,000	CY	\$ 4.50	\$ 9,000.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	6,300	SY	\$ 5.00	\$ 31,500.00	
6		BASE COURSE	6,000	SY	\$ 20.00	\$ 120,000.00	
7		PCC APRON	5,800	SY	\$ 100.00	\$ 580,000.00	
8		SODDING	600	SY	\$ 3.50	\$ 2,100.00	
9		PAVEMENT MARKINGS	1	LS	\$ 18,000.00	\$ 18,000.00	
10		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 22,000.00	\$ 22,000.00	

Approximate Total Construction Cost ==> \$ 896,600.00

SURVEYING & DESIGN TESTING @ 5%: \$ 44,830.00
ENGINEERING @ 12%: \$ 107,592.00
INSPECTION & TESTING @ 8%: \$ 71,728.00
AIRPORT ADMINISTRATION @ 1%: \$ 8,966.00

Approximate Total Services Cost ==> \$ 233,116.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 1,129,716.00
ADD 20% CONTINGENCY ==> \$ 225,943.20
\$ 1,355,659.20

USE ==> \$ 1,356,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 55: Mid-field Hangar, Apron & Parking Lot - Phase II

Approx. Hangar Area:	264,000	SF
Approx. Apron Area:	41,200	SY
Approx. Parking Lot Area:	9,400	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 4,000,000.00	\$ 4,000,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 150,000.00	\$ 150,000.00	
3		SITE PREPARATION	1	LS	\$ 175,000.00	\$ 175,000.00	
4		CLEARING AND GRUBBING	27	AC	\$ 3,000.00	\$ 81,000.00	
5		EMBANKMENT/EXCAVATION	26,600	CY	\$ 7.00	\$ 186,200.00	
6		SODDING	15,000	SY	\$ 3.50	\$ 52,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 450,000.00	\$ 450,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 550,000.00	\$ 550,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 45,000.00	\$ 45,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 350,000.00	\$ 350,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 120,000.00	\$ 120,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 35,000.00	\$ 35,000.00	
14		FENCE CONSTRUCTION	1,500	LF	\$ 25.00	\$ 37,500.00	
MRO Hangar @ 264,000 SF							
15		MAINTENANCE HANGAR CONSTRUCTION	264,000	SF	\$ 110.00	\$ 29,040,000.00	
16		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
MRO Apron @ 41,200 SY							
17		SUBBASE COURSE	44,500	SY	\$ 5.00	\$ 222,500.00	
18		BASE COURSE	43,000	SY	\$ 15.00	\$ 645,000.00	
19		PCC APRON	41,200	SY	\$ 100.00	\$ 4,120,000.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 55: Mid-field Hangar, Apron & Parking Lot - Phase II

Approx. Hangar Area:	264,000	SF
Approx. Apron Area:	41,200	SY
Approx. Parking Lot Area:	9,400	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lots @ 9,400 SY							
20		SUBBASE COURSE	10,200	SY	\$ 5.00	\$ 51,000.00	
21		BASE COURSE	10,000	SY	\$ 20.00	\$ 200,000.00	
22		BITUMINOUS SURFACE COURSE (2 IN)	1,100	TON	\$ 135.00	\$ 148,500.00	
23		BITUMINOUS PRIME COAT	4,700	GAL	\$ 3.00	\$ 14,100.00	

Approximate Total Construction Cost ==> \$ 41,723,300.00

SURVEYING & DESIGN TESTING @ 5%: \$ 2,086,165.00
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 10%: \$ 4,172,330.00
INSPECTION & TESTING @ 10%: \$ 4,172,330.00
AIRPORT ADMINISTRATION @ 1%: \$ 417,233.00

Approximate Total Services Cost ==> \$ 10,853,058.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 52,576,358.00**
ADD 20% CONTINGENCY ==> \$ 10,515,271.60
\$ 63,091,629.60

USE ==>
\$ 63,092,000.00

NOTES:

1. POTENTIAL WETLAND MITIGATION TO BE IDENTIFIED AND IS NOT INCLUDED IN THIS ESTIMATE.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 56: Fire Suppression and Fire Loop Rehabilitation (Hgr 13, 14, Fire Loop Phase VI)

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		REMOVE EXISTING SYSTEM	1	LS	\$ 100,000.00		
2		ALLOWANCE FOR FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,400,000.00		
3		CONNECT NEW SYSTEM TO HANGAR 13 AND 14	1	LS	\$ 200,000.00		

Approximate Total Construction Cost ==> \$ 1,700,000.00

SURVEYING & DESIGN TESTING @ 5%: \$ 85,000.00
ENGINEERING @ 10%: \$ 170,000.00
INSPECTION & TESTING @ 5%: \$ 85,000.00
AIRPORT ADMINISTRATION @ 1%: \$ 17,000.00

Approximate Total Services Cost ==> \$ 357,000.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 2,057,000.00
ADD 20% CONTINGENCY ==> \$ 411,400.00
\$ 2,468,400.00

USE ==> \$ 2,469,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 57: Installation ILS and MALSR - Runway 9R/27L

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 220,000.00		
2		INSTRUMENT LANDING SYSTEM	1	LS	\$ 1,500,000.00		
3		ALLOWANCE FOR APPROACH LIGHTING SYSTEM	1	LS	\$ 500,000.00		
4		FAA COORDINATION	1	SY	\$ 200,000.00		
Approximate Total Construction Cost ==>							\$ 2,420,000.00
SURVEYING & DESIGN TESTING @ 5%: \$							121,000.00
ENGINEERING @ 12%: \$							290,400.00
CONSTRUCTION ADMINISTRATION @ 8%: \$							193,600.00
AIRPORT ADMINISTRATION @ 1%: \$							24,200.00
Approximate Total Services Cost ==>							<u>\$ 629,200.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 3,049,200.00
ADD 20% CONTINGENCY ==>							<u>\$ 609,840.00</u>
							<u>\$ 3,659,040.00</u>
USE ==>							\$ 3,660,000.00

NOTE:

1. BE DETERMINED. PROJECT BUDGET MAY VARY WITH REQUIREMENTS.

AVCON, INC.
Estimator: V. Lewis

**PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD**

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 58: Northwest Infrastructure Improvements

Approx. Pavement Area:	11,000 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 88,500.00	\$ 88,500.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 15,000.00	\$ 15,000.00	
3		SITE PREPARATION	14,000	SY	\$ 2.50	\$ 35,000.00	
4		SUBBASE COURSE	12,000	SY	\$ 5.00	\$ 60,000.00	
5		BASE COURSE	11,500	SY	\$ 20.00	\$ 230,000.00	
6		BITUMINOUS SURFACE COURSE (4 IN)	2,500	TON	\$ 135.00	\$ 337,500.00	
7		BITUMINOUS PRIME COAT	5,500	GAL	\$ 3.00	\$ 16,500.00	
8		BITUMINOUS TACK COAT	2,200	GAL	\$ 3.00	\$ 6,600.00	
9		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 60,000.00	\$ 60,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
11		SODDING	6,000	SY	\$ 3.50	\$ 21,000.00	
12		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 50,000.00	\$ 50,000.00	

Approximate Total Construction Cost ==> \$ 970,100.00

SURVEYING/GEOTECH @ 4%: \$ 38,804.00
ENGINEERING @ 10%: \$ 97,010.00
INSPECTION & TESTING @ 5%: \$ 48,505.00
AIRPORT ADMINISTRATION @ 1%: \$ 9,701.00

Approximate Total Services Cost ==> \$ 194,020.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 1,164,120.00

ADD 20% CONTINGENCY ==> \$ 232,824.00

\$ 1,396,944.00

Note:

1. ASSUME ALL HANGAR DEVELOPMENT IS PRIVATELY FUNDED
2. NO DEVELOPMENT WILL PROCEED UNTIL COMPLETION OF ENVIRONMENTAL REMEDIATION

USE ==> \$ 1,397,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 59:		Rehabilitate Terminal Road and Parking Lot	Approx. Pavement Area:		12,000	SY	
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 48,000.00	\$ 48,000.00	
2		ASPHALT PAVEMENT MILLING	6,000	SY	\$ 6.00	\$ 36,000.00	
3		MAINTENANCE OF TRAFFIC	1	LS	\$ 25,000.00	\$ 25,000.00	
4		BITUMINOUS SURFACE COURSE (2 IN)	1,350	TON	\$ 135.00	\$ 182,250.00	
5		BITUMINOUS TACK COAT	2,400	GAL	\$ 3.00	\$ 7,200.00	
6		PAVEMENT MARKINGS/REFLECTORS	1	LS	\$ 30,000.00	\$ 30,000.00	
7		SHOULDER GRADING	1	LS	\$ 10,000.00	\$ 10,000.00	
8		SODDING	10,000	SY	\$ 3.50	\$ 35,000.00	
9		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
10		ALLOWANCE FOR UTILITY MODIFICATIONS	1	LS	\$ 20,000.00	\$ 20,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 20,000.00	\$ 20,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 10,000.00	\$ 10,000.00	
13		ALLOWANCE FOR CURB/GUTTER IMPROVEMENTS	1	LS	\$ 10,000.00	\$ 10,000.00	
14		LANDSCAPING ALLOWANCE	1	LS	\$ 20,000.00	\$ 20,000.00	
15		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 25,000.00	\$ 25,000.00	

Approximate Total Construction Cost ==> \$ 528,450.00

SURVEYING & DESIGN TESTING @ 5%: \$ 26,422.50
ENGINEERING @ 12%: \$ 63,414.00
INSPECTION & TESTING @ 10%: \$ 52,845.00
AIRPORT ADMINISTRATION @ 2%: \$ 10,569.00

Approximate Total Services Cost ==> \$ 153,250.50

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 681,700.50**
ADD 20% CONTINGENCY ==> \$ 136,340.10
\$ 818,040.60

USE ==> \$ 819,000.00

AVCON, INC.
Estimator: V. Lewis

**PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD**

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 60: New Air Traffic Control Tower

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Control Tower							
1		ALLOWANCE FOR AIR TRAFFIC CONTROL TOWER	1	LS	\$ 2,000,000.00	\$ 2,000,000.00	
2		ALLOWANCE FOR EQUIPMENT	1	LS	\$ 500,000.00	\$ 500,000.00	
3		ALLOWANCE FOR JAA/AFTIL COORDINATION	1	LS	\$ 500,000.00	\$ 500,000.00	
Parking Lot @ 2,500 SY							
4		MOBILIZATION	1	LS	\$ 17,000.00	\$ 17,000.00	
5		EROSION AND SEDIMENT CONTROL	1	LS	\$ 7,000.00	\$ 7,000.00	
6		CLEARING AND GRUBBING	5	AC	\$ 3,000.00	\$ 15,000.00	
7		SUBBASE COURSE	2,700	SY	\$ 5.00	\$ 13,500.00	
8		BASE COURSE	2,500	SY	\$ 20.00	\$ 50,000.00	
9		BITUMINOUS SURFACE COURSE (2 IN)	300	TON	\$ 135.00	\$ 40,500.00	
10		BITUMINOUS PRIME COAT	1,250	GAL	\$ 3.00	\$ 3,750.00	
11		PAVEMENT MARKINGS	1,000	SF	\$ 1.50	\$ 1,500.00	
12		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 10,000.00	\$ 10,000.00	
13		VEHICULAR SIGNAGE	1	LS	\$ 15,000.00	\$ 15,000.00	
14		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 10,000.00	\$ 10,000.00	

Approximate Total Construction Cost ==> \$ 3,183,250.00

SURVEYING & DESIGN TESTING @ 5%: \$ 159,162.50
ENGINEERING @ 12%: \$ 381,990.00
INSPECTION & TESTING @ 8%: \$ 254,660.00
AIRPORT ADMINISTRATION @ 1%: \$ 31,832.50

Approximate Total Services Cost ==> \$ 827,645.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 4,010,895.00
ADD 20% CONTINGENCY ==> \$ 802,179.00
\$ 4,813,074.00

USE ==> \$ 4,814,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07

file: Short-term
2003.037.05

AVCON Project:

Project No. 61:	Mid-Field Taxilane - Phase III	Approx. pavement area:	5,600 SY				
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST

1		MOBILIZATION	1	LS	\$ 78,000.00	\$ 78,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 30,000.00	\$ 30,000.00	
3		EMBANKMENT/EXCAVATION	1,900	CY	\$ 4.50	\$ 8,550.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	6,100	SY	\$ 5.00	\$ 30,500.00	
6		BASE COURSE	5,800	SY	\$ 20.00	\$ 116,000.00	
7		PCC APRON	5,600	SY	\$ 100.00	\$ 560,000.00	
8		SODDING	200	SY	\$ 3.50	\$ 700.00	
9		PAVEMENT MARKINGS	1	LS	\$ 18,000.00	\$ 18,000.00	
10		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 22,000.00	\$ 22,000.00	

Approximate Total Construction Cost ==> \$ 866,750.00

SURVEYING & DESIGN TESTING @ 5%: \$ 43,337.50
ENGINEERING @ 12%: \$ 104,010.00
INSPECTION & TESTING @ 8%: \$ 69,340.00
AIRPORT ADMINISTRATION @ 1%: \$ 8,667.50

Approximate Total Services Cost ==> \$ 225,355.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 1,092,105.00

ADD 20% CONTINGENCY ==> \$ 218,421.00

\$ 1,310,526.00

USE ==> \$ 1,311,000.00

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Project No. 62: Mid-field Hangar, Apron & Parking Lot - Phase III

Approx. Hangar Area:	264,000	SF
Approx. Apron Area:	41,400	SY
Approx. Parking Lot Area:	9,400	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 4,000,000.00	\$ 4,000,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 150,000.00	\$ 150,000.00	
3		SITE PREPARATION	1	LS	\$ 175,000.00	\$ 175,000.00	
4		CLEARING AND GRUBBING	27	AC	\$ 3,000.00	\$ 81,000.00	
5		EMBANKMENT/EXCAVATION	26,600	CY	\$ 7.00	\$ 186,200.00	
6		SODDING	15,500	SY	\$ 3.50	\$ 54,250.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 450,000.00	\$ 450,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 550,000.00	\$ 550,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 45,000.00	\$ 45,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 350,000.00	\$ 350,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 120,000.00	\$ 120,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 35,000.00	\$ 35,000.00	
14		FENCE CONSTRUCTION	1,500	LF	\$ 25.00	\$ 37,500.00	
MRO Hangar @ 264,000 SF							
15		MAINTENANCE HANGAR CONSTRUCTION	264,000	SF	\$ 110.00	\$ 29,040,000.00	
16		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
MRO Apron @ 41,400 SY							
17		SUBBASE COURSE	44,800	SY	\$ 5.00	\$ 224,000.00	
18		BASE COURSE	43,000	SY	\$ 15.00	\$ 645,000.00	
19		PCC APRON	41,400	SY	\$ 100.00	\$ 4,140,000.00	
Parking Lots @ 9,400 SY							
20		SUBBASE COURSE	10,200	SY	\$ 5.00	\$ 51,000.00	
21		BASE COURSE	10,000	SY	\$ 20.00	\$ 200,000.00	
22		BITUMINOUS SURFACE COURSE (2 IN)	1,100	TON	\$ 135.00	\$ 148,500.00	
23		BITUMINOUS PRIME COAT	4,700	GAL	\$ 3.00	\$ 14,100.00	

Approximate Total Construction Cost ==> \$ 41,746,550.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
 AVCON Project: 2003.037.05

Project No. 62: Mid-field Hangar, Apron & Parking Lot - Phase III

Approx. Hangar Area:	264,000	SF
Approx. Apron Area:	41,400	SY
Approx. Parking Lot Area:	9,400	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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SURVEYING & DESIGN TESTING @ 5%: \$ 2,087,327.50
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 10%: \$ 4,174,655.00
 INSPECTION & TESTING @ 10%: \$ 4,174,655.00
 AIRPORT ADMINISTRATION @ 1%: \$ 417,465.50

Approximate Total Services Cost ==> \$ 10,859,103.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 52,605,653.00**

ADD 20% CONTINGENCY ==> \$ 10,521,130.60

\$ 63,126,783.60

NOTES:

1. POTENTIAL WETLAND MITIGATION TO BE IDENTIFIED AND IS NOT INCLUDED IN THIS ESTIMATE.

\$ 63,127,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07

file: Short-term
 2003.037.05

AVCON Project:

Project No. 63:	Mid-Field Taxilane - Phase IV	Approx. pavement area:	5,600 SY				
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST

1		MOBILIZATION	1	LS	\$ 78,000.00	\$ 78,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 30,000.00	\$ 30,000.00	
3		EMBANKMENT/EXCAVATION	1,900	CY	\$ 4.50	\$ 8,550.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	6,100	SY	\$ 5.00	\$ 30,500.00	
6		BASE COURSE	5,800	SY	\$ 20.00	\$ 116,000.00	
7		PCC APRON	5,600	SY	\$ 100.00	\$ 560,000.00	
8		SODDING	200	SY	\$ 3.50	\$ 700.00	
9		PAVEMENT MARKINGS	1	LS	\$ 18,000.00	\$ 18,000.00	
10		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 22,000.00	\$ 22,000.00	

Approximate Total Construction Cost ==> \$ 866,750.00

SURVEYING & DESIGN TESTING @ 5%: \$ 43,337.50
 ENGINEERING @ 12%: \$ 104,010.00
 INSPECTION & TESTING @ 8%: \$ 69,340.00
 AIRPORT ADMINISTRATION @ 1%: \$ 8,667.50

Approximate Total Services Cost ==> \$ 225,355.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 1,092,105.00

ADD 20% CONTINGENCY ==> \$ 218,421.00

\$ 1,310,526.00

USE ==> \$ 1,311,000.00

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Project No. 64: Mid-Field Hangar, Apron & Parking Lot - Phase IV

Approx. Hangar Area:	264,000	SF
Approx. Apron Area:	41,400	SY
Approx. Parking Lot Area:	6,200	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 4,000,000.00	\$ 4,000,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 150,000.00	\$ 150,000.00	
3		SITE PREPARATION	1	LS	\$ 175,000.00	\$ 175,000.00	
4		CLEARING AND GRUBBING	27	AC	\$ 3,000.00	\$ 81,000.00	
5		EMBANKMENT/EXCAVATION	26,600	CY	\$ 7.00	\$ 186,200.00	
6		SODDING	15,500	SY	\$ 3.50	\$ 54,250.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 450,000.00	\$ 450,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 550,000.00	\$ 550,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 45,000.00	\$ 45,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 350,000.00	\$ 350,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 120,000.00	\$ 120,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 35,000.00	\$ 35,000.00	
14		FENCE CONSTRUCTION	1,500	LF	\$ 25.00	\$ 37,500.00	
MRO Hangar @ 264,000 SF							
15		MAINTENANCE HANGAR CONSTRUCTION	264,000	SF	\$ 110.00	\$ 29,040,000.00	
16		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
MRO Apron @ 41,400 SY							
17		SUBBASE COURSE	44,800	SY	\$ 5.00	\$ 224,000.00	
18		BASE COURSE	43,000	SY	\$ 15.00	\$ 645,000.00	
19		PCC APRON	41,400	SY	\$ 100.00	\$ 4,140,000.00	
Parking Lots @ 6,200 SY							
20		SUBBASE COURSE	6,700	SY	\$ 5.00	\$ 33,500.00	
21		BASE COURSE	6,500	SY	\$ 20.00	\$ 130,000.00	
22		BITUMINOUS SURFACE COURSE (2 IN)	700	TON	\$ 135.00	\$ 94,500.00	
23		BITUMINOUS PRIME COAT	3,100	GAL	\$ 3.00	\$ 9,300.00	

Approximate Total Construction Cost ==> \$ 41,600,250.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 64: Mid-Field Hangar, Apron & Parking Lot - Phase IV

Approx. Hangar Area:	264,000	SF
Approx. Apron Area:	41,400	SY
Approx. Parking Lot Area:	6,200	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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SURVEYING & DESIGN TESTING @ 5%: \$ 2,080,012.50
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 10%: \$ 4,160,025.00
 INSPECTION & TESTING @ 10%: \$ 4,160,025.00
 AIRPORT ADMINISTRATION @ 1%: \$ 416,002.50

Approximate Total Services Cost ==> \$ 10,821,065.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 52,421,315.00**

ADD 20% CONTINGENCY ==> \$ 10,484,263.00

\$ 62,905,578.00

NOTES:

1. POTENTIAL WETLAND MITIGATION TO BE IDENTIFIED AND IS NOT INCLUDED IN THIS ESTIMATE.

USE ==> \$ 62,906,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 65: Update Master Plan/ALP (2015)

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR MASTER PLAN UPDATE	1	LS	\$ 230,000.00	\$ 230,000.00	
2		ALLOWANCE FOR AGENCY COORDINATION	1	LS	\$ 5,000.00	\$ 5,000.00	
3		ADMINISTRATION	1	LS	\$ 5,000.00	\$ 5,000.00	
Approximate Total Construction Cost ==>							<u>\$ 240,000.00</u>
USE ==>							\$ 240,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 66: Runway/Taxiway/Safety Area Drainage, Rehabilitation - Phase IV

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR DRAINAGE/STRUCTURAL IMPROVEMENTS	1	LS	\$ 400,000.00	\$ 400,000.00	

Approximate Total Construction Cost ==> \$ 400,000.00

PERMITTING & PROFESSIONAL SERVICES @ 25%: \$ 100,000.00

Approximate Total Services Cost ==> \$ 100,000.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 500,000.00

Notes

1. IN APPROVED ENVIRONMENTAL RESOURCES PERMIT. PROJECT BUDGET MAY VARY BASED ON REQUIREMENTS.

USE ==> \$ 500,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 67:		Mid-Field Taxilane - Phase V			Approx. pavement area:		6,100 SY	
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST	
1		MOBILIZATION	1	LS	\$ 85,000.00	\$ 85,000.00		
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 30,000.00	\$ 30,000.00		
3		EMBANKMENT/EXCAVATION	2,000	CY	\$ 4.50	\$ 9,000.00		
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00		
5		SUBBASE COURSE	6,600	SY	\$ 5.00	\$ 33,000.00		
6		BASE COURSE	6,300	SY	\$ 20.00	\$ 126,000.00		
7		PCC APRON	6,100	SY	\$ 100.00	\$ 610,000.00		
8		SODDING	800	SY	\$ 3.50	\$ 2,800.00		
9		PAVEMENT MARKINGS	1	LS	\$ 18,000.00	\$ 18,000.00		
10		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 22,000.00	\$ 22,000.00		

Approximate Total Construction Cost ==> \$ 938,800.00

SURVEYING & DESIGN TESTING @ 5%: \$ 46,940.00
ENGINEERING @ 12%: \$ 112,656.00
INSPECTION & TESTING @ 8%: \$ 75,104.00
AIRPORT ADMINISTRATION @ 1%: \$ 9,388.00

Approximate Total Services Cost ==> \$ 244,088.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 1,182,888.00
ADD 20% CONTINGENCY ==> \$ 236,577.60
\$ 1,419,465.60

USE ==> \$ 1,420,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 68: Mid-field Hangar, Apron & Parking Lot - Phase V

Approx. Hangar Area:	130,000	SF
Approx. Apron Area:	53,900	SY
Approx. Parking Lot Area:	3,700	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 2,600,000.00	\$ 2,600,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 130,000.00	\$ 130,000.00	
3		SITE PREPARATION	1	LS	\$ 150,000.00	\$ 150,000.00	
4		CLEARING AND GRUBBING	16	AC	\$ 3,000.00	\$ 48,000.00	
5		EMBANKMENT/EXCAVATION	24,000	CY	\$ 7.00	\$ 168,000.00	
6		SODDING	14,000	SY	\$ 3.50	\$ 49,000.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 450,000.00	\$ 450,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 550,000.00	\$ 550,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 45,000.00	\$ 45,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 350,000.00	\$ 350,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 130,000.00	\$ 130,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 35,000.00	\$ 35,000.00	
14		FENCE CONSTRUCTION	1,500	LF	\$ 25.00	\$ 37,500.00	
MRO Hangar @ 130,000 SF							
15		MAINTENANCE HANGAR CONSTRUCTION	130,000	SF	\$ 110.00	\$ 14,300,000.00	
16		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
MRO Apron @ 53,900 SY							
17		SUBBASE COURSE	58,000	SY	\$ 5.00	\$ 290,000.00	
18		BASE COURSE	56,000	SY	\$ 15.00	\$ 840,000.00	
19		PCC APRON	53,900	SY	\$ 100.00	\$ 5,390,000.00	
Parking Lots @ 3,700 SY							
20		SUBBASE COURSE	4,000	SY	\$ 5.00	\$ 20,000.00	
21		BASE COURSE	3,850	SY	\$ 20.00	\$ 77,000.00	
22		BITUMINOUS SURFACE COURSE (2 IN)	400	TON	\$ 135.00	\$ 54,000.00	
23		BITUMINOUS PRIME COAT	3,100	GAL	\$ 3.00	\$ 9,300.00	

Approximate Total Construction Cost ==> \$ 26,762,800.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
 AVCON Project: 2003.037.05

Project No. 68: Mid-field Hangar, Apron & Parking Lot - Phase V

Approx. Hangar Area:	130,000	SF
Approx. Apron Area:	53,900	SY
Approx. Parking Lot Area:	3,700	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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SURVEYING & DESIGN TESTING @ 5%: \$ 1,338,140.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 10%: \$ 2,676,280.00
 INSPECTION & TESTING @ 10%: \$ 2,676,280.00
 AIRPORT ADMINISTRATION @ 1%: \$ 267,628.00

Approximate Total Services Cost ==> \$ 6,963,328.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 33,726,128.00

ADD 20% CONTINGENCY ==> \$ 6,745,225.60

\$ 40,471,353.60

NOTES:

1. POTENTIAL WETLAND MITIGATION TO BE IDENTIFIED AND IS NOT INCLUDED IN THIS ESTIMATE.

USE ==> \$ 40,471,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
 2003.037.05

AVCON Project: 2003.037.05

Project No. 69:	Mid-field Parallel Taxiway - Phase II	Approx. Pavement Area	28,000 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 240,000.00	\$ 240,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 40,000.00	\$ 40,000.00	
3		CLEARING AND GRUBBING	7	AC	\$ 3,000.00	\$ 21,000.00	
4		SITE PREPARATION	30,000	SY	\$ 3.00	\$ 90,000.00	
5		EMBANKMENT/EXCAVATION	9,350	CY	\$ 7.00	\$ 65,450.00	
6		SUBBASE COURSE	30,000	SY	\$ 5.00	\$ 150,000.00	
7		BASE COURSE	29,000	SY	\$ 20.00	\$ 580,000.00	
8		BITUMOUS SURFACE COURSE (5 IN)	7,700	TON	\$ 135.00	\$ 1,039,500.00	
9		BITUMINOUS PRIME COAT	14,000	GAL	\$ 3.00	\$ 42,000.00	
10		BITUMINOUS TAC COAT	5,600	GAL	\$ 3.00	\$ 16,800.00	
11		PAVEMENT MARKINGS	1	LS	\$ 25,000.00	\$ 25,000.00	
12		SODDING	5,600	SY	\$ 3.50	\$ 19,600.00	
13		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 150,000.00	\$ 150,000.00	
14		ALLOWANCE FOR TAXIWAY LIGHTING & SIGNAGE	1	LS	\$ 200,000.00	\$ 200,000.00	
15		SEEDING AND MULCHING	1	AC	3000	\$ 3,000.00	

Approximate Total Construction Cost ==> \$ 2,682,350.00

SURVEYING & DESIGN TESTING @ 5%: \$ 134,117.50
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$ 321,882.00
 INSPECTION & TESTING @ 8%: \$ 214,588.00
 AIRPORT ADMINISTRATION @ 1%: \$ 26,823.50

Approximate Total Services Cost ==> \$ 702,411.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 3,384,761.00**
 ADD 20% CONTINGENCY ==> \$ 676,952.20
\$ 4,061,713.20

NOTES:

1. POTENTIAL WETLAND MITIGATION COSTS NOT INCLUDED IN PROJECT BUDGET

USE ==> \$ 4,062,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 70: Airport Security Improvements - Phase II

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		AOA FENCE REPAIR/REPLACEMENT	33,000	LF	\$ 25.00	\$ 825,000.00	
							Approximate Total Construction Cost ==> \$ 825,000.00
							PROFESSIONAL SERVICES @ 10%: \$ 82,500.00
							Approximate Total Services Cost ==> <u>\$ 82,500.00</u>
							PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 907,500.00
							ADD 20% CONTINGENCY ==> <u>\$ 181,500.00</u>
							<u>\$ 1,089,000.00</u>
							USE ==> \$ 1,089,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
 AVCON Project: 2003.037.05

Project No. 71: Southeast Development Roadway Access

Approx. Pavement Area	55,000 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 215,000.00	\$ 215,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 75,000.00	\$ 75,000.00	
3		MAINTENANCE OF TRAFFIC	1	LS	\$ 25,000.00	\$ 25,000.00	
4		BITUMINOUS SURFACE COURSE (2 IN)	6,100	TON	\$ 135.00	\$ 823,500.00	
5		BITUMINOUS PRIME COAT	27,500	GAL	\$ 3.00	\$ 82,500.00	
6		PAVEMENT MARKINGS	1	LS	\$ 75,000.00	\$ 75,000.00	
7		SODDING	55,000	SY	\$ 3.50	\$ 192,500.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 250,000.00	\$ 250,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 100,000.00	\$ 100,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 300,000.00	\$ 300,000.00	
11		ALLOWANCE FOR FENCE/GATE IMPROVEMENTS	1	LS	\$ 100,000.00	\$ 100,000.00	
12		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 100,000.00	\$ 100,000.00	
13		VEHICULAR SIGNAGE	1	LS	\$ 20,000.00	\$ 20,000.00	

Approximate Total Construction Cost ==> \$2,358,500.00

SURVEYING & DESIGN TESTING @ 5%: \$ 117,925.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @12%: \$ 283,020.00
 INSPECTION & TESTING @8%: \$ 188,680.00
 AIRPORT ADMINISTRATION @ 2%: \$ 47,170.00

Approximate Total Services Cost ==> \$ 641,795.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$3,000,295.00**
 ADD 20% CONTINGENCY ==> \$ 600,059.00
\$3,600,354.00

NOTES:

1. POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

USE ==> \$3,601,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 72:	Mid-Field Taxilane - Phase VI	Approx. pavement area:	8,300 SY				
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST

1		MOBILIZATION	1	LS	\$ 114,000.00	\$ 114,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 30,000.00	\$ 30,000.00	
3		EMBANKMENT/EXCAVATION	2,800	CY	\$ 4.50	\$ 12,600.00	
4		CLEARING AND GRUBBING	2	AC	\$ 3,000.00	\$ 6,000.00	
5		SUBBASE COURSE	9,000	SY	\$ 5.00	\$ 45,000.00	
6		BASE COURSE	8,600	SY	\$ 20.00	\$ 172,000.00	
7		PCC APRON	8,300	SY	\$ 100.00	\$ 830,000.00	
8		SODDING	300	SY	\$ 3.50	\$ 1,050.00	
9		PAVEMENT MARKINGS	1	LS	\$ 20,000.00	\$ 20,000.00	
10		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 25,000.00	\$ 25,000.00	

Approximate Total Construction Cost ==> \$ 1,255,650.00

SURVEYING & DESIGN TESTING @ 5%: \$ 62,782.50
ENGINEERING @ 12%: \$ 150,678.00
INSPECTION & TESTING @ 8%: \$ 100,452.00
AIRPORT ADMINISTRATION @ 1%: \$ 12,556.50

Approximate Total Services Cost ==> \$ 326,469.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **1,582,119.00**
ADD 20% CONTINGENCY ==> \$ 316,423.80
\$ 1,898,542.80

USE ==> \$ 1,899,000.00

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Project No. 73: Mid-field Hangar, Apron & Parking Lot - Phase VI

Approx. Hangar Area:	100,000	SF
Approx. Apron Area:	58,700	SY
Approx. Parking Lot Area:	27,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 2,000,000.00	\$ 2,000,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 130,000.00	\$ 130,000.00	
3		SITE PREPARATION	1	LS	\$ 155,000.00	\$ 155,000.00	
4		CLEARING AND GRUBBING	17	AC	\$ 3,000.00	\$ 51,000.00	
5		EMBANKMENT/EXCAVATION	29,000	CY	\$ 7.00	\$ 203,000.00	
6		SODDING	11,000	SY	\$ 3.50	\$ 38,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 450,000.00	\$ 450,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 550,000.00	\$ 550,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 45,000.00	\$ 45,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 350,000.00	\$ 350,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 140,000.00	\$ 140,000.00	
13		MAINTENANCE OF TRAFFIC	1	LS	\$ 35,000.00	\$ 35,000.00	
14		FENCE CONSTRUCTION	1,500	LF	\$ 25.00	\$ 37,500.00	
Cargo Hangar @ 100,000 SF							
15		CARGO HANGAR CONSTRUCTION	100,000	SF	\$ 110.00	\$ 11,000,000.00	
16		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
Cargo Apron @ 58,700 SY							
17		SUBBASE COURSE	63,500	SY	\$ 5.00	\$ 317,500.00	
18		BASE COURSE	61,000	SY	\$ 15.00	\$ 915,000.00	
19		PCC APRON	58,700	SY	\$ 100.00	\$ 5,870,000.00	
Parking Lots @ 27,500 SY							
20		SUBBASE COURSE	30,000	SY	\$ 5.00	\$ 150,000.00	
21		BASE COURSE	28,600	SY	\$ 20.00	\$ 572,000.00	
22		BITUMINOUS SURFACE COURSE (2 IN)	3,000	TON	\$ 135.00	\$ 405,000.00	
23		BITUMINOUS PRIME COAT	13,750	GAL	\$ 3.00	\$ 41,250.00	

Approximate Total Construction Cost ==> \$ 24,495,750.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 73: Mid-field Hangar, Apron & Parking Lot - Phase VI

Approx. Hangar Area:	100,000	SF
Approx. Apron Area:	58,700	SY
Approx. Parking Lot Area:	27,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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SURVEYING & DESIGN TESTING @ 5%: \$ 1,224,787.50
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 10%: \$ 2,449,575.00
 INSPECTION & TESTING @ 10%: \$ 2,449,575.00
 AIRPORT ADMINISTRATION @ 1%: \$ 244,957.50

Approximate Total Services Cost ==> \$ 6,373,895.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 30,869,645.00

ADD 20% CONTINGENCY ==> \$ 6,173,929.00

\$ 37,043,574.00

NOTES:

1. POTENTIAL WETLAND MITIGATION TO BE IDENTIFIED AND IS NOT INCLUDED IN THIS ESTIMATE.

USE ==> \$ 37,044,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
 file: Long-term

AVCON Project: 2003.037.05

Project No. 74: Mid-field Parallel Taxiway - Phase III Approx. Pavement Area 19,200 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 200,000.00	\$ 200,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 35,000.00	\$ 35,000.00	
3		CLEARING AND GRUBBING	7	AC	\$ 3,000.00	\$ 21,000.00	
4		SITE PREPARATION	30,000	SY	\$ 3.00	\$ 90,000.00	
5		EMBANKMENT/EXCAVATION	9,350	CY	\$ 7.00	\$ 65,450.00	
6		SUBBASE COURSE	21,000	SY	\$ 5.00	\$ 105,000.00	
7		BASE COURSE	20,000	SY	\$ 20.00	\$ 400,000.00	
8		BITUMOUS SURFACE COURSE (5 IN)	5,300	TON	\$ 135.00	\$ 715,500.00	
9		BITUMINOUS PRIME COAT	9,600	GAL	\$ 3.00	\$ 28,800.00	
10		BITUMINOUS TAC COAT	3,850	GAL	\$ 3.00	\$ 11,550.00	
11		PAVEMENT MARKINGS	1	LS	\$ 20,000.00	\$ 20,000.00	
12		SODDING	5,000	SY	\$ 3.50	\$ 17,500.00	
13		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 100,000.00	\$ 100,000.00	
14		ALLOWANCE FOR TAXIWAY LIGHTING & SIGNAGE	1	LS	\$ 150,000.00	\$ 150,000.00	
15		SEEDING AND MULCHING	1	AC	3000	\$ 3,000.00	

Approximate Total Construction Cost ==> \$ 1,962,800.00

SURVEYING & DESIGN TESTING @ 5%: \$ 98,140.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$ 235,536.00
 INSPECTION & TESTING @ 8%: \$ 157,024.00
 AIRPORT ADMINISTRATION @ 1%: \$ 19,628.00

Approximate Total Services Cost ==> \$ 515,328.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 2,478,128.00**

ADD 20% CONTINGENCY ==> \$ 495,625.60

\$ 2,973,753.60

NOTES:

1. POTENTIAL WETLAND MITIGATION COSTS NOT INCLUDED IN PROJECT BUDGET

USE ==> \$ 2,974,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 75: Southeast Development Drainage Improvements - Phase I

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR STRUCTURAL/DRAINAGE IMPROVEMENTS	1	LS	\$ 400,000.00	\$ 400,000.00	
							Approximate Total Construciton Cost ==> \$ 400,000.00
							PERMITTING AND PROFESSIONAL SERVICES @ 25%: \$ 100,000.00
							Approximate Total Construction Cost ==> <u>\$ 500,000.00</u>
							USE ==> \$ 500,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 76: Mid-Field Taxilane - Phase VII **Approx. pavement area: 16,500 SY**

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 150,000.00	\$ 150,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 40,000.00	\$ 40,000.00	
3		EMBANKMENT/EXCAVATION	5,500	CY	\$ 4.50	\$ 24,750.00	
4		CLEARING AND GRUBBING	3	AC	\$ 3,000.00	\$ 9,000.00	
5		SUBBASE COURSE	18,000	SY	\$ 5.00	\$ 90,000.00	
6		BASE COURSE	17,160	SY	\$ 20.00	\$ 343,200.00	
7		PCC APRON	16,500	SY	\$ 100.00	\$ 1,650,000.00	
8		SODDING	2,000	SY	\$ 3.50	\$ 7,000.00	
9		PAVEMENT MARKINGS	1	LS	\$ 35,000.00	\$ 35,000.00	
10		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 45,000.00	\$ 45,000.00	

Approximate Total Construction Cost ==> \$ 2,393,950.00

SURVEYING & DESIGN TESTING @ 5%: \$ 119,697.50
ENGINEERING @ 12%: \$ 287,274.00
INSPECTION & TESTING @ 8%: \$ 191,516.00
AIRPORT ADMINISTRATION @ 1%: \$ 23,939.50

Approximate Total Services Cost ==> \$ 622,427.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **3,016,377.00**

ADD 20% CONTINGENCY ==> \$ 603,275.40

\$ 3,619,652.40

USE ==> \$ 3,620,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 77: Mid-field Hangar, Apron & Parking Lot - Phase VII

Approx. Hangar Area:	55,000	SF
Approx. Apron Area:	78,500	SY
Approx. Parking Lot Area:	20,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 2,200,000.00	\$ 2,200,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 130,000.00	\$ 130,000.00	
3		SITE PREPARATION	1	LS	\$ 130,000.00	\$ 130,000.00	
4		CLEARING AND GRUBBING	21	AC	\$ 3,000.00	\$ 63,000.00	
5		EMBANKMENT/EXCAVATION	35,000	CY	\$ 7.00	\$ 245,000.00	
6		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
7		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 450,000.00	\$ 450,000.00	
8		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 550,000.00	\$ 550,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 50,000.00	\$ 50,000.00	
10		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 350,000.00	\$ 350,000.00	
11		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 130,000.00	\$ 130,000.00	
12		MAINTENANCE OF TRAFFIC	1	LS	\$ 35,000.00	\$ 35,000.00	
13		FENCE CONSTRUCTION	1,000	LF	\$ 25.00	\$ 25,000.00	
Cargo Hangar @ 55,000 SF							
14		CARGO HANGAR CONSTRUCTION	55,000	SF	\$ 110.00	\$ 6,050,000.00	
15		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
Cargo Apron @ 78,500 SY							
16		SUBBASE COURSE	85,000	SY	\$ 5.00	\$ 425,000.00	
17		BASE COURSE	81,500	SY	\$ 15.00	\$ 1,222,500.00	
18		PCC APRON	78,500	SY	\$ 100.00	\$ 7,850,000.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Mid-term
AVCON Project: 2003.037.05

Project No. 77: Mid-field Hangar, Apron & Parking Lot - Phase VII

Approx. Hangar Area:	55,000	SF
Approx. Apron Area:	78,500	SY
Approx. Parking Lot Area:	20,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lots @ 20,500 SY							
19		SUBBASE COURSE	22,000	SY	\$ 5.00	\$ 110,000.00	
20		BASE COURSE	21,300	SY	\$ 20.00	\$ 426,000.00	
21		BITUMINOUS SURFACE COURSE (2 IN)	2,300	TON	\$ 135.00	\$ 310,500.00	
22		BITUMINOUS PRIME COAT	10,250	GAL	\$ 3.00	\$ 30,750.00	

Approximate Total Construction Cost ==> \$ 21,822,750.00

SURVEYING & DESIGN TESTING @ 5%: \$ 1,091,137.50
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 10%: \$ 2,182,275.00
INSPECTION & TESTING @ 10%: \$ 2,182,275.00
AIRPORT ADMINISTRATION @ 1%: \$ 218,227.50

Approximate Total Services Cost ==> \$ 5,678,915.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 27,501,665.00**
ADD 20% CONTINGENCY ==> \$ 5,500,333.00
\$ 33,001,998.00

NOTES:

1. POTENTIAL WETLAND MITIGATION TO BE IDENTIFIED AND IS NOT INCLUDED IN THIS ESTIMATE.

USE ==> \$ 33,002,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term

AVCON Project: 2003.037.05

Project No. 78:	Mid-field Parallel Taxiway - Phase IV	Approx. Pavement Area	4,000 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 38,000.00	\$ 38,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 2,500.00	\$ 2,500.00	
3		CLEARING AND GRUBBING	1	AC	\$ 2,000.00	\$ 2,000.00	
4		EMBANKMENT/EXCAVATION	1,300	CY	\$ 7.00	\$ 9,100.00	
5		SUBBASE COURSE	4,400	SY	\$ 5.00	\$ 22,000.00	
6		BASE COURSE	4,200	SY	\$ 20.00	\$ 84,000.00	
7		BITUMOUS SURFACE COURSE (5 IN)	1,100	TON	\$ 135.00	\$ 148,500.00	
8		BITUMINOUS PRIME COAT	2,000	GAL	\$ 3.00	\$ 6,000.00	
9		BITUMINOUS TAC COAT	800	GAL	\$ 3.00	\$ 2,400.00	
10		PAVEMENT MARKINGS	1	LS	\$ 4,000.00	\$ 4,000.00	
11		SODDING	500	SY	\$ 3.50	\$ 1,750.00	
12		ALLOWANCE FOR DAMAGE IMPROVEMENTS	1	LS	\$ 5,000.00	\$ 5,000.00	
13		ALLOWANCE FOR TAXIWAY LIGHTING & SIGNAGE	1	LS	\$ 15,000.00	\$ 15,000.00	

Approximate Total Construction Cost ==> \$ 340,250.00

SURVEYING & DESIGN TESTING @ 5%: \$ 17,012.50
ENGINEERING @ 12%: \$ 40,830.00
INSPECTION & TESTING @ 8%: \$ 27,220.00
AIRPORT ADMINISTRATION @ 1%: \$ 3,402.50

Approximate Total Services Cost ==> \$ 88,465.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 428,715.00**
ADD 20% CONTINGENCY ==> \$ 85,743.00
\$ 514,458.00

NOTES:

1. POTENTIAL WETLAND MITIGATION COSTS NOT INCLUDED IN PROJECT BUDGET

USE ==> \$ 515,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 79: Rehabilitate and Remark Runways and Taxiways

Approx. asphalt area:	327,058 SY
Approx. concrete area:	232,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		EXISTING ASPHALT MILLING	327,058	SY	\$ 6.00	\$ 1,962,348.00	
2		CONCRETE REPAIR	4,700	SY	\$ 300.00	\$ 1,410,000.00	
3		CRACK REPAIR	100,000	LF	\$ 2.00	\$ 200,000.00	
4		BITUMINOUS SURFACE COARSE (2 IN)	36,000	TON	\$ 135.00	\$ 4,860,000.00	
5		PAVEMENT MARKINGS	1	LS	\$ 200,000.00	\$ 200,000.00	
6		REJUVINATOR	23,000	GAL	\$ 1.00	\$ 23,000.00	

Approximate Total Construction Cost ==> \$ 6,693,000.00

SURVEYING & DESIGN TESTING @ 3%: \$ 200,790.00
ENGINEERING @ 10%: \$ 669,300.00
INSPECTION & TESTING @ 8%: \$ 535,440.00
AIRPORT ADMINISTRATION @ 1%: \$ 66,930.00

Approximate Total Services Cost ==> \$ 1,472,460.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 8,165,460.00**
ADD 20% CONTINGENCY ==> \$ 1,633,092.00
\$ 9,798,552.00

USE ==> \$ 9,799,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 80: Southeast Development Utility Improvements

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 180,000.00	\$ 180,000.00	
							Approximate Total Construction Cost ==> \$ 180,000.00
							PROFESSIONAL SERVICES @ 12%: \$ 21,600.00
							Approximate Total Services Cost ==> <u>\$ 201,600.00</u>
							USE ==> \$ 202,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 81:	Mid-Field Taxilane - Phase VIII	Approx. pavement area:	6,300 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 86,000.00	\$ 86,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00	
3		EMBANKMENT/EXCAVATION	2,100	CY	\$ 4.50	\$ 9,450.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	6,800	SY	\$ 5.00	\$ 34,000.00	
6		BASE COURSE	6,500	SY	\$ 20.00	\$ 130,000.00	
7		PCC APRON	6,300	SY	\$ 100.00	\$ 630,000.00	
8		PAVEMENT MARKINGS	1	LS	\$ 18,000.00	\$ 18,000.00	
9		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 22,000.00	\$ 22,000.00	

Approximate Total Construction Cost ==> \$ 952,450.00

SURVEYING & DESIGN TESTING @ 5%: \$ 47,622.50

ENGINEERING @ 12%: \$ 114,294.00

INSPECTION & TESTING @ 8%: \$ 76,196.00

AIRPORT ADMINISTRATION @ 1%: \$ 9,524.50

Approximate Total Services Cost ==> \$ 247,637.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **1,200,087.00**

ADD 20% CONTINGENCY ==> \$ 240,017.40

\$ 1,440,104.40

USE ==> \$ 1,440,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 82: Mid-field Hangar, Apron & Parking Lot - Phase VIII

Approx. Hangar Area:	55,000	SF
Approx. Apron Area:	45,700	SY
Approx. Parking Lot Area:	29,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,500,000.00	\$ 1,500,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 130,000.00	\$ 130,000.00	
3		SITE PREPARATION	1	LS	\$ 130,000.00	\$ 130,000.00	
4		CLEARING AND GRUBBING	13	AC	\$ 3,000.00	\$ 39,000.00	
5		EMBANKMENT/EXCAVATION	24,000	CY	\$ 7.00	\$ 168,000.00	
6		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
7		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 350,000.00	\$ 350,000.00	
8		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 450,000.00	\$ 450,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 40,000.00	\$ 40,000.00	
10		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 350,000.00	\$ 350,000.00	
11		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 100,000.00	\$ 100,000.00	
12		MAINTENANCE OF TRAFFIC	1	LS	\$ 25,000.00	\$ 25,000.00	
13		FENCE CONSTRUCTION	800	LF	\$ 25.00	\$ 20,000.00	
Cargo Hangar @ 55,000 SF							
14		CARGO HANGAR CONSTRUCTION	55,000	SF	\$ 110.00	\$ 6,050,000.00	
15		FIRE SUPPRESSION SYSTEM	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
Cargo Apron @ 45,700 SY							
16		SUBBASE COURSE	49,500	SY	\$ 5.00	\$ 247,500.00	
17		BASE COURSE	47,500	SY	\$ 15.00	\$ 712,500.00	
18		PCC APRON	45,700	SY	\$ 100.00	\$ 4,570,000.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 82: Mid-field Hangar, Apron & Parking Lot - Phase VIII

Approx. Hangar Area:	55,000	SF
Approx. Apron Area:	45,700	SY
Approx. Parking Lot Area:	29,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Parking Lots @ 29,500 SY							
19		SUBBASE COURSE	32,000	SY	\$ 5.00	\$ 160,000.00	
20		BASE COURSE	31,000	SY	\$ 20.00	\$ 620,000.00	
21		BITUMINOUS SURFACE COURSE (2 IN)	3,250	TON	\$ 135.00	\$ 438,750.00	
22		BITUMINOUS PRIME COAT	15,000	GAL	\$ 3.00	\$ 45,000.00	

Approximate Total Construction Cost ==> \$ 17,175,750.00

SURVEYING & DESIGN TESTING @ 5%: \$ 858,787.50
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 10%: \$ 1,717,575.00
INSPECTION & TESTING @ 10%: \$ 1,717,575.00
AIRPORT ADMINISTRATION @ 1%: \$ 171,757.50

Approximate Total Services Cost ==> \$ 4,470,695.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 21,646,445.00**
ADD 20% CONTINGENCY ==> \$ 4,329,289.00
\$ 25,975,734.00

NOTES:

1. POTENTIAL WETLAND MITIGATION TO BE IDENTIFIED AND IS NOT INCLUDED IN THIS ESTIMATE.

USE ==> \$ 25,976,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 83:	Southeast Taxilane - Phase I	Approx. pavement area:	4,100 SY				
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	PRICE	ITEM COST	TOTAL COST

1		MOBILIZATION	1	LS	\$ 29,000.00	\$ 29,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00	
3		EMBANKMENT/EXCAVATION	1,300	CY	\$ 4.50	\$ 5,850.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	4,000	SY	\$ 5.00	\$ 20,000.00	
6		BASE COURSE	4,000	SY	\$ 20.00	\$ 80,000.00	
7		BITUMINOUS SURFACE COURSE (4 IN)	880	TON	\$ 135.00	\$ 118,800.00	
8		BITUMINOUS PRIME COAT	2,000	GAL	\$ 3.00	\$ 6,000.00	
9		BITUMINOUS TACK COAT	800	GAL	\$ 3.00	\$ 2,400.00	
10		SODDING	800	SY	\$ 3.50	\$ 2,800.00	
11		PAVEMENT MARKINGS	1	LS	\$ 10,000.00	\$ 10,000.00	
12		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 20,000.00	\$ 20,000.00	

Approximate Total Construction Cost ==> \$ 317,850.00

SURVEYING & DESIGN TESTING @ 5%: \$ 15,892.50
ENGINEERING @ 12%: \$ 38,142.00
INSPECTION & TESTING @ 8%: \$ 25,428.00
AIRPORT ADMINISTRATION @ 1%: \$ 3,178.50

Approximate Total Services Cost ==> \$ 82,641.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 400,491.00
ADD 20% CONTINGENCY ==> \$ 80,098.20
\$ 480,589.20

USE ==> \$ 481,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 84: Southeast Hangars & Aprons - Phase I

Approx. Hangar Area:	120,000	SF
Approx. Apron Area:	13,900	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,200,000.00	\$ 1,200,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
4		CLEARING AND GRUBBING	4	AC	\$ 3,000.00	\$ 12,000.00	
5		EMBANKMENT/EXCAVATION	6,500	CY	\$ 7.00	\$ 45,500.00	
6		SODDING	8,000	SY	\$ 3.50	\$ 28,000.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 210,000.00	\$ 210,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 240,000.00	\$ 240,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 40,000.00	\$ 40,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 200,000.00	\$ 200,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 60,000.00	\$ 60,000.00	
13		FENCE CONSTRUCTION	2,500	LF	\$ 25.00	\$ 62,500.00	
Corporate Hangars, 2@20,000 SF & 8@10,000 SF							
14		CORPORATE HANGAR CONSTRUCTION	120,000	SF	\$ 85.00	\$ 10,200,000.00	
Corporate Aprons @ 13,900 SY							
15		SUBBASE COURSE	15,000	SY	\$ 5.00	\$ 75,000.00	
16		BASE COURSE	14,500	SY	\$ 20.00	\$ 290,000.00	
17		BITUMINOUS SURFACE COURSE (4 IN)	3,000	TON	\$ 135.00	\$ 405,000.00	
18		BITUMINOUS PRIME COAT	7,000	GAL	\$ 3.00	\$ 21,000.00	
19		BITUMINOUS TAC COAT	3,000	GAL	\$ 3.00	\$ 9,000.00	

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 84: Southeast Hangars & Aprons - Phase I

Approx. Hangar Area:	120,000	SF
Approx. Apron Area:	13,900	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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Approximate Total Construction Cost ==> \$ 13,258,000.00

SURVEYING & DESIGN TESTING @ 3%: \$ 397,740.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$ 1,590,960.00
 INSPECTION & TESTING @ 5%: \$ 662,900.00
 AIRPORT ADMINISTRATION @ 1%: \$ 132,580.00

Approximate Total Services Cost ==> \$ 2,789,180.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 16,047,180.00**
 ADD 20% CONTINGENCY ==> \$ 3,209,436.00
\$ 19,256,616.00

USE ==> \$ 19,257,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
 file: Long-term
 AVCON Project: 2003.037.05

Project No. 85: Southeast Parallel Taxiway - Phase I **Approx. Pavement Area: 45,000 SY**

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 380,000.00	\$ 380,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 80,000.00	\$ 80,000.00	
3		CLEARING AND GRUBBING	24	AC	\$ 3,000.00	\$ 72,000.00	
4		SITE PREPARATION	48,000	SY	\$ 3.00	\$ 144,000.00	
5		EMBANKMENT/EXCAVATION	15,000	CY	\$ 7.00	\$ 105,000.00	
6		SUBBASE COURSE	49,000	SY	\$ 5.00	\$ 245,000.00	
7		BASE COURSE	47,000	SY	\$ 20.00	\$ 940,000.00	
8		BITUMOUS SURFACE COURSE (4 IN)	10,000	TON	\$ 135.00	\$ 1,350,000.00	
9		BITUMINOUS PRIME COAT	22,500	GAL	\$ 3.00	\$ 67,500.00	
10		BITUMINOUS TAC COAT	9,000	GAL	\$ 3.00	\$ 27,000.00	
11		PAVEMENT MARKINGS	1	LS	\$ 50,000.00	\$ 50,000.00	
12		SODDING	11,000	SY	\$ 3.50	\$ 38,500.00	
13		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 300,000.00	\$ 300,000.00	
14		ALLOWANCE FOR LIGHTING & SIGNAGE	1	LS	\$ 400,000.00	\$ 400,000.00	
15		SEEDING AND MULCHING	3	AC	3000	\$ 9,000.00	

Approximate Total Construction Cost ==> \$ 4,208,000.00

SURVEYING & DESIGN TESTING @ 5%: \$ 210,400.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$ 504,960.00
 INSPECTION & TESTING @ 8%: \$ 336,640.00
 AIRPORT ADMINISTRATION @ 1%: \$ 42,080.00

Approximate Total Services Cost ==> \$ 1,099,080.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 5,307,080.00**
 ADD 20% CONTINGENCY ==> **\$ 1,061,416.00**
\$ 6,368,496.00

NOTES:

1. POTENTIAL WETLAND MITIGATION COSTS NOT INCLUDED IN PROJECT BUDGET

USE ==> \$ 6,369,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 86: Southeast Access Road & Parking Lot - Phase I

Approx. Roadway Area:	6,400 SY
Approx. Parking Lot Area:	3,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 60,000.00	\$ 60,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 15,000.00	\$ 15,000.00	
3		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 10,000.00	\$ 10,000.00	
5		EMBANKMENT/EXCAVATION	2,200	CY	\$ 7.00	\$ 15,400.00	
6		PAVEMENT MARKINGS	1	LS	\$ 15,000.00	\$ 15,000.00	
7		SODDING	9,900	SY	\$ 3.50	\$ 34,650.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 10,000.00	\$ 10,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 35,000.00	\$ 35,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 10,000.00	\$ 10,000.00	
Access Road @ 6,400 SY							
13		SUBBASE COURSE	7,000	SY	\$ 5.00	\$ 35,000.00	
14		BASE COURSE	6,600	SY	\$ 20.00	\$ 132,000.00	
15		BITUMINOUS SURFACE COURSE (2 IN)	700	TON	\$ 135.00	\$ 94,500.00	
16		BITUMINOUS PRIME COAT	3,200	GAL	\$ 3.00	\$ 9,600.00	
Parking Lot @ 3,500 SY							
17		SUBBASE COURSE	3,800	SY	\$ 5.00	\$ 19,000.00	
18		BASE COURSE	3,650	SY	\$ 20.00	\$ 73,000.00	
19		BITUMINOUS SURFACE COURSE (2 IN)	400	TON	\$ 135.00	\$ 54,000.00	
20		BITUMINOUS PRIME COAT	1,750	GAL	\$ 3.00	\$ 5,250.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 86: Southeast Access Road & Parking Lot - Phase I

Approx. Roadway Area:	6,400 SY
Approx. Parking Lot Area:	3,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Approximate Total Construction Cost ==>							\$ 720,400.00
SURVEYING & DESIGN TESTING @ 5%:							\$ 36,020.00
ENGINEERING @12%:							\$ 86,448.00
INSPECTION & TESTING @10%:							\$ 72,040.00
AIRPORT ADMINISTRATION @ 2%:							\$ 14,408.00
Approximate Total Services Cost ==>							\$ 208,916.00
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 929,316.00
ADD 20% CONTINGENCY ==>							\$ 41,783.20
							\$ 971,099.20
USE ==>							\$ 1,116,000.00

NOTES:

- POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 87: Southeast Taxilane - Phase II Approx. pavement area: 11,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 75,000.00	\$ 75,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00	
3		EMBANKMENT/EXCAVATION	3,700	CY	\$ 4.50	\$ 16,650.00	
4		CLEARING AND GRUBBING	2	AC	\$ 3,000.00	\$ 6,000.00	
5		SUBBASE COURSE	11,900	SY	\$ 5.00	\$ 59,500.00	
6		BASE COURSE	11,400	SY	\$ 20.00	\$ 228,000.00	
7		BITUMOUS SURFACE COURSE (4 IN)	2,400	TON	\$ 135.00	\$ 324,000.00	
8		BITUMINOUS PRIME COAT	5,500	GAL	\$ 3.00	\$ 16,500.00	
9		BITUMINOUS TACK COAT	2,200	GAL	\$ 3.00	\$ 6,600.00	
10		SODDING	2,100	SY	\$ 3.50	\$ 7,350.00	
11		PAVEMENT MARKINGS	1	LS	\$ 30,000.00	\$ 30,000.00	
12		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 40,000.00	\$ 40,000.00	

Approximate Total Construction Cost ==> \$ 829,600.00

SURVEYING & DESIGN TESTING @ 5%: \$ 41,480.00
ENGINEERING @ 12%: \$ 99,552.00
INSPECTION & TESTING @ 8%: \$ 66,368.00
AIRPORT ADMINISTRATION @ 1%: \$ 8,296.00

Approximate Total Services Cost ==> \$ 215,696.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 1,045,296.00
ADD 20% CONTINGENCY ==> \$ 209,059.20
\$ 1,254,355.20

USE ==> \$ 1,255,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
2003.037.05
AVCON Project:

Project No. 88: Southeast Hangars & Aprons - Phase II

Approx. Hangar Area:	30,000 SF
Approx. Apron Area:	74,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 800,000.00	\$ 800,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 80,000.00	\$ 80,000.00	
3		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
4		CLEARING AND GRUBBING	20	AC	\$ 3,000.00	\$ 60,000.00	
5		EMBANKMENT/EXCAVATION	25,000	CY	\$ 7.00	\$ 175,000.00	
6		SODDING	2,000	SY	\$ 3.50	\$ 7,000.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 220,000.00	\$ 220,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 25,000.00	\$ 25,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 220,000.00	\$ 220,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 80,000.00	\$ 80,000.00	
13		FENCE CONSTRUCTION	3,000	LF	\$ 25.00	\$ 75,000.00	
		Maintenance Hangars, 2 @ 15,000 SF					
14		MAINTENANCE HANGAR CONSTRUCTION	30,000	SF	\$ 85.00	\$ 2,550,000.00	
		FBO Apron @ 74,000 SY					
15		SUBBASE COURSE	80,000	SY	\$ 5.00	\$ 400,000.00	
16		BASE COURSE	77,000	SY	\$ 20.00	\$ 1,540,000.00	
17		BITUMINOUS SURFACE COURSE (4 IN)	16,000	TON	\$ 135.00	\$ 2,160,000.00	
18		BITUMINOUS PRIME COAT	37,000	GAL	\$ 3.00	\$ 111,000.00	
19		BITUMINOUS TAC COAT	14,800	GAL	\$ 3.00	\$ 44,400.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 88: Southeast Hangars & Aprons - Phase II

Approx. Hangar Area:	30,000	SF
Approx. Apron Area:	74,000	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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Approximate Total Construction Cost ==> \$ 8,847,400.00

SURVEYING & DESIGN TESTING @ 3%: \$ 265,422.00
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 12%: \$ 1,061,688.00
INSPECTION & TESTING @ 5%: \$ 442,370.00
AIRPORT ADMINISTRATION @ 1%: \$ 88,474.00

Approximate Total Services Cost ==> \$ 1,862,954.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 10,710,354.00**
ADD 20% CONTINGENCY ==> \$ 2,142,070.80
\$ 12,852,424.80

USE ==> \$ 12,853,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 89: New GA Terminal in Southeast Development Area

Approx Building Area: 26,500 SF

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		GA TERMINAL	1	LS	\$ 5,500,000.00	\$ 5,500,000.00	
							Approximate Total Construction Cost ==> \$ 5,500,000.00
							PROFESSIONAL SERVICES @ 20%: \$ 1,100,000.00
							Approximate Total Services Cost ==> \$ 6,600,000.00
							PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 6,600,000.00
							ADD 20% CONTINGENCY ==> \$ 1,320,000.00
							\$ 7,920,000.00
							USE ==> \$ 7,920,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
2003.037.05
AVCON Project:

Project No. 90: Southeast Access Road & Parking Lot - Phase II

Approx. Roadway Area:	1,300 SY
Approx. Parking Lot Area:	5,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 41,000.00	\$ 41,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 10,000.00	\$ 10,000.00	
3		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 6,000.00	\$ 6,000.00	
5		EMBANKMENT/EXCAVATION	1,300	CY	\$ 7.00	\$ 9,100.00	
6		PAVEMENT MARKINGS	1	LS	\$ 10,000.00	\$ 10,000.00	
7		SODDING	5,000	SY	\$ 3.50	\$ 17,500.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 5,000.00	\$ 5,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 25,000.00	\$ 25,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 20,000.00	\$ 20,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 8,000.00	\$ 8,000.00	
Access Road @ 1,300 SY							
13		SUBBASE COURSE	1,400	SY	\$ 5.00	\$ 7,000.00	
14		BASE COURSE	1,350	SY	\$ 20.00	\$ 27,000.00	
15		BITUMINOUS SURFACE COURSE (2 IN)	140	TON	\$ 135.00	\$ 18,900.00	
16		BITUMINOUS PRIME COAT	650	GAL	\$ 3.00	\$ 1,950.00	
Parking Lot @ 5,000 SY							
17		SUBBASE COURSE	5,400	SY	\$ 5.00	\$ 27,000.00	
18		BASE COURSE	5,200	SY	\$ 20.00	\$ 104,000.00	
19		BITUMINOUS SURFACE COURSE (2 IN)	550	TON	\$ 135.00	\$ 74,250.00	
20		BITUMINOUS PRIME COAT	2,500	GAL	\$ 3.00	\$ 7,500.00	

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 90: Southeast Access Road & Parking Lot - Phase II

Approx. Roadway Area:	1,300	SY
Approx. Parking Lot Area:	5,000	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Approximate Total Construction Cost ==>							\$ 452,200.00
SURVEYING & DESIGN TESTING @ 5%: \$							22,610.00
ENGINEERING @12%: \$							54,264.00
INSPECTION & TESTING @10%: \$							45,220.00
AIRPORT ADMINISTRATION @ 2%: \$							9,044.00
Approximate Total Services Cost ==>							<u>\$ 131,138.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 583,338.00
ADD 20% CONTINGENCY ==>							<u>\$ 26,227.60</u>
							\$ 609,565.60
USE ==>							\$ 700,000.00

NOTES:

1. POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
2003.037.05
AVCON Project:

Project No. 91: Southeast Access Road & Parking Lot - Phase III

Approx. Roadway Area:	4,500 SY
Approx. Parking Lot Area:	5,300 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 58,000.00	\$ 58,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 15,000.00	\$ 15,000.00	
3		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 10,000.00	\$ 10,000.00	
5		EMBANKMENT/EXCAVATION	2,400	CY	\$ 7.00	\$ 16,800.00	
6		PAVEMENT MARKINGS	1	LS	\$ 15,000.00	\$ 15,000.00	
7		SODDING	7,000	SY	\$ 3.50	\$ 24,500.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 50,000.00	\$ 50,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 10,000.00	\$ 10,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 45,000.00	\$ 45,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 30,000.00	\$ 30,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 10,000.00	\$ 10,000.00	
Access Road @ 4,500 SY							
13		SUBBASE COURSE	4,900	SY	\$ 5.00	\$ 24,500.00	
14		BASE COURSE	4,700	SY	\$ 20.00	\$ 94,000.00	
15		BITUMINOUS SURFACE COURSE (2 IN)	49	TON	\$ 135.00	\$ 6,615.00	
16		BITUMINOUS PRIME COAT	1,650	GAL	\$ 3.00	\$ 4,950.00	
Parking Lot @ 5,300 SY							
17		SUBBASE COURSE	5,700	SY	\$ 5.00	\$ 28,500.00	
18		BASE COURSE	5,500	SY	\$ 20.00	\$ 110,000.00	
19		BITUMINOUS SURFACE COURSE (2 IN)	500	TON	\$ 135.00	\$ 67,500.00	
20		BITUMINOUS PRIME COAT	2,650	GAL	\$ 3.00	\$ 7,950.00	

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 91: Southeast Access Road & Parking Lot - Phase III

Approx. Roadway Area:	4,500	SY
Approx. Parking Lot Area:	5,300	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Approximate Total Construction Cost ==>							\$ 631,315.00
SURVEYING & DESIGN TESTING @ 5%:							\$ 31,565.75
ENGINEERING @12%:							\$ 75,757.80
INSPECTION & TESTING @10%:							\$ 63,131.50
AIRPORT ADMINISTRATION @ 2%:							\$ 12,626.30
Approximate Total Services Cost ==>							<u>\$ 183,081.35</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 814,396.35
ADD 20% CONTINGENCY ==>							<u>\$ 36,616.27</u>
							\$ 851,012.62
USE ==>							\$ 978,000.00

NOTES:

- POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 92: Approach Lighting System on Runway 18L/36R

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 110,000.00	\$ 110,000.00	
2		INSTRUMENT LANDING SYSTEM	1	LS	\$ 730,000.00	\$ 730,000.00	
3		ALLOWANCE FOR APPROACH LIGHTING IMPROVEMENTS	1	LS	\$ 120,000.00	\$ 120,000.00	
4		FAA COORDINATION	1	LS	\$ 260,000.00	\$ 260,000.00	
Approximate Total Construction Cost ==>							\$ 1,220,000.00
SURVEYING @ 5%:							\$ 61,000.00
ENGINEERING @ 12%:							\$ 147,000.00
AIRPORT ADMINISTRATION @ 1%:							\$ 12,000.00
Approximate Total Services Cost ==>							<u>\$ 1,440,000.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							<u>\$ 1,440,000.00</u>
ADD 15% CONTINGENCY ==>							<u>\$ 216,000.00</u>
							\$ 1,656,000.00
USE ==>							\$ 1,656,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 93: Rejuvenation of Airport Pavement

Approx. pavement area: 560,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		REJUVINATOR	560,000	SY	\$ 1.00	\$ 560,000.00	
2		ALLOWANCE FOR PAVEMENT MARKINGS	1	LS	\$250,000.00	\$ 250,000.00	

Approximate Total Construction Cost ==> \$ 810,000.00

INSPECTION & TESTING @ 4%: \$ 32,400.00
AIRPORT ADMINISTRATION @ 1%: \$ 8,100.00

Approximate Total Services Cost ==> \$ 40,500.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 850,500.00**
ADD 20% CONTINGENCY ==> \$ 170,100.00
\$ 1,020,600.00

USE ==> \$ 1,021,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 94: Southeast Development Drainage Improvements - Phase II

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR STRUCTURAL/DRAINAGE IMPROVEMENTS	1	LS	\$ 800,000.00	\$ 800,000.00	
							Approximate Total Construction Cost ==> \$ 800,000.00
							PERMITTING AND PROFESSIONAL SERVICES @ 25%: \$ 200,000.00
							Approximate Total Services Cost ==> <u>\$1,000,000.00</u>
							USE ==> \$1,000,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 2003.037.05

AVCON Project:

Project No. 95: Southeast Taxilane - Phase III Approx. pavement area: 5,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 39,000.00	\$ 39,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00	
3		EMBANKMENT/EXCAVATION	1,800	CY	\$ 4.50	\$ 8,100.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	6,000	SY	\$ 5.00	\$ 30,000.00	
6		BASE COURSE	5,700	SY	\$ 20.00	\$ 114,000.00	
7		BITUMOUS SURFACE COURSE (4 IN)	1,200	TON	\$ 135.00	\$ 162,000.00	
8		BITUMINOUS PRIME COAT	2,750	GAL	\$ 3.00	\$ 8,250.00	
9		BITUMINOUS TACK COAT	1,100	GAL	\$ 3.00	\$ 3,300.00	
10		SODDING	1,000	SY	\$ 3.50	\$ 3,500.00	
11		PAVEMENT MARKINGS	1	LS	\$ 20,000.00	\$ 20,000.00	
12		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 25,000.00	\$ 25,000.00	

Approximate Total Construction Cost ==> \$ 436,150.00

SURVEYING & DESIGN TESTING @ 5%: \$ 21,807.50
 ENGINEERING @ 12%: \$ 52,338.00
 INSPECTION & TESTING @ 8%: \$ 34,892.00
 AIRPORT ADMINISTRATION @ 1%: \$ 4,361.50

Approximate Total Services Cost ==> \$ 113,399.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **549,549.00**
 ADD 20% CONTINGENCY ==> \$ 109,909.80
 \$ 659,458.80

USE ==> \$ 660,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
Cecil Field

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 96: Southeast Hangars & Aprons - Phase III

Approx. Hangar Area:	120,000 SF
Approx. Apron Area:	14,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,300,000.00	\$ 1,300,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
4		CLEARING AND GRUBBING	13	AC	\$ 3,000.00	\$ 39,000.00	
5		EMBANKMENT/EXCAVATION	9,000	CY	\$ 7.00	\$ 63,000.00	
6		SODDING	3,000	SY	\$ 3.50	\$ 10,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 220,000.00	\$ 220,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 40,000.00	\$ 40,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 220,000.00	\$ 220,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 60,000.00	\$ 60,000.00	
13		FENCE CONSTRUCTION	2,500	LF	\$ 25.00	\$ 62,500.00	\$ 2,375,000.00
Corporate Hangars, 2@20,000 SF & 8@10,000 SF							
14		CORPORATE HANGAR CONSTRUCTION	120,000	SF	\$ 85.00	\$ 10,200,000.00	\$ 10,200,000.00
Corporate Aprons @ 14,500 SY							
15		SUBBASE COURSE	15,700	SY	\$ 5.00	\$ 78,500.00	
16		BASE COURSE	15,100	SY	\$ 20.00	\$ 302,000.00	
17		BITUMINOUS SURFACE COURSE (4 IN)	3,200	TON	\$ 135.00	\$ 432,000.00	
18		BITUMINOUS PRIME COAT	7,250	GAL	\$ 3.00	\$ 21,750.00	
19		BITUMINOUS TAC COAT	2,900	GAL	\$ 3.00	\$ 8,700.00	\$ 842,950.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 96: Southeast Hangars & Aprons - Phase III

Approx. Hangar Area:	120,000	SF
Approx. Apron Area:	14,500	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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Approximate Total Construction Cost ==> \$ 13,417,950.00

SURVEYING & DESIGN TESTING @ 3%: \$ 402,538.50
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 12%: \$ 1,610,154.00
INSPECTION & TESTING @ 5%: \$ 670,897.50
AIRPORT ADMINISTRATION @ 1%: \$ 134,179.50

Approximate Total Services Cost ==> \$ 2,822,769.50

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 16,240,719.50**
ADD 20% CONTINGENCY ==> \$ 3,248,143.90
\$ 19,488,863.40

USE ==> \$ 19,489,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
 2003.037.05

AVCON Project:

Project No. 97: Southeast Taxilane - Phase IV Approx. pavement area: 6,200 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 44,000.00	\$ 44,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00	
3		EMBANKMENT/EXCAVATION	2,100	CY	\$ 4.50	\$ 9,450.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	6,700	SY	\$ 5.00	\$ 33,500.00	
6		BASE COURSE	6,400	SY	\$ 20.00	\$ 128,000.00	
7		BITUMOUS SURFACE COURSE (4 IN)	1,400	TON	\$ 135.00	\$ 189,000.00	
8		BITUMINOUS PRIME COAT	3,100	GAL	\$ 3.00	\$ 9,300.00	
9		BITUMINOUS TACK COAT	1,240	GAL	\$ 3.00	\$ 3,720.00	
10		SODDING	1,000	SY	\$ 3.50	\$ 3,500.00	
11		PAVEMENT MARKINGS	1	LS	\$ 20,000.00	\$ 20,000.00	
12		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 25,000.00	\$ 25,000.00	

Approximate Total Construction Cost ==> \$ 488,470.00

SURVEYING & DESIGN TESTING @ 5%: \$ 24,423.50
 ENGINEERING @ 12%: \$ 58,616.40
 INSPECTION & TESTING @ 8%: \$ 39,077.60
 AIRPORT ADMINISTRATION @ 1%: \$ 4,884.70

Approximate Total Services Cost ==> \$ 127,002.20

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **615,472.20**
 ADD 20% CONTINGENCY ==> \$ 123,094.44
 \$ 738,566.64

USE ==> \$ 739,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 98: Southeast Hangars & Aprons - Phase IV

Approx. Hangar Area:	120,000	SF
Approx. Apron Area:	13,800	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,300,000.00	\$ 1,300,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
4		CLEARING AND GRUBBING	13	AC	\$ 3,000.00	\$ 39,000.00	
5		EMBANKMENT/EXCAVATION	9,000	CY	\$ 7.00	\$ 63,000.00	
6		SODDING	3,000	SY	\$ 3.50	\$ 10,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 220,000.00	\$ 220,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 40,000.00	\$ 40,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 220,000.00	\$ 220,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 60,000.00	\$ 60,000.00	
13		FENCE CONSTRUCTION	2,500	LF	\$ 25.00	\$ 62,500.00	
Corporate Hangars, 2@20,000 SF & 8@10,000 SF							
14		CORPORATE HANGAR CONSTRUCTION	120,000	SF	\$ 85.00	\$ 10,200,000.00	
Corporate Aprons @ 13,800 SY							
15		SUBBASE COURSE	15,000	SY	\$ 5.00	\$ 75,000.00	
16		BASE COURSE	14,500	SY	\$ 20.00	\$ 290,000.00	
17		BITUMINOUS SURFACE COURSE (4 IN)	3,000	TON	\$ 135.00	\$ 405,000.00	
18		BITUMINOUS PRIME COAT	7,000	GAL	\$ 3.00	\$ 21,000.00	
19		BITUMINOUS TAC COAT	3,000	GAL	\$ 3.00	\$ 9,000.00	

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 98: Southeast Hangars & Aprons - Phase IV

Approx. Hangar Area:	120,000	SF
Approx. Apron Area:	13,800	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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Approximate Total Construction Cost ==> \$ 13,375,000.00

SURVEYING & DESIGN TESTING @ 3%: \$ 401,250.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$ 1,605,000.00
 INSPECTION & TESTING @ 5%: \$ 668,750.00
 AIRPORT ADMINISTRATION @ 1%: \$ 133,750.00

Approximate Total Services Cost ==> \$ 2,813,750.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 16,188,750.00**
 ADD 20% CONTINGENCY ==> \$ 3,237,750.00
\$ 19,426,500.00

USE ==> \$ 19,427,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 99: Southeast Parallel Taxiway - Phase II Approx. Pavement Area 27,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 230,000.00	\$230,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		CLEARING AND GRUBBING	10	AC	\$ 3,000.00	\$ 30,000.00	
4		SITE PREPARATION	27,000	SY	\$ 3.00	\$ 81,000.00	
5		EMBANKMENT/EXCAVATION	9,000	CY	\$ 7.00	\$ 63,000.00	
6		SUBBASE COURSE	29,000	SY	\$ 5.00	\$145,000.00	
7		BASE COURSE	28,000	SY	\$ 20.00	\$560,000.00	
8		BITUMOUS SURFACE COURSE (4 IN)	5,400	TON	\$ 135.00	\$729,000.00	
9		BITUMINOUS PRIME COAT	13,500	GAL	\$ 3.00	\$ 40,500.00	
10		BITUMINOUS TAC COAT	5,400	GAL	\$ 3.00	\$ 16,200.00	
11		PAVEMENT MARKINGS	1	LS	\$ 40,000.00	\$ 40,000.00	
12		SODDING	7,000	SY	\$ 3.50	\$ 24,500.00	
13		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 250,000.00	\$250,000.00	
14		ALLOWANCE FOR LIGHTING & SIGNAGE	1	LS	\$ 250,000.00	\$250,000.00	
15		SEEDING AND MULCHING	2	AC	3000	\$ 6,000.00	

Approximate Total Construction Cost ==> \$ 2,525,200.00

SURVEYING & DESIGN TESTING @ 5%: \$126,260.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$303,024.00
 INSPECTION & TESTING @ 8%: \$202,016.00
 AIRPORT ADMINISTRATION @ 1%: \$ 25,252.00

Approximate Total Services Cost ==> \$ 661,552.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 3,186,752.00**

ADD 20% CONTINGENCY ==> \$ 637,350.40

\$ 3,824,102.40

NOTES:

1. POTENTIAL WETLAND MITIGATION COSTS NOT INCLUDED IN PROJECT BUDGET

USE ==> \$ 3,825,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 100: Airport Security Improvements - Phase III

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		AOA FENCE REPAIR/REPLACEMENT	7,400	LF	\$ 25.00	\$ 185,000.00	
Approximate Total Construction Cost ==>							\$ 185,000.00
PROFESSIONAL SERVICES @ 10%:							\$ 18,500.00
Approximate Total Services Cost ==>							<u>\$ 18,500.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							\$ 203,500.00
ADD 20% CONTINGENCY ==>							<u>\$ 40,700.00</u>
							<u>\$ 244,200.00</u>
USE ==>							\$ 245,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 101: Southeast Taxilane - Phase V Approx. pavement area: 6,200 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 44,000.00	\$ 44,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 20,000.00	\$ 20,000.00	
3		EMBANKMENT/EXCAVATION	2,100	CY	\$ 4.50	\$ 9,450.00	
4		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
5		SUBBASE COURSE	6,700	SY	\$ 5.00	\$ 33,500.00	
6		BASE COURSE	6,400	SY	\$ 20.00	\$ 128,000.00	
7		BITUMOUS SURFACE COURSE (4 IN)	1,400	TON	\$ 135.00	\$ 189,000.00	
8		BITUMINOUS PRIME COAT	3,100	GAL	\$ 3.00	\$ 9,300.00	
9		BITUMINOUS TACK COAT	1,240	GAL	\$ 3.00	\$ 3,720.00	
10		SODDING	1,000	SY	\$ 3.50	\$ 3,500.00	
11		PAVEMENT MARKINGS	1	LS	\$ 20,000.00	\$ 20,000.00	
12		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 25,000.00	\$ 25,000.00	

Approximate Total Construction Cost ==> \$ 488,470.00

SURVEYING & DESIGN TESTING @ 5%: \$ 24,423.50
ENGINEERING @ 12%: \$ 58,616.40
INSPECTION & TESTING @ 8%: \$ 39,077.60
AIRPORT ADMINISTRATION @ 1%: \$ 4,884.70

Approximate Total Services Cost ==> \$ 127,002.20

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ 615,472.20
ADD 20% CONTINGENCY ==> \$ 123,094.44
\$ 738,566.64

USE ==> \$ 739,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
Cecil Field

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 102: Southeast Hangars & Aprons - Phase V

Approx. Hangar Area:	120,000	SF
Approx. Apron Area:	13,800	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,300,000.00	\$ 1,300,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
4		CLEARING AND GRUBBING	13	AC	\$ 3,000.00	\$ 39,000.00	
5		EMBANKMENT/EXCAVATION	9,000	CY	\$ 7.00	\$ 63,000.00	
6		SODDING	3,000	SY	\$ 3.50	\$ 10,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 220,000.00	\$ 220,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 40,000.00	\$ 40,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 220,000.00	\$ 220,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 60,000.00	\$ 60,000.00	
13		FENCE CONSTRUCTION	2,500	LF	\$ 25.00	\$ 62,500.00	
Corporate Hangars, 2@20,000 SF & 8@10,000 SF							
14		CORPORATE HANGAR CONSTRUCTION	120,000	SF	\$ 85.00	\$ 10,200,000.00	
Corporate Aprons @ 13,800 SY							
15		SUBBASE COURSE	15,000	SY	\$ 5.00	\$ 75,000.00	
16		BASE COURSE	14,500	SY	\$ 20.00	\$ 290,000.00	
17		BITUMINOUS SURFACE COURSE (4 IN)	3,000	TON	\$ 135.00	\$ 405,000.00	
18		BITUMINOUS PRIME COAT	7,000	GAL	\$ 3.00	\$ 21,000.00	
19		BITUMINOUS TAC COAT	3,000	GAL	\$ 3.00	\$ 9,000.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 102: Southeast Hangars & Aprons - Phase V

Approx. Hangar Area:	120,000	SF
Approx. Apron Area:	13,800	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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Approximate Total Construction Cost ==> \$ 13,375,000.00

SURVEYING & DESIGN TESTING @ 3%: \$ 401,250.00
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 12%: \$ 1,605,000.00
INSPECTION & TESTING @ 5%: \$ 668,750.00
AIRPORT ADMINISTRATION @ 1%: \$ 133,750.00

Approximate Total Services Cost ==> \$ 2,813,750.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 16,188,750.00**
ADD 20% CONTINGENCY ==> \$ 3,237,750.00
\$ 19,426,500.00

USE ==> \$ 19,427,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
 file: Long-term
 2003.037.05

AVCON Project: 2003.037.05

Project No. 103:	Southeast Parallel Taxiway - Phase III	Approx. Pavement Area	41,700 SY
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ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 270,000.00	\$ 270,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 65,000.00	\$ 65,000.00	
3		CLEARING AND GRUBBING	20	AC	\$ 3,000.00	\$ 60,000.00	
4		SITE PREPARATION	42,000	SY	\$ 3.00	\$ 126,000.00	
5		EMBANKMENT/EXCAVATION	13,700	CY	\$ 7.00	\$ 95,900.00	
6		SUBBASE COURSE	45,000	SY	\$ 5.00	\$ 225,000.00	
7		BASE COURSE	43,000	SY	\$ 20.00	\$ 860,000.00	
8		BITUMOUS SURFACE COURSE (4 IN)	9,300	TON	\$ 135.00	\$ 1,255,500.00	
9		BITUMINOUS PRIME COAT	20,850	GAL	\$ 3.00	\$ 62,550.00	
10		BITUMINOUS TAC COAT	8,350	GAL	\$ 3.00	\$ 25,050.00	
11		PAVEMENT MARKINGS	1	LS	\$ 50,000.00	\$ 50,000.00	
12		SODDING	10,500	SY	\$ 2.15	\$ 22,575.00	
13		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 400,000.00	\$ 400,000.00	
14		ALLOWANCE FOR LIGHTING & SIGNAGE	1	LS	\$ 400,000.00	\$ 400,000.00	
15		SEEDING AND MULCHING	2	AC	3000	\$ 6,000.00	
Approximate Total Construction Cost ==>						\$ 3,923,575.00	

SURVEYING & DESIGN TESTING @ 5%: \$ 196,178.75
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$ 470,829.00
 INSPECTION & TESTING @ 8%: \$ 313,886.00
 AIRPORT ADMINISTRATION @ 1%: \$ 39,235.75

Approximate Total Services Cost ==> \$ 1,025,129.50

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 4,948,704.50**

ADD 20% CONTINGENCY ==> **\$ 989,740.90**

\$ 5,938,445.40

NOTES:

1. POTENTIAL WETLAND MITIGATION COSTS NOT INCLUDED IN PROJECT BUDGET

USE ==> \$ 5,939,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 104: Southeast Access Road & Parking Lot - Phase IV

Approx. Roadway Area:	3,700 SY
Approx. Parking Lot Area:	4,750 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 45,000.00	\$ 45,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 12,000.00	\$ 12,000.00	
3		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 8,000.00	\$ 8,000.00	
5		EMBANKMENT/EXCAVATION	2,000	CY	\$ 7.00	\$ 14,000.00	
6		PAVEMENT MARKINGS	1	LS	\$ 10,000.00	\$ 10,000.00	
7		SODDING	5,000	SY	\$ 3.50	\$ 17,500.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 10,000.00	\$ 10,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 35,000.00	\$ 35,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 30,000.00	\$ 30,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 10,000.00	\$ 10,000.00	
Access Road @ 3,700 SY							
13		SUBBASE COURSE	4,000	SY	\$ 5.00	\$ 20,000.00	
14		BASE COURSE	3,800	SY	\$ 20.00	\$ 76,000.00	
15		BITUMINOUS SURFACE COURSE (2 IN)	400	TON	\$ 135.00	\$ 54,000.00	
16		BITUMINOUS PRIME COAT	650	GAL	\$ 3.00	\$ 1,950.00	
Parking Lot @ 4,750 SY							
17		SUBBASE COURSE	5,100	SY	\$ 5.00	\$ 25,500.00	
18		BASE COURSE	5,000	SY	\$ 20.00	\$ 100,000.00	
19		BITUMINOUS SURFACE COURSE (2 IN)	520	TON	\$ 135.00	\$ 70,200.00	
20		BITUMINOUS PRIME COAT	2,400	GAL	\$ 3.00	\$ 7,200.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 104: Southeast Access Road & Parking Lot - Phase IV

Approx. Roadway Area:	3,700 SY
Approx. Parking Lot Area:	4,750 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Approximate Total Construction Cost ==>							\$ 589,350.00
SURVEYING & DESIGN TESTING @ 5%:							\$ 29,467.50
ENGINEERING @12%:							\$ 70,722.00
INSPECTION & TESTING @10%:							\$ 58,935.00
AIRPORT ADMINISTRATION @ 2%:							\$ 11,787.00
Approximate Total Services Cost ==>							<u>\$ 170,911.50</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							<u>\$ 760,261.50</u>
ADD 20% CONTINGENCY ==>							<u>\$ 34,182.30</u>
							\$ 794,443.80
USE ==>							\$ 913,000.00

NOTES:

1. POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 105: Environmental Assessment for Runway 17/35

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		ALLOWANCE FOR ENVIRONMENTAL ASSESSMENT	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
						Approximate Total Services Cost ==>	\$ 1,000,000.00
						USE ==>	\$ 1,000,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

AVCON Project:

Project No. 106: Southeast Taxilane - Phase VI **Approx. pavement area: 12,000 SY**

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 80,000.00	\$ 80,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 30,000.00	\$ 30,000.00	
3		EMBANKMENT/EXCAVATION	4,000	CY	\$ 4.50	\$ 18,000.00	
4		CLEARING AND GRUBBING	2	AC	\$ 3,000.00	\$ 6,000.00	
5		SUBBASE COURSE	13,000	SY	\$ 5.00	\$ 65,000.00	
6		BASE COURSE	12,500	SY	\$ 20.00	\$ 250,000.00	
7		BITUMOUS SURFACE COURSE (4 IN)	2,600	TON	\$ 135.00	\$ 351,000.00	
8		BITUMINOUS PRIME COAT	6,000	GAL	\$ 3.00	\$ 18,000.00	
9		BITUMINOUS TACK COAT	2,400	GAL	\$ 3.00	\$ 7,200.00	
10		SODDING	1,300	SY	\$ 3.50	\$ 4,550.00	
11		PAVEMENT MARKINGS	1	LS	\$ 25,000.00	\$ 25,000.00	
12		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 30,000.00	\$ 30,000.00	

Approximate Total Construction Cost ==> \$ 884,750.00

SURVEYING & DESIGN TESTING @ 5%: \$ 44,237.50
ENGINEERING @ 12%: \$ 106,170.00
INSPECTION & TESTING @ 8%: \$ 70,780.00
AIRPORT ADMINISTRATION @ 1%: \$ 8,847.50

Approximate Total Services Cost ==> \$ 230,035.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **1,114,785.00**
ADD 20% CONTINGENCY ==> \$ 222,957.00
\$ 1,337,742.00

USE ==> \$ 1,338,000.00

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 107: Southeast Hangars & Aprons - Phase VI

Approx. Hangar Area:	160,000 SF
Approx. Apron Area:	18,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,400,000.00	\$ 1,400,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
4		CLEARING AND GRUBBING	13	AC	\$ 3,000.00	\$ 39,000.00	
5		EMBANKMENT/EXCAVATION	12,000	CY	\$ 7.00	\$ 84,000.00	
6		SODDING	5,000	SY	\$ 3.50	\$ 17,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 40,000.00	\$ 40,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 220,000.00	\$ 220,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 50,000.00	\$ 50,000.00	
13		FENCE CONSTRUCTION	2,500	LF	\$ 25.00	\$ 62,500.00	
Corporate Hangars, 1@20,000 SF, 4@10,000 SF, 5@3,600 SF, 5@2,300 SF; T-Hangars @69,000 SF							
14		CORPORATE HANGAR CONSTRUCTION	91,000	SF	\$ 85.00	\$ 7,735,000.00	
15		T-HANGAR CONSTRUCTION	69,000	SF	\$ 45.00	\$ 3,105,000.00	
Corporate Aprons @ 18,000 SY							
16		SUBBASE COURSE	19,500	SY	\$ 5.00	\$ 97,500.00	
17		BASE COURSE	18,700	SY	\$ 20.00	\$ 374,000.00	
18		BITUMINOUS SURFACE COURSE (4 IN)	4,000	TON	\$ 135.00	\$ 540,000.00	
19		BITUMINOUS PRIME COAT	9,000	GAL	\$ 3.00	\$ 27,000.00	
20		BITUMINOUS TAC COAT	3,600	GAL	\$ 3.00	\$ 10,800.00	

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 107: Southeast Hangars & Aprons - Phase VI

Approx. Hangar Area:	160,000	SF
Approx. Apron Area:	18,000	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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Approximate Total Construction Cost ==> \$ 14,362,300.00

SURVEYING & DESIGN TESTING @ 3%: \$ 430,869.00
 ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
 ENGINEERING @ 12%: \$ 1,723,476.00
 INSPECTION & TESTING @ 5%: \$ 718,115.00
 AIRPORT ADMINISTRATION @ 1%: \$ 143,623.00

Approximate Total Services Cost ==> \$ 3,021,083.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 17,383,383.00**
 ADD 20% CONTINGENCY ==> \$ 3,476,676.60
\$ 20,860,059.60

USE ==> \$ 20,860,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 108: Southeast Access Road & Parking Lot - Phase V

Approx. Roadway Area:	3,700 SY
Approx. Parking Lot Area:	4,750 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 45,000.00	\$ 45,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 12,000.00	\$ 12,000.00	
3		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 8,000.00	\$ 8,000.00	
5		EMBANKMENT/EXCAVATION	2,000	CY	\$ 7.00	\$ 14,000.00	
6		PAVEMENT MARKINGS	1	LS	\$ 10,000.00	\$ 10,000.00	
7		SODDING	5,000	SY	\$ 3.50	\$ 17,500.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 10,000.00	\$ 10,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 35,000.00	\$ 35,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 30,000.00	\$ 30,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 10,000.00	\$ 10,000.00	
Access Road @ 3,700 SY							
13		SUBBASE COURSE	4,000	SY	\$ 5.00	\$ 20,000.00	
14		BASE COURSE	3,800	SY	\$ 20.00	\$ 76,000.00	
15		BITUMINOUS SURFACE COURSE (2 IN)	400	TON	\$ 135.00	\$ 54,000.00	
16		BITUMINOUS PRIME COAT	650	GAL	\$ 3.00	\$ 1,950.00	
Parking Lot @ 4,750 SY							
17		SUBBASE COURSE	5,100	SY	\$ 5.00	\$ 25,500.00	
18		BASE COURSE	5,000	SY	\$ 20.00	\$ 100,000.00	
19		BITUMINOUS SURFACE COURSE (2 IN)	520	TON	\$ 135.00	\$ 70,200.00	
20		BITUMINOUS PRIME COAT	2,400	GAL	\$ 3.00	\$ 7,200.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 108: Southeast Access Road & Parking Lot - Phase V

Approx. Roadway Area:	3,700 SY
Approx. Parking Lot Area:	4,750 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Approximate Total Construction Cost ==>							\$ 589,350.00
SURVEYING & DESIGN TESTING @ 5%:							\$ 29,467.50
ENGINEERING @12%:							\$ 70,722.00
INSPECTION & TESTING @10%:							\$ 58,935.00
AIRPORT ADMINISTRATION @ 2%:							\$ 11,787.00
Approximate Total Services Cost ==>							<u>\$ 170,911.50</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							<u>\$ 760,261.50</u>
ADD 20% CONTINGENCY ==>							<u>\$ 34,182.30</u>
							\$ 794,443.80
USE ==>							\$ 913,000.00

NOTES:

1. POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Short-term
2003.037.05

Project No. 109: Southeast Taxilane - Phase VII AVCON Project: 14,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 93,000.00	\$ 93,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 30,000.00	\$ 30,000.00	
3		EMBANKMENT/EXCAVATION	4,700	CY	\$ 4.50	\$ 21,150.00	
4		CLEARING AND GRUBBING	2	AC	\$ 3,000.00	\$ 6,000.00	
5		SUBBASE COURSE	15,000	SY	\$ 5.00	\$ 75,000.00	
6		BASE COURSE	14,600	SY	\$ 20.00	\$ 292,000.00	
7		BITUMOUS SURFACE COURSE (4 IN)	3,100	TON	\$ 135.00	\$ 418,500.00	
8		BITUMINOUS PRIME COAT	7,000	GAL	\$ 3.00	\$ 21,000.00	
9		BITUMINOUS TACK COAT	2,800	GAL	\$ 3.00	\$ 8,400.00	
10		SODDING	1,500	SY	\$ 3.50	\$ 5,250.00	
11		PAVEMENT MARKINGS	1	LS	\$ 25,000.00	\$ 25,000.00	
12		ALLOWANCE FOR TAXILANE LIGHTING	1	LS	\$ 30,000.00	\$ 30,000.00	

Approximate Total Construction Cost ==> \$ 1,025,300.00

SURVEYING & DESIGN TESTING @ 5%: \$ 51,265.00
ENGINEERING @ 12%: \$ 123,036.00
INSPECTION & TESTING @ 8%: \$ 82,024.00
AIRPORT ADMINISTRATION @ 1%: \$ 10,253.00

Approximate Total Services Cost ==> \$ 266,578.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> \$ **1,291,878.00**
ADD 20% CONTINGENCY ==> \$ 258,375.60
\$ 1,550,253.60

USE ==> \$ 1,550,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 110: Southeast Hangars & Aprons - Phase VII

Approx. Hangar Area:	160,000 SF
Approx. Apron Area:	18,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 1,400,000.00	\$ 1,400,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 60,000.00	\$ 60,000.00	
3		SITE PREPARATION	1	LS	\$ 70,000.00	\$ 70,000.00	
4		CLEARING AND GRUBBING	13	AC	\$ 3,000.00	\$ 39,000.00	
5		EMBANKMENT/EXCAVATION	12,000	CY	\$ 7.00	\$ 84,000.00	
6		SODDING	5,000	SY	\$ 3.50	\$ 17,500.00	
7		ALLOWANCE FOR SIDEWALK IMPROVEMENTS	1	LS	\$ 30,000.00	\$ 30,000.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
9		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 200,000.00	\$ 200,000.00	
10		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 40,000.00	\$ 40,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 220,000.00	\$ 220,000.00	
12		ALLOWANCE FOR PAVEMENT MARKINGS & SIGNAGE	1	LS	\$ 50,000.00	\$ 50,000.00	
13		FENCE CONSTRUCTION	2,500	LF	\$ 25.00	\$ 62,500.00	
Corporate Hangars, 1@20,000 SF, 4@10,000 SF, 5@3,600 SF, 5@2,300 SF; T-Hangars @69,000 SF							
14		CORPORATE HANGAR CONSTRUCTION	91,000	SF	\$ 85.00	\$ 7,735,000.00	
15		T-HANGAR CONSTRUCTION	69,000	SF	\$ 45.00	\$ 3,105,000.00	
Corporate Aprons @ 18,000 SY							
16		SUBBASE COURSE	19,500	SY	\$ 5.00	\$ 97,500.00	
17		BASE COURSE	18,700	SY	\$ 20.00	\$ 374,000.00	
18		BITUMINOUS SURFACE COURSE (4 IN)	4,000	TON	\$ 135.00	\$ 540,000.00	
19		BITUMINOUS PRIME COAT	9,000	GAL	\$ 3.00	\$ 27,000.00	
20		BITUMINOUS TAC COAT	3,600	GAL	\$ 3.00	\$ 10,800.00	

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 110: Southeast Hangars & Aprons - Phase VII

Approx. Hangar Area:	160,000	SF
Approx. Apron Area:	18,000	SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
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Approximate Total Construction Cost ==> \$ 14,362,300.00

SURVEYING & DESIGN TESTING @ 3%: \$ 430,869.00
ALLOWANCE FOR PERMITTING FEES: \$ 5,000.00
ENGINEERING @ 12%: \$ 1,723,476.00
INSPECTION & TESTING @ 5%: \$ 718,115.00
AIRPORT ADMINISTRATION @ 1%: \$ 143,623.00

Approximate Total Services Cost ==> \$ 3,021,083.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 17,383,383.00**
ADD 20% CONTINGENCY ==> \$ 3,476,676.60
\$ 20,860,059.60

USE ==> \$ 20,860,000.00

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 111: Southeast Access Road & Parking Lot - Phase VI

Approx. Roadway Area:	3,500 SY
Approx. Parking Lot Area:	6,200 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 45,000.00	\$ 45,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 12,000.00	\$ 12,000.00	
3		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 8,000.00	\$ 8,000.00	
5		EMBANKMENT/EXCAVATION	2,000	CY	\$ 7.00	\$ 14,000.00	
6		PAVEMENT MARKINGS	1	LS	\$ 10,000.00	\$ 10,000.00	
7		SODDING	5,000	SY	\$ 3.50	\$ 17,500.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 10,000.00	\$ 10,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 35,000.00	\$ 35,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 30,000.00	\$ 30,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 10,000.00	\$ 10,000.00	
Access Road @ 3,500 SY							
13		SUBBASE COURSE	3,800	SY	\$ 5.00	\$ 19,000.00	
14		BASE COURSE	3,600	SY	\$ 20.00	\$ 72,000.00	
15		BITUMINOUS SURFACE COURSE (2 IN)	400	TON	\$ 135.00	\$ 54,000.00	
16		BITUMINOUS PRIME COAT	1,750	GAL	\$ 3.00	\$ 5,250.00	
Parking Lot @ 6,200 SY							
17		SUBBASE COURSE	6,700	SY	\$ 5.00	\$ 33,500.00	
18		BASE COURSE	6,500	SY	\$ 20.00	\$ 130,000.00	
19		BITUMINOUS SURFACE COURSE (2 IN)	680	TON	\$ 135.00	\$ 91,800.00	
20		BITUMINOUS PRIME COAT	3,100	GAL	\$ 3.00	\$ 9,300.00	

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 111: Southeast Access Road & Parking Lot - Phase VI

Approx. Roadway Area:	3,500 SY
Approx. Parking Lot Area:	6,200 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Approximate Total Construction Cost ==>							\$ 649,350.00
SURVEYING & DESIGN TESTING @ 5%:							\$ 32,467.50
ENGINEERING @12%:							\$ 77,922.00
INSPECTION & TESTING @10%:							\$ 64,935.00
AIRPORT ADMINISTRATION @ 2%:							\$ 12,987.00
Approximate Total Services Cost ==>							<u>\$ 188,311.50</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							<u>\$ 837,661.50</u>
ADD 20% CONTINGENCY ==>							<u>\$ 37,662.30</u>
							<u>\$ 875,323.80</u>
USE ==>							\$ 1,006,000.00

NOTES:

1. POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 112: Southeast Access Road & Parking Lot - Phase VII

Approx. Roadway Area:	3,900 SY
Approx. Parking Lot Area:	6,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 45,000.00	\$ 45,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 12,000.00	\$ 12,000.00	
3		CLEARING AND GRUBBING	1	AC	\$ 3,000.00	\$ 3,000.00	
4		MAINTENANCE OF TRAFFIC	1	LS	\$ 8,000.00	\$ 8,000.00	
5		EMBANKMENT/EXCAVATION	2,000	CY	\$ 7.00	\$ 14,000.00	
6		PAVEMENT MARKINGS	1	LS	\$ 10,000.00	\$ 10,000.00	
7		SODDING	5,000	SY	\$ 3.50	\$ 17,500.00	
8		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 40,000.00	\$ 40,000.00	
9		ALLOWANCE FOR LANDSCAPING	1	LS	\$ 10,000.00	\$ 10,000.00	
10		ALLOWANCE FOR UTILITY IMPROVEMENTS	1	LS	\$ 35,000.00	\$ 35,000.00	
11		ALLOWANCE FOR AREA LIGHTING	1	LS	\$ 30,000.00	\$ 30,000.00	
12		VEHICULAR SIGNAGE	1	LS	\$ 10,000.00	\$ 10,000.00	
Access Road @ 3,900 SY							
13		SUBBASE COURSE	4,200	SY	\$ 5.00	\$ 21,000.00	
14		BASE COURSE	4,000	SY	\$ 20.00	\$ 80,000.00	
15		BITUMINOUS SURFACE COURSE (2 IN)	450	TON	\$ 135.00	\$ 60,750.00	
16		BITUMINOUS PRIME COAT	1,950	GAL	\$ 3.00	\$ 5,850.00	
Parking Lot @ 6,200 SY							
17		SUBBASE COURSE	6,700	SY	\$ 5.00	\$ 33,500.00	
18		BASE COURSE	6,500	SY	\$ 20.00	\$ 130,000.00	
19		BITUMINOUS SURFACE COURSE (2 IN)	700	TON	\$ 135.00	\$ 94,500.00	
20		BITUMINOUS PRIME COAT	3,100	GAL	\$ 3.00	\$ 9,300.00	

AVCON, INC.
 Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
 AVCON Project: 2003.037.05

Project No. 112: Southeast Access Road & Parking Lot - Phase VII

Approx. Roadway Area:	3,900 SY
Approx. Parking Lot Area:	6,500 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
Approximate Total Construction Cost ==>							\$ 669,400.00
SURVEYING & DESIGN TESTING @ 5%:							\$ 33,470.00
ENGINEERING @12%:							\$ 80,328.00
INSPECTION & TESTING @10%:							\$ 66,940.00
AIRPORT ADMINISTRATION @ 2%:							\$ 13,388.00
Approximate Total Services Cost ==>							<u>\$ 194,126.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							<u>\$ 863,526.00</u>
ADD 20% CONTINGENCY ==>							<u>\$ 172,705.20</u>
							<u>\$ 1,036,231.20</u>
USE ==>							\$ 1,037,000.00

NOTES:

1. POTENTIAL WETLAND IMPACTS TO BE IDENTIFIED. MITIGATION COSTS NOT INCLUDED ON PROJECT BUDGET.

AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 113: Construct Runway 17/35

Approx Pavement Area: 265,000 SY

ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 2,025,000.00	\$ 2,025,000.00	
2		EROSION AND SEDIMENT CONTROL	1	LS	\$ 100,000.00	\$ 100,000.00	
3		CLEARING AND GRUBBING	640	AC	\$ 3,000.00	\$ 1,920,000.00	
4		SITE PREPARATION	350,000	SY	\$ 2.00	\$ 700,000.00	
5		EMBANKMENT/EXCAVATION	120,000	CY	\$ 7.00	\$ 840,000.00	
6		SUBBASE COURSE	295,000	SY	\$ 5.00	\$ 1,475,000.00	
7		BASE COURSE	280,000	SY	\$ 20.00	\$ 5,600,000.00	
8		BITUMINOUS SURFACE COURSE (5 IN)	73,000	TONS	\$ 135.00	\$ 9,855,000.00	
9		BITUMINOUS PRIME COAT	140,000	GAL	\$ 3.00	\$ 420,000.00	
10		BITUMINOUS TAC COAT	56,000	GAL	\$ 3.00	\$ 168,000.00	
11		PAVEMENT MARKINGS	175,000	SF	\$ 1.50	\$ 262,500.00	
12		SODDING	50,000	SY	\$ 3.50	\$ 175,000.00	
13		ALLOWANCE FOR DRAINAGE IMPROVEMENTS	1	LS	\$ 1,000,000.00	\$ 1,000,000.00	
14		AIRFIELD GUIDANCE SIGN	3,700	EA	\$ 44.00	\$ 162,800.00	
15		5 KV CABLE	200,000	LF	\$ 1.25	\$ 250,000.00	
16		NO. 6 COPPER COUNTERPOISE	106,000	LF	\$ 0.85	\$ 90,100.00	
17		DUCT, CONCRETE ENCASED	12,000	LF	\$ 35.00	\$ 420,000.00	
18		DUCT, DIRECT BURRIED	80,000	LF	\$ 5.00	\$ 400,000.00	
19		ELECTRICAL VAULT IMPROVEMENTS	1	LS	\$ 100,000.00	\$ 100,000.00	
20		INSTRUMENT LANDING SYSTEM (PAPI)	2	EA	\$ 150,000.00	\$ 300,000.00	
21		WIND CONE	2	EA	\$ 15,000.00	\$ 30,000.00	
22		ELECTRICAL MANHOLES/HANDHOLDS	5,000	EA	\$ 40.00	\$ 200,000.00	
23		EDGE/THRESHOLD LIGHTS	550	EA	\$ 650.00	\$ 357,500.00	
24		RUNWAY DISTANCE REMAINING SIGNS	8	EA	\$ 3,600.00	\$ 28,800.00	

Approximate Total Construction Cost ==> \$ 26,879,700.00

ENGINEERING @ 10%: \$ 2,687,970.00
CONSTRUCTION MANAGEMENT O&P 7%: \$ 1,881,579.00
SURVEYING/GEOTECHNICAL @ 6%: \$ 1,612,782.00
AIRPORT ADMINISTRATION @ 1%: \$ 268,797.00
PERMINTING @ 1%: \$ 268,797.00

Approximate Total Services Cost ==> \$ 6,719,925.00

PRELIMINARY ESTIMATE OF PROJECT COST ==> **\$ 33,599,625.00**
ADD 20% CONTINGENCY ==> \$ 6,719,925.00
\$ 40,319,550.00

USE ==> \$ 40,320,000.00

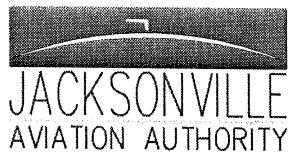
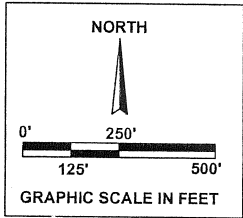
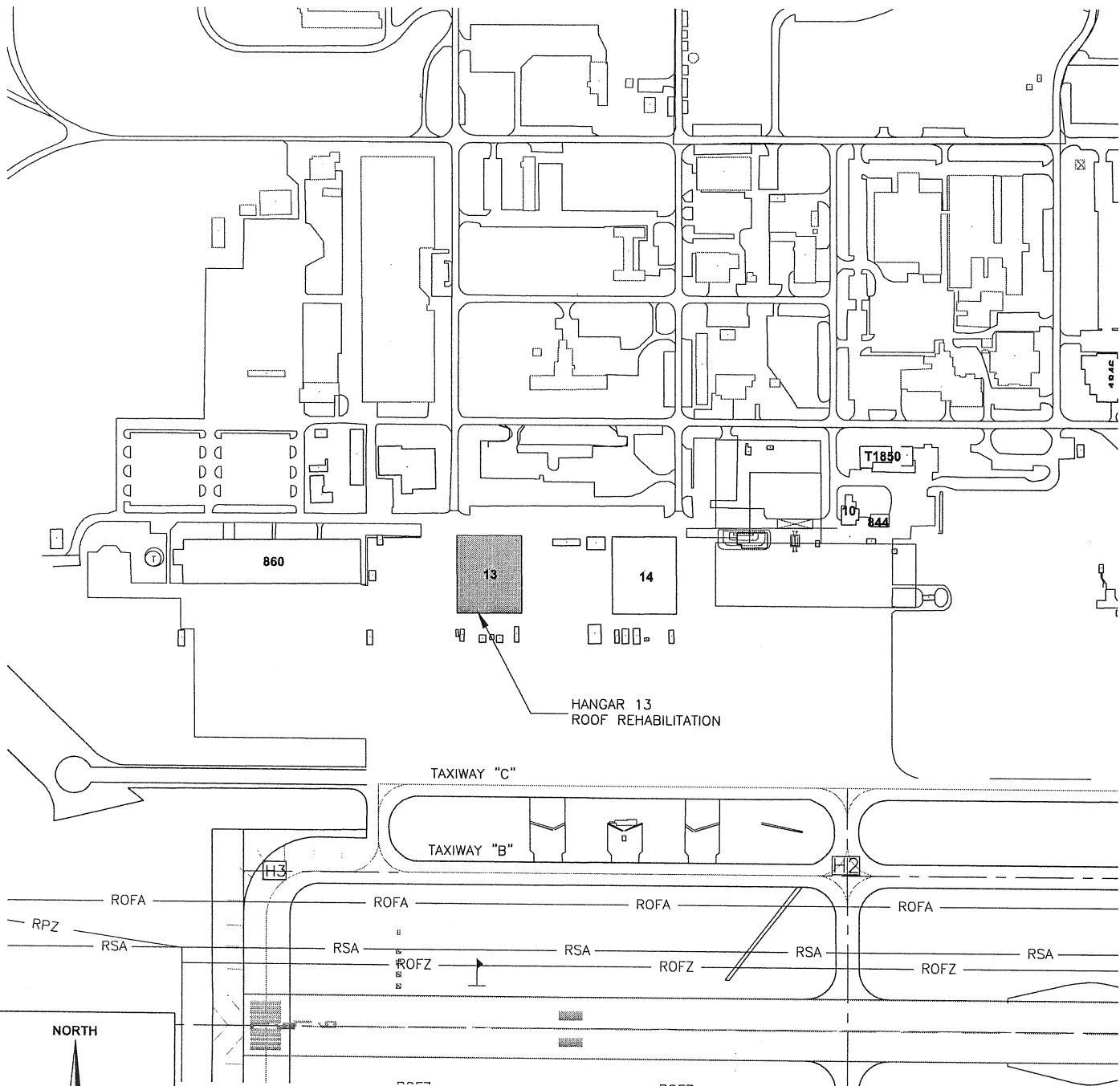
AVCON, INC.
Estimator: V. Lewis

PRELIMINARY ESTIMATE OF PROJECT COST
AIRPORT MASTER PLAN UPDATE
CECIL FIELD

Feb-07
file: Long-term
AVCON Project: 2003.037.05

Project No. 114: Approach Lighting System on Parallel Runway 17/35

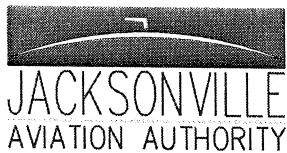
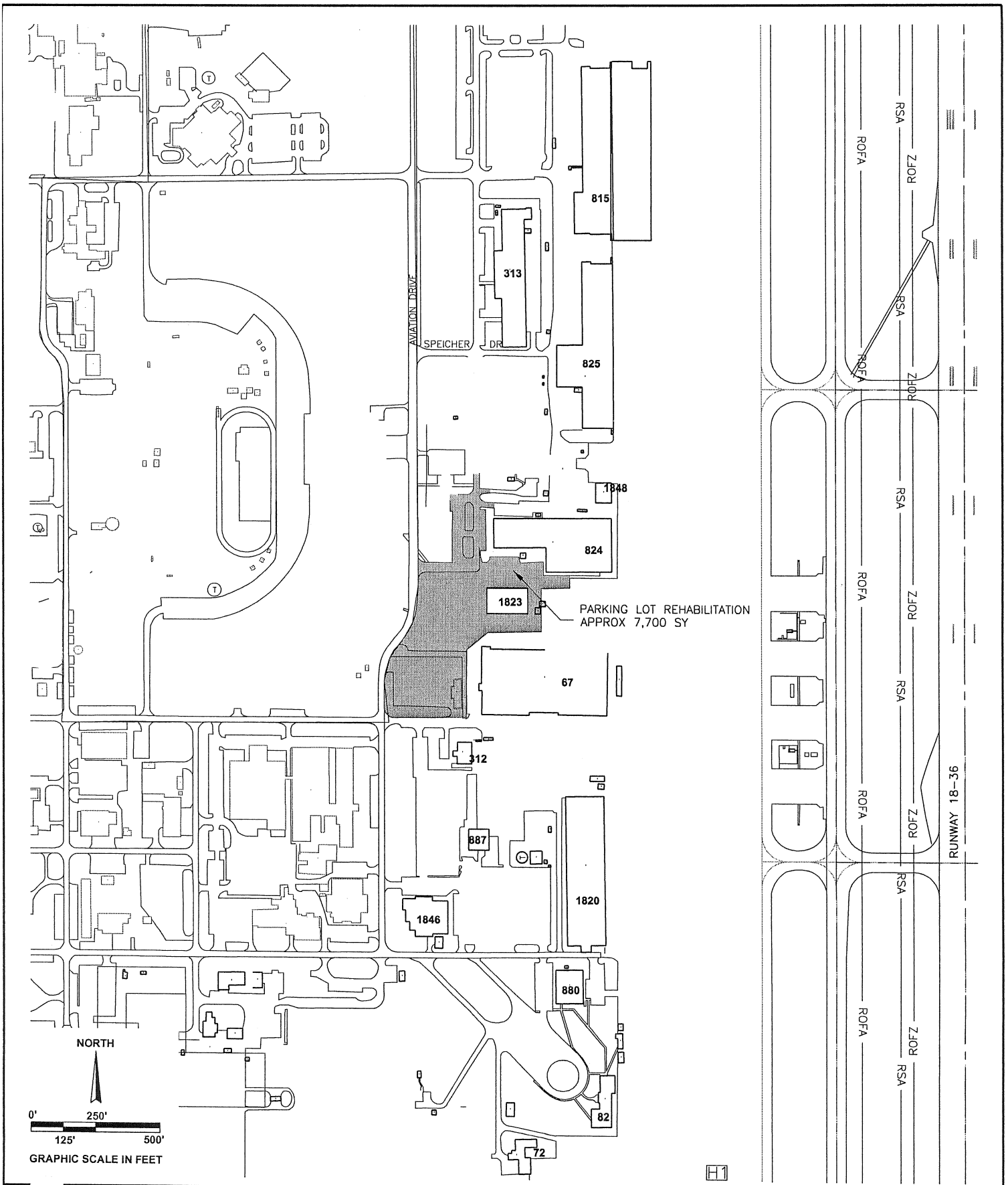
ITEM	SPEC. NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	ITEM COST	TOTAL COST
1		MOBILIZATION	1	LS	\$ 70,000.00	\$ 70,000.00	
2		ALLOWANCE FOR APPROACH LIGHTING IMPROVEMENTS	1	LS	\$ 500,000.00	\$ 500,000.00	
3		FAA COORDINATION	1	LS	\$ 200,000.00	\$ 200,000.00	
Approximate Total Construction Cost ==>							\$ 770,000.00
SURVEYING @ 5%:							\$ 38,500.00
ENGINEERING @ 12%:							\$ 92,400.00
CONSTRUCTION ADMINISTRATION @ 8%:							\$ 61,600.00
AIRPORT ADMINISTRATION @ 1%:							\$ 7,700.00
Approximate Total Services Cost ==>							<u>\$ 200,200.00</u>
PRELIMINARY ESTIMATE OF PROJECT COST ==>							<u>\$ 970,200.00</u>
ADD 15% CONTINGENCY ==>							<u>\$ 145,530.00</u>
							\$ 1,115,730.00
USE ==>							\$ 1,116,000.00



PROJECT #2

**HANGAR 13 ROOF
REHABILITATION**

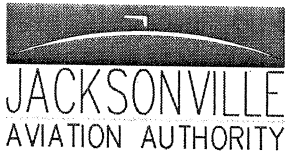
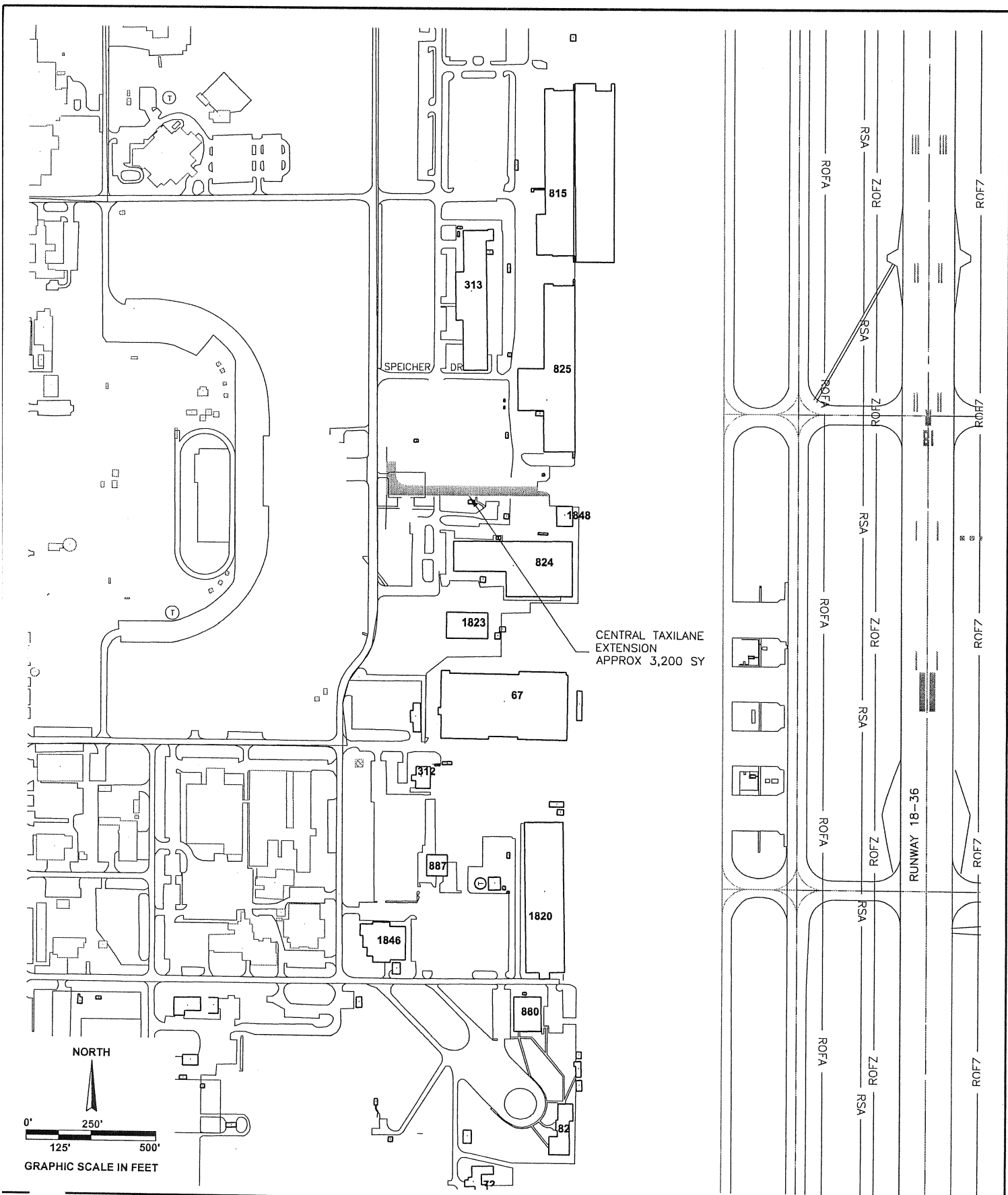
CECIL FIELD AIRPORT



PROJECT #3

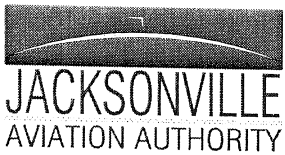
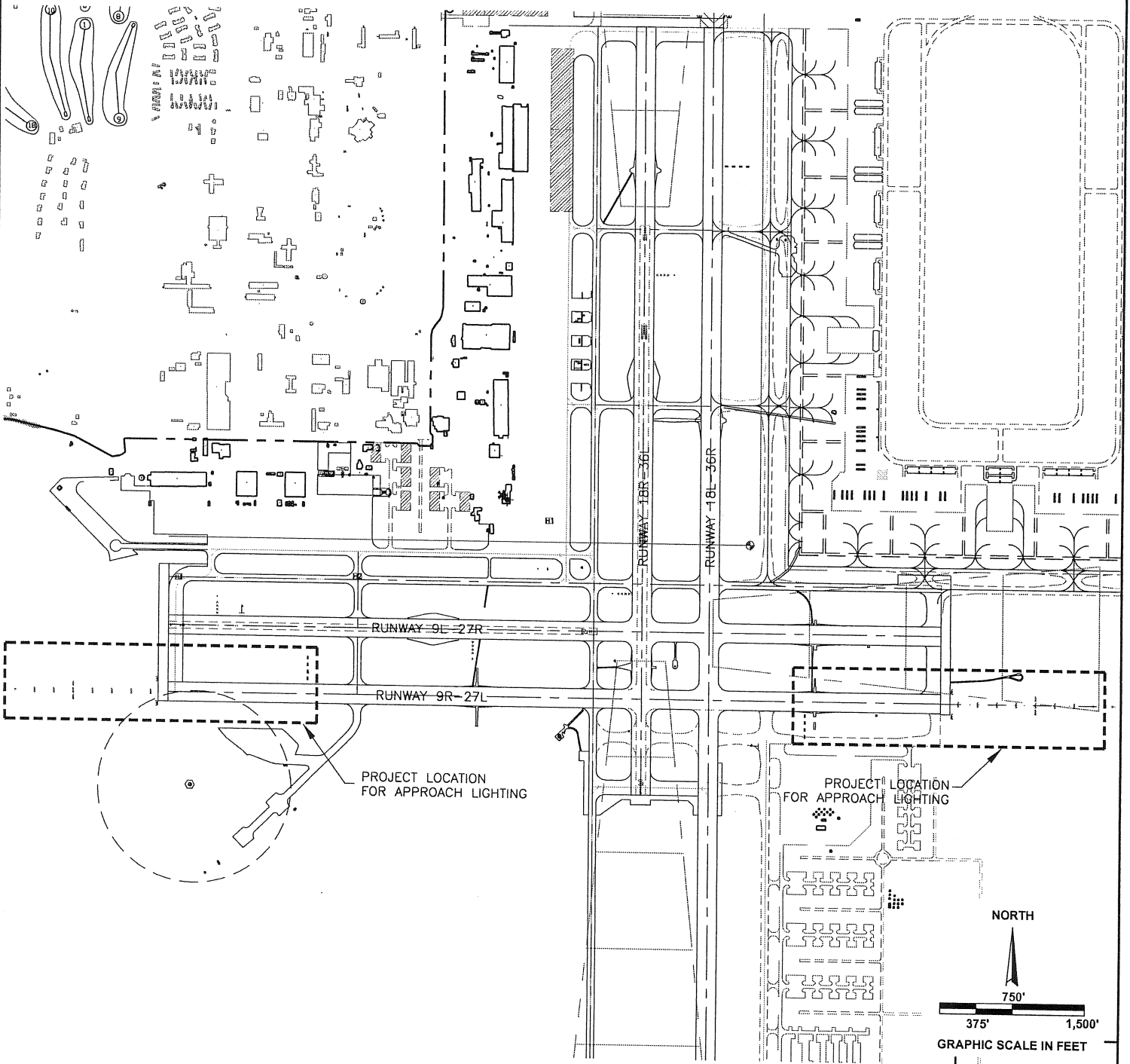
**AIRPORT PARKING
REHABILITATION - PHASE I**

CECIL FIELD AIRPORT



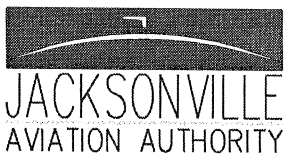
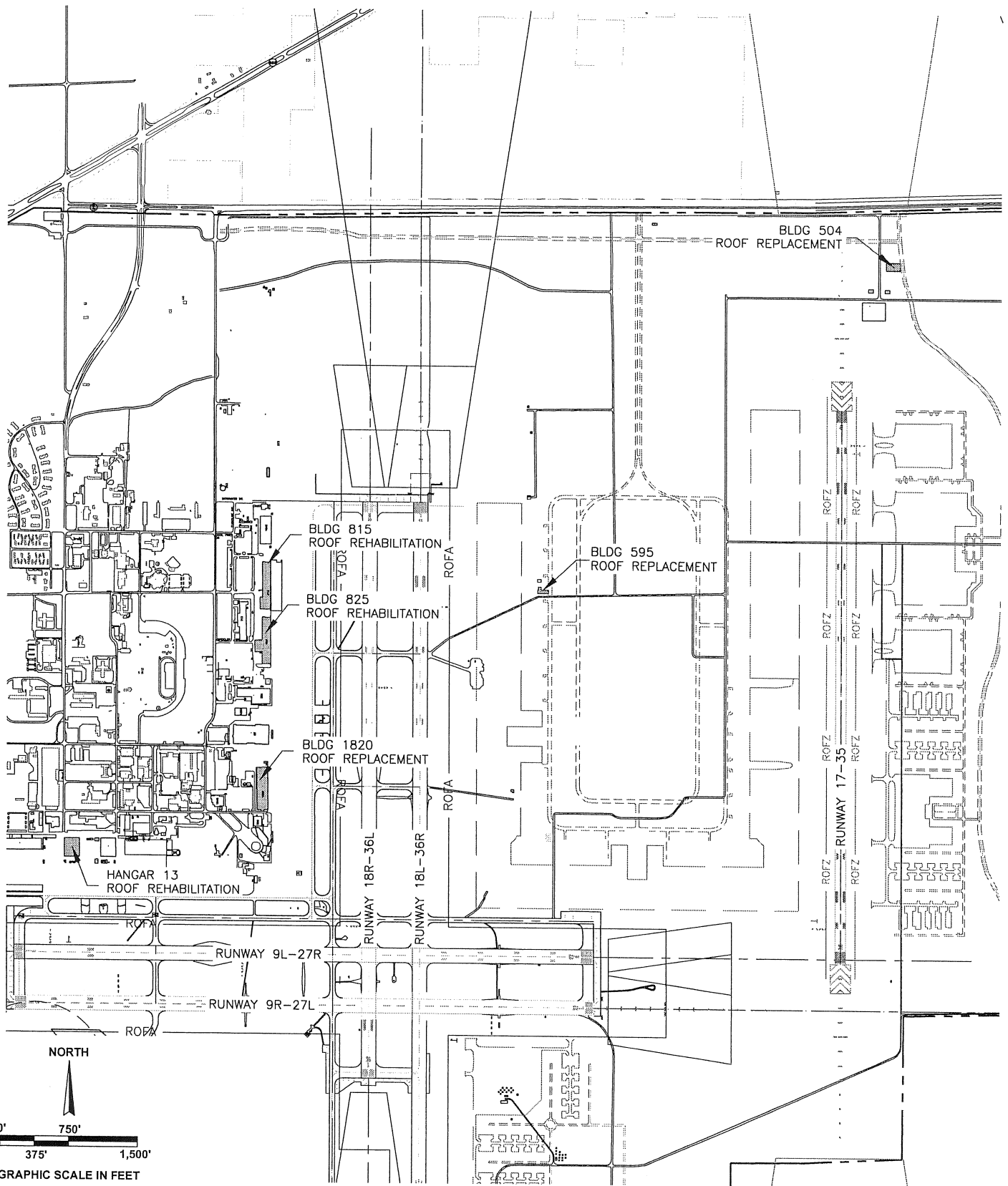
PROJECT #4
CENTRAL TAXILANE
EXTENSION

CECIL FIELD AIRPORT



PROJECT #6
APPROACH LIGHTING
SYSTEM ON
RUNWAY 9R-27L

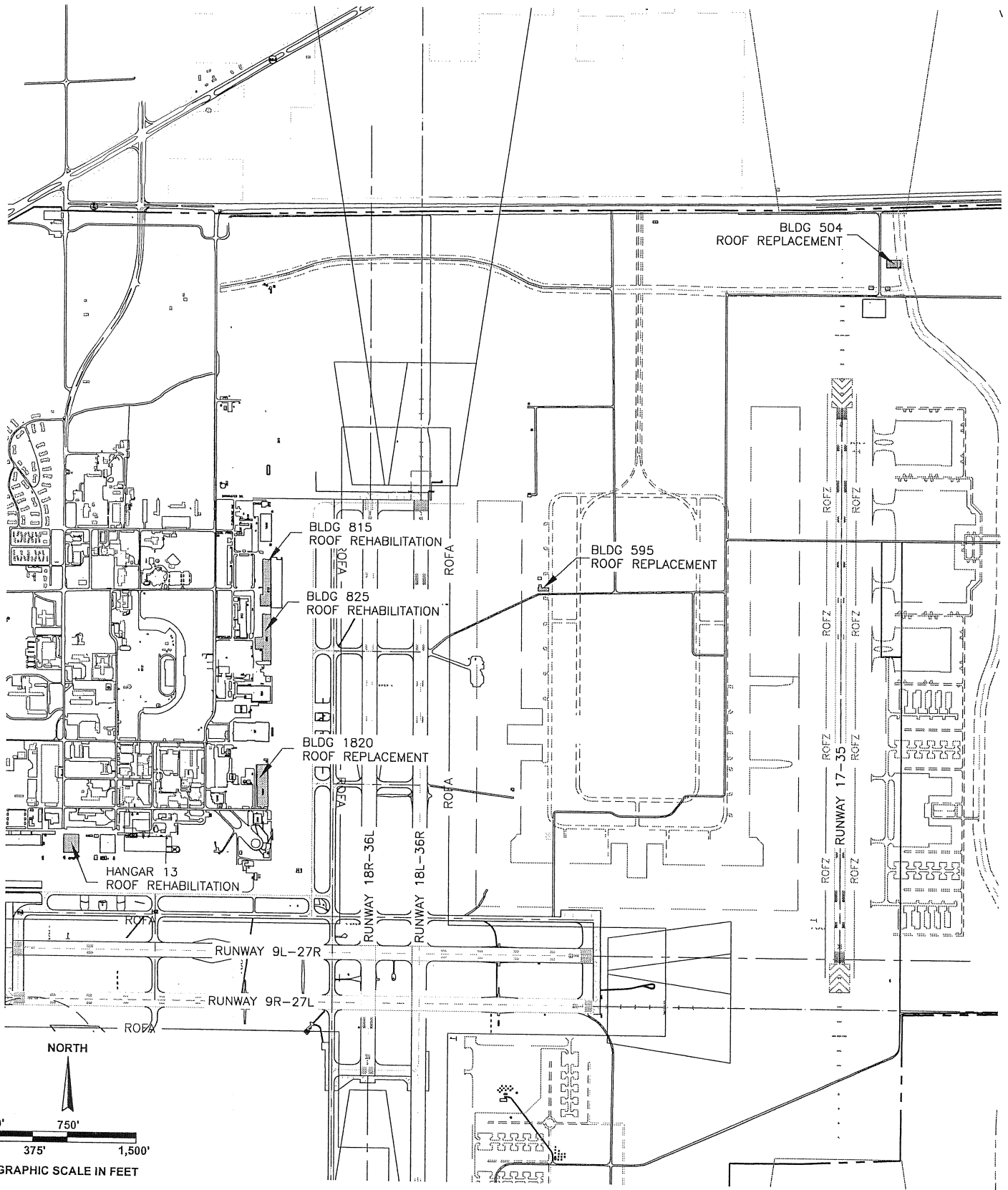
CECIL FIELD AIRPORT



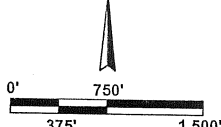
PROJECT #7

**ROOF REHABILITATION -
HANGAR 13, 825, 815, 1820
AND BUILDINGS 595 AND 504**

CECIL FIELD AIRPORT



NORTH

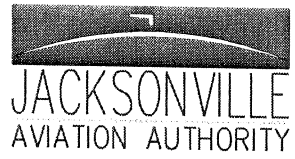


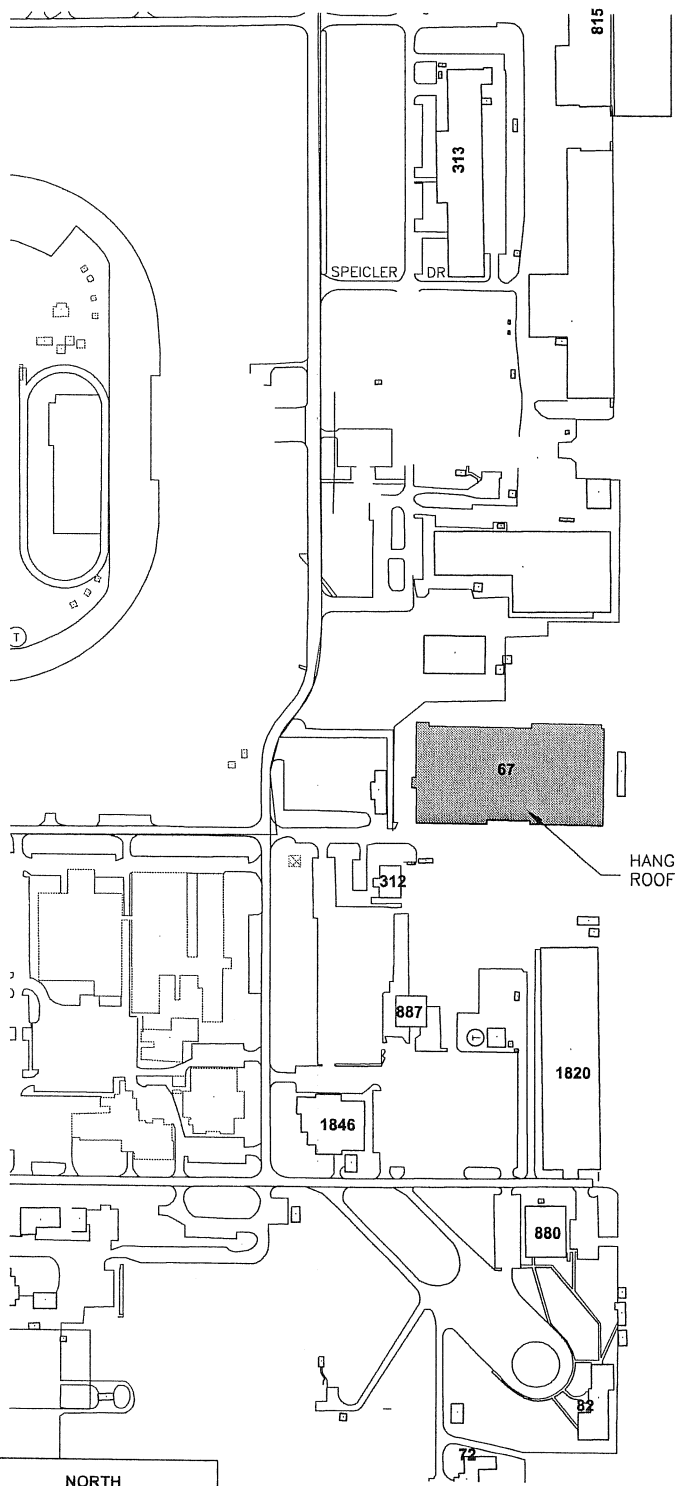
GRAPHIC SCALE IN FEET

PROJECT #7

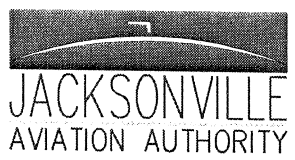
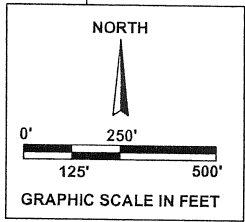
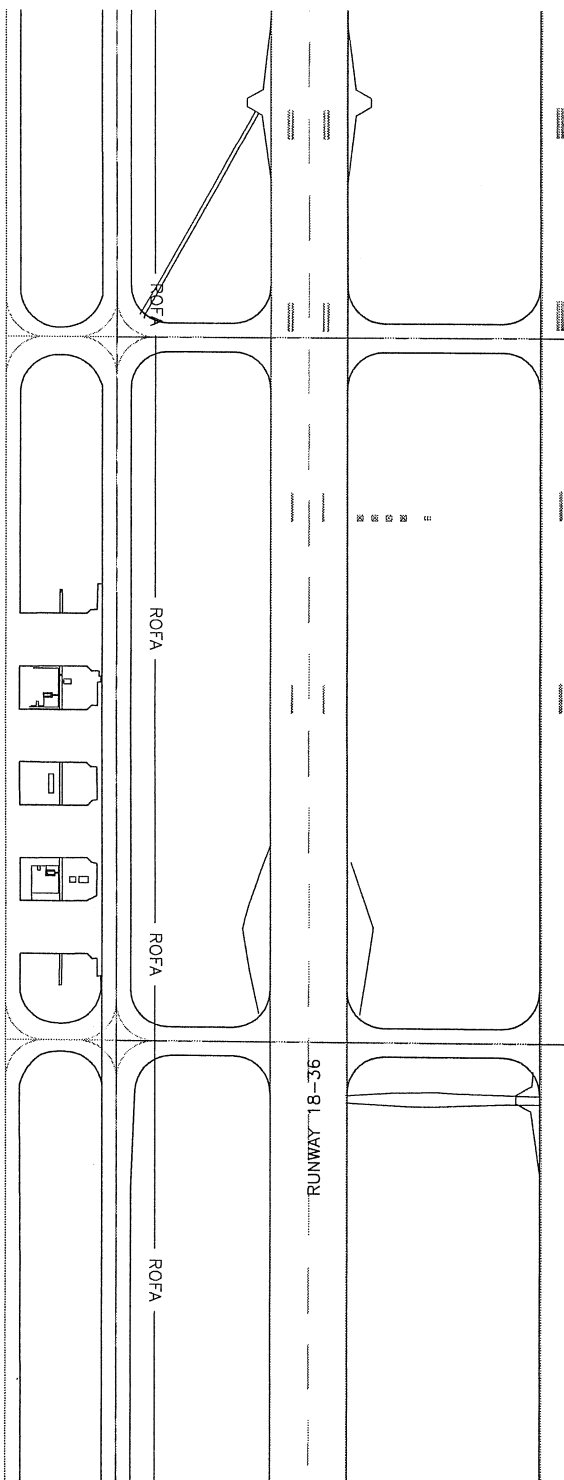
**ROOF REHABILITATION -
HANGAR 13, 825, 815, 1820
AND BUILDINGS 595 AND 504**

CECIL FIELD AIRPORT



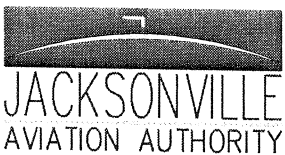
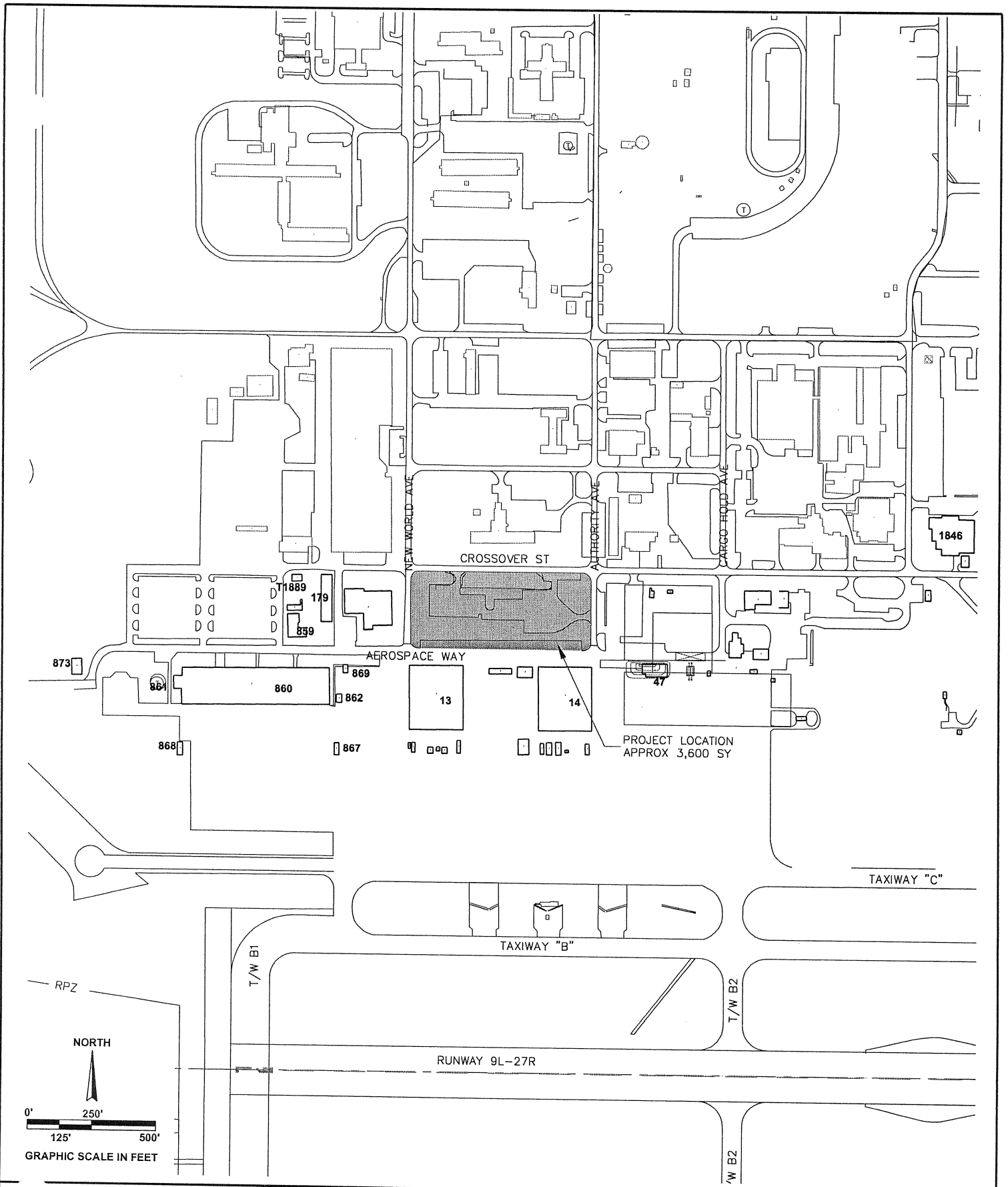


HANGAR 67
ROOF REHABILITATION



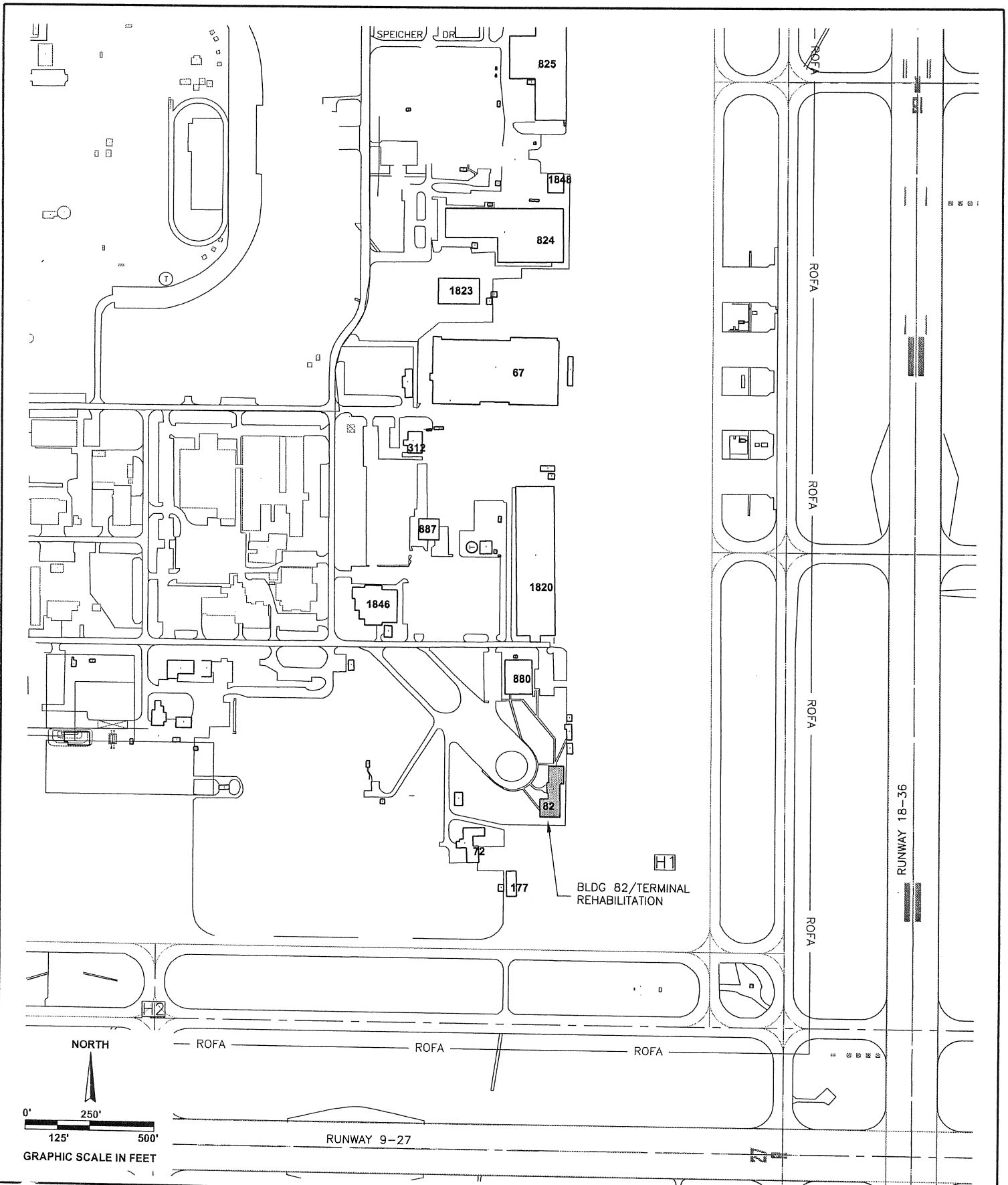
PROJECT #8
REHABILITATE HANGAR 67
ROOF

CECIL FIELD AIRPORT



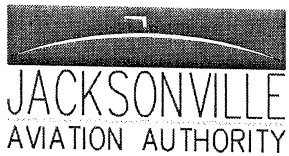
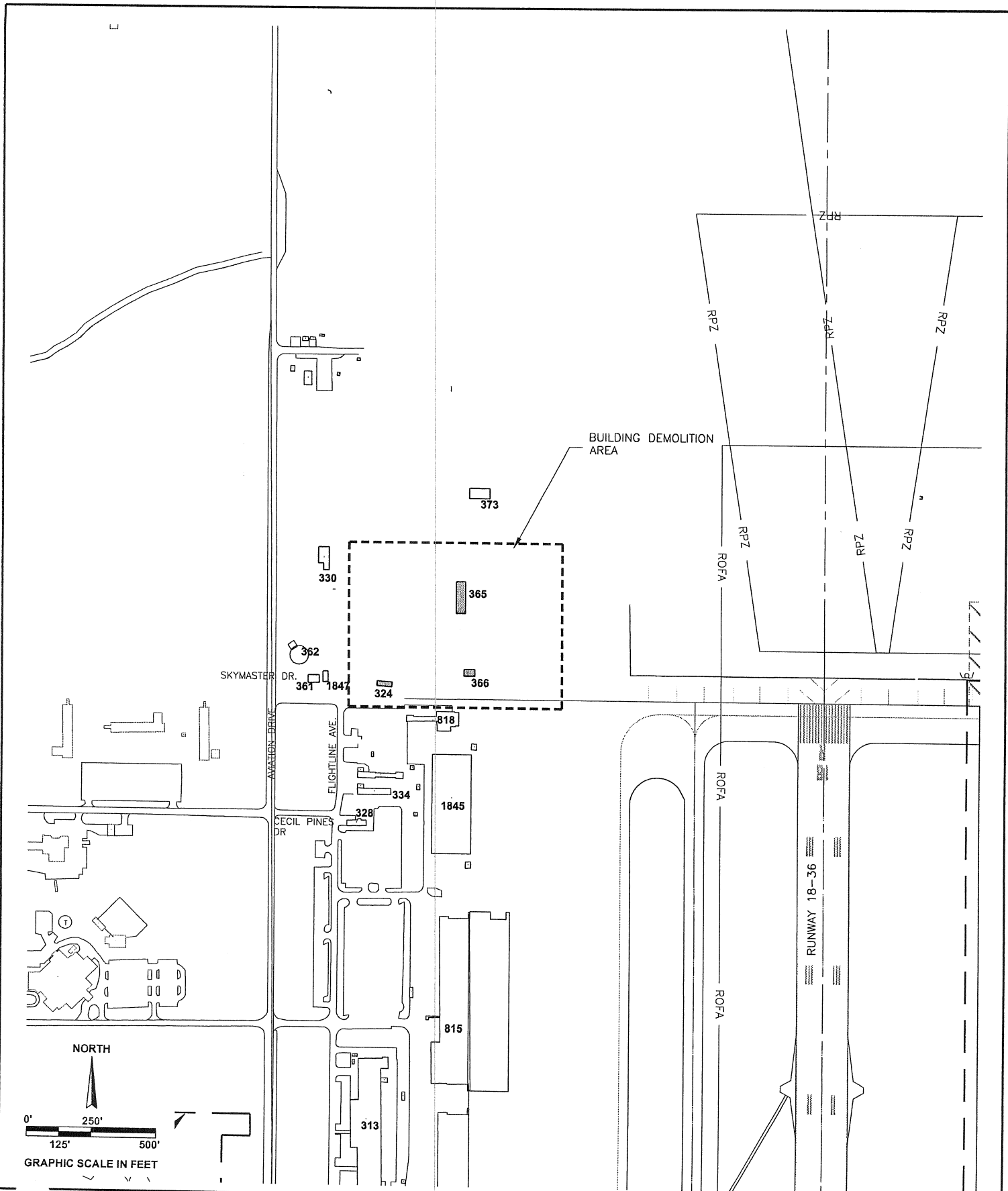
PROJECT #11
PARKING LOT UPGRADE -
PHASE II

CECIL FIELD AIRPORT



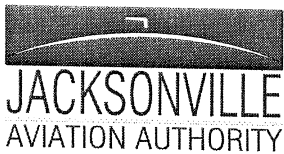
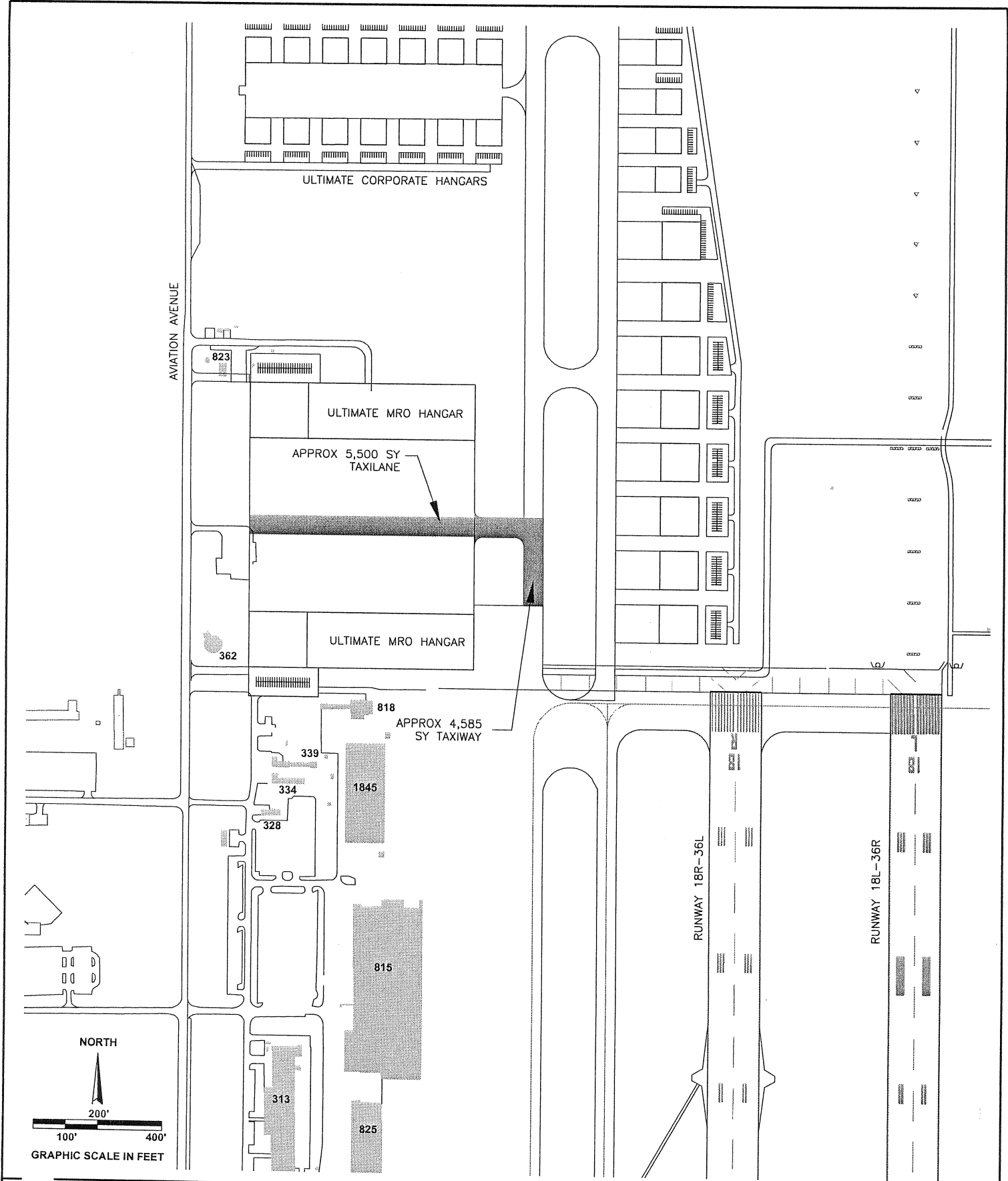
PROJECT #12
BLDG 82/TERMINAL REHABILITATION - PHASE III

CECIL FIELD AIRPORT



PROJECT #13
BUILDINGS 324, 365
& 366 DEMOLITION

CECIL FIELD AIRPORT



PROJECT #15
SITE 9B TAXIWAY - PHASE I

CECIL FIELD AIRPORT

AVIATION AVENUE

ULTIMATE CORPORATE HANGARS

29,300 SY APRON

ULTIMATE MRO HANGAR

ULTIMATE MRO HANGAR

823

362

818

339

1845

334

328

815

313

825

RUNWAY 18R-36L

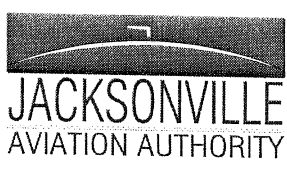
NORTH

250'

125

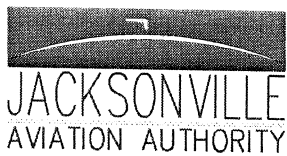
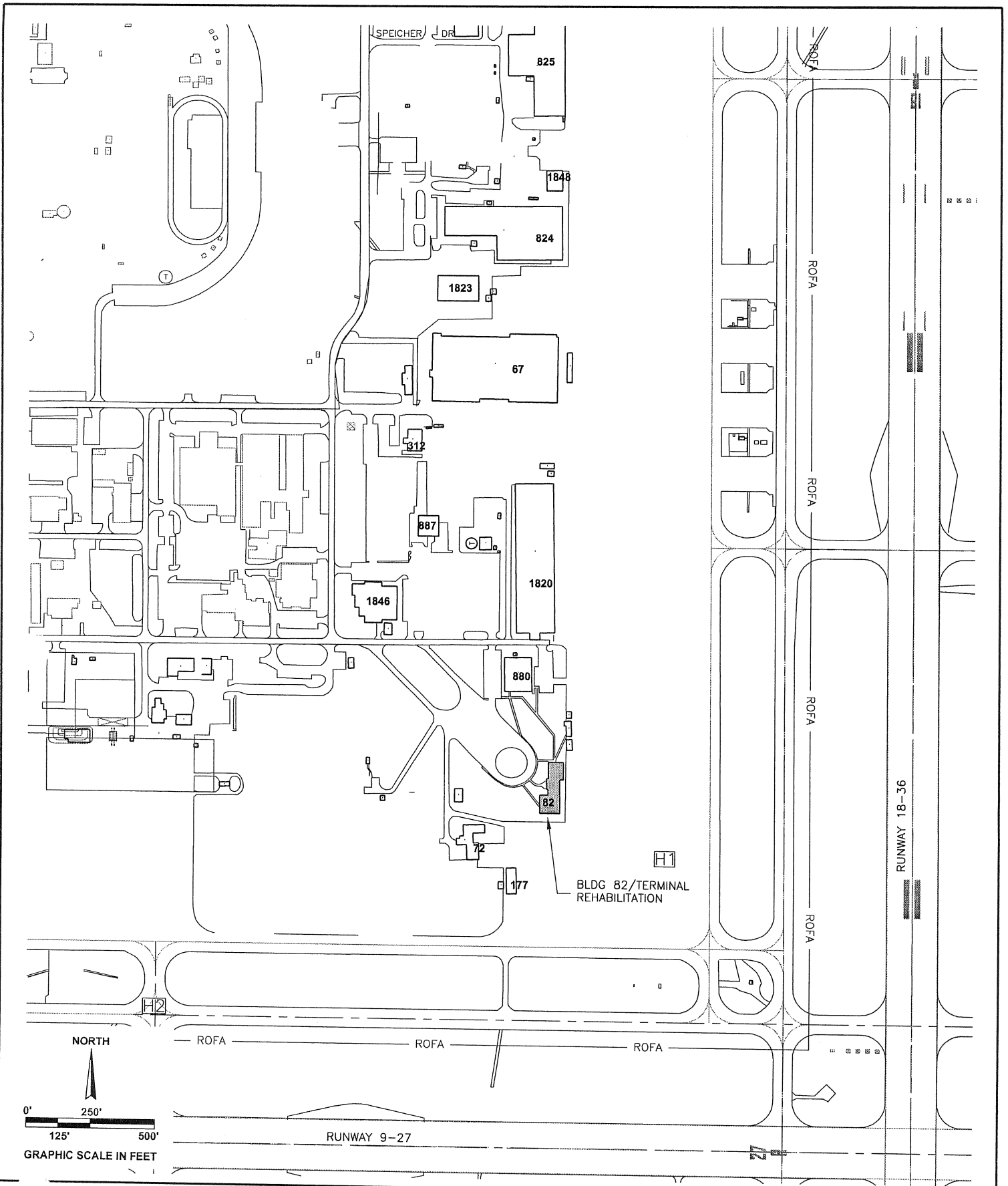
500'

GRAPHIC SCALE IN FEET



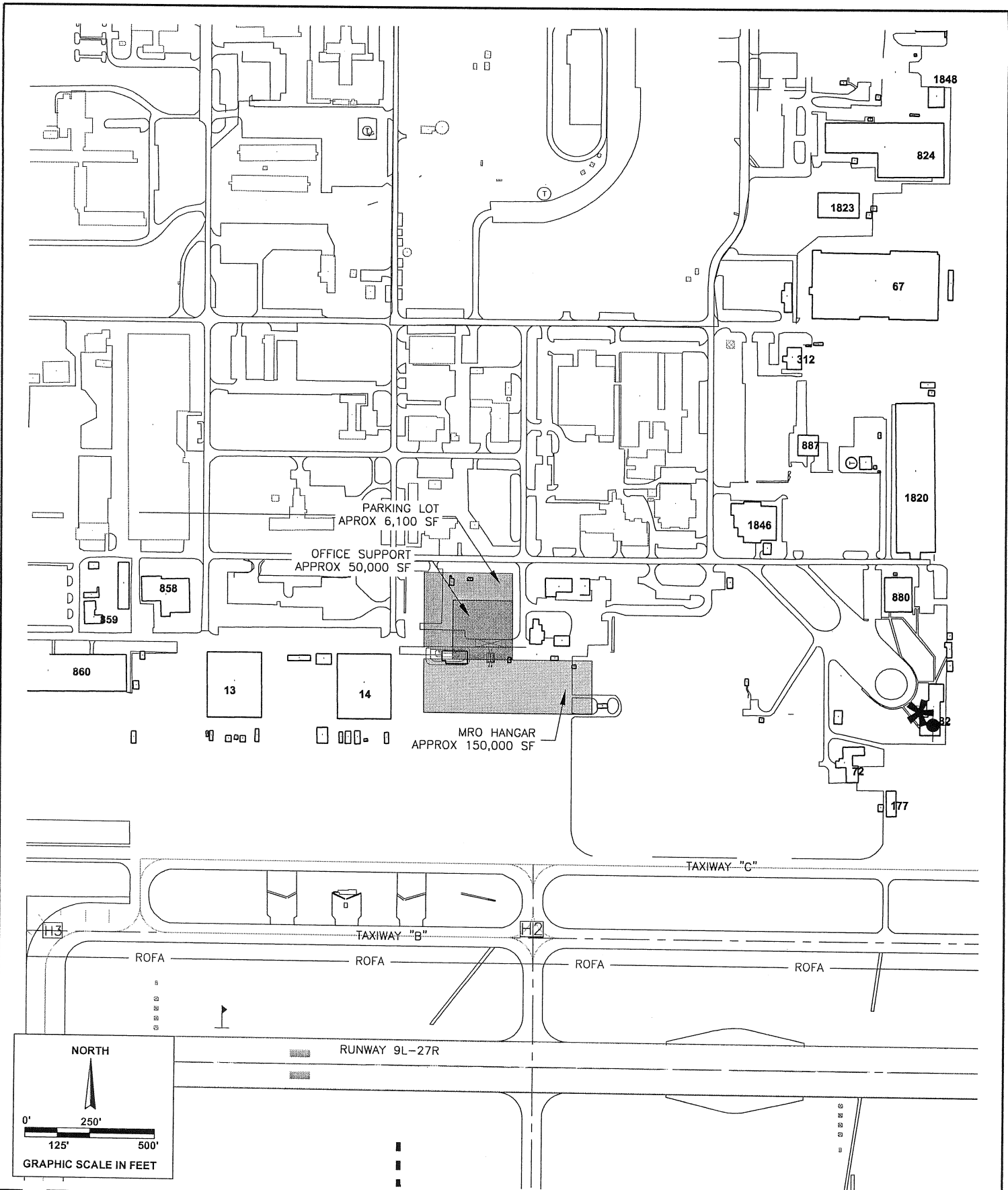
PROJECT #16
CONSTRUCT NEW APRON

CECIL FIELD AIRPORT



PROJECT #18
BUILDING 82/TERMINAL
REHABILITATION - PHASE IV

CECIL FIELD AIRPORT

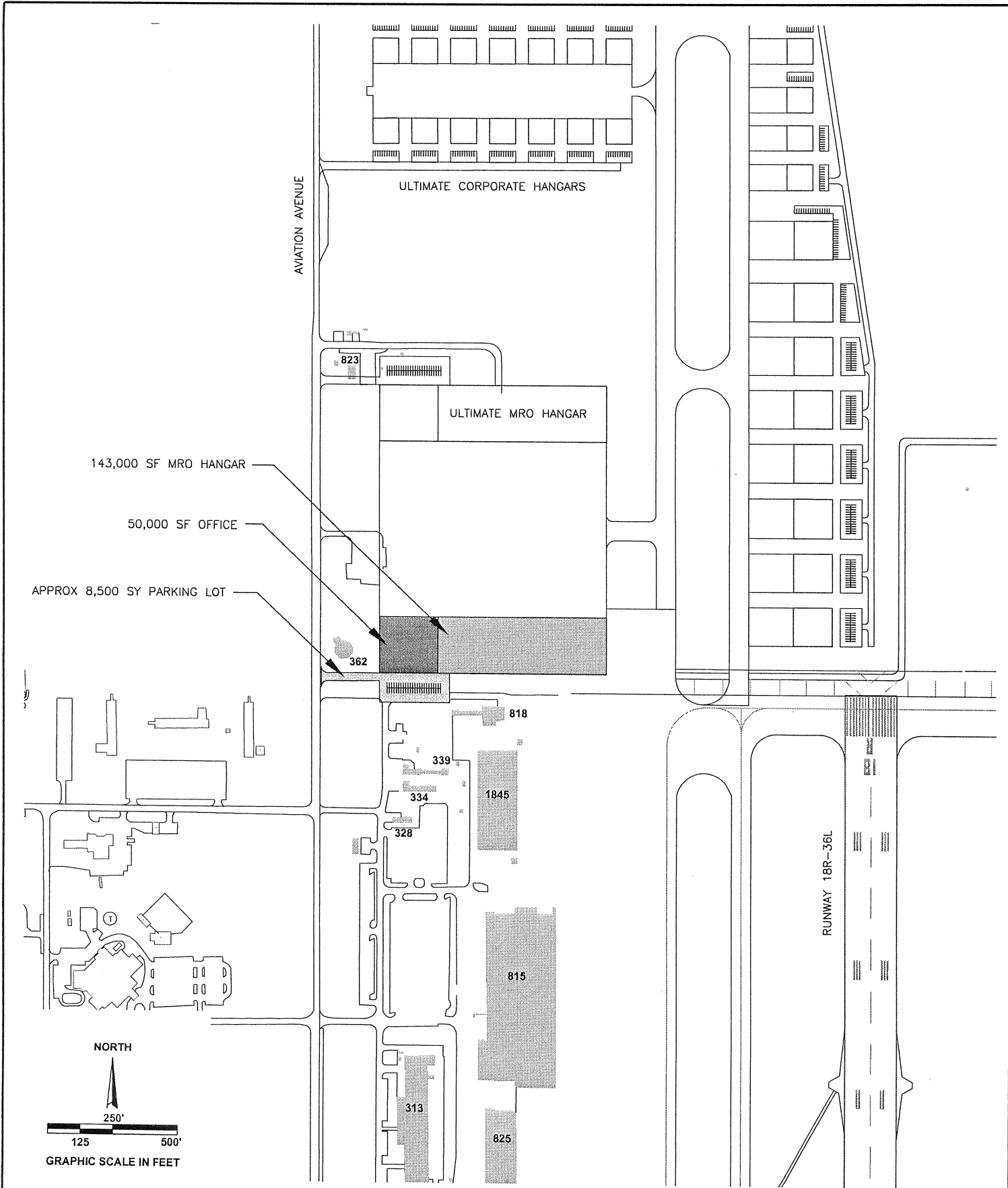


JACKSONVILLE
 AVIATION AUTHORITY

PROJECT #19

**MRO HANGAR
 DEVELOPMENT
 NORTHWEST AREA**

CECIL FIELD AIRPORT

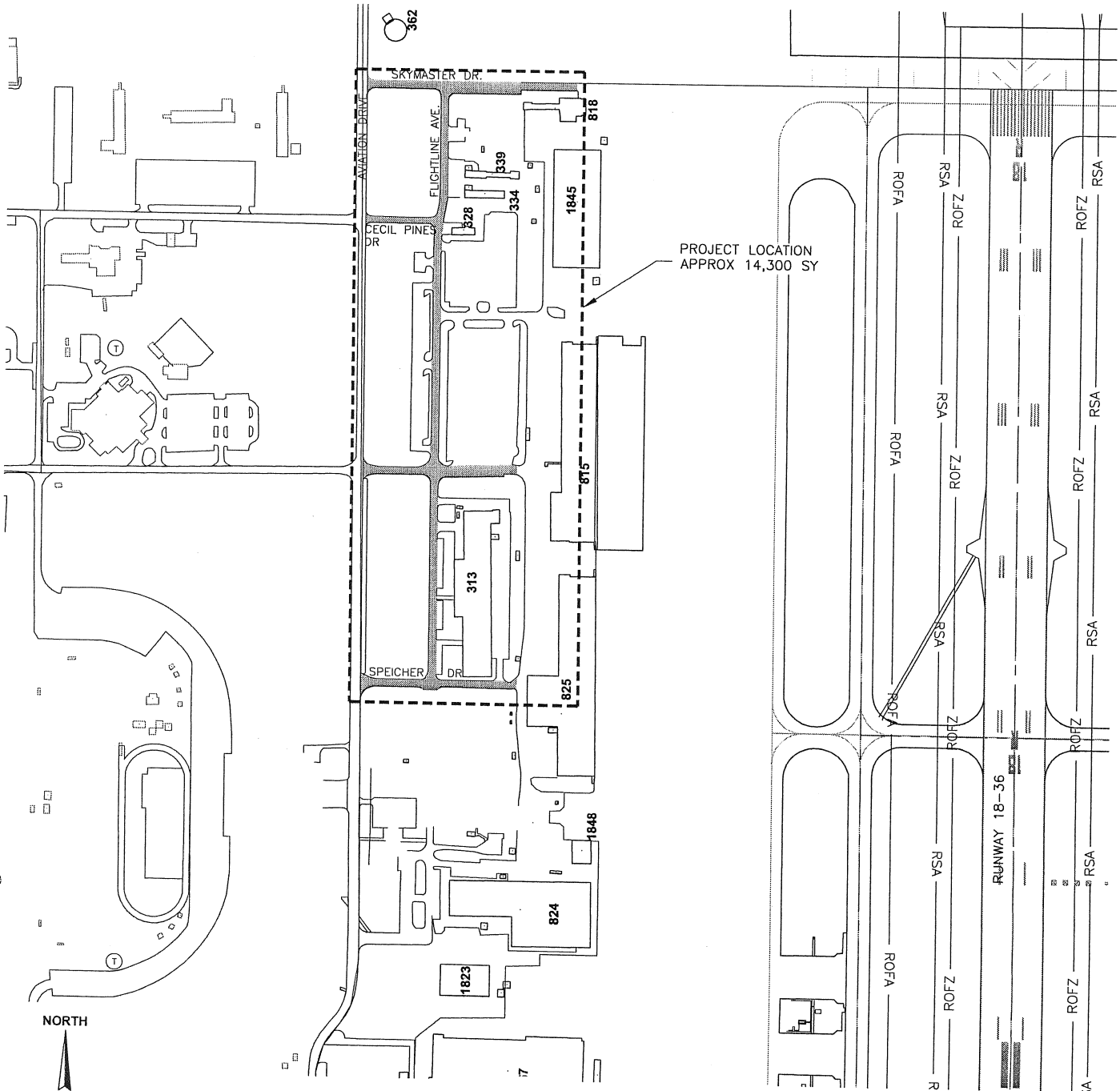


JACKSONVILLE
AVIATION AUTHORITY

PROJECT #20

**SITE 9B HANGAR & PARKING
LOT - PHASE I**

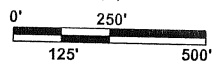
CECIL FIELD AIRPORT



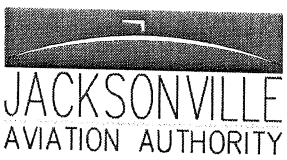
PROJECT LOCATION
APPROX 14,300 SY

RUNWAY 18-36

NORTH

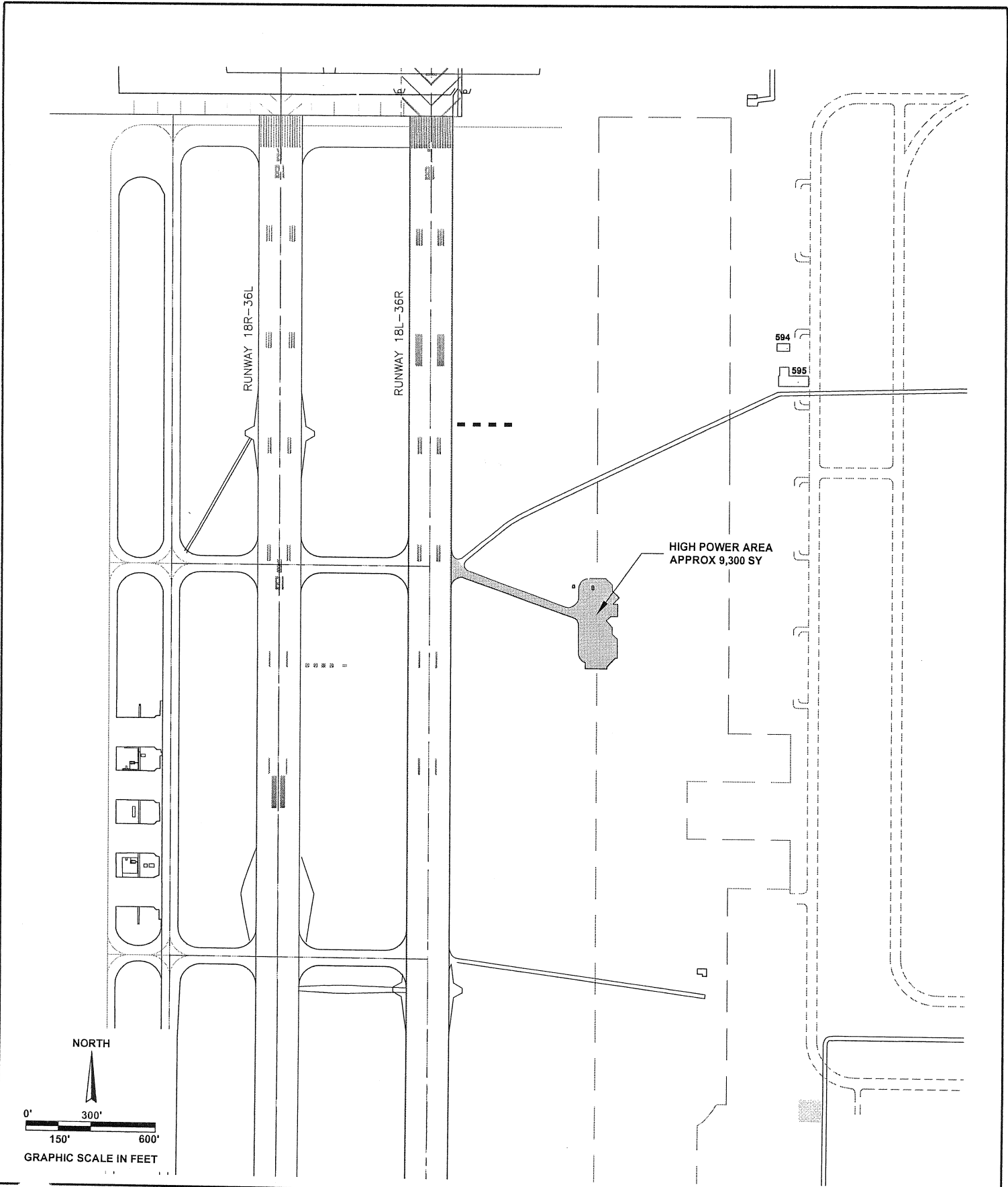


GRAPHIC SCALE IN FEET



PROJECT #24
AIRPORT ROADWAY
PAVEMENT REHABILITATION
PHASE I

CECIL FIELD AIRPORT



JACKSONVILLE
AVIATION AUTHORITY

PROJECT #25

**REHABILITATE HIGH POWER
AREA, TAXIWAY A2**

CECIL FIELD AIRPORT

103 RD STREET (COUNTY ROAD NO. 29)

PERIMETER ROAD N.

AVIATION AVENUE

STARTING POINT OF PROJECT BOUNDARY

SCOUT RD. WEST

SKYRAIDER RD.

28,000 LF ROAD
2 LANES WIDE

APPROACH RD.

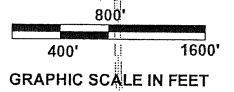
CESSNA BLVD.

SCOUT RD. EAST

END POINT OF PROJECT BOUNDARY

PERIMETER ROAD E.

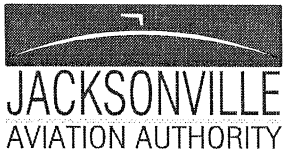
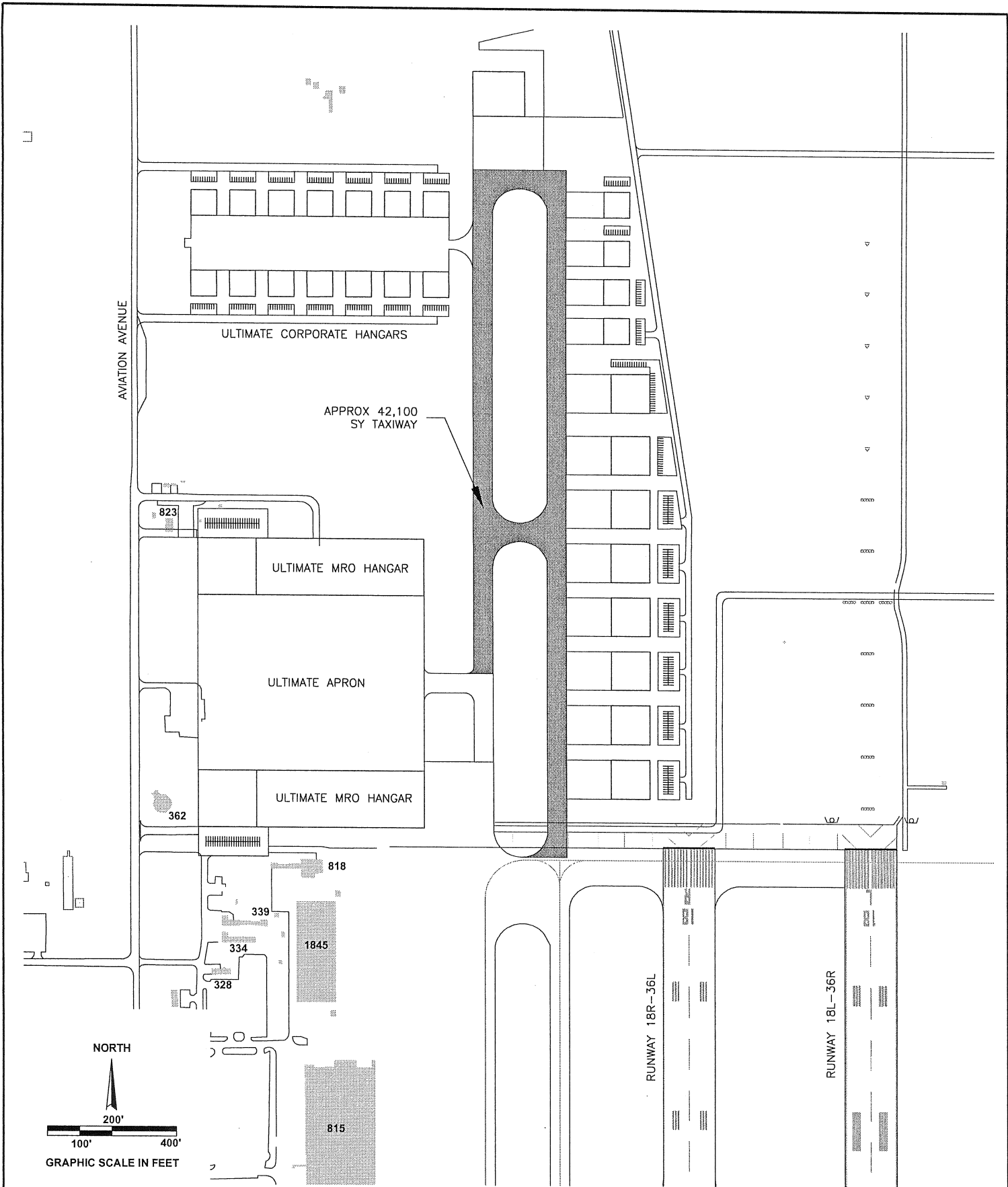
NORTH



PROJECT #27

**MID-FIELD AREA
DEVELOPMENT ROADWAY
ACCESS**

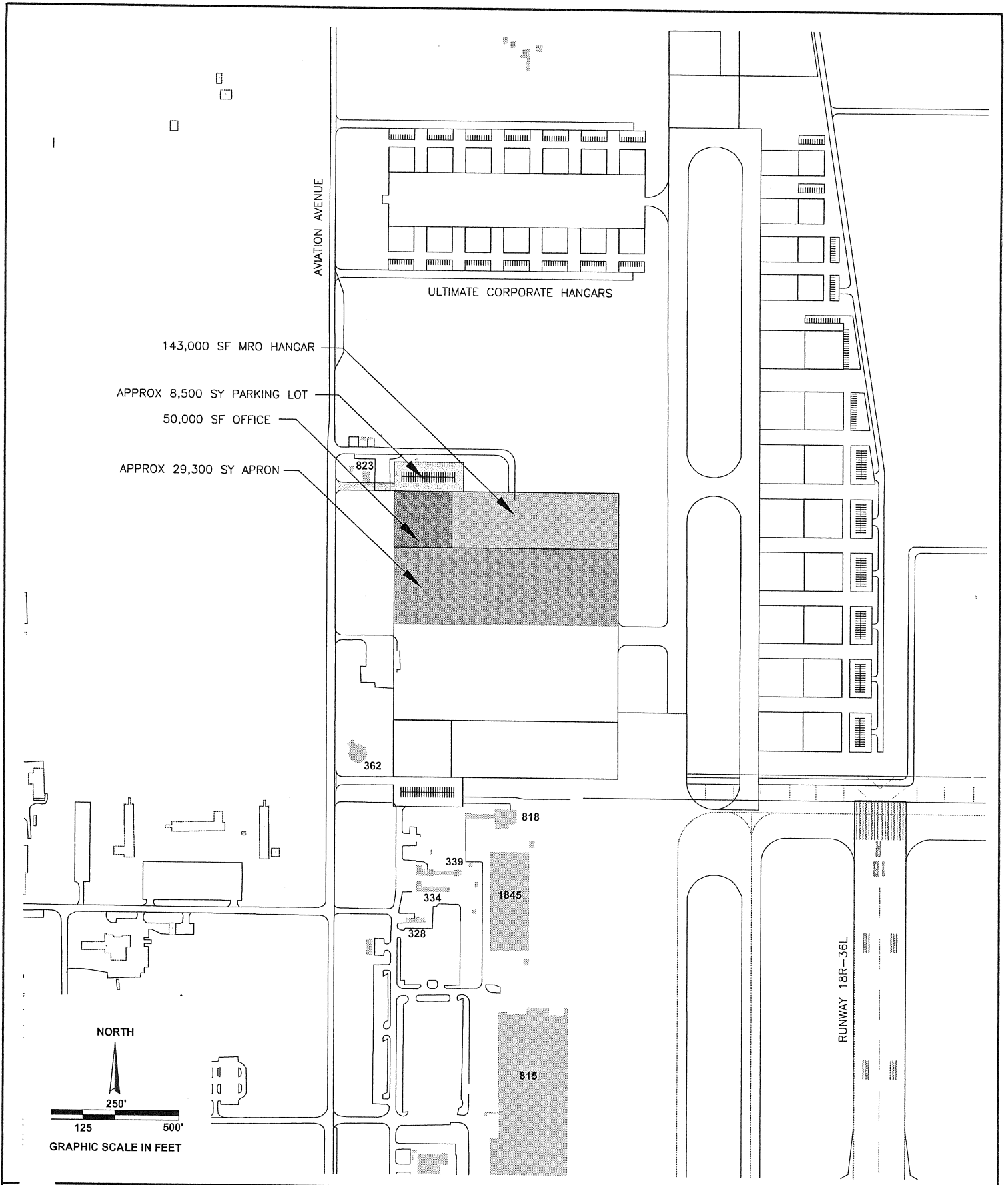
CECIL FIELD AIRPORT



PROJECT #29

**DESIGN AND CONSTRUCT
TAXIWAY "D" EXTENSION
NORTH**

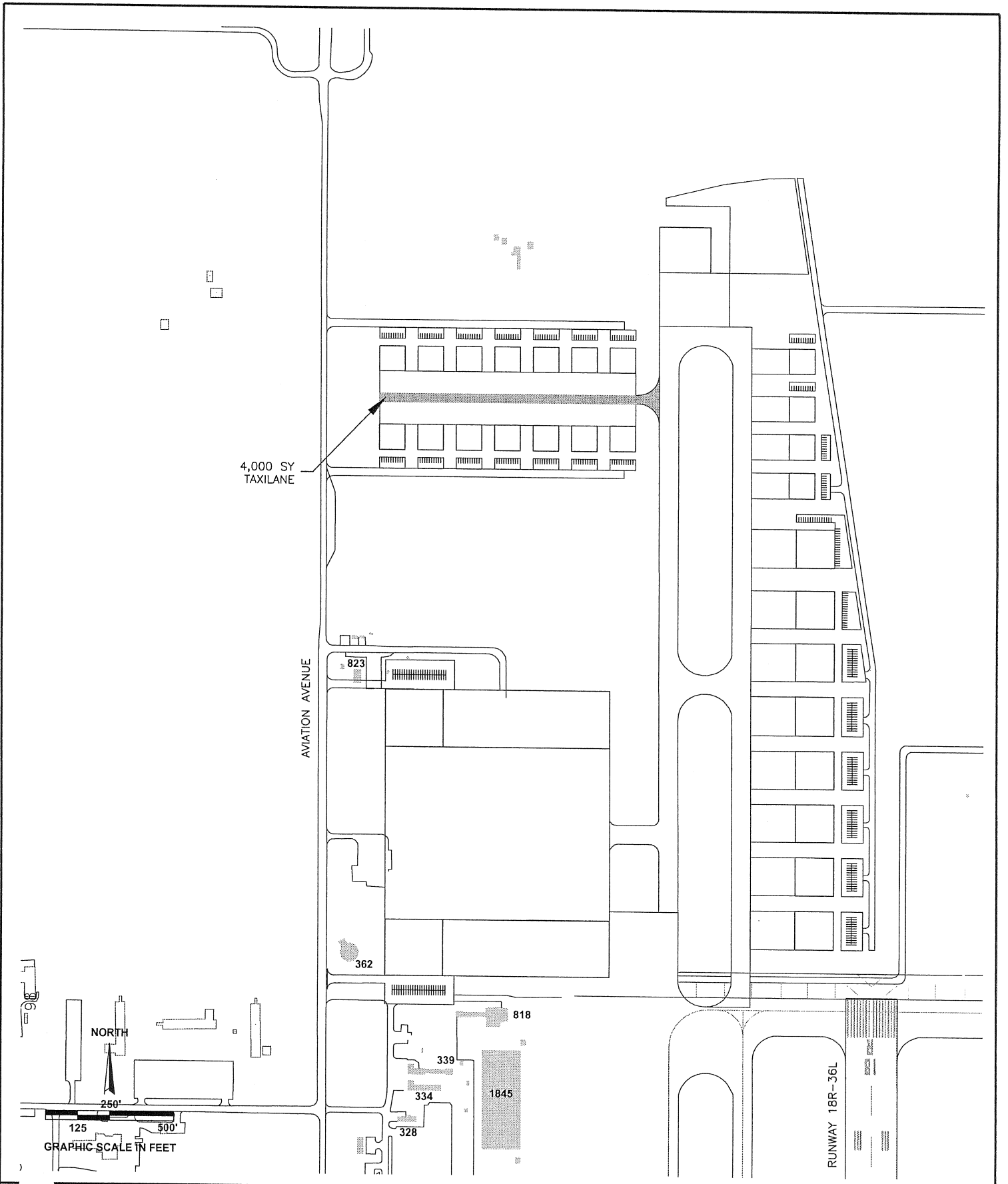
CECIL FIELD AIRPORT



PROJECT #30

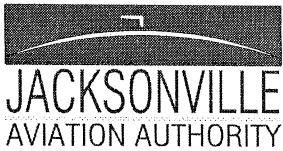
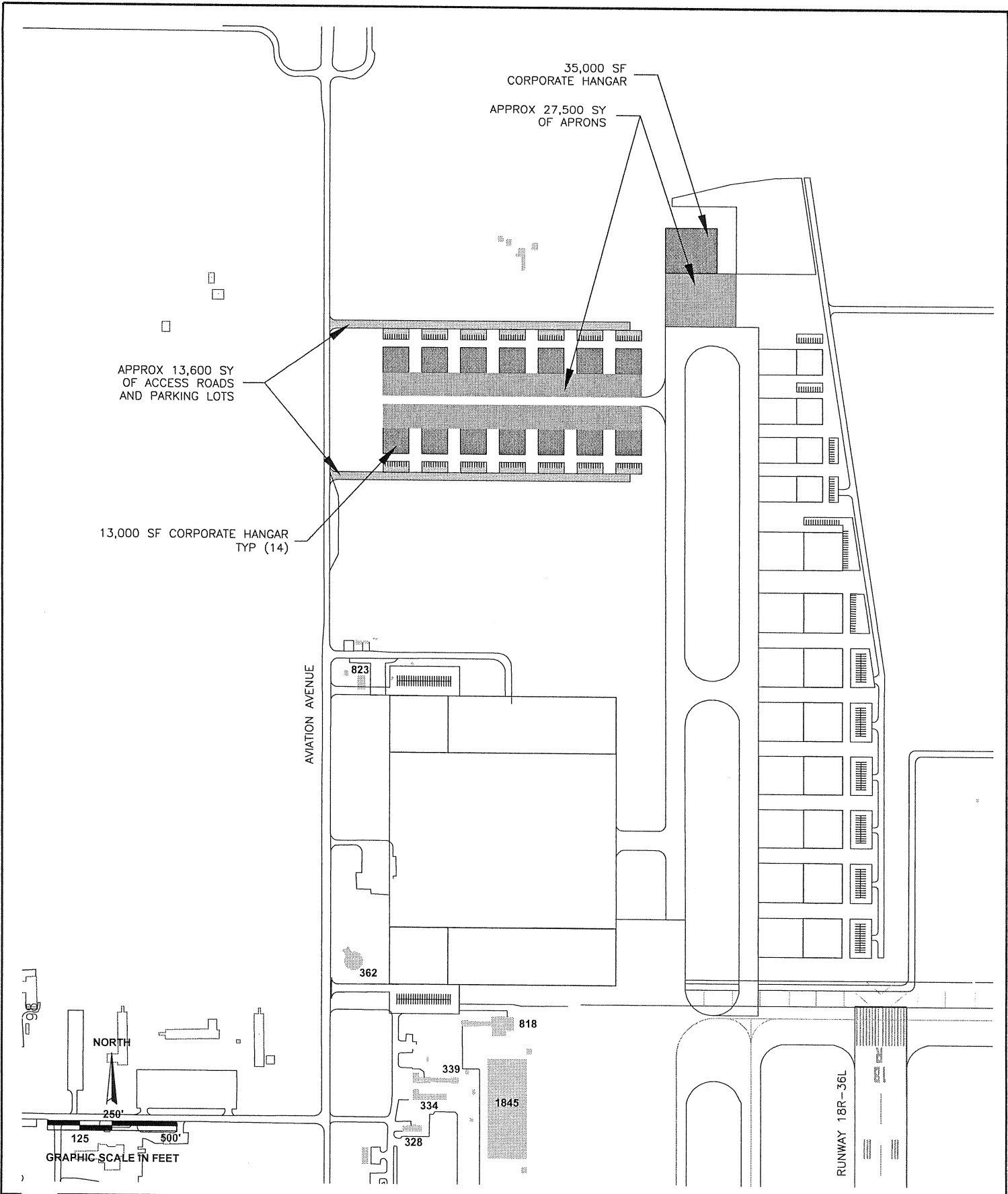
SITE 9B HANGAR, APRON & PARKING LOT - PHASE II

CECIL FIELD AIRPORT



PROJECT #31
SITE 9B TAXILANE

CECIL FIELD AIRPORT



PROJECT #32

**SITE 9B HANGAR, APRON &
PARKING LOT - PHASE III**

CECIL FIELD AIRPORT

103 RD STREET (COUNTY ROAD NO. 29)

PERIMETER ROAD N.

STARTING POINT OF PROJECT

SKYRAIDER RD.

SCOUT RD. WEST

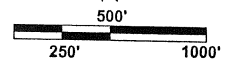
APPROX 30,000 LF OF ROADWAY
2 LANES WIDE

APPROACH RD.

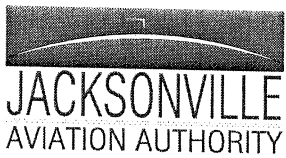
RUNWAY 18R-36L

RUNWAY 18L-36R

NORTH

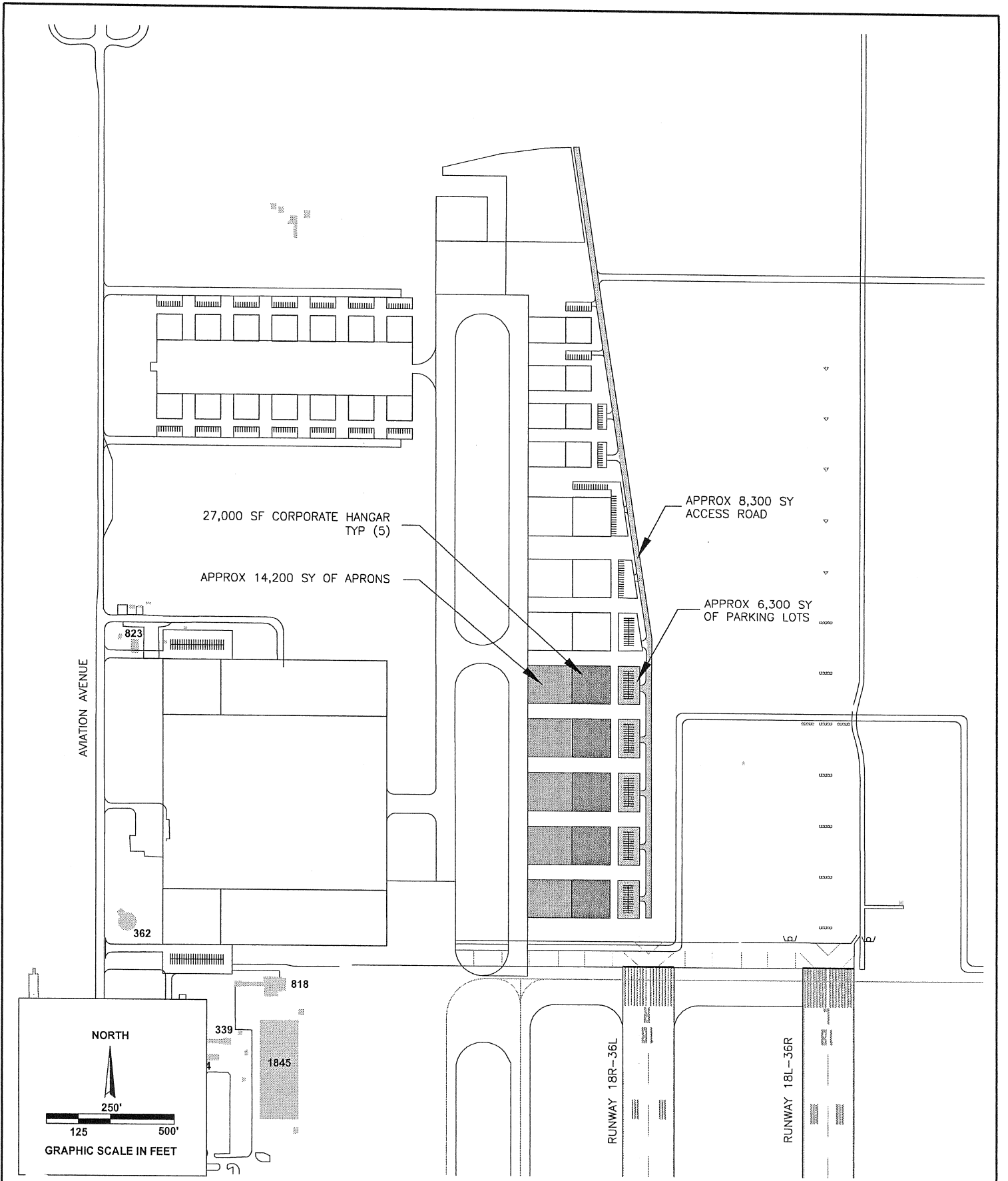


GRAPHIC SCALE IN FEET



PROJECT #36
MID-FIELD AREA
DEVELOPMENT ROADWAY
ACCESS - PHASE II, INTERIOR
LOOP

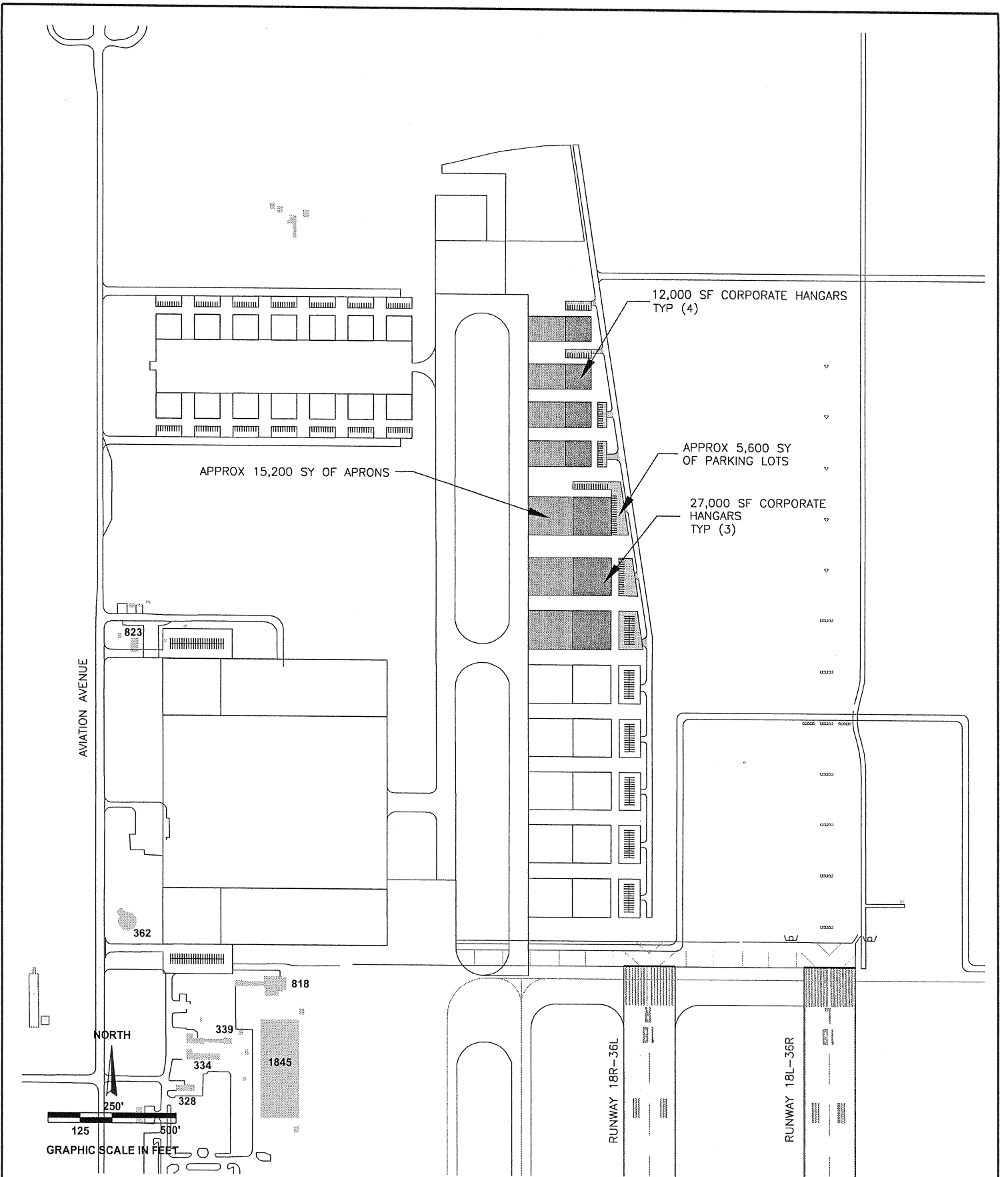
CECIL FIELD AIRPORT



PROJECT #37

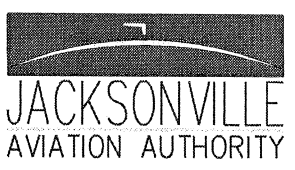
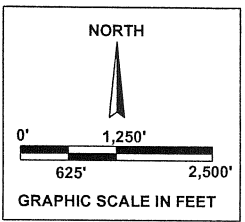
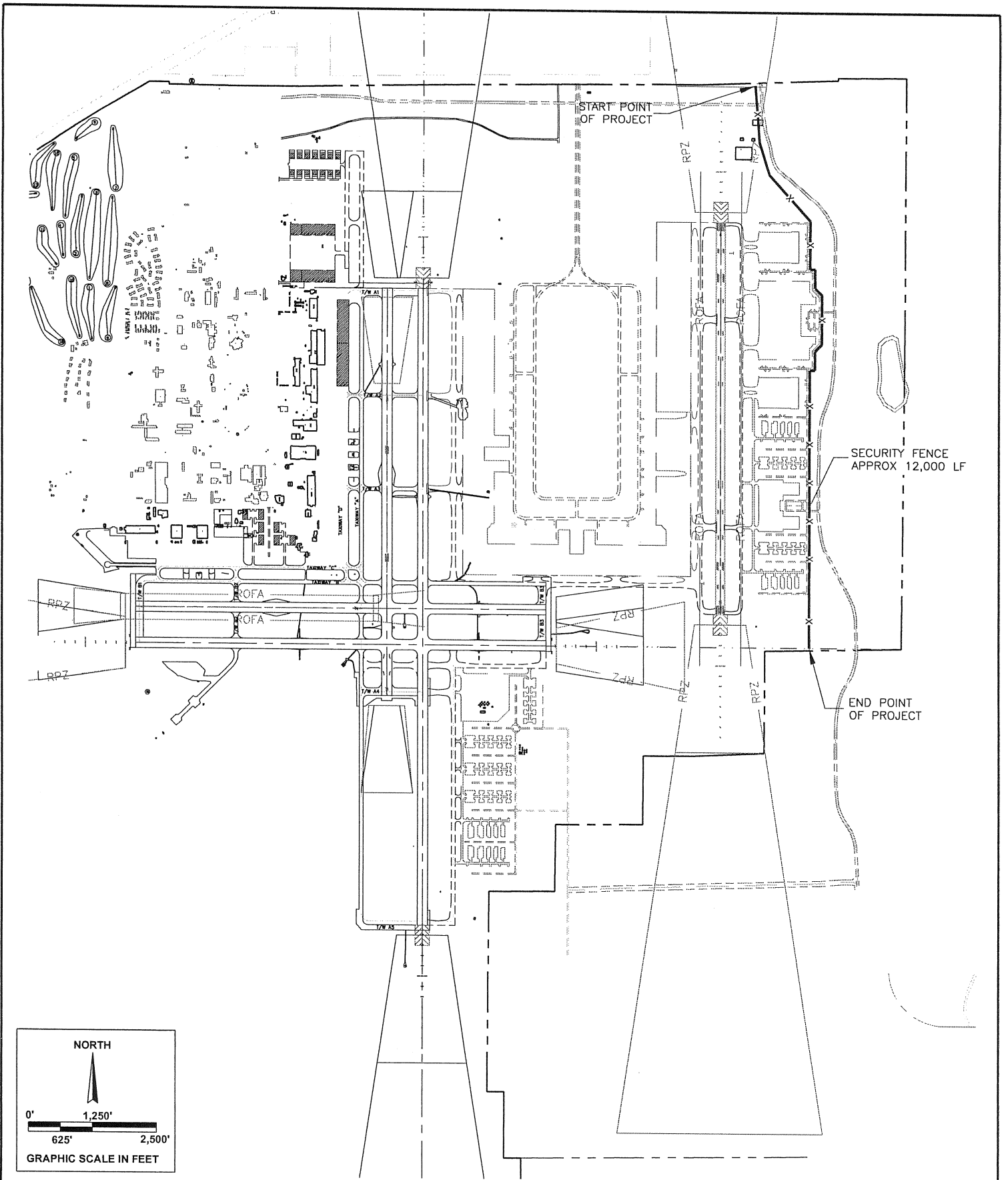
SITE 9B HANGAR, APRON & PARKING LOT - PHASE IV

CECIL FIELD AIRPORT



PROJECT #40
SITE 9B HANGAR, APRON & PARKING LOT - PHASE V

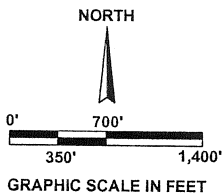
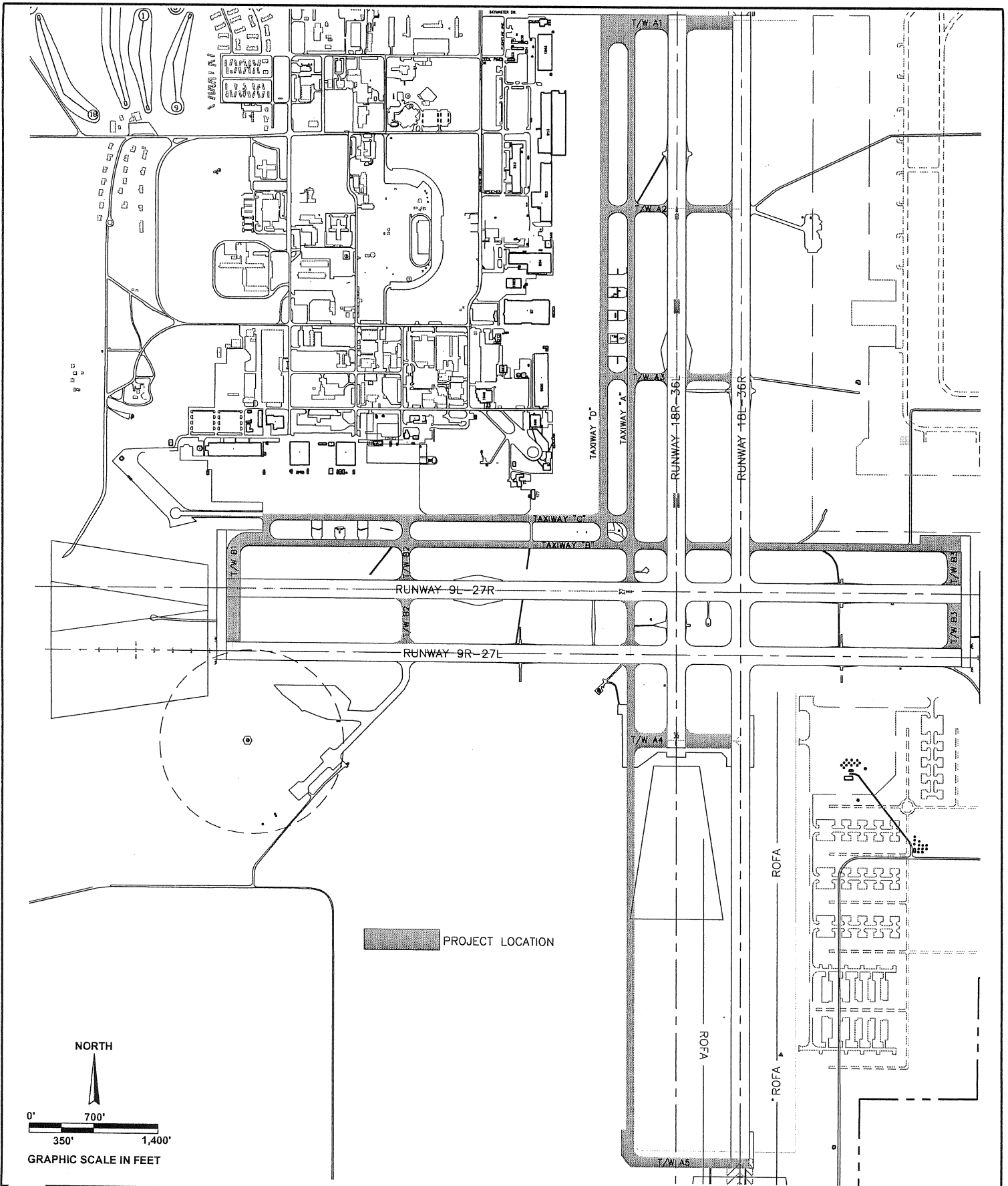
CECIL FIELD AIRPORT



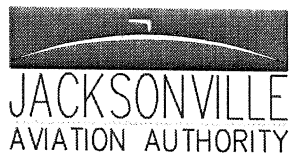
PROJECT #41

AIRPORT SECURITY IMPROVEMENTS - PHASE I

CECIL FIELD AIRPORT

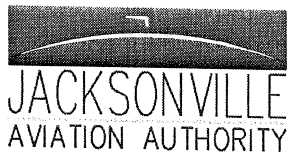
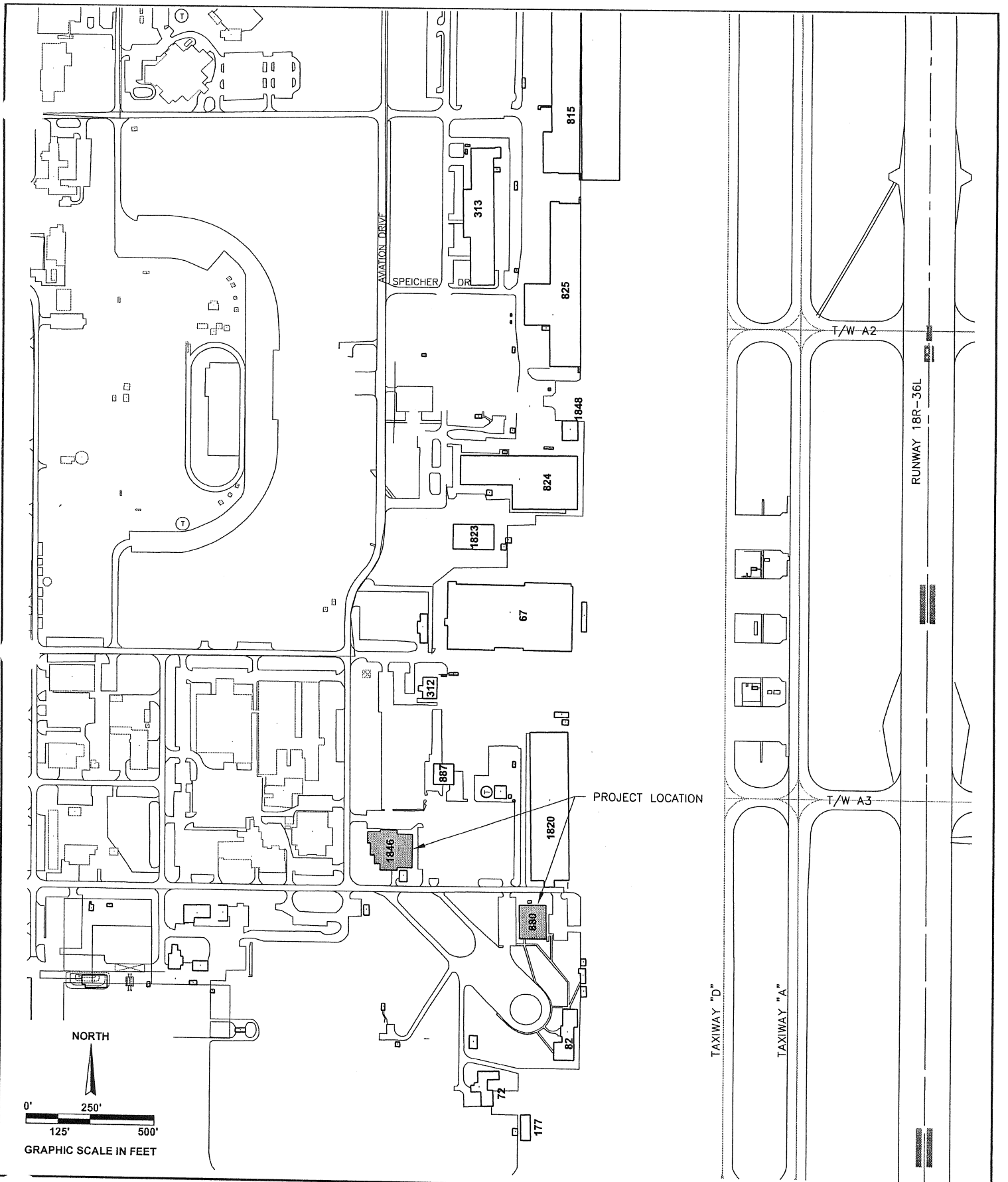


PROJECT LOCATION



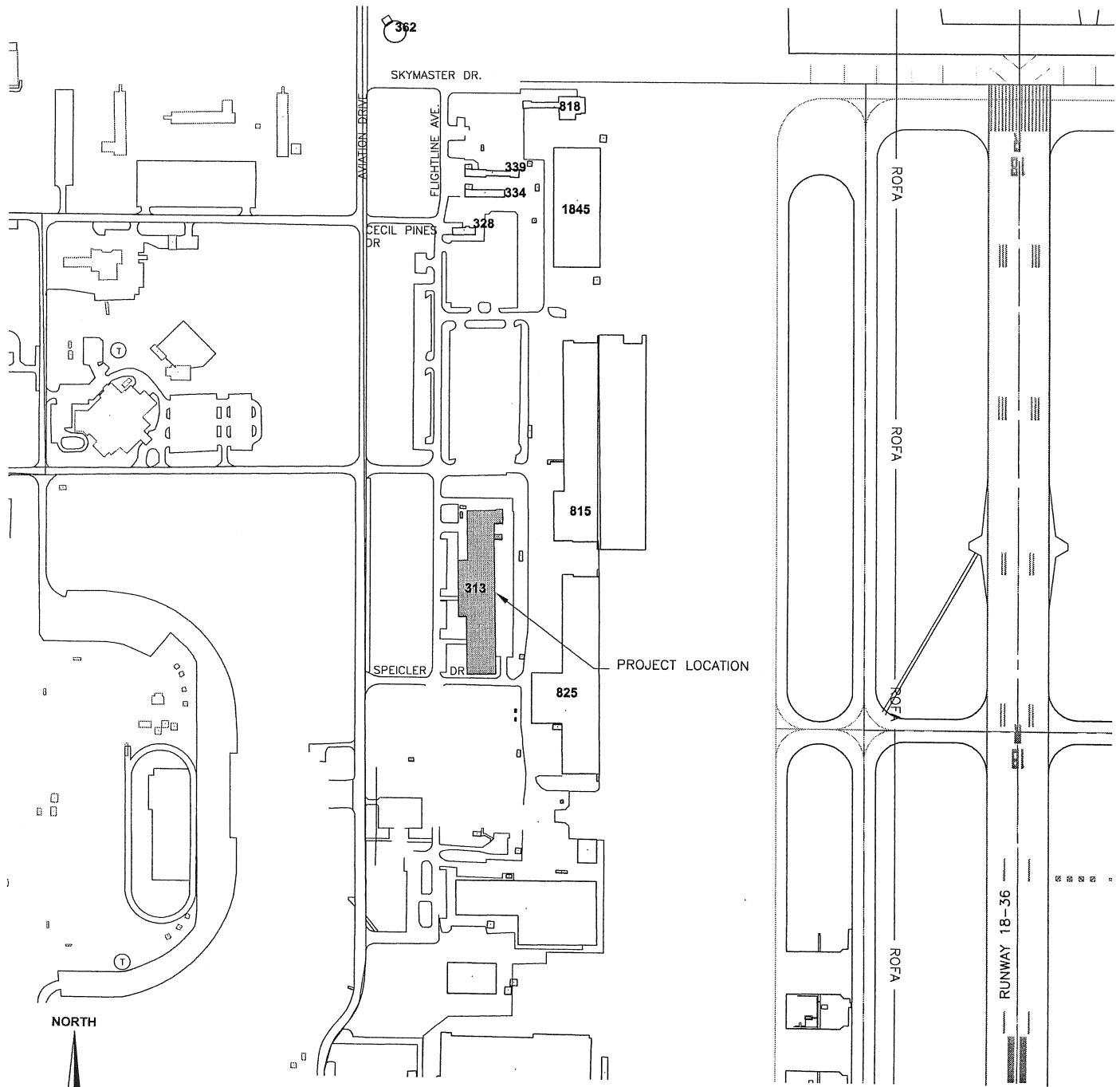
PROJECT #42
REHABILITATE AND REMARK TAXIWAY SURFACES

CECIL FIELD AIRPORT

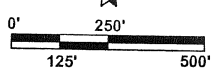


PROJECT #43
REHABILITATE BUILDING 1846
AND 880 ROOF
REPLACEMENT

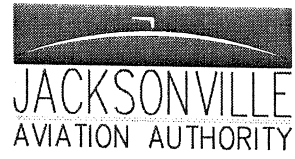
CECIL FIELD AIRPORT



NORTH

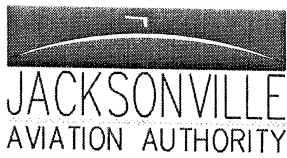
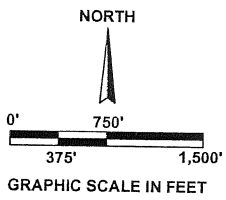
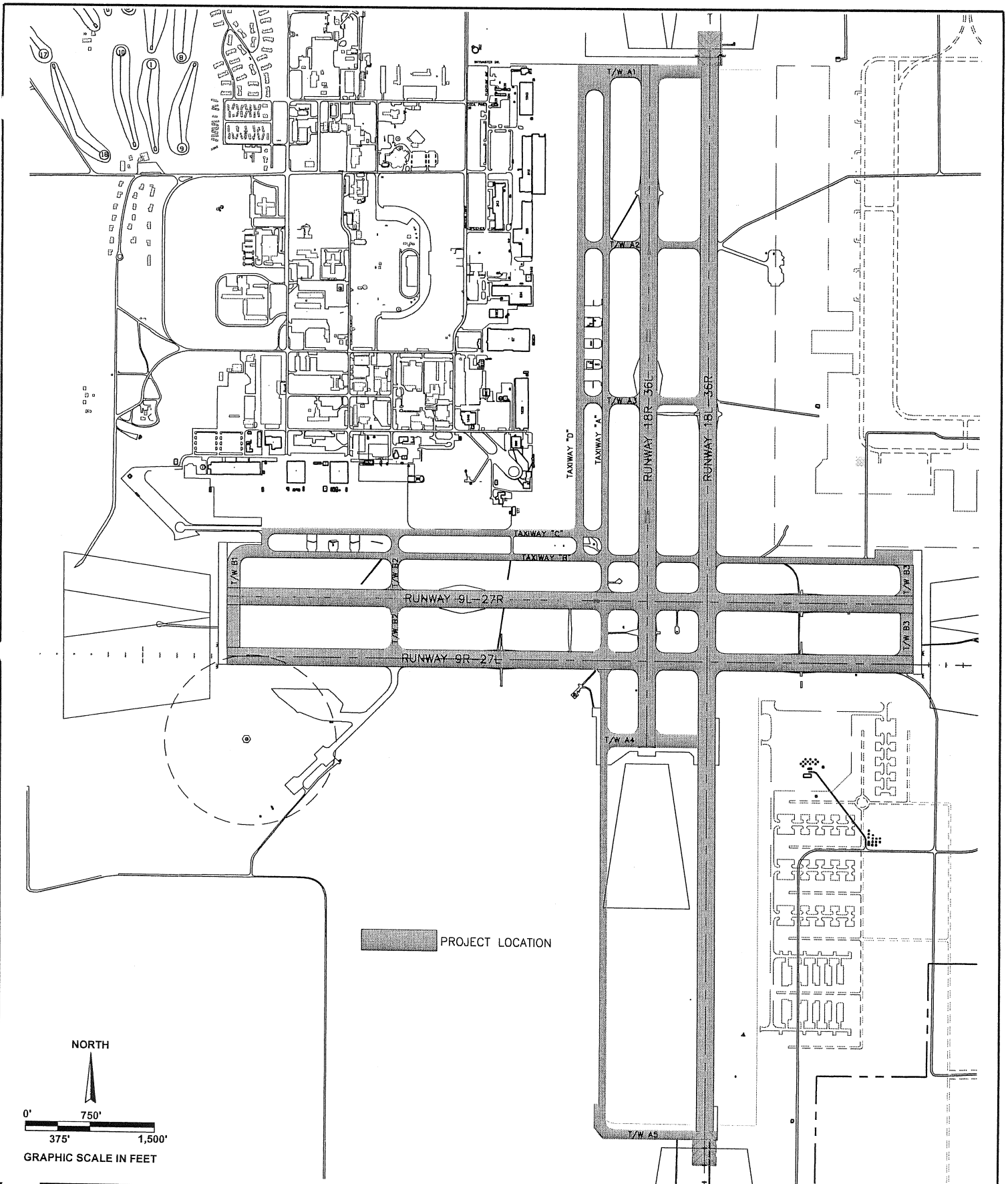


GRAPHIC SCALE IN FEET



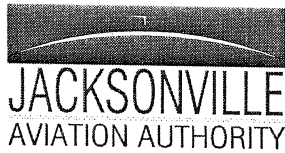
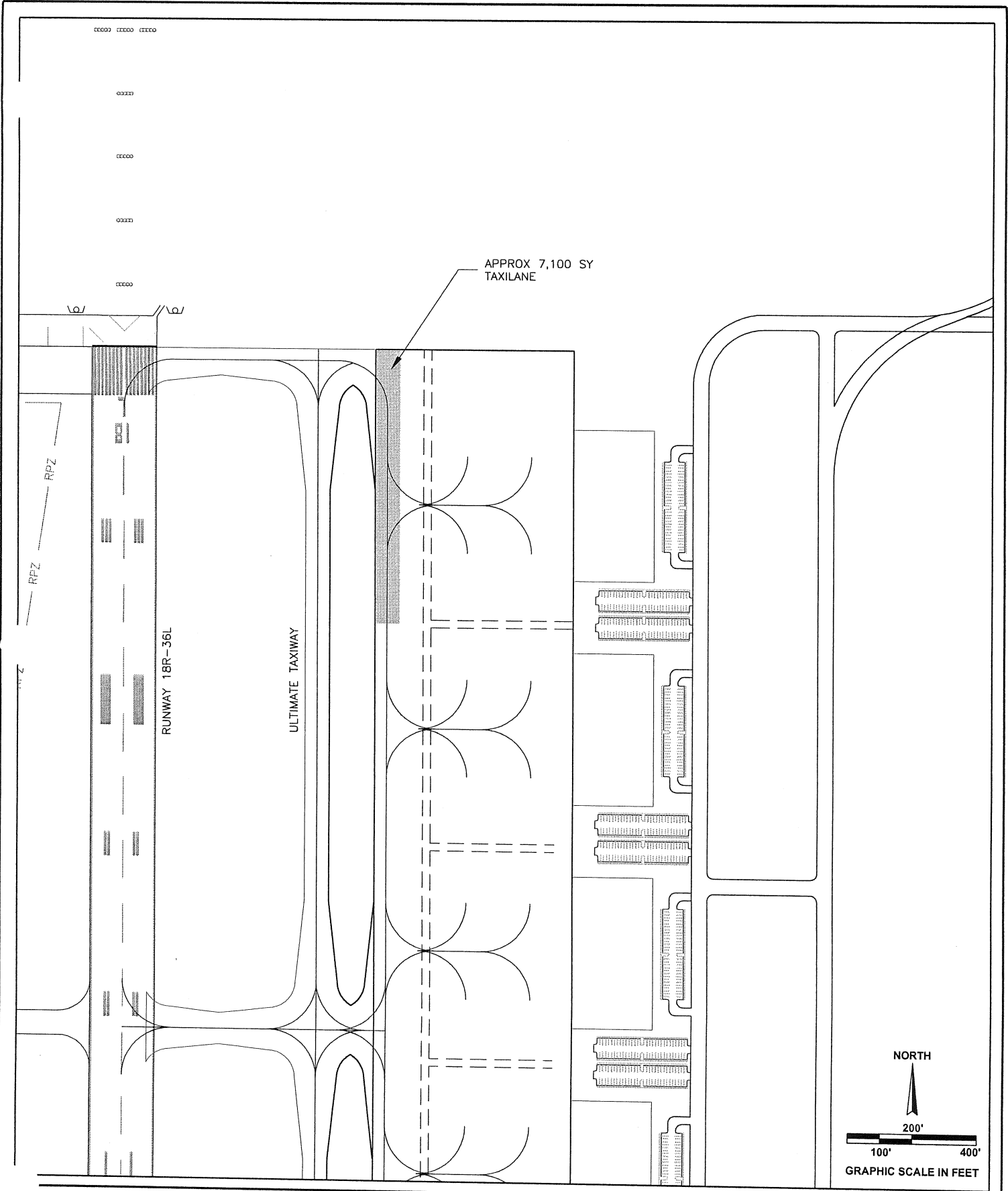
PROJECT #45
REHABILITATE BUILDING 313,
ROOF REPLACEMENT

CECIL FIELD AIRPORT



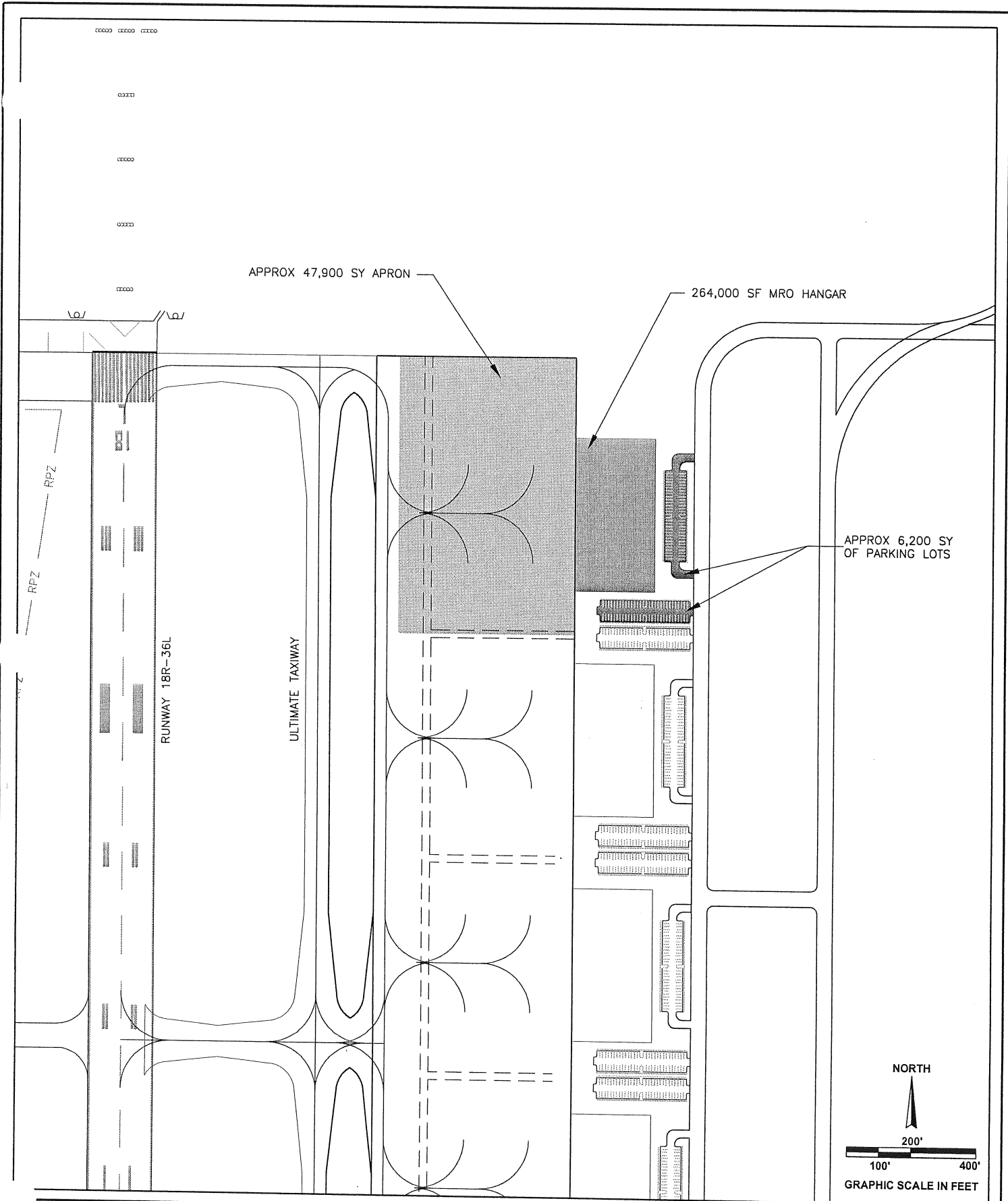
PROJECT #46
REJUVENATION OF AIRPORT PAVEMENT

CECIL FIELD AIRPORT



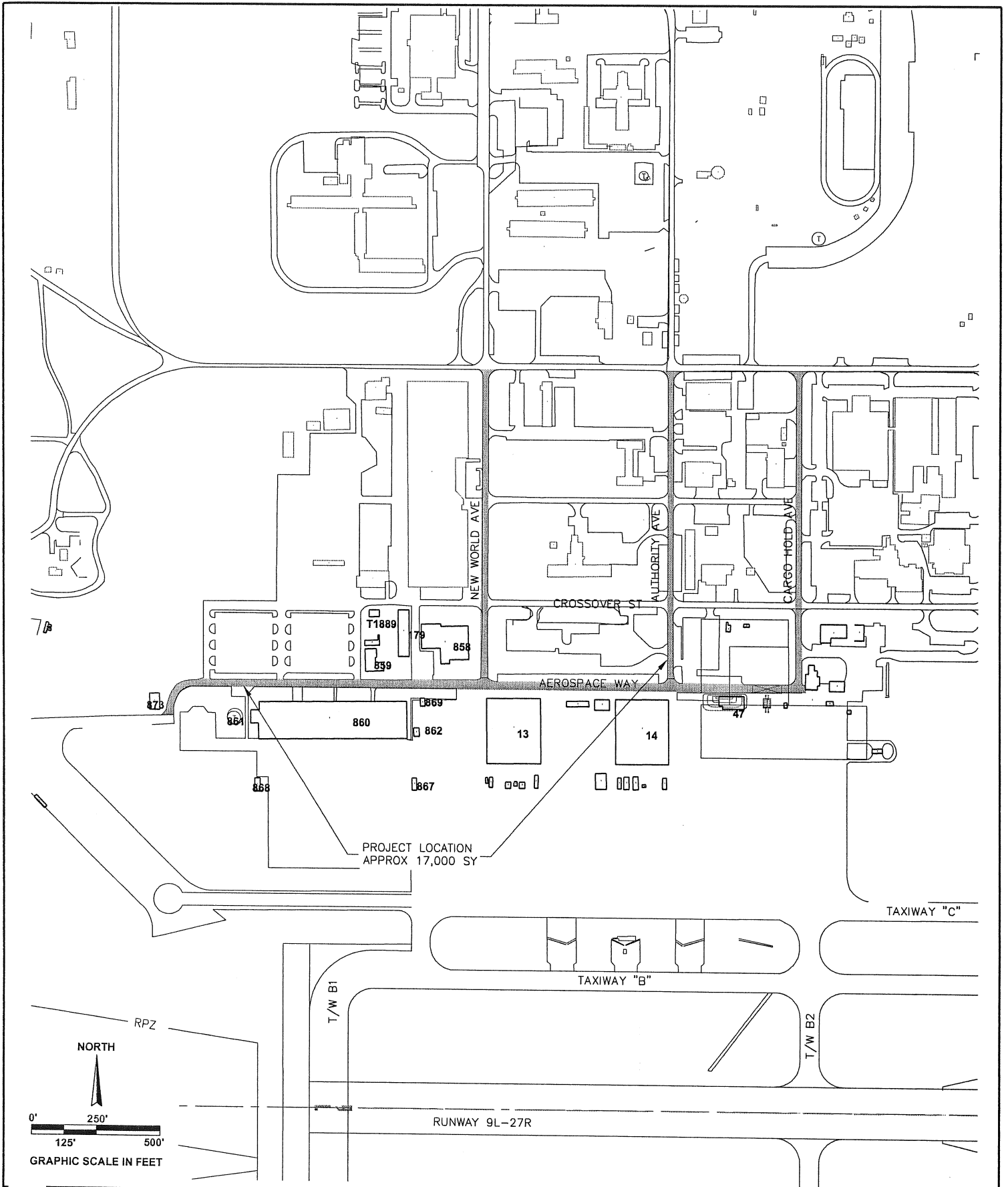
PROJECT #47
MID-FIELD TAXILANE -
PHASE I

CECIL FIELD AIRPORT

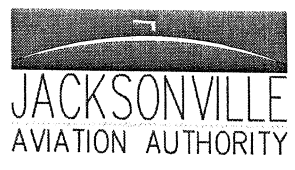
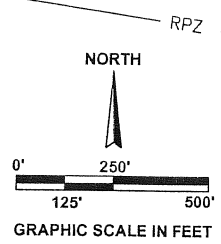


PROJECT #48
MID-FIELD HANGAR, APRON
& PARKING LOT - PHASE I

CECIL FIELD AIRPORT

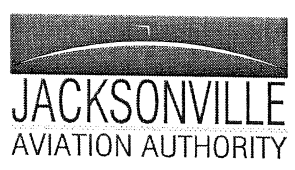
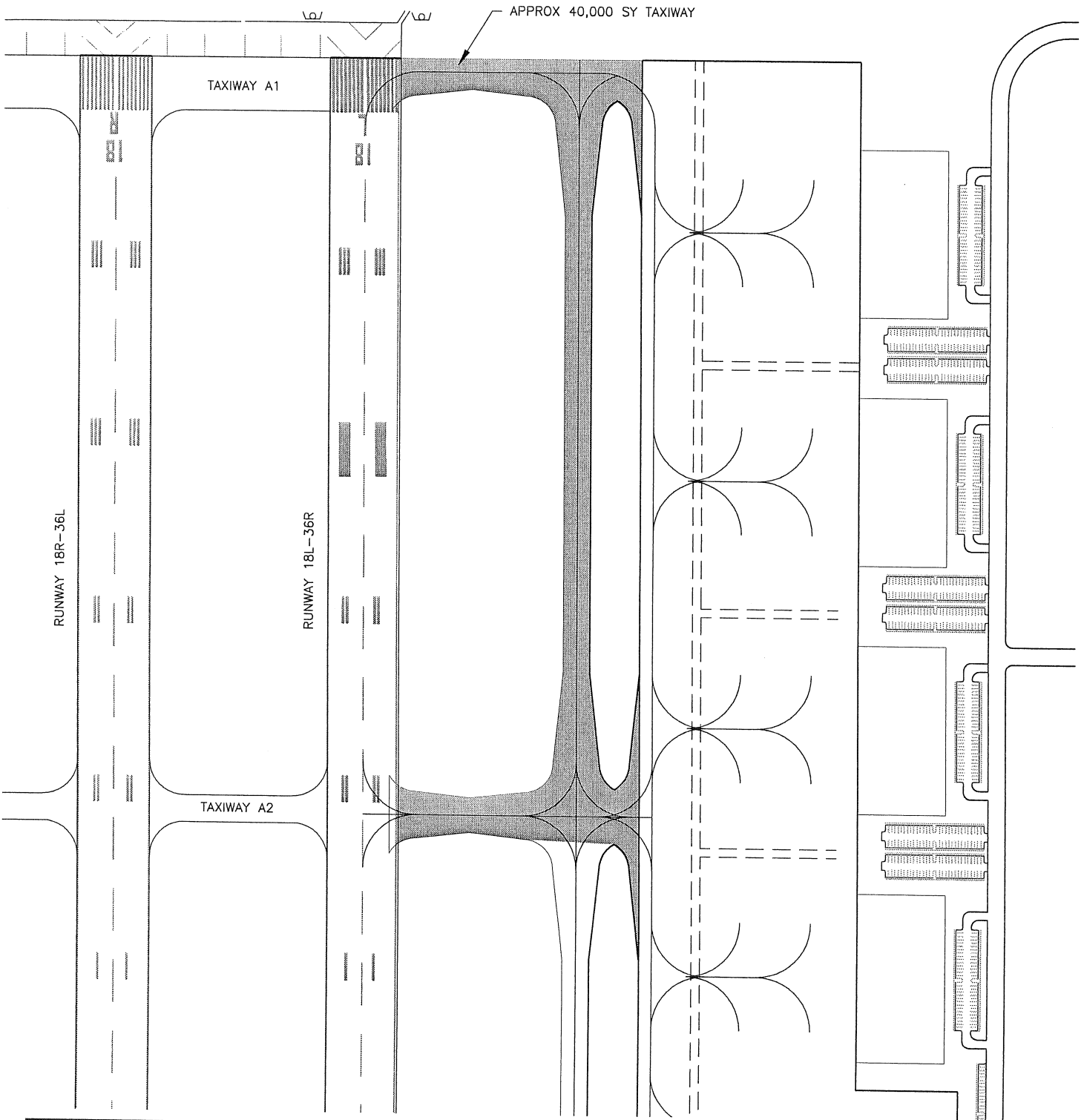
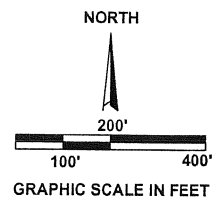


PROJECT LOCATION
APPROX 17,000 SY



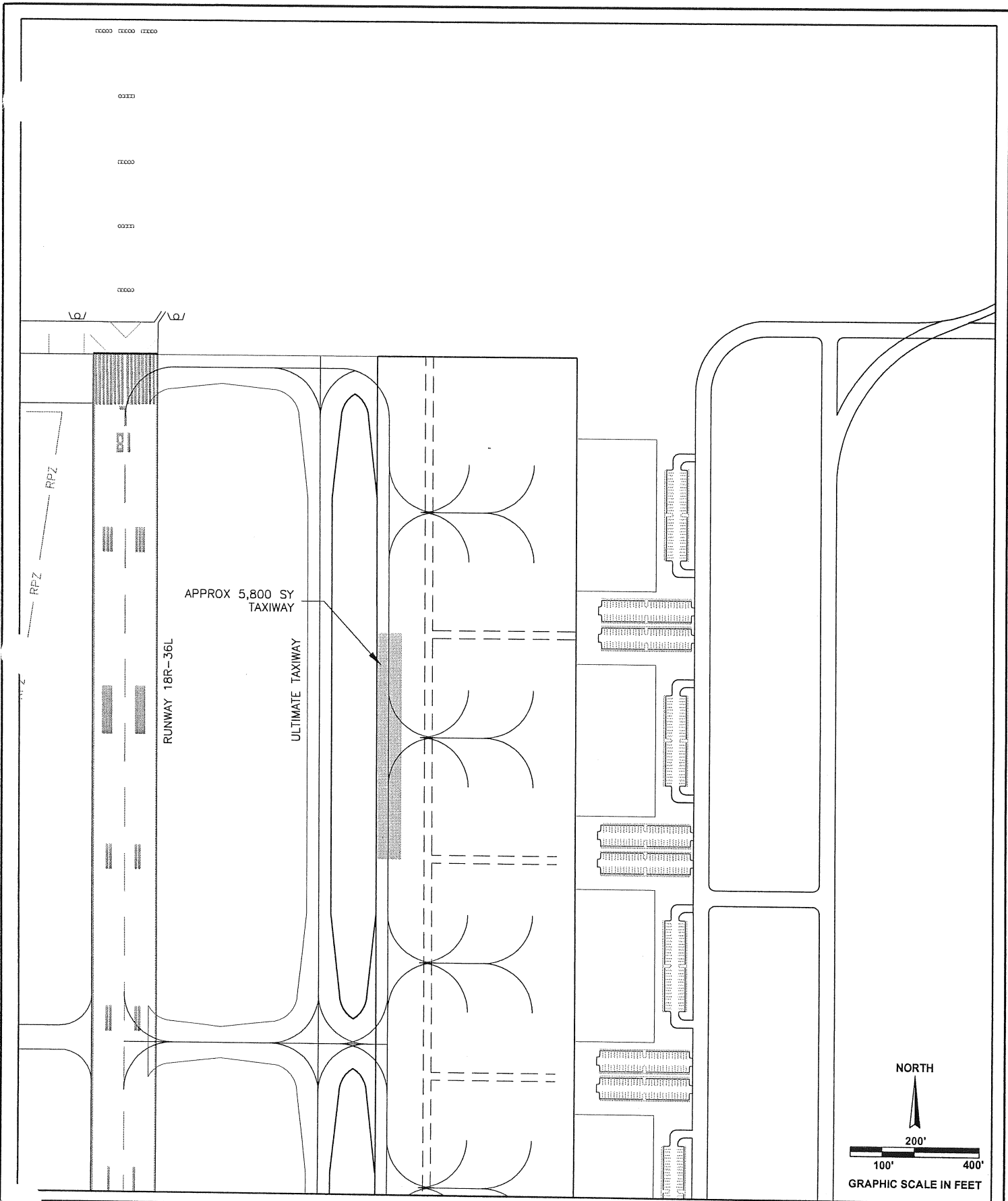
PROJECT #49
AIRPORT ROADWAY
PAVEMENT REHABILITATION

CECIL FIELD AIRPORT



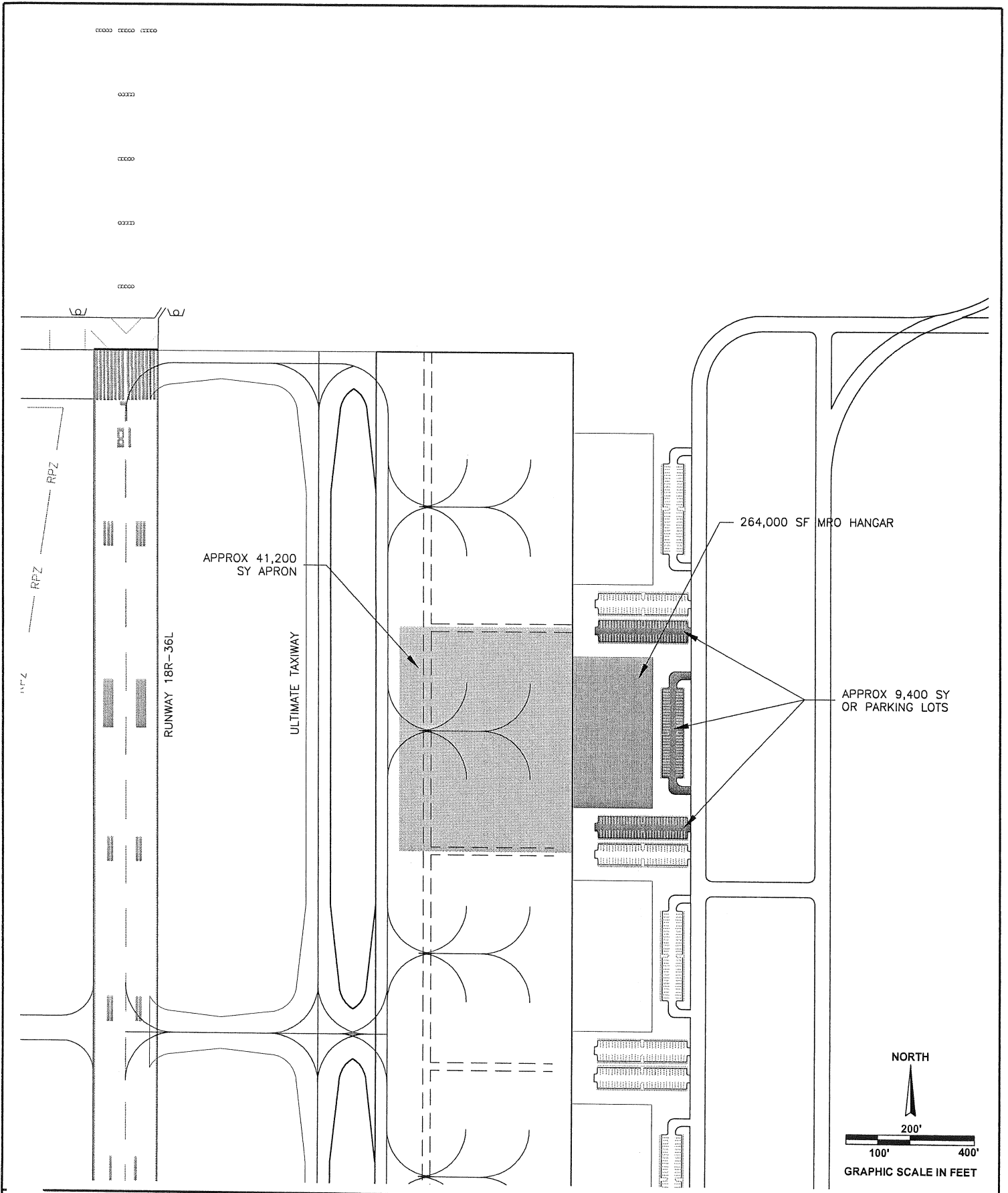
PROJECT #52
MID-FIELD PARALLEL TAXIWAY - PHASE I

CECIL FIELD AIRPORT



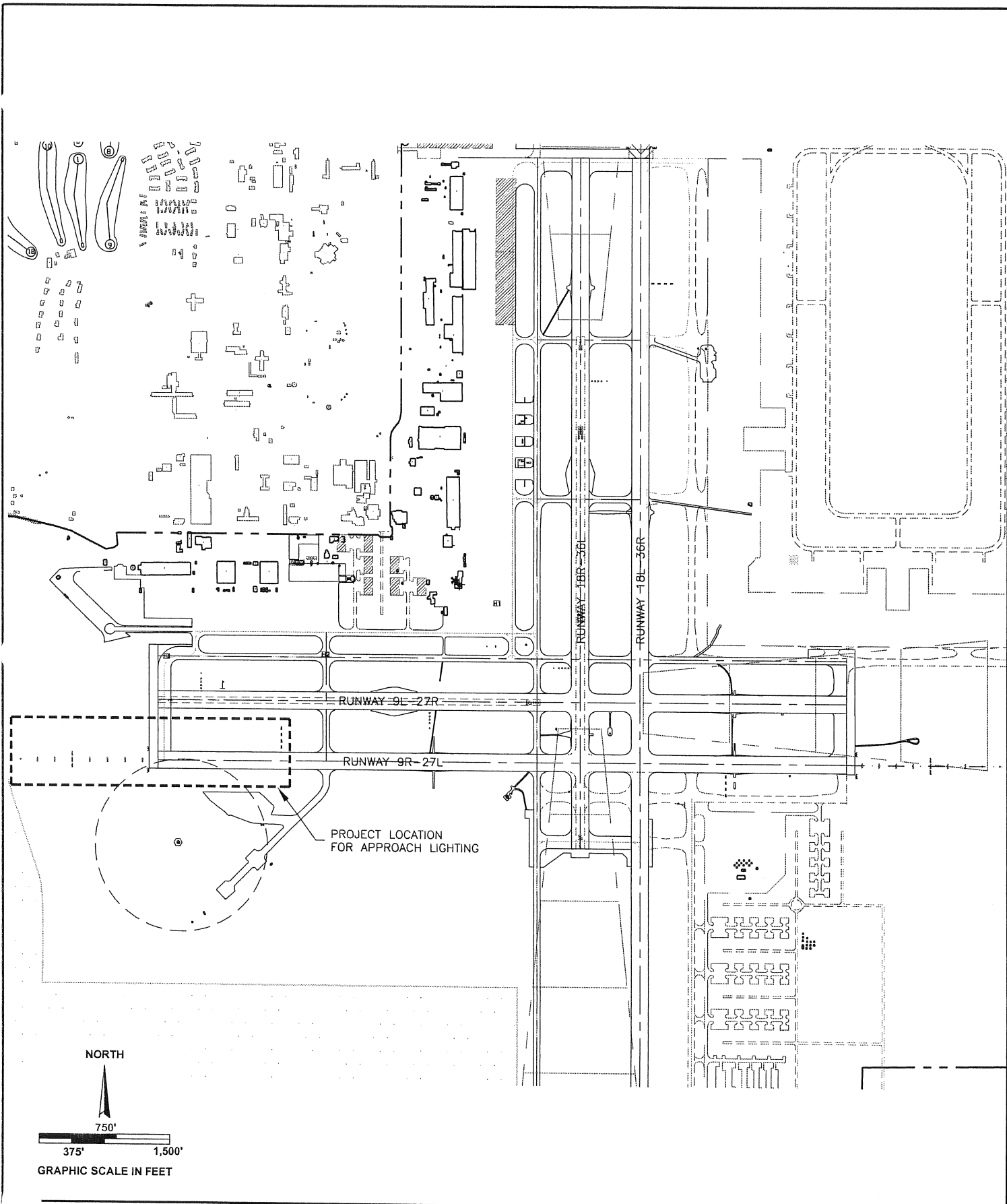
PROJECT #54
MID-FIELD TAXILANE -
PHASE II

CECIL FIELD AIRPORT



PROJECT #55
MID-FIELD HANGAR, APRON & PARKING LOT - PHASE II

CECIL FIELD AIRPORT



NORTH

750'

375'

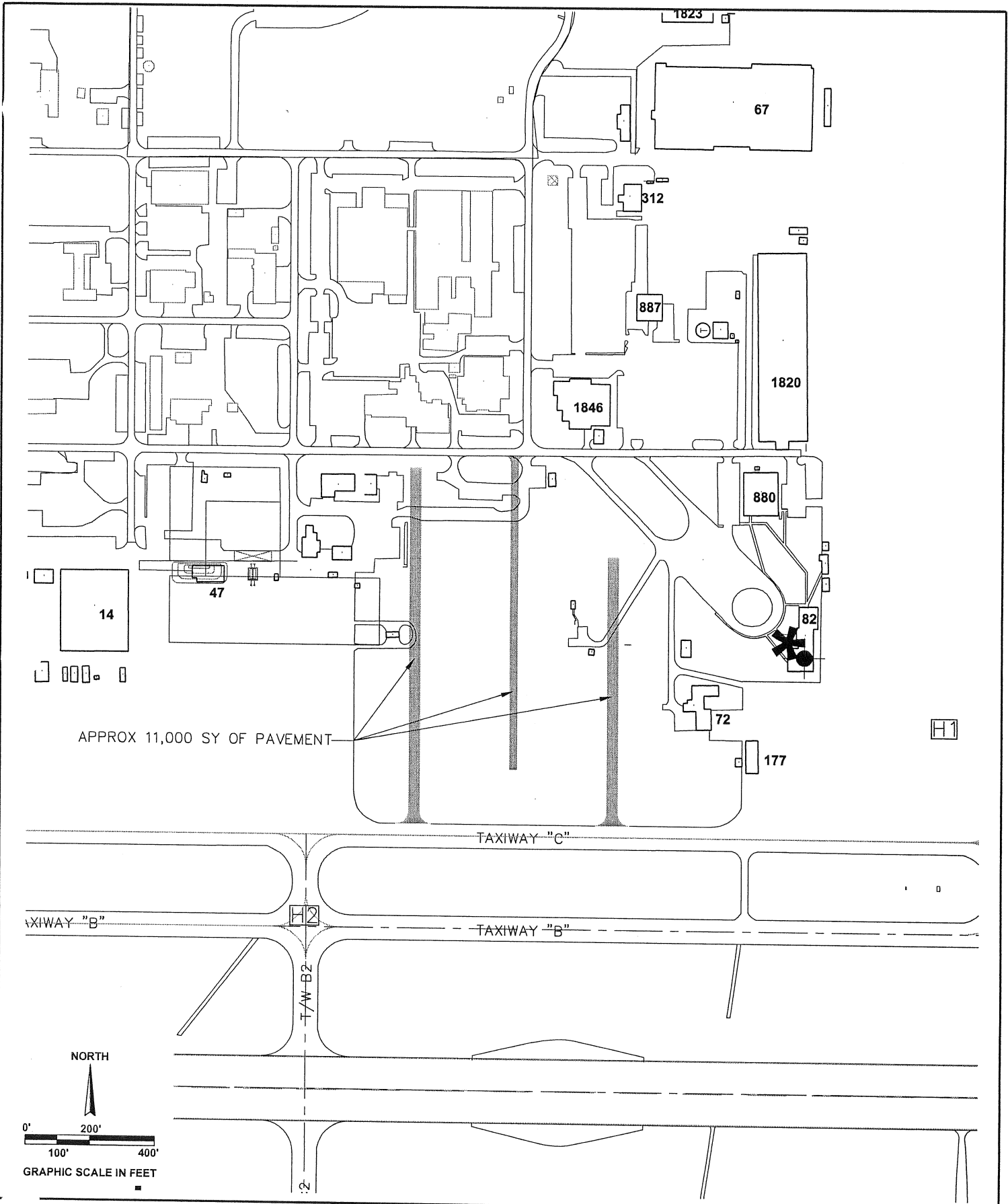
1,500'

GRAPHIC SCALE IN FEET



PROJECT #57
INSTALLATION ILS & MALSR
RUNWAY 9R

CECIL FIELD AIRPORT

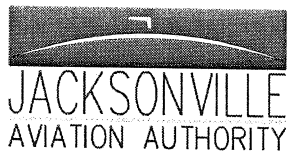


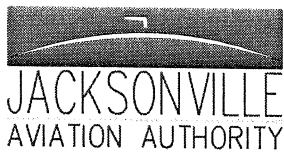
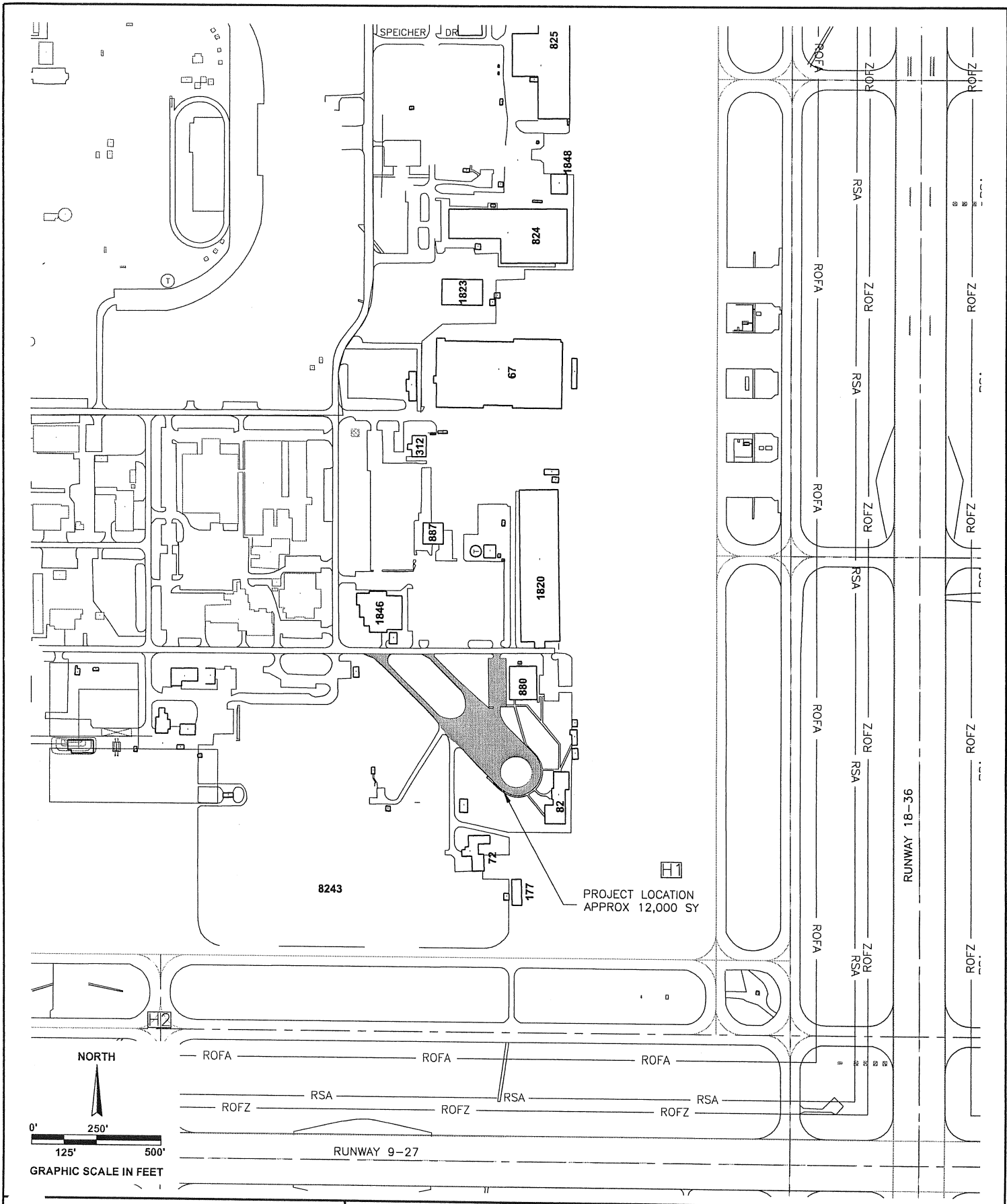
APPROX 11,000 SY OF PAVEMENT

PROJECT #58

**NORTHWEST
INFRASTRUCTURE
IMPROVEMENT**

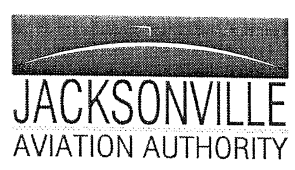
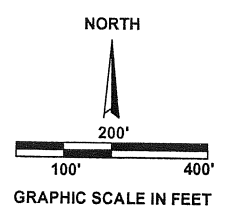
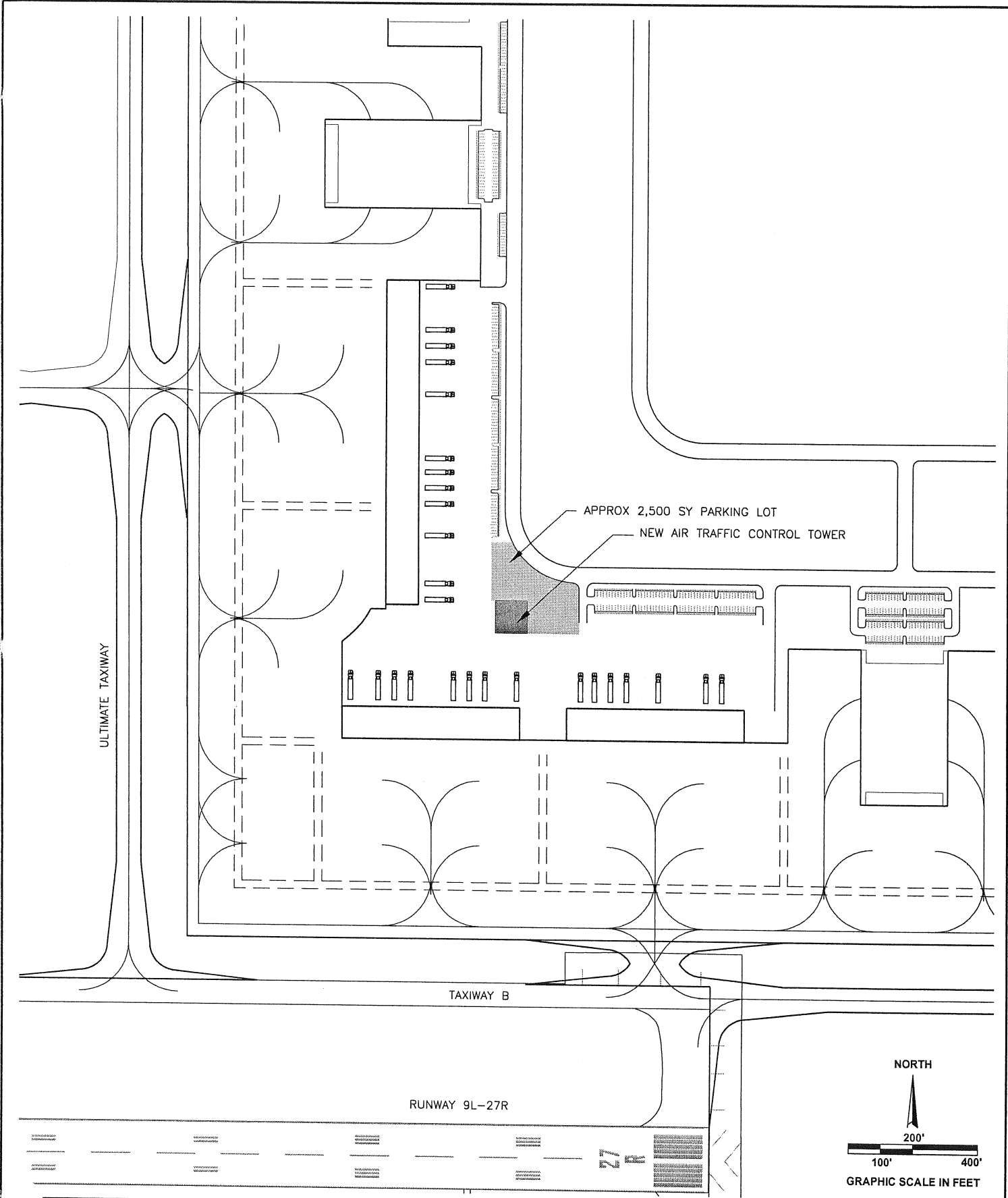
CECIL FIELD AIRPORT





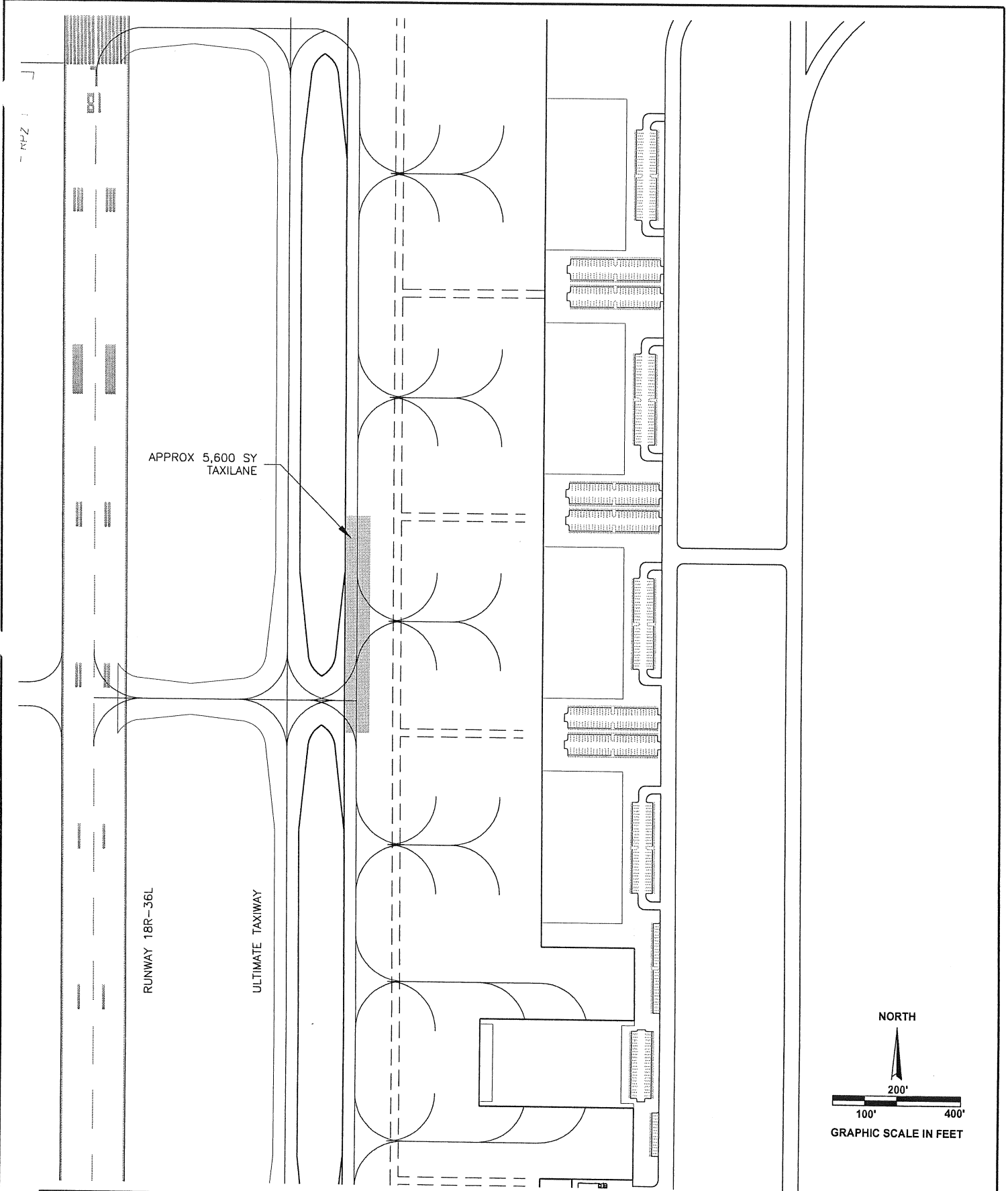
PROJECT #59
REHABILITATE TERMINAL
ROAD AND PARKING LOT

CECIL FIELD AIRPORT



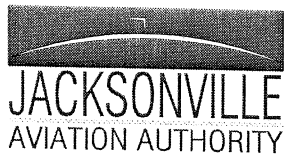
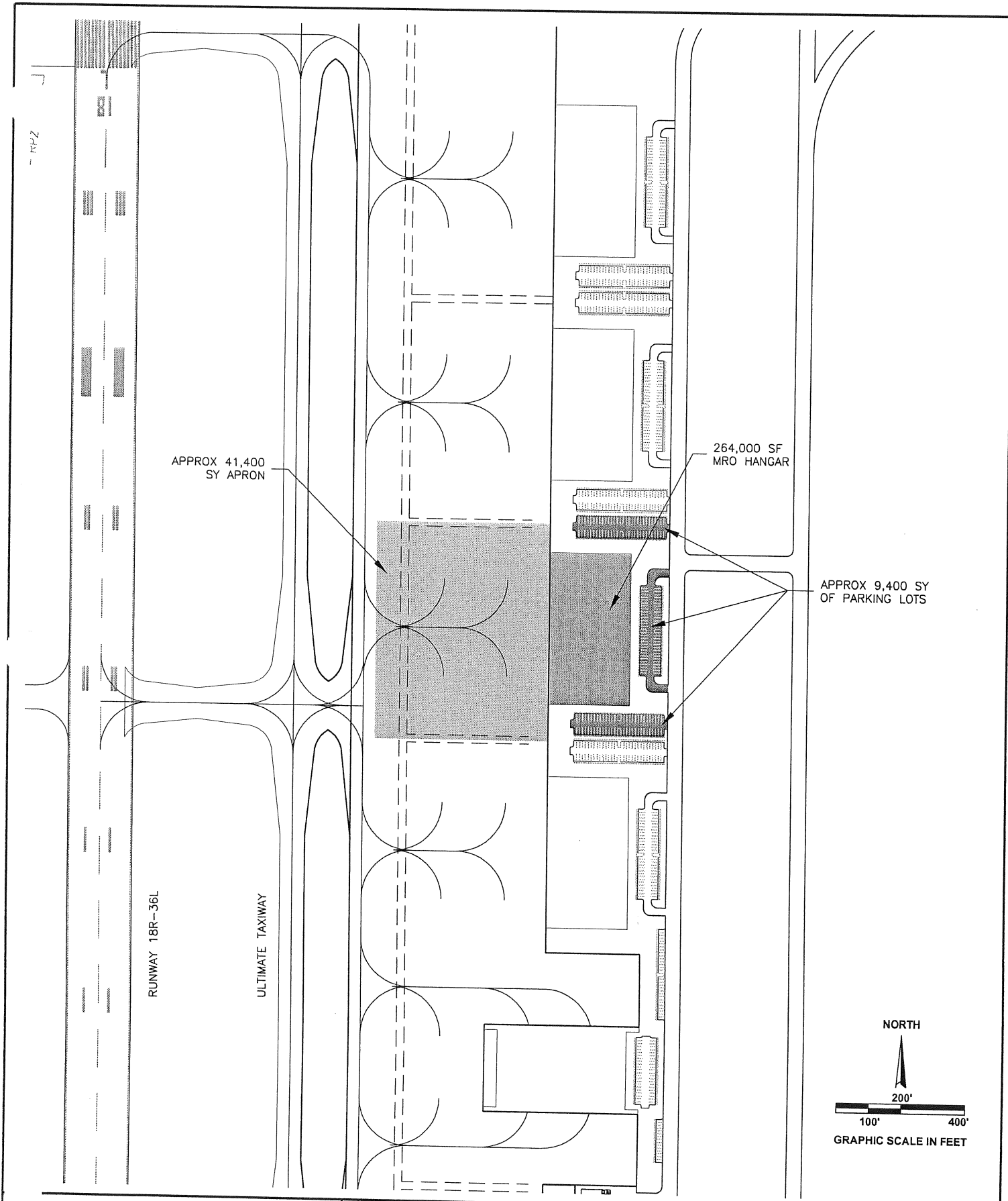
PROJECT #60
NEW AIR TRAFFIC CONTROL TOWER

CECIL FIELD AIRPORT



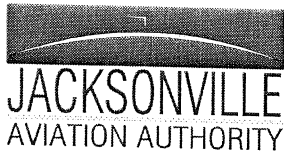
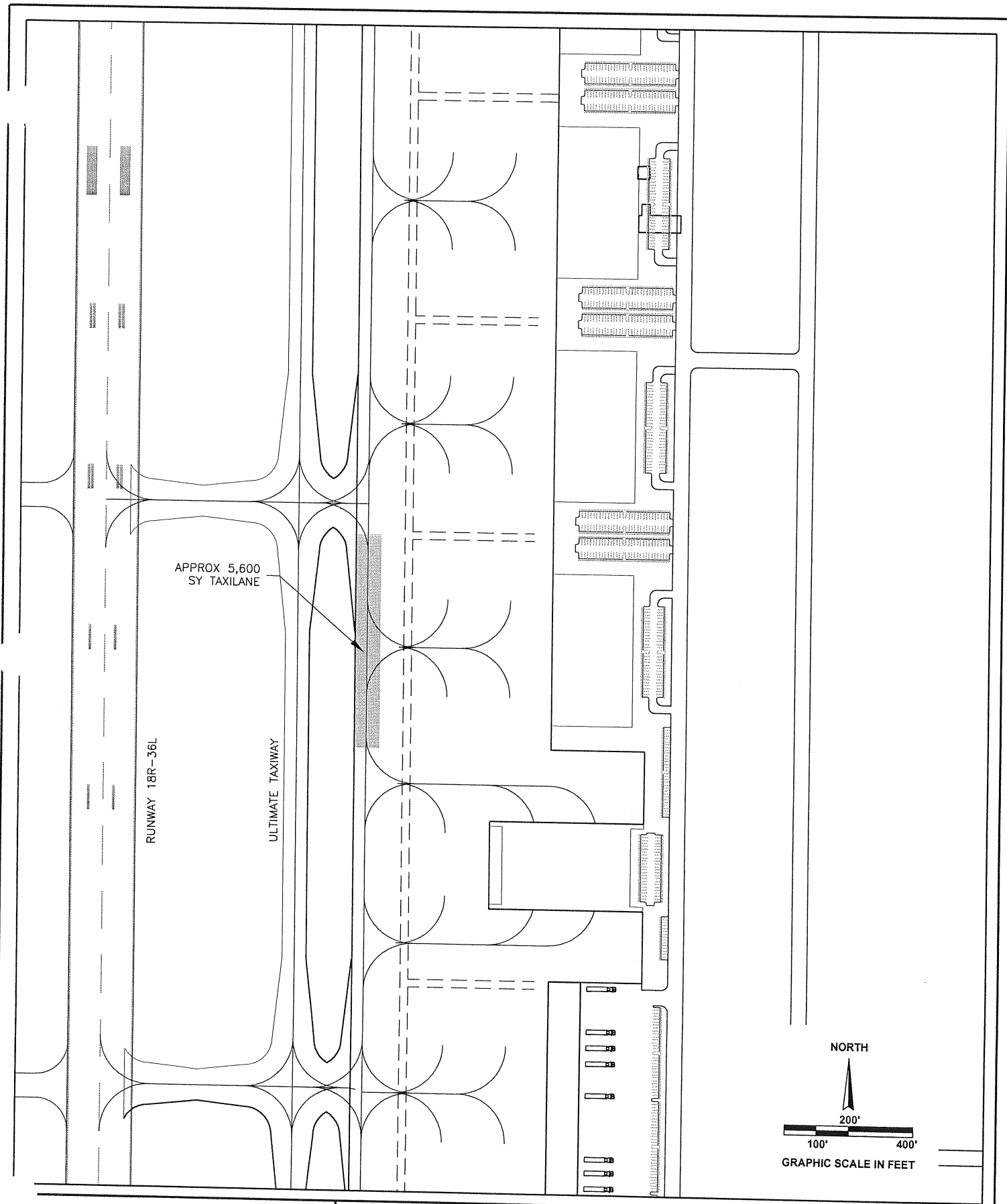
PROJECT #61
MID-FIELD TAXILANE -
PHASE III

CECIL FIELD AIRPORT



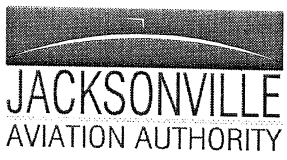
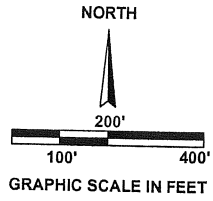
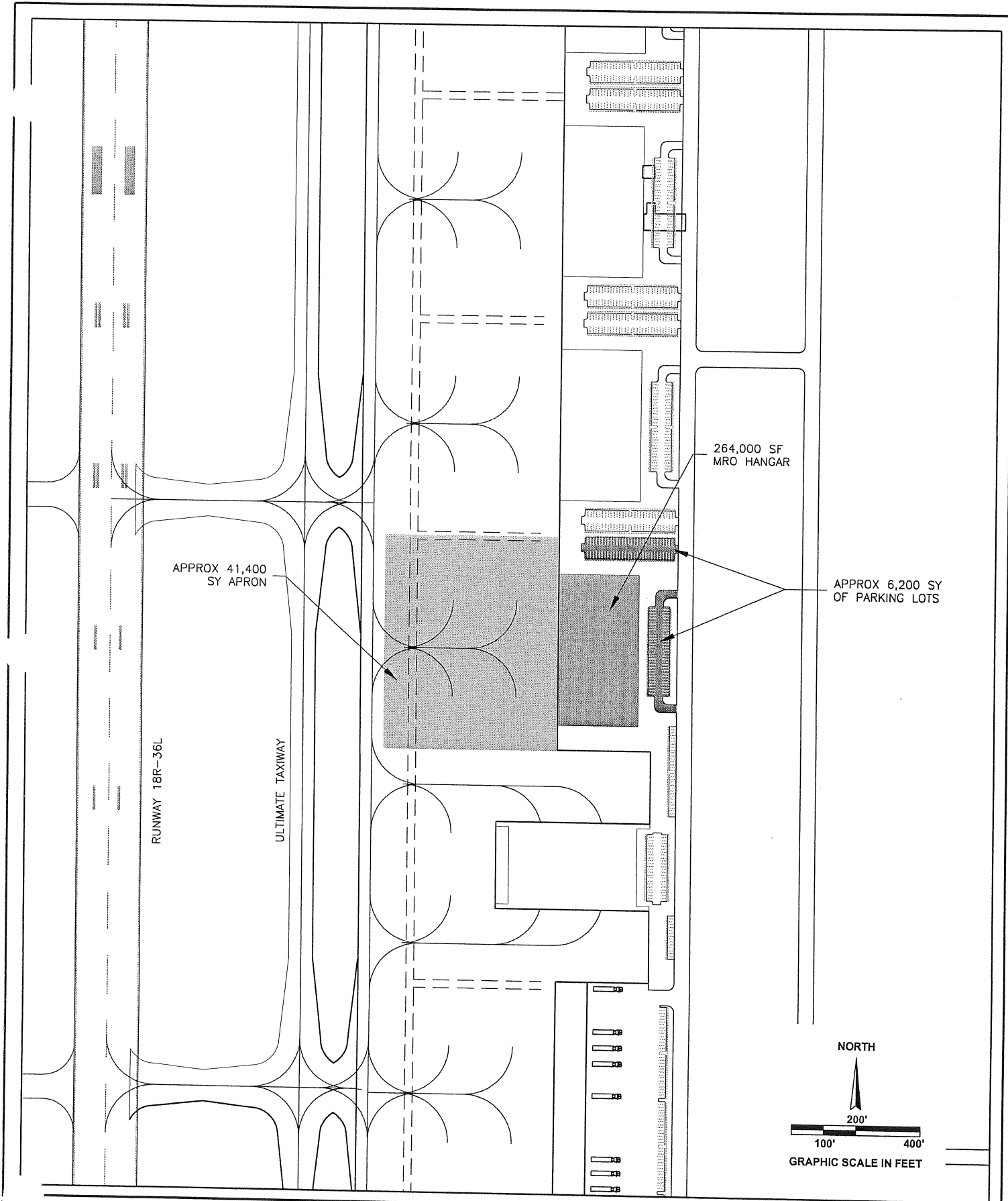
PROJECT #62
MID-FIELD HANGAR, APRON
& PARKING LOT - PHASE III

CECIL FIELD AIRPORT



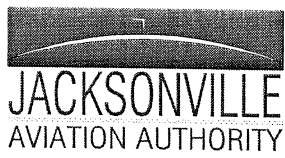
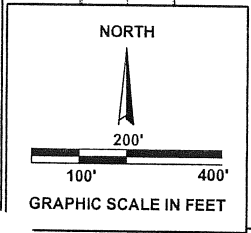
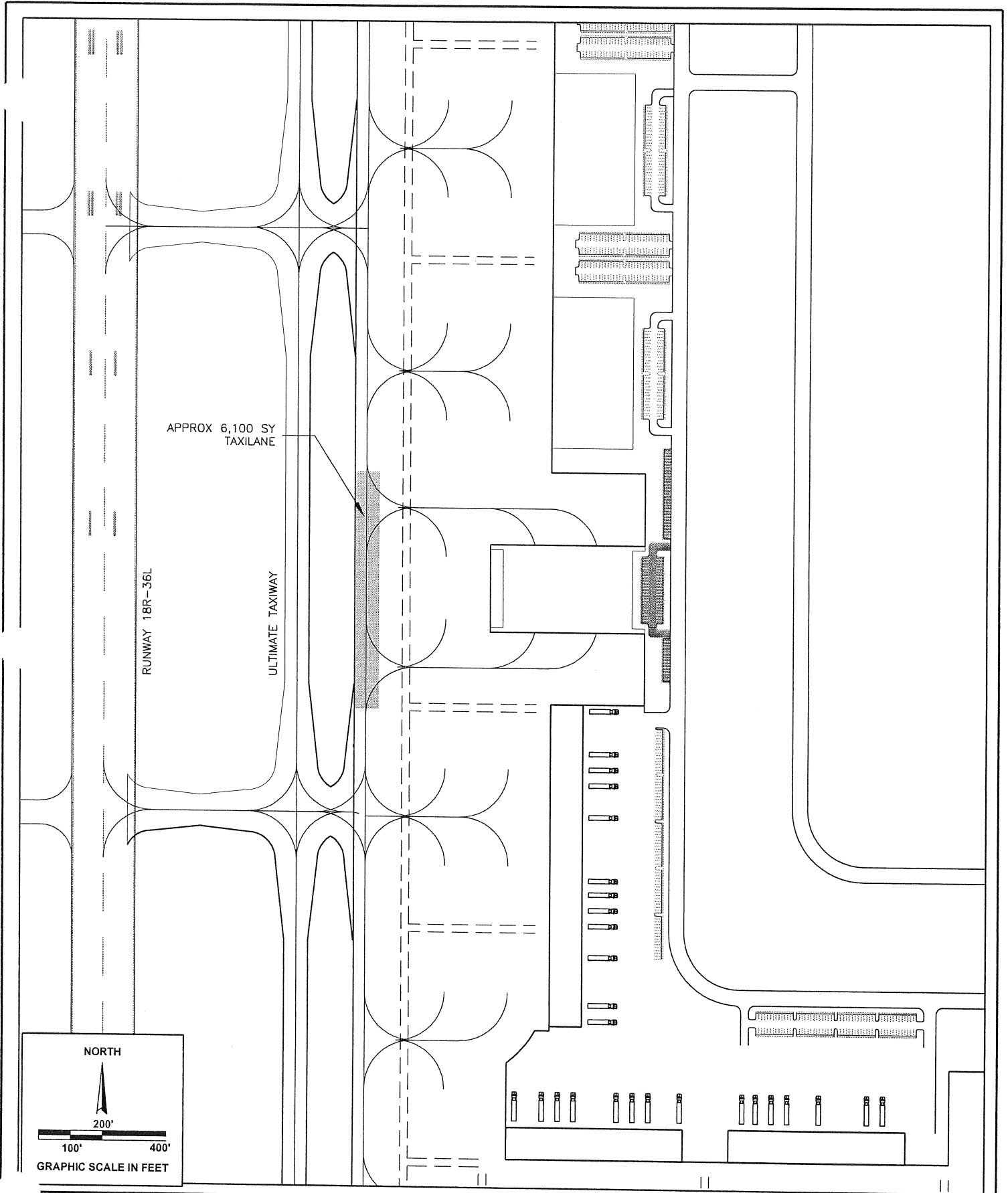
PROJECT #63
MID-FIELD TAXILANE -
PHASE IV

CECIL FIELD AIRPORT



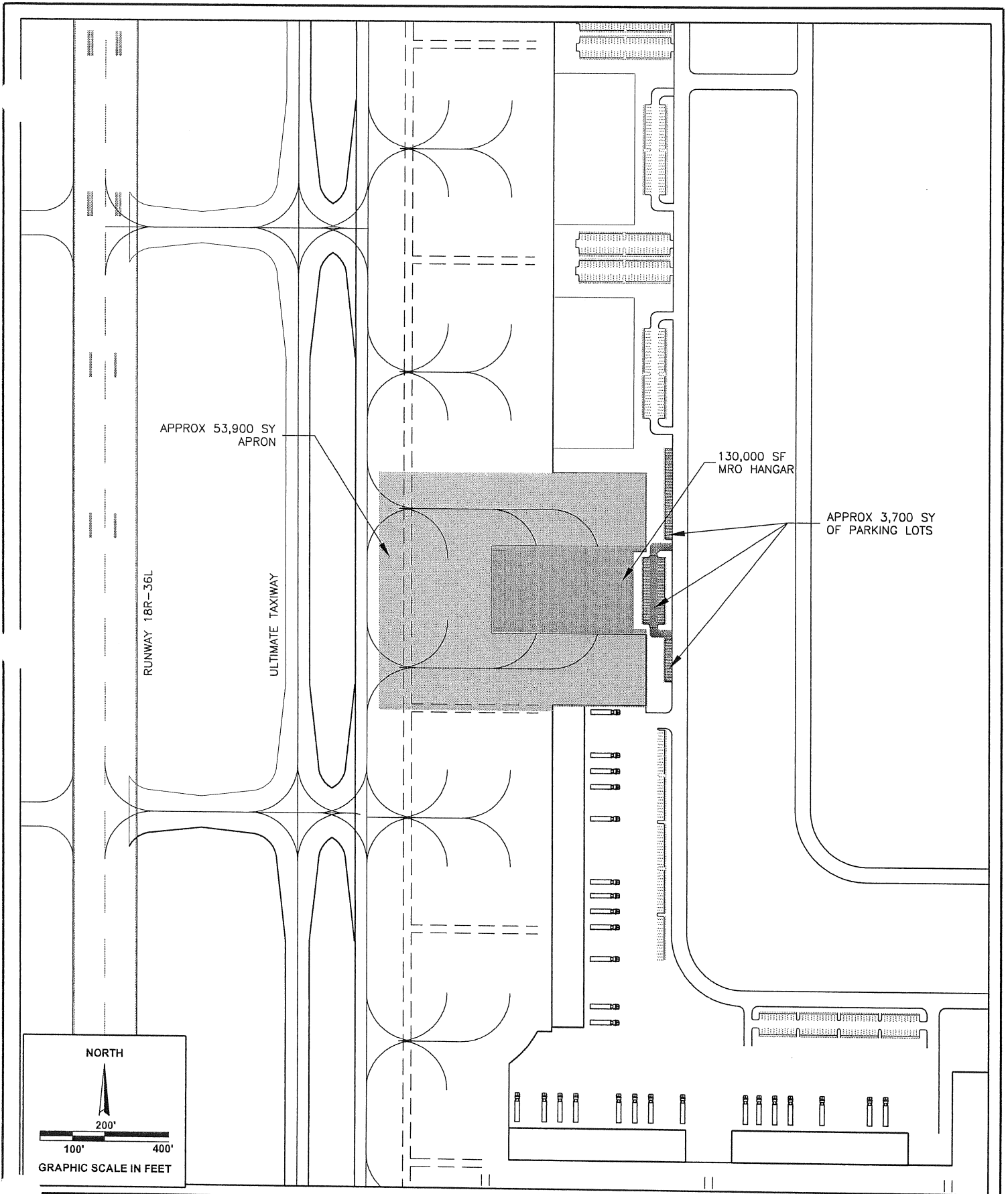
PROJECT #64
MID-FIELD HANGAR, APRON & PARKING LOT - PHASE IV

CECIL FIELD AIRPORT



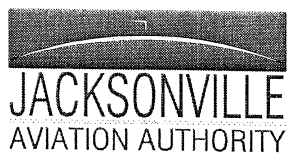
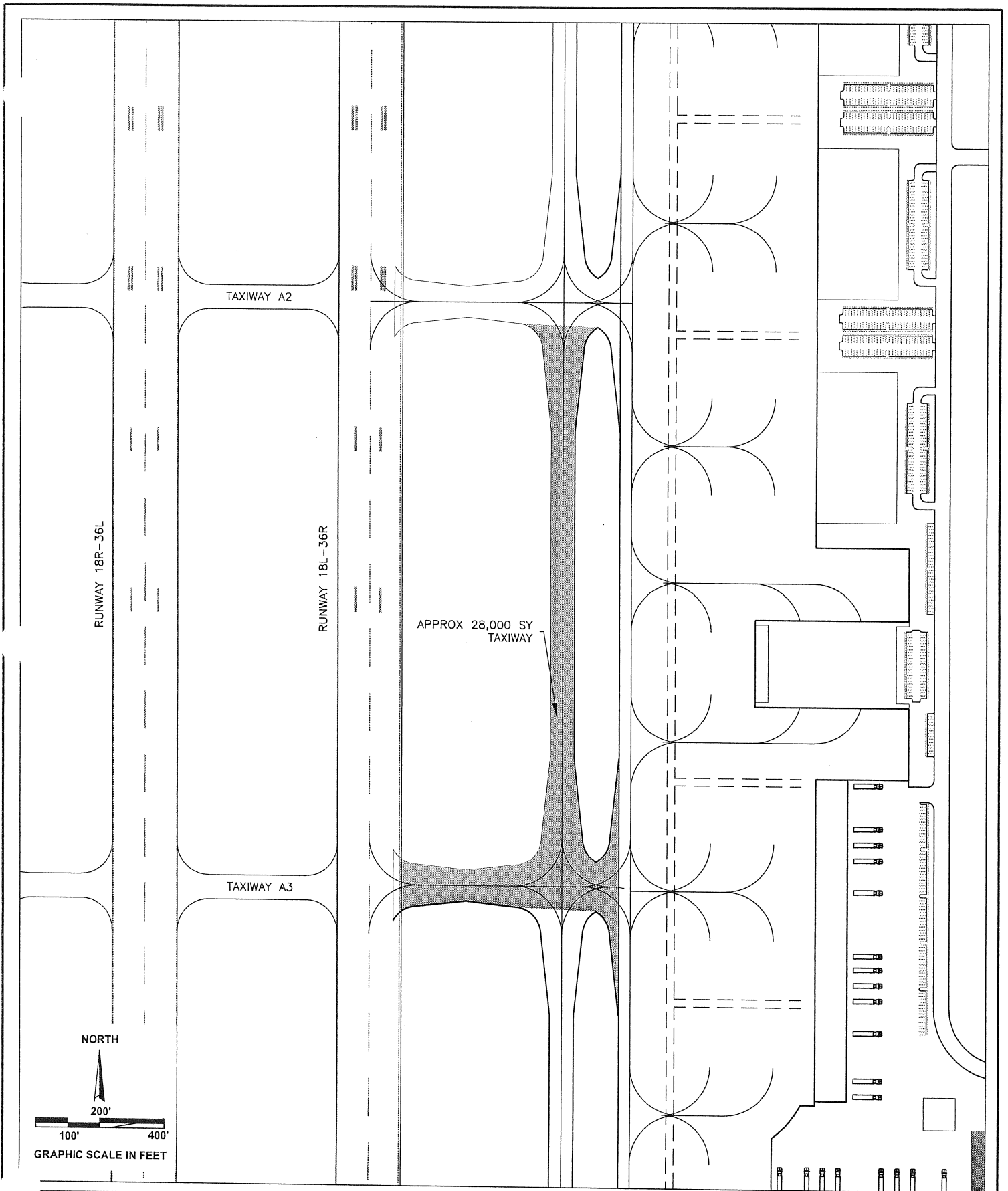
PROJECT #67
MID-FIELD TAXILANE -
PHASE V

CECIL FIELD AIRPORT



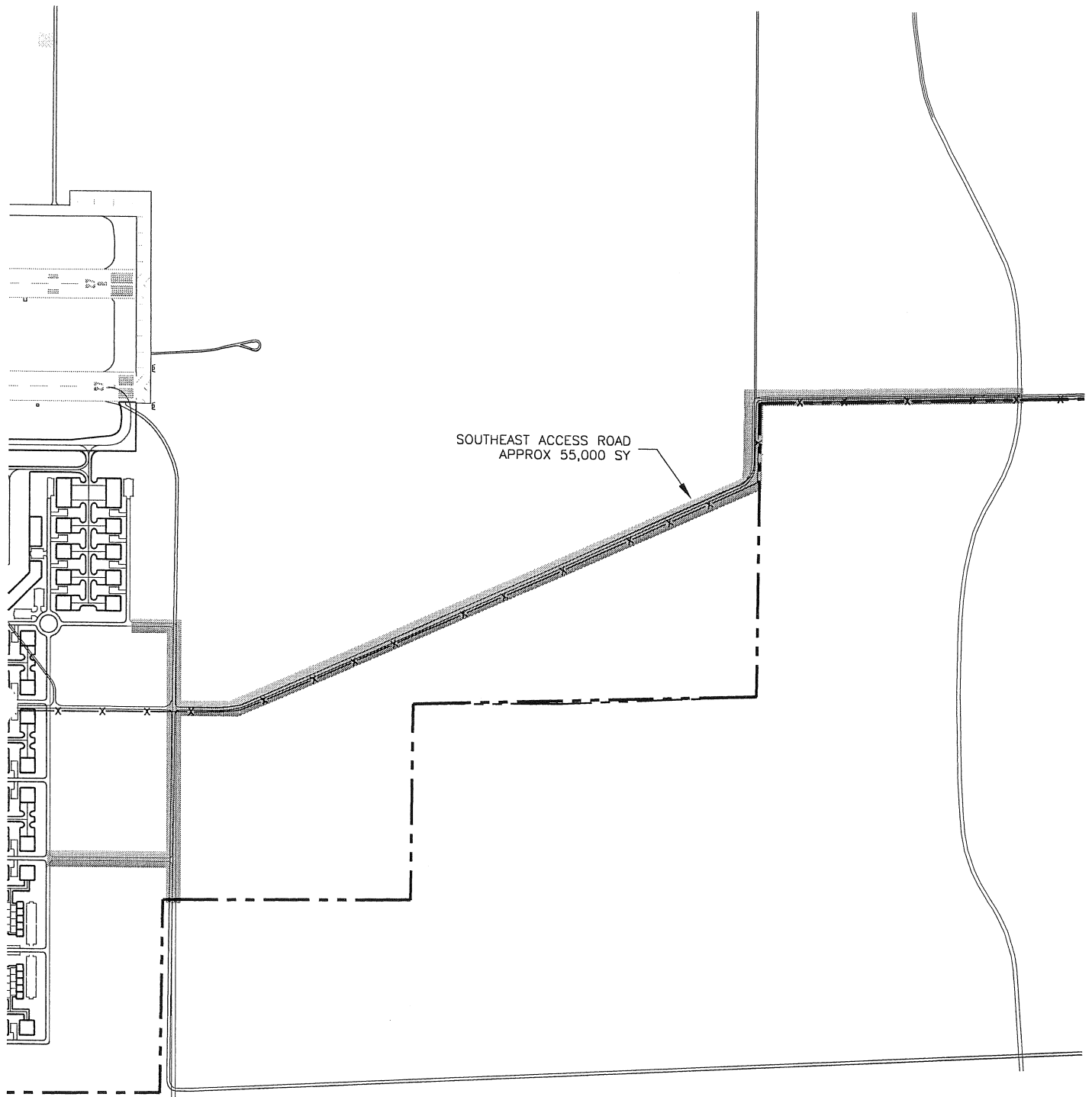
PROJECT #68
MID-FIELD HANGAR, APRON & PARKING LOT - PHASE V

CECIL FIELD AIRPORT

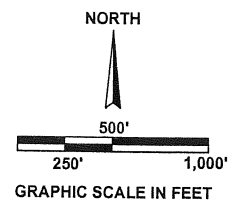


PROJECT #69
MID-FIELD PARALLEL TAXIWAY - PHASE II

CECIL FIELD AIRPORT

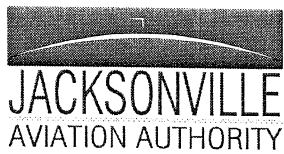
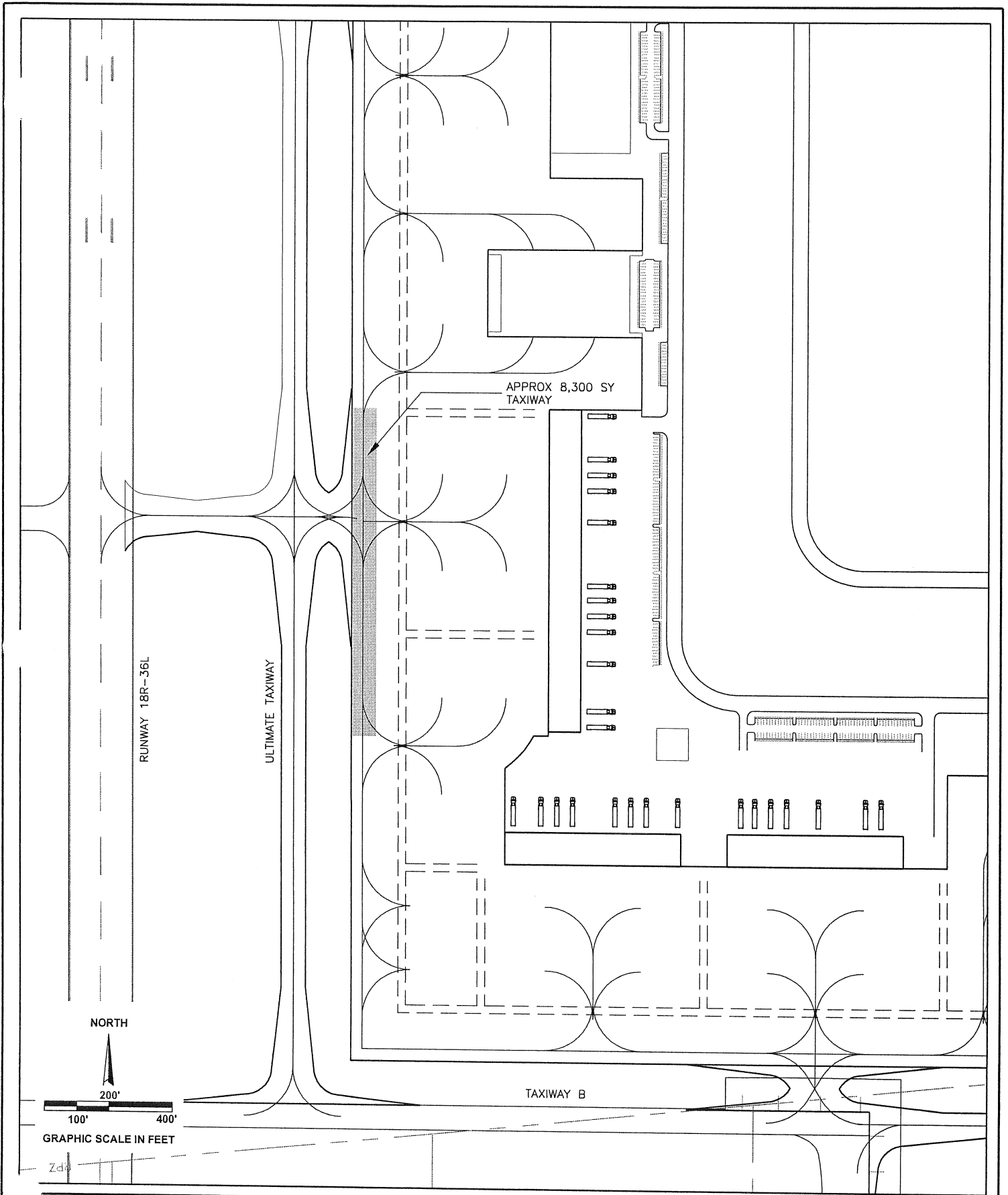


SOUTHEAST ACCESS ROAD
APPROX 55,000 SY



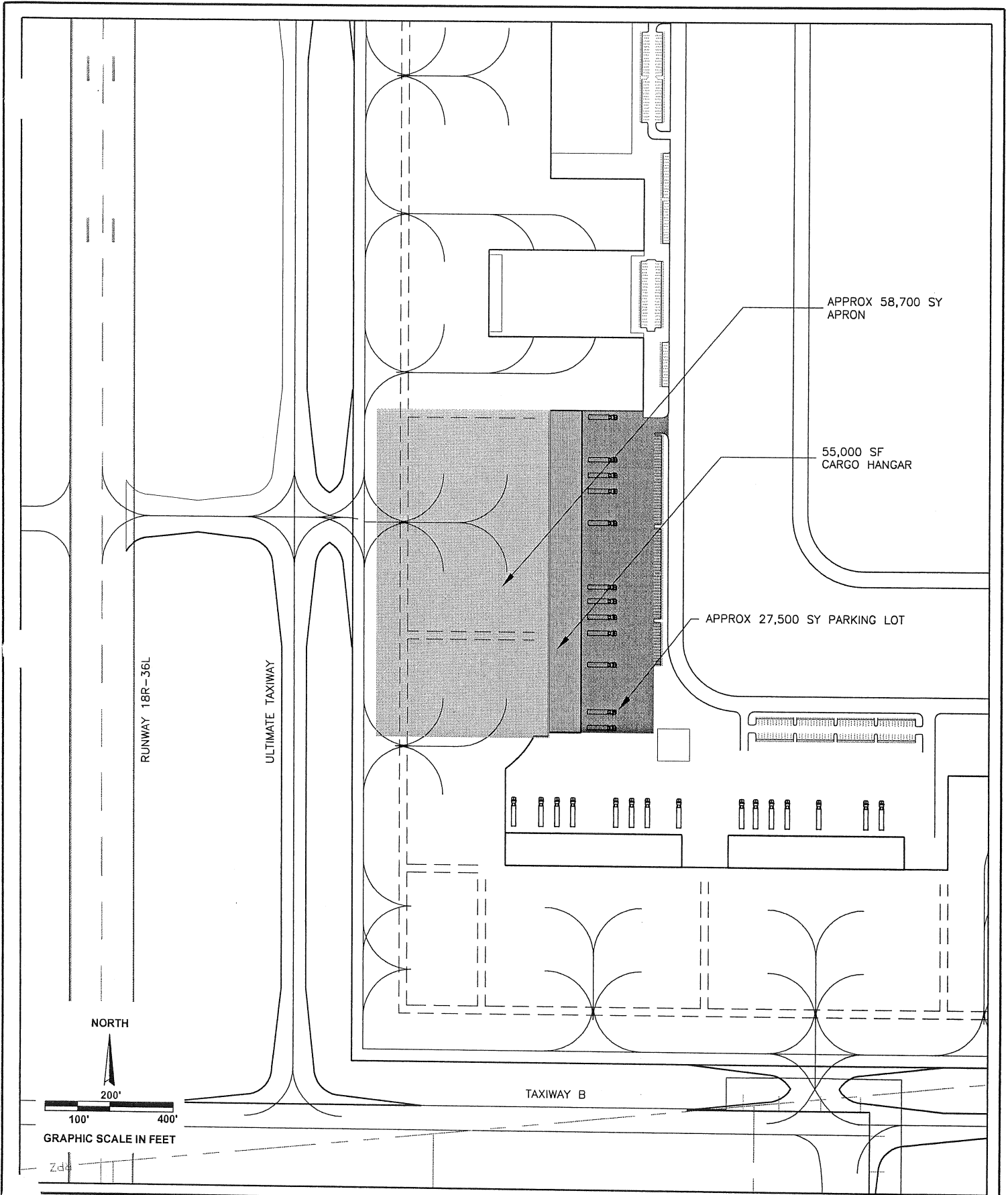
PROJECT #71
SOUTHEAST DEVELOPMENT
ROADWAY ACCESS

CECIL FIELD AIRPORT



PROJECT #72
MID-FIELD TAXILANE -
PHASE VI

CECIL FIELD AIRPORT



NORTH

200'

100' 400'

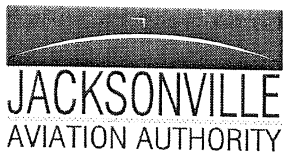
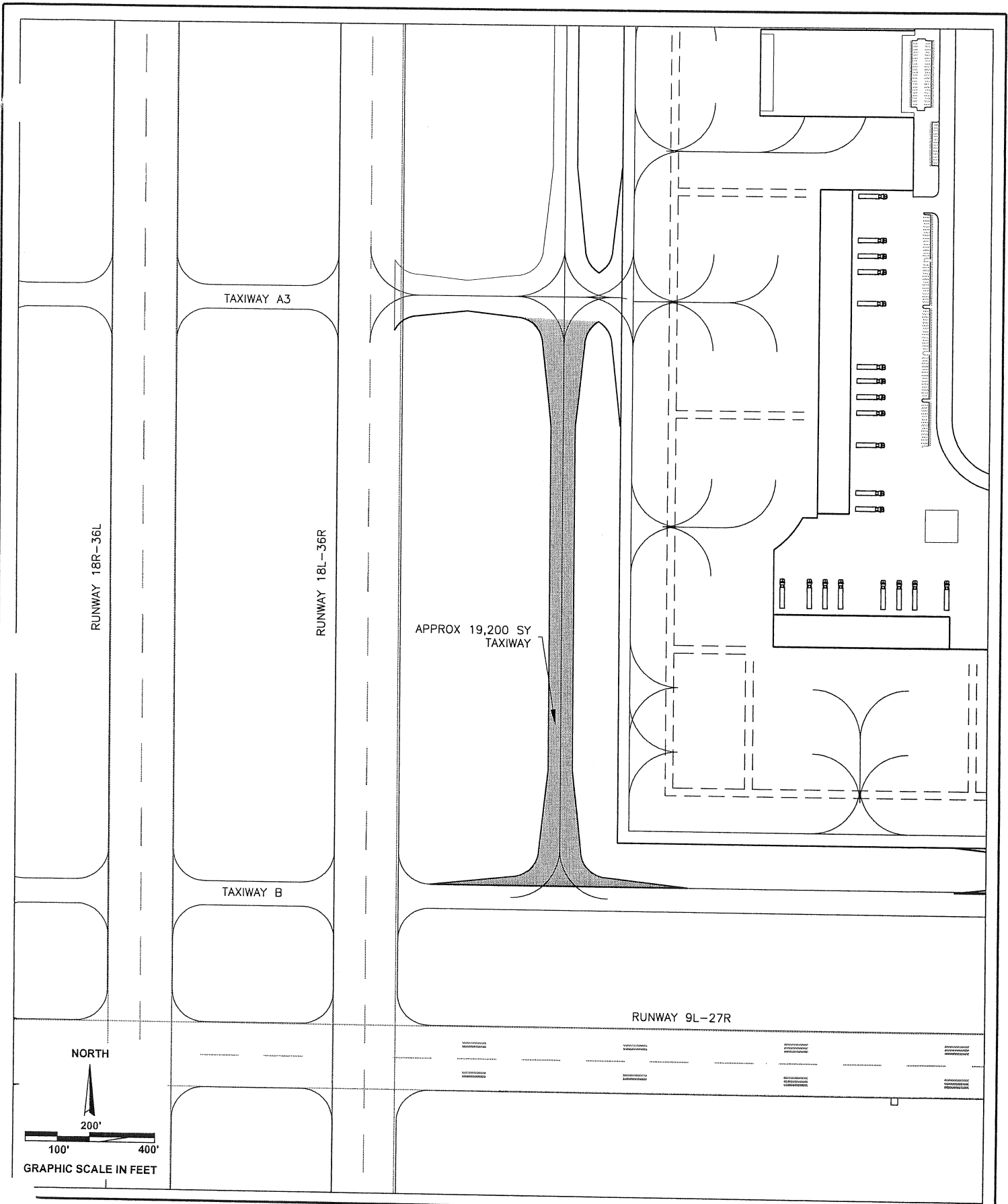
GRAPHIC SCALE IN FEET



PROJECT #73

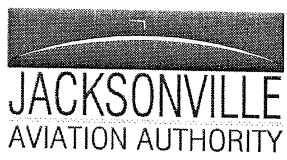
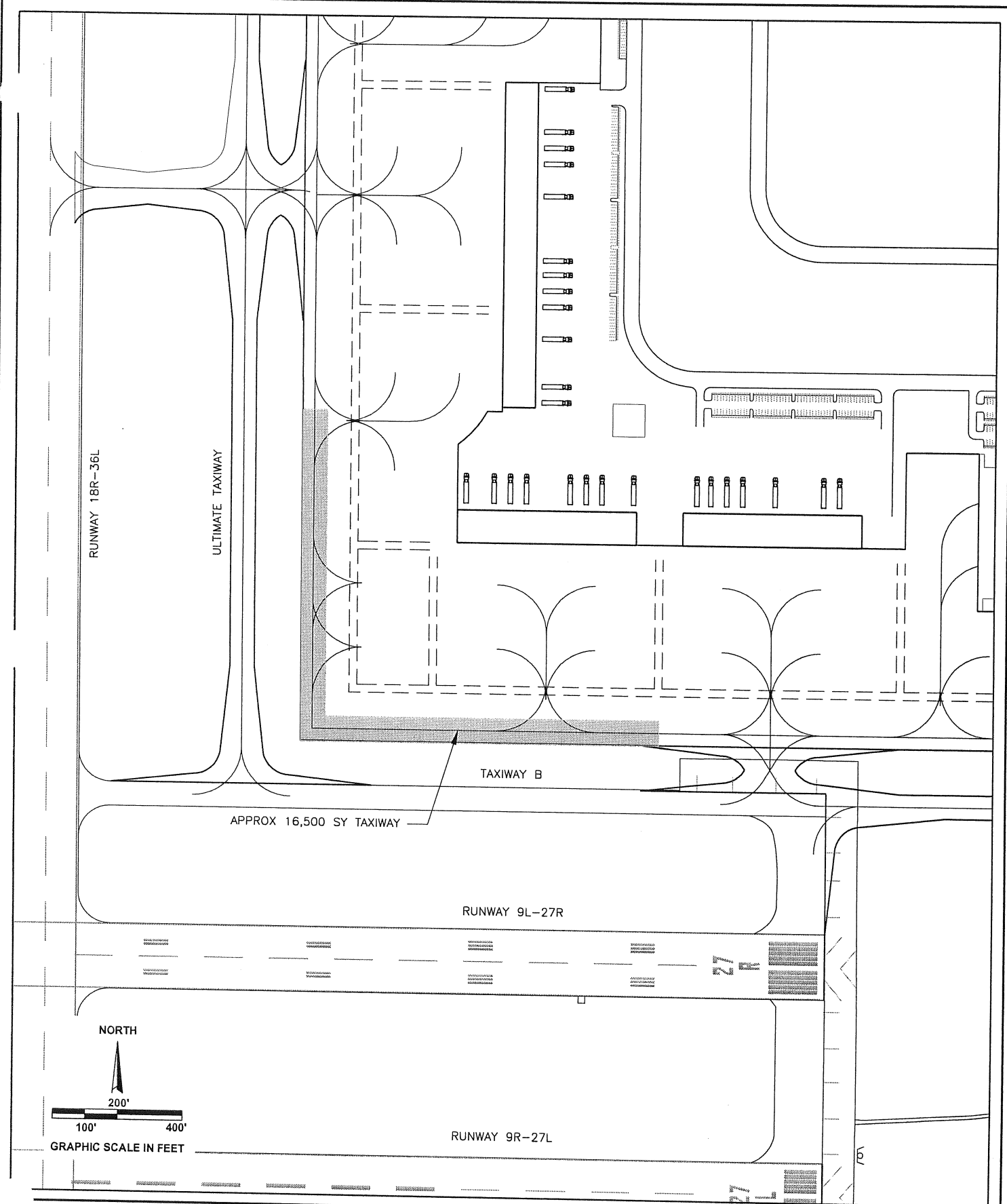
**MID-FIELD HANGAR, APRON
& PARKING LOT - PHASE VI**

CECIL FIELD AIRPORT



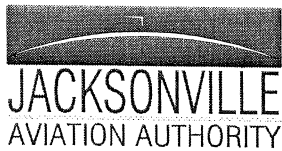
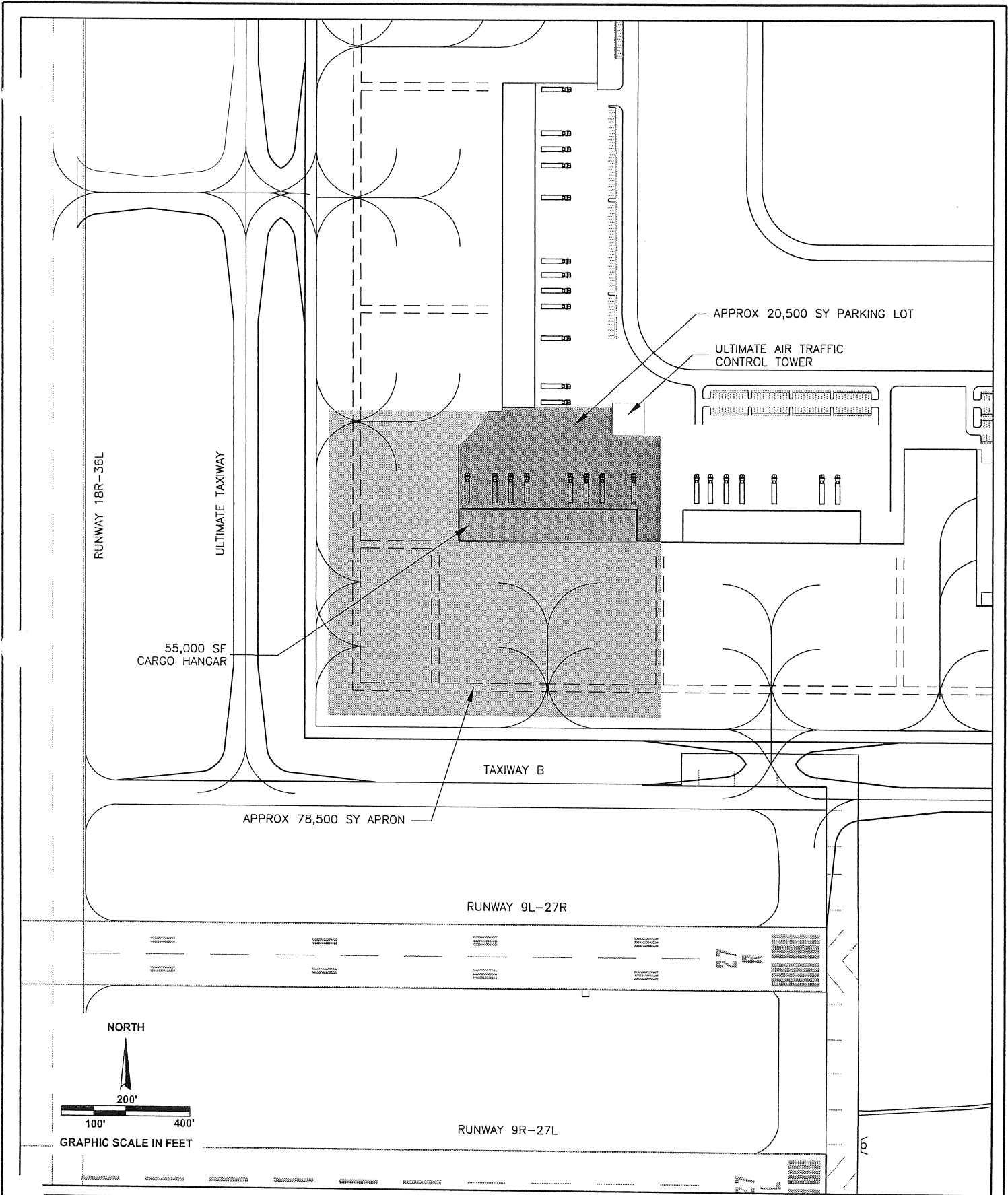
PROJECT #74
MID-FIELD PARALLEL
TAXIWAY - PHASE III

CECIL FIELD AIRPORT



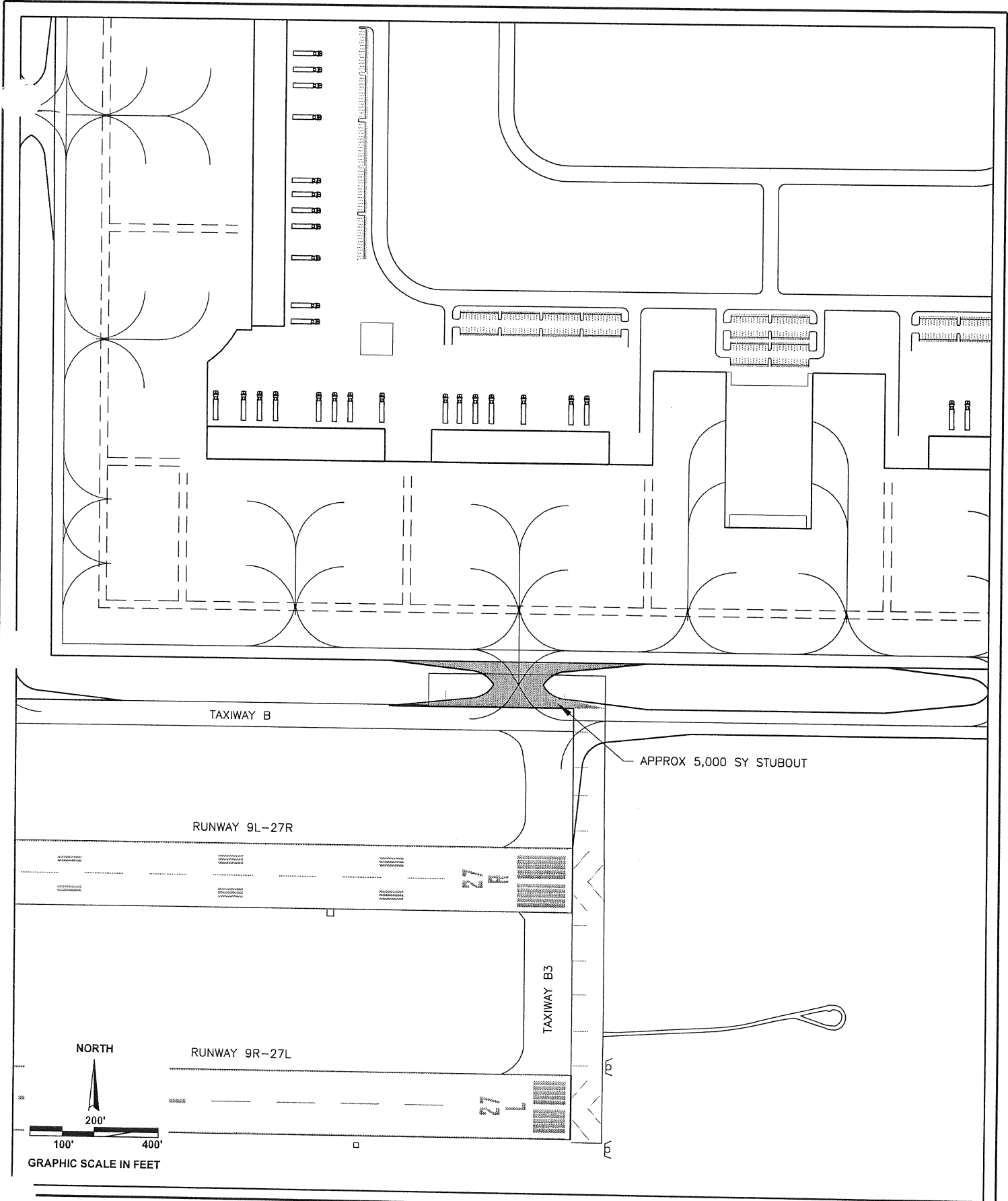
PROJECT #76
MID-FIELD TAXILANE -
PHASE VII

CECIL FIELD AIRPORT



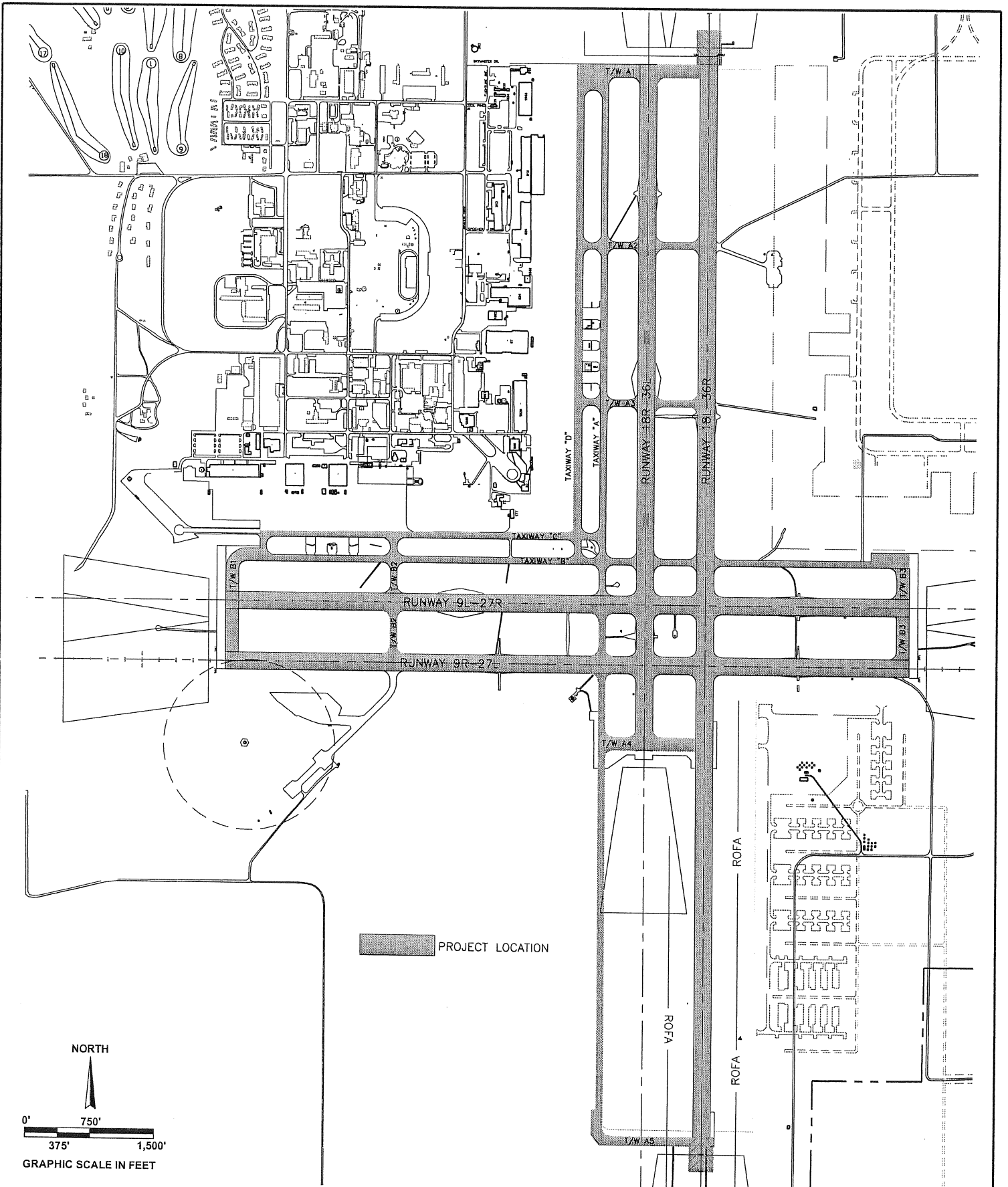
PROJECT #77
MID-FIELD HANGAR, APRON & PARKING LOT - PHASE VII

CECIL FIELD AIRPORT

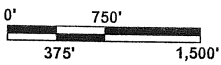


PROJECT #78
MID-FIELD PARALLEL
TAXIWAY - PHASE IV

CECIL FIELD AIRPORT

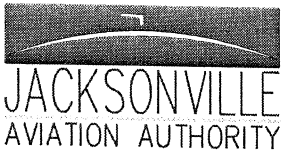


NORTH



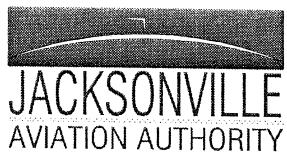
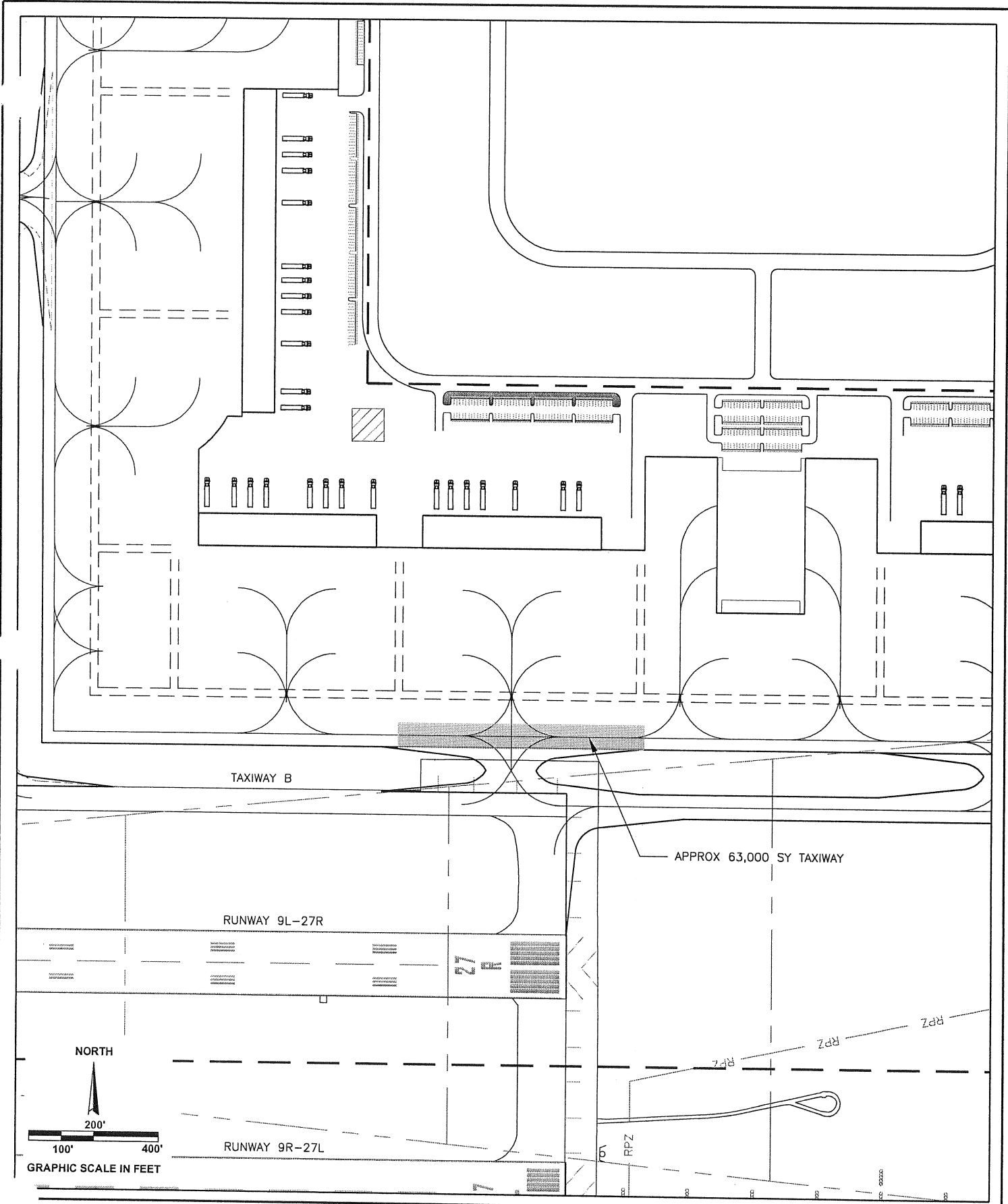
GRAPHIC SCALE IN FEET

PROJECT LOCATION



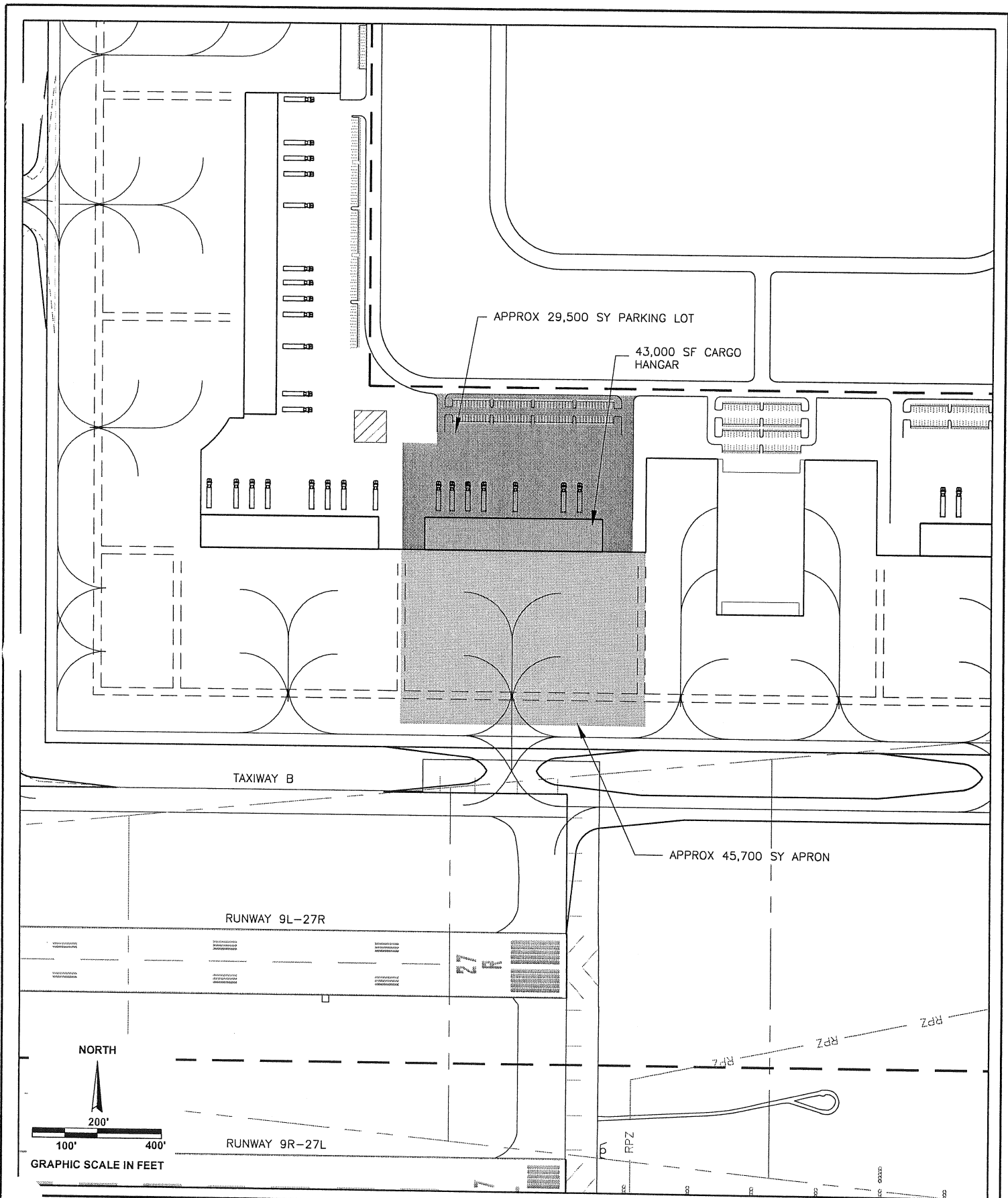
PROJECT #79
REHABILITATE AND REMARK
RUNWAYS AND TAXIWAYS

CECIL FIELD AIRPORT



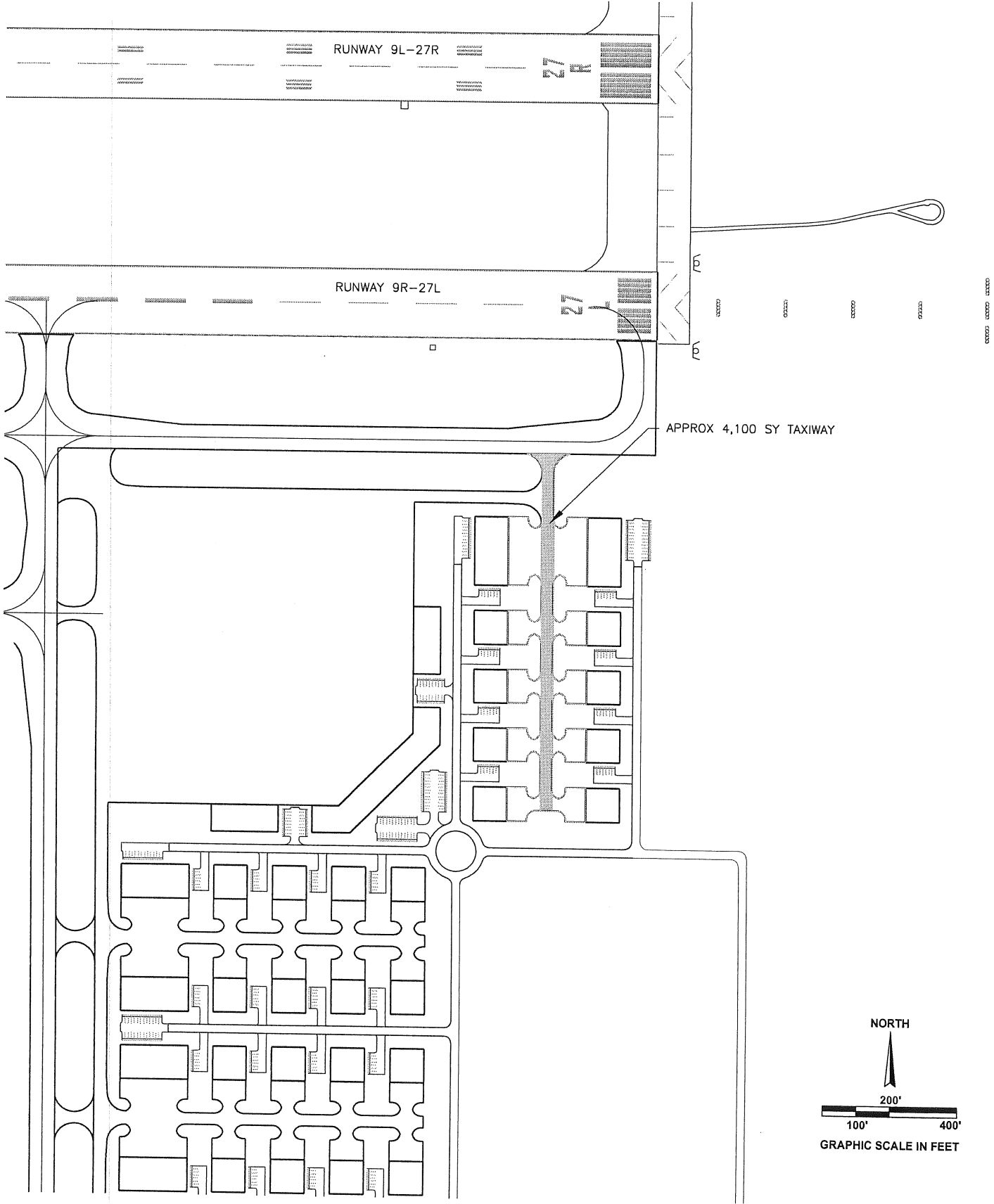
PROJECT #81
MID-FIELD TAXILANE -
PHASE VIII

CECIL FIELD AIRPORT



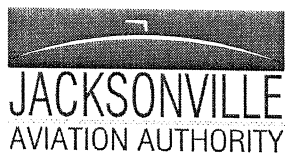
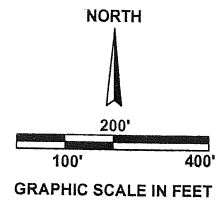
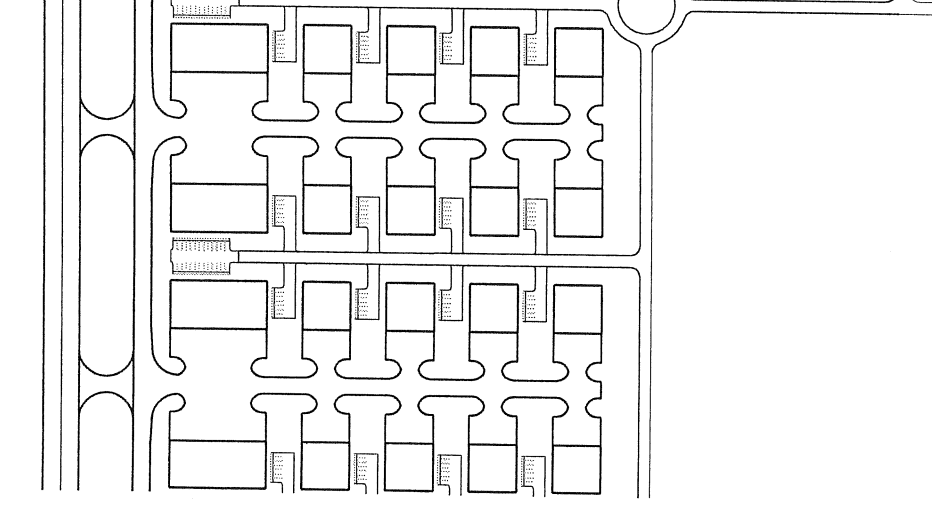
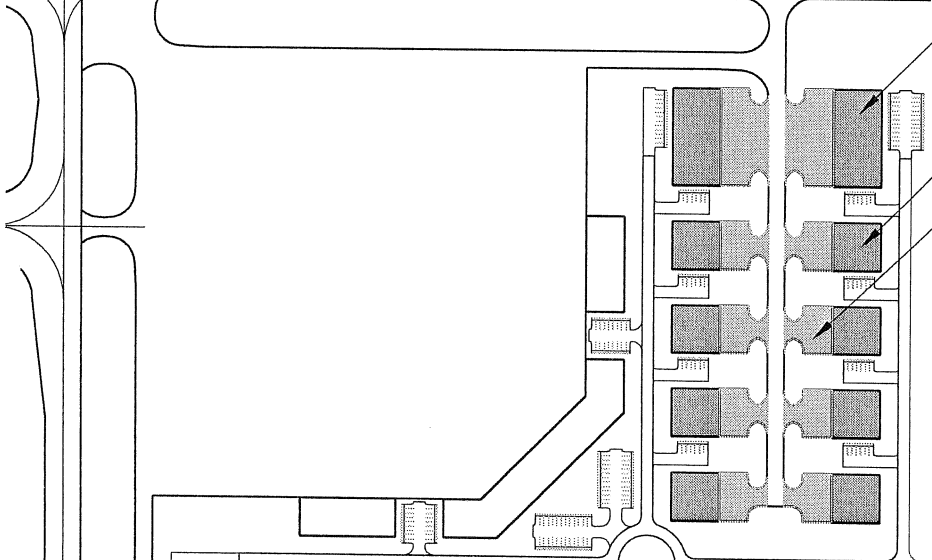
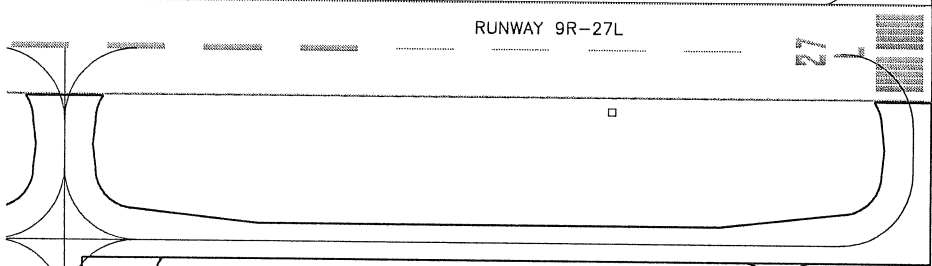
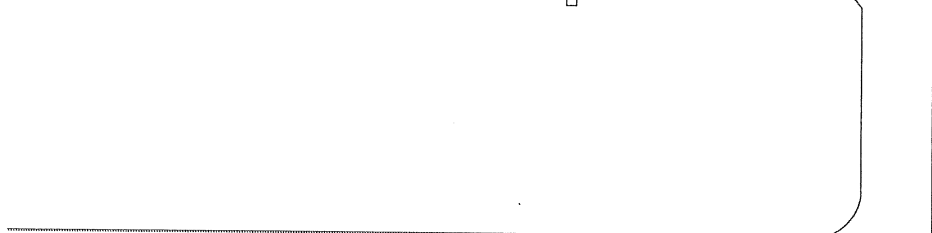
PROJECT #82
MID-FIELD HANGAR, APRON & PARKING LOT - PHASE VIII

CECIL FIELD AIRPORT



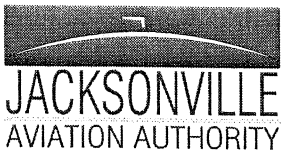
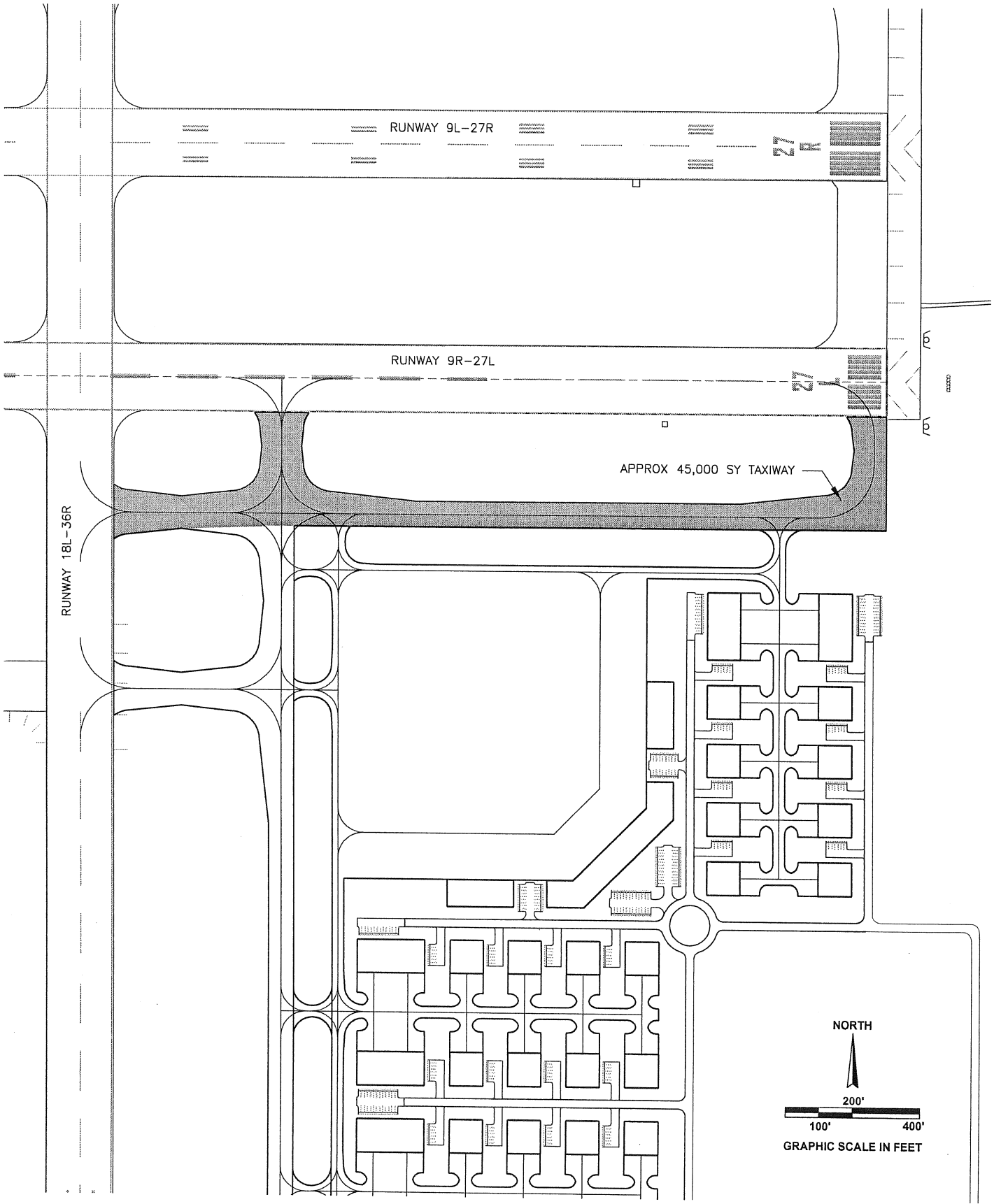
PROJECT #83
SOUTHEAST TAXILANE - PH I

CECIL FIELD AIRPORT



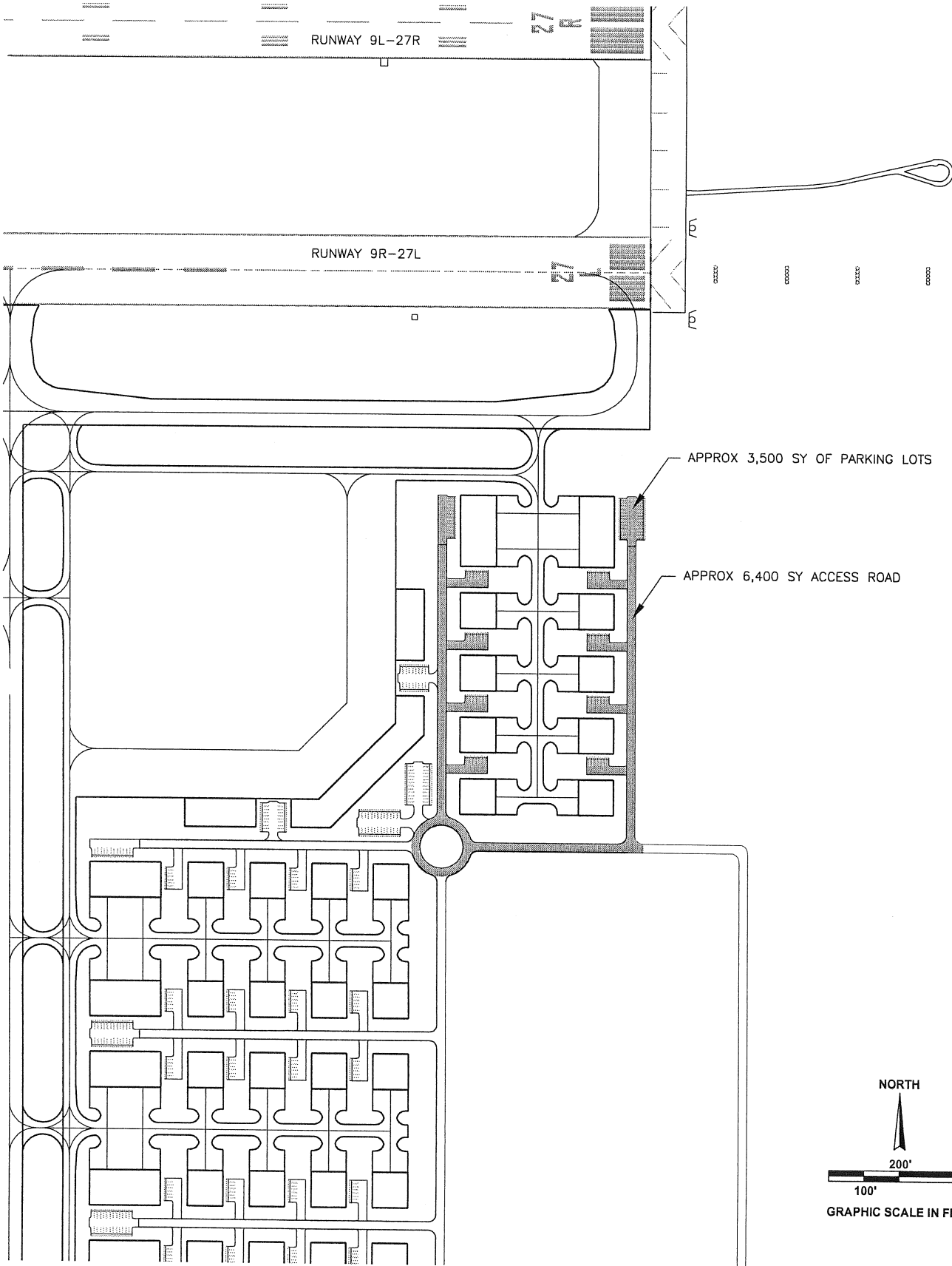
PROJECT #84
**SOUTHEAST HANGARS &
APRON - PHASE I**

CECIL FIELD AIRPORT



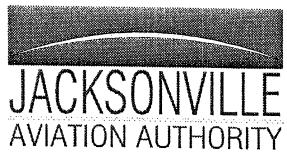
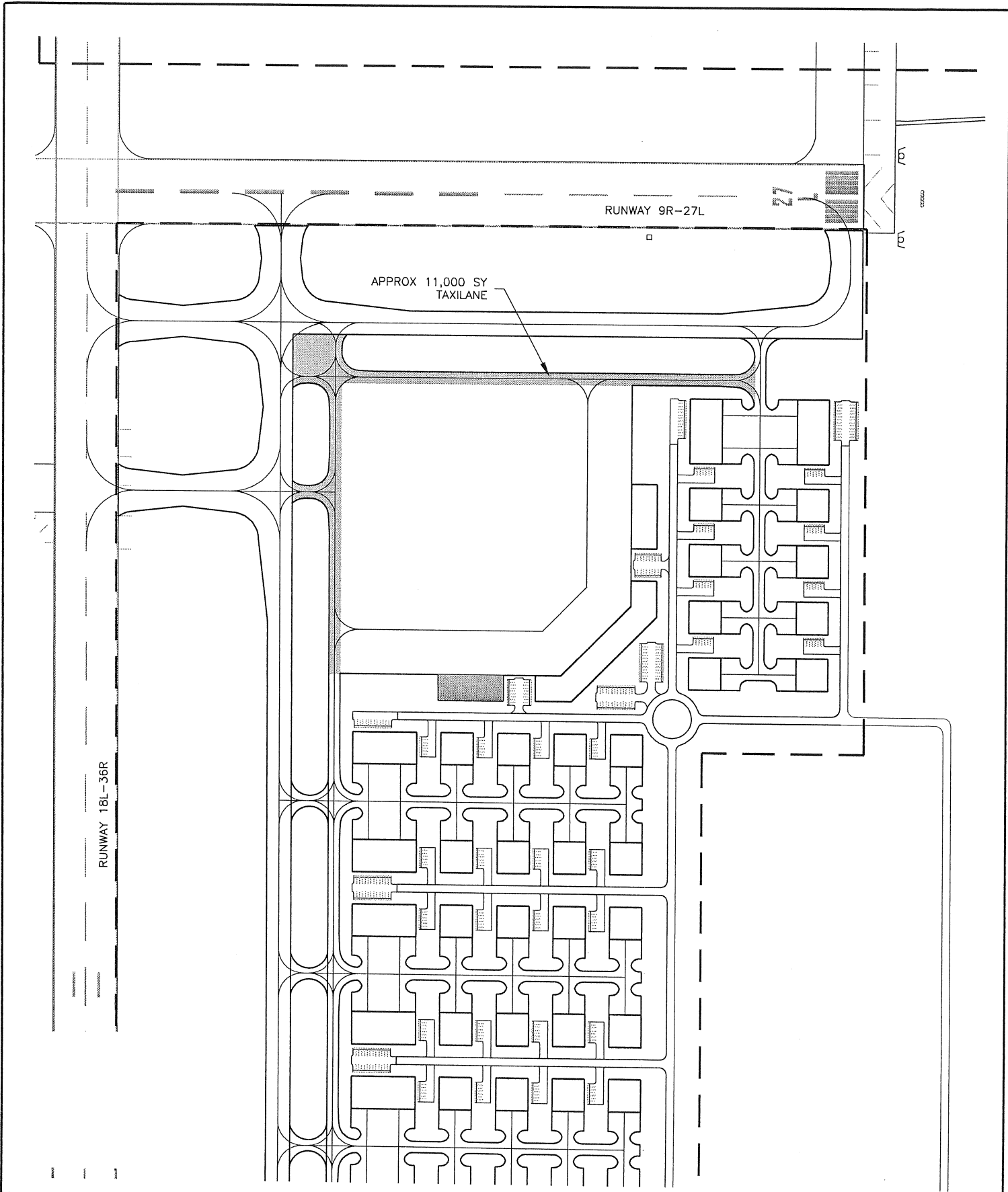
PROJECT #85
SOUTHEAST PARALLEL TAXIWAY - PHASE I

CECIL FIELD AIRPORT



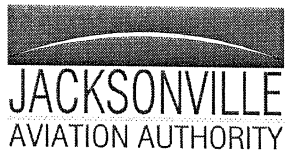
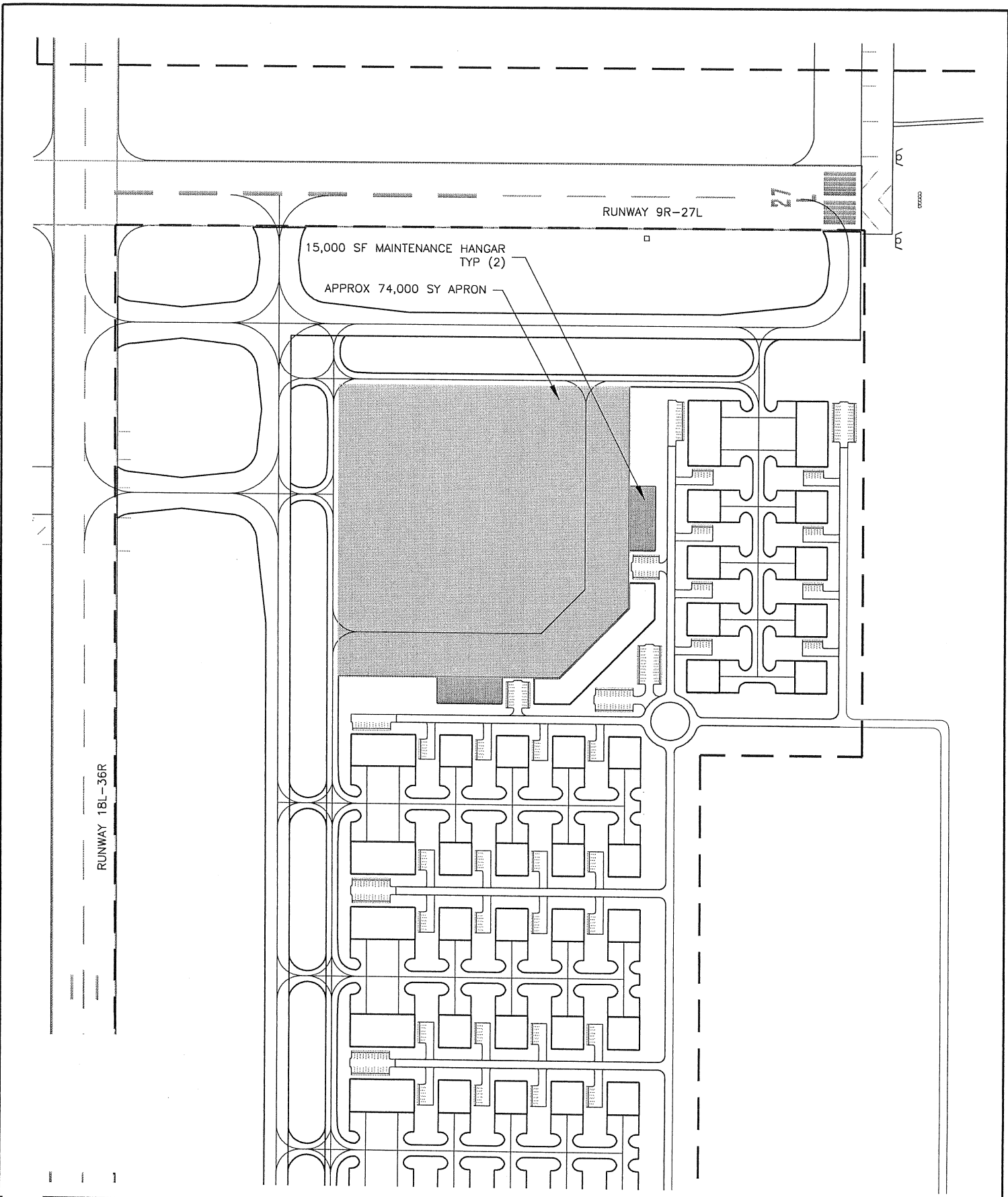
PROJECT #86
SOUTHEAST ACCESS ROAD
& PARKING LOT - PHASE I

CECIL FIELD AIRPORT



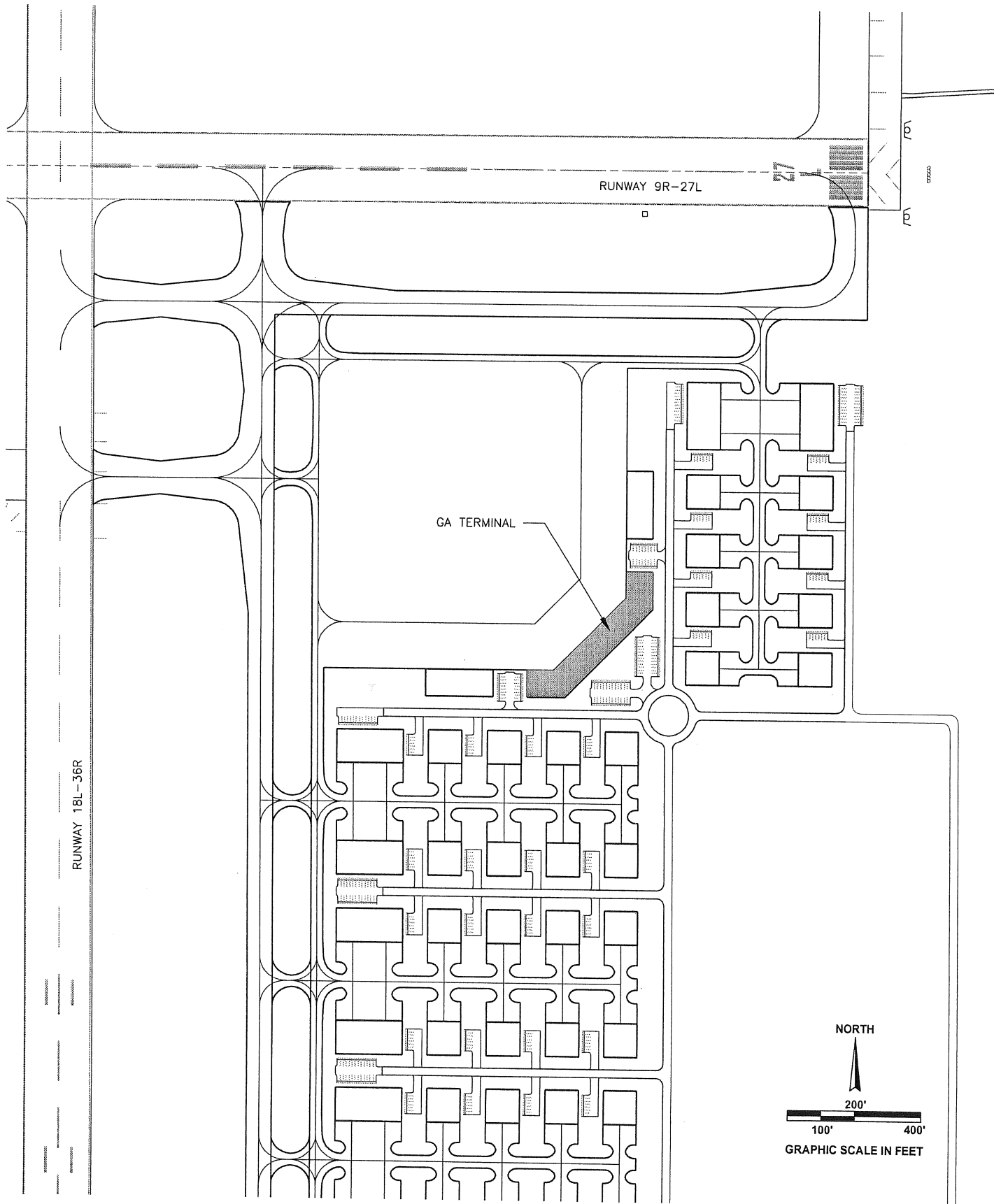
PROJECT #87
SOUTHEAST TAXILANE -
PHASE II

CECIL FIELD AIRPORT



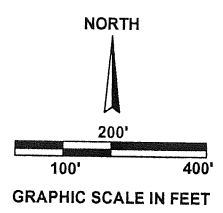
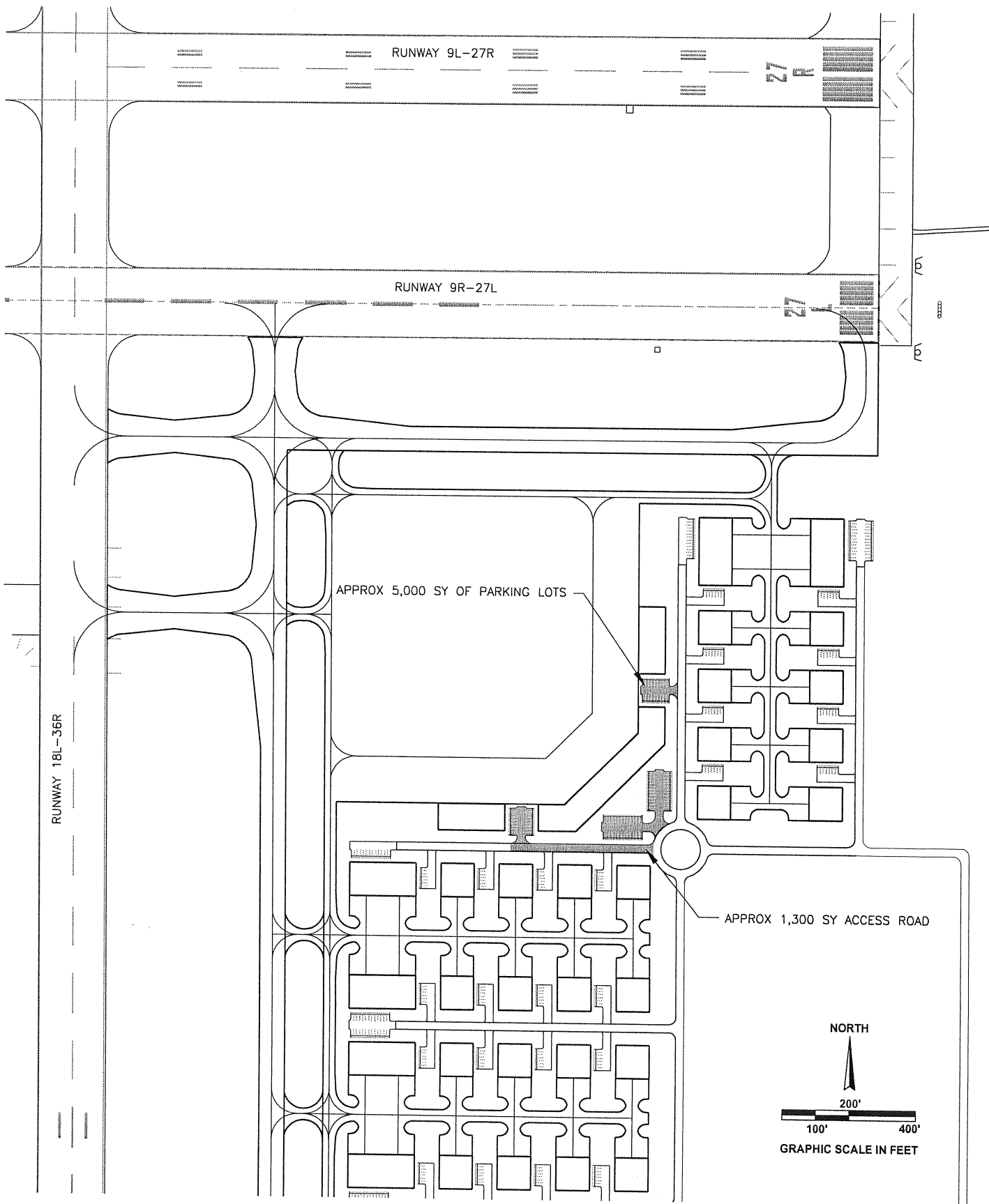
PROJECT #88
SOUTHEAST HANGAR &
APRON - PHASE II

CECIL FIELD AIRPORT



PROJECT #89
NEW GA TERMINAL IN
SOUTHEAST DEVELOPMENT
AREA

CECIL FIELD AIRPORT



PROJECT #90
SOUTHEAST ACCESS ROAD & PARKING LOT - PHASE II

CECIL FIELD AIRPORT

RUNWAY 9R-27L

27

APPROX 5,300 SY OF PARKING LOTS

APPROX 3,300 SY OF ACCESS ROADS

RUNWAY 18L-36R

NORTH

200'

100'

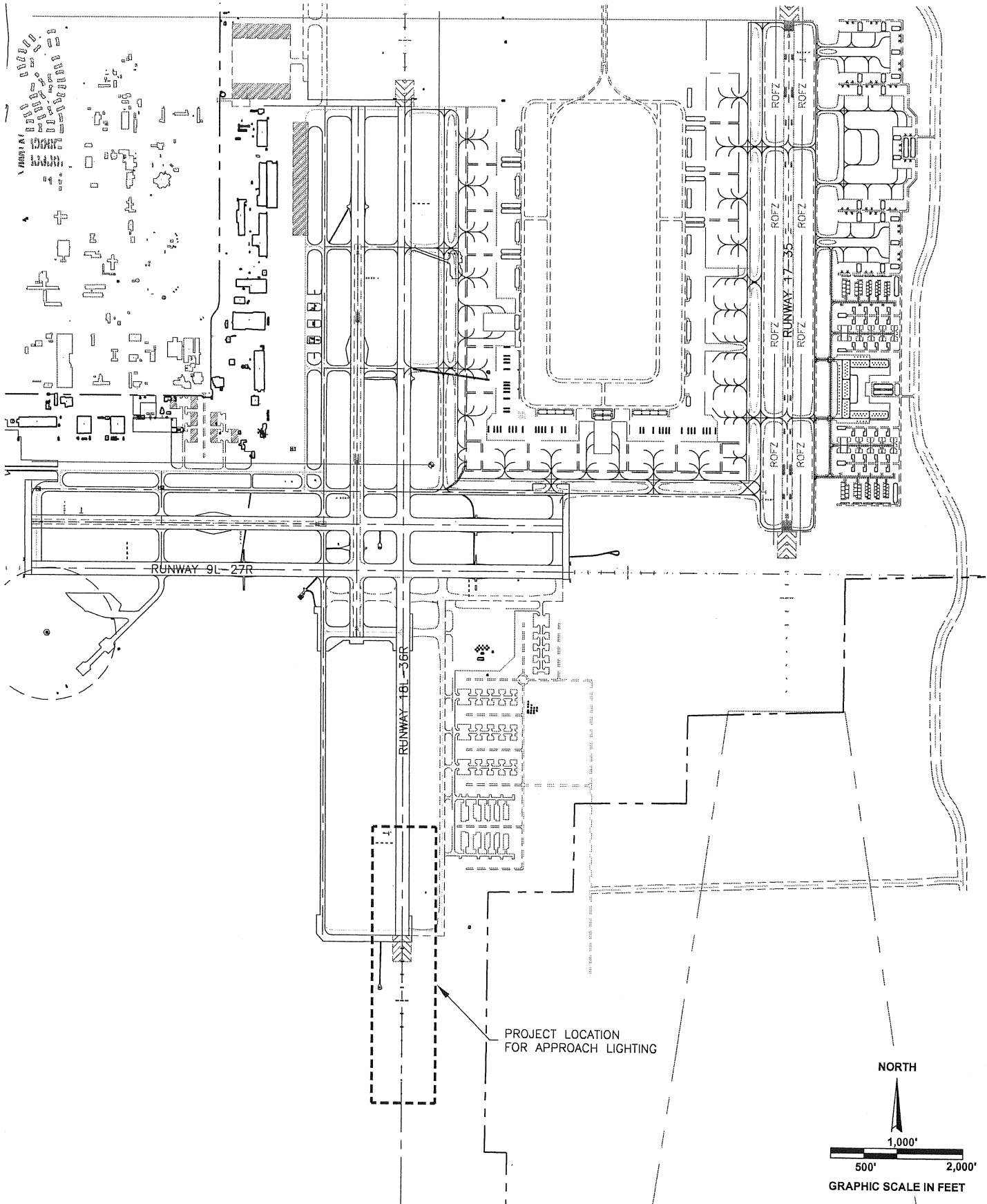
400'

GRAPHIC SCALE IN FEET



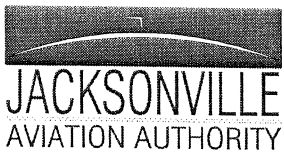
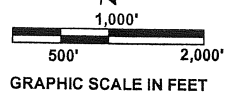
PROJECT #91
SOUTHEAST ACCESS ROAD & PARKING LOT - PHASE III

CECIL FIELD AIRPORT



PROJECT LOCATION
FOR APPROACH LIGHTING

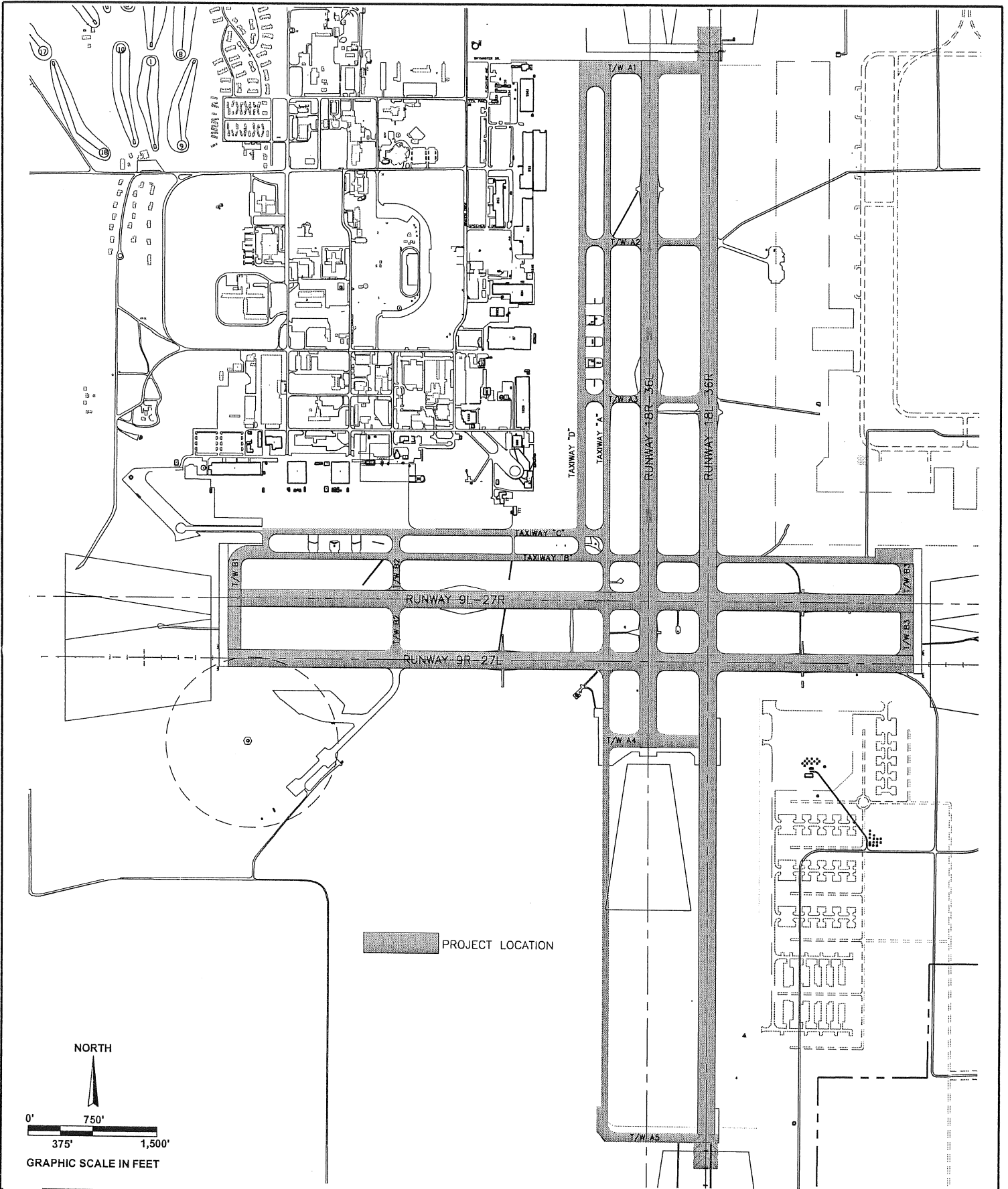
NORTH



PROJECT #92

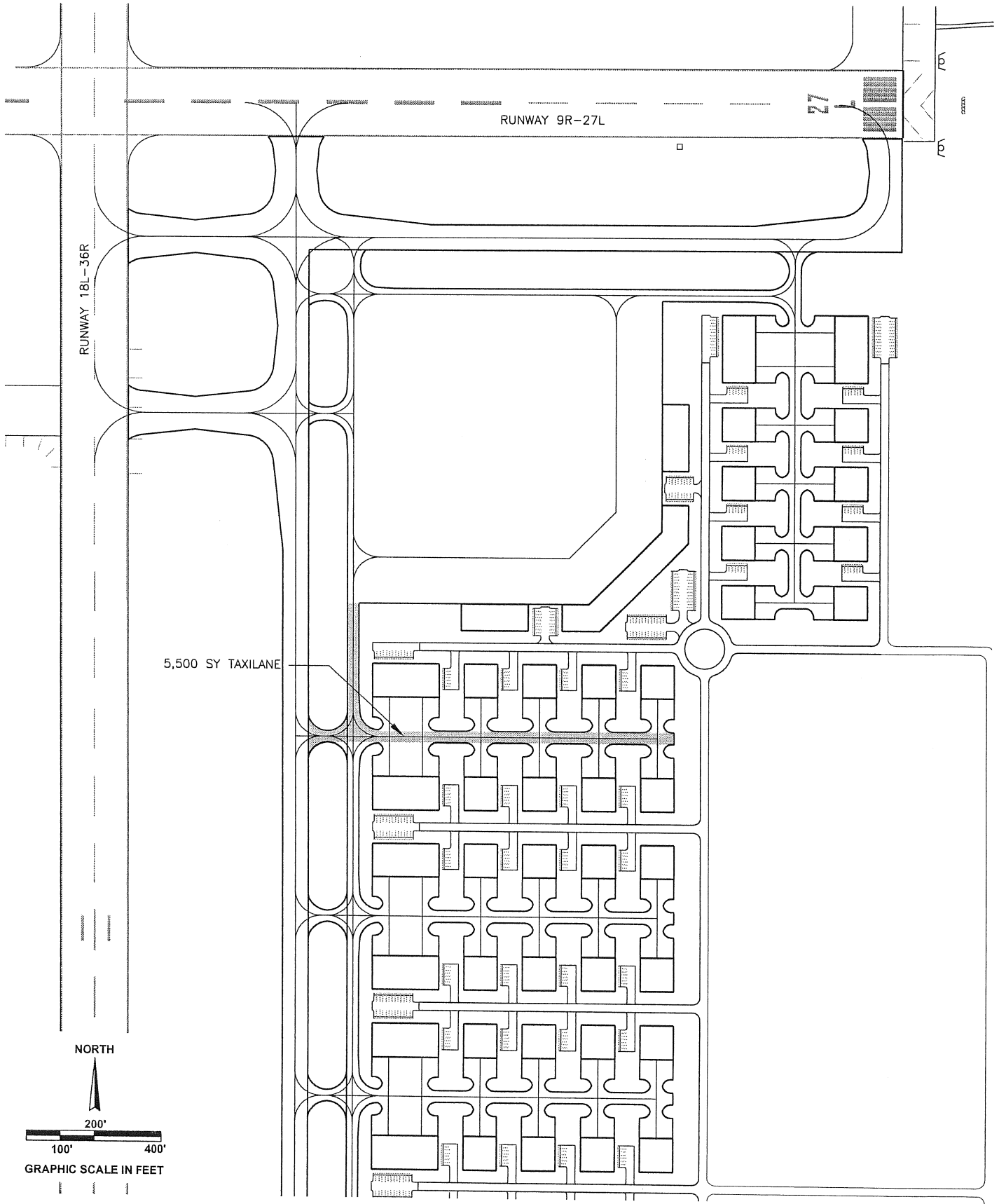
**APPROACH LIGHTING
SYSTEM ON RUNWAY
18L/36R**

CECIL FIELD AIRPORT



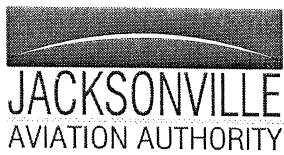
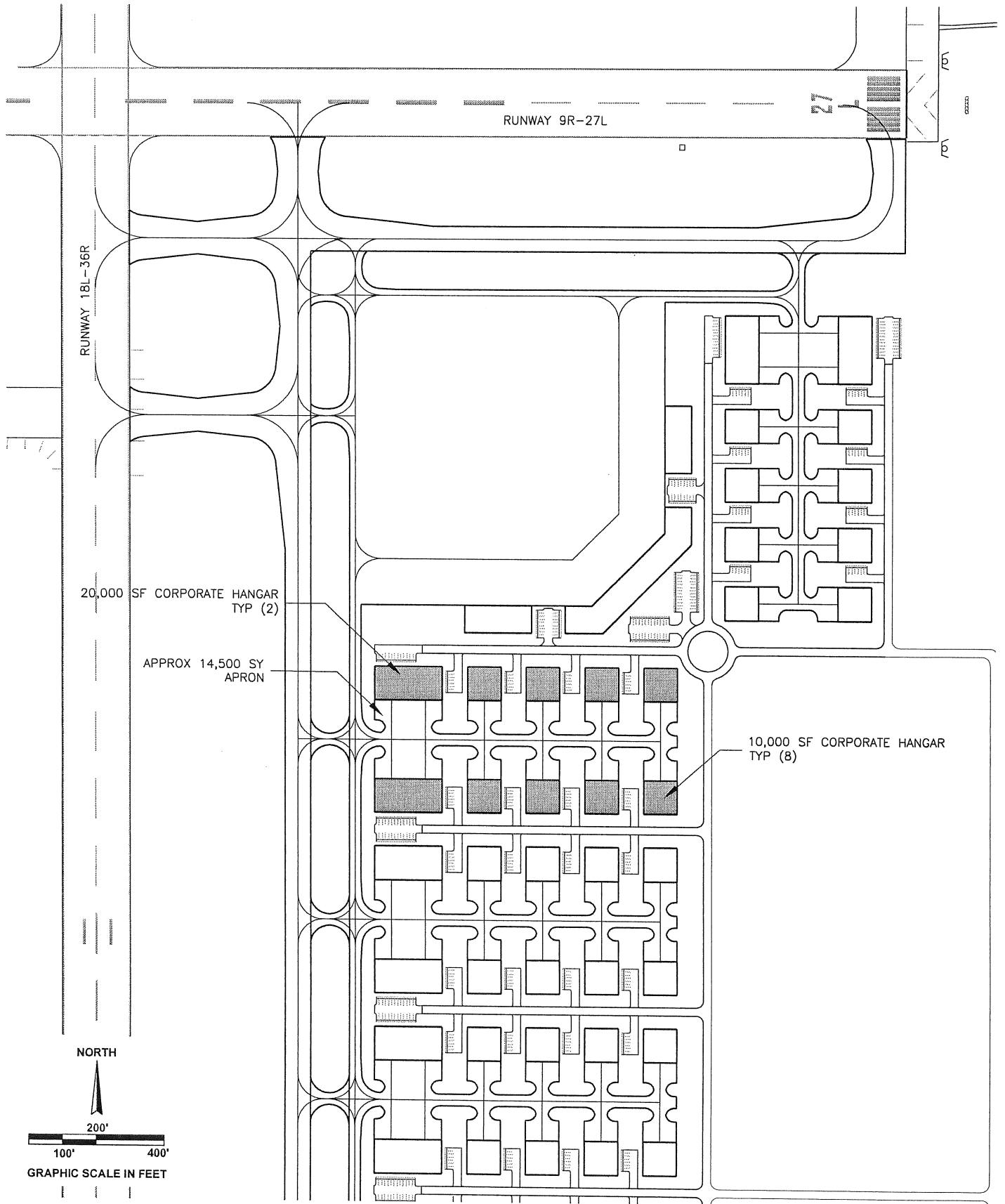
PROJECT #93
REJUVENATION OF AIRPORT
PAVEMENT

CECIL FIELD AIRPORT



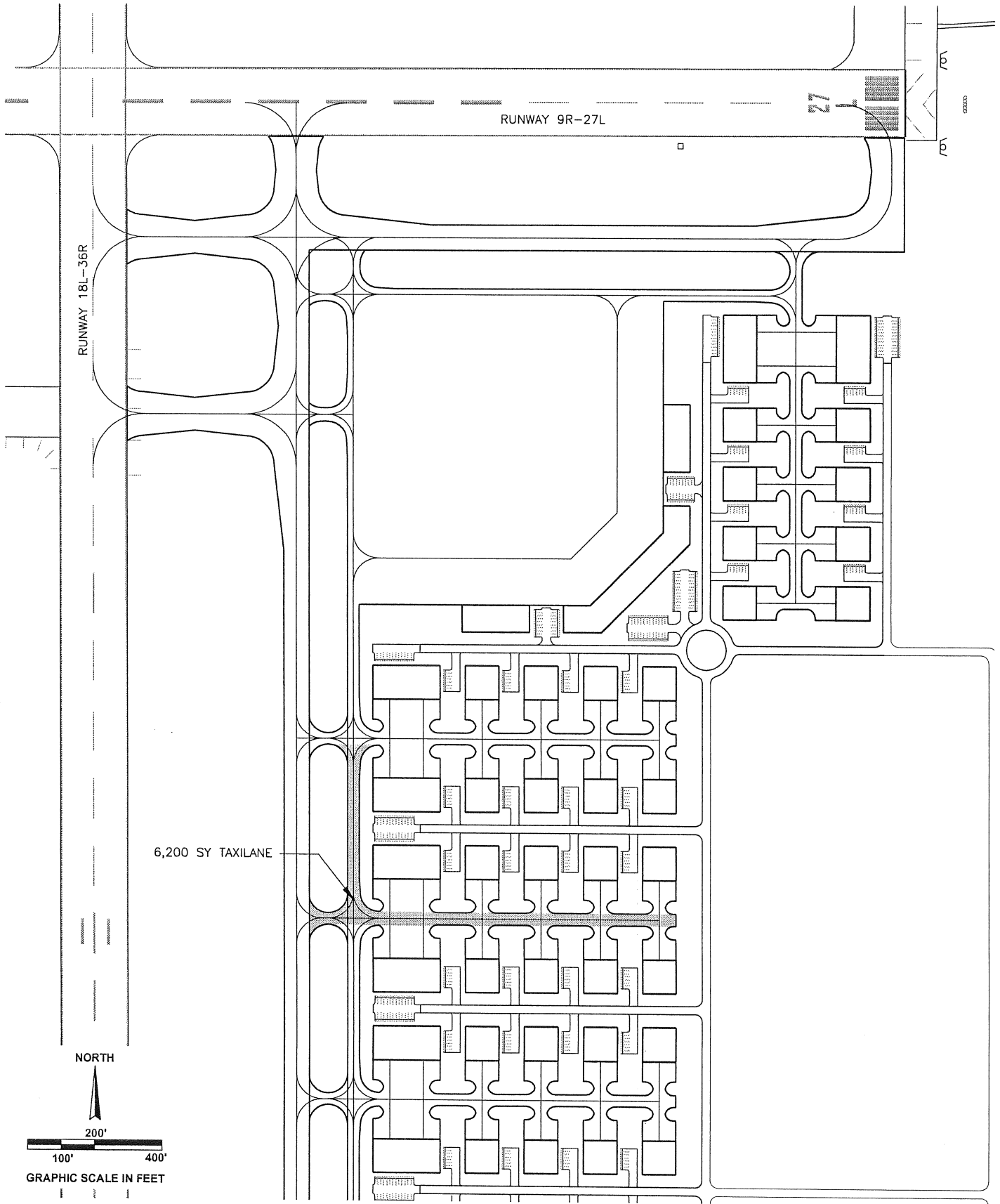
PROJECT #95
SOUTHEAST TAXILANE
PHASE III

CECIL FIELD AIRPORT



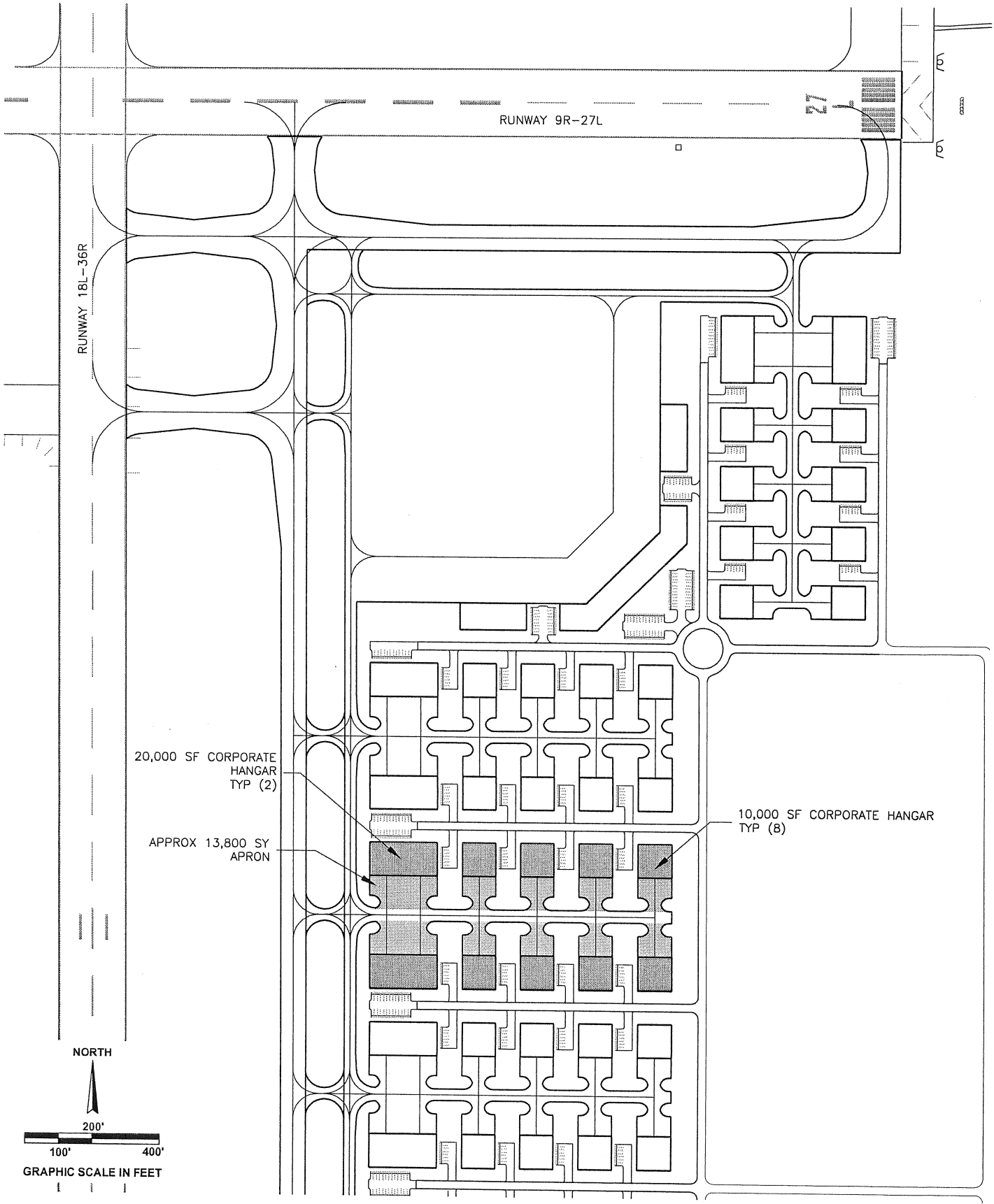
PROJECT #96
SOUTHEAST HANGARS &
APRON - PHASE III

CECIL FIELD AIRPORT



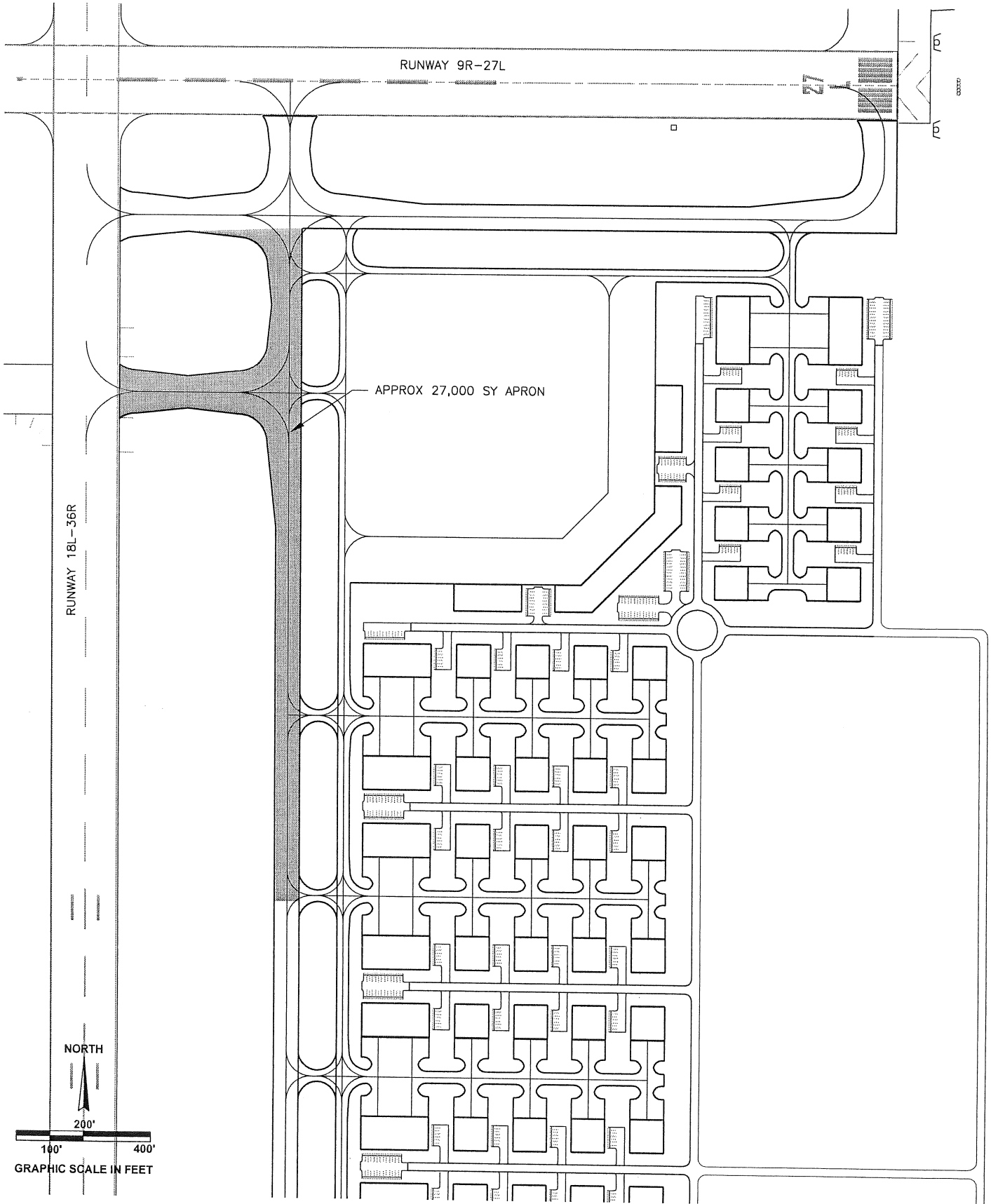
PROJECT #97
SOUTHEAST TAXILANE
PHASE IV

CECIL FIELD AIRPORT



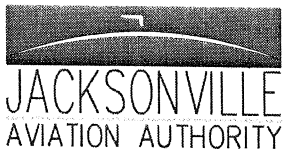
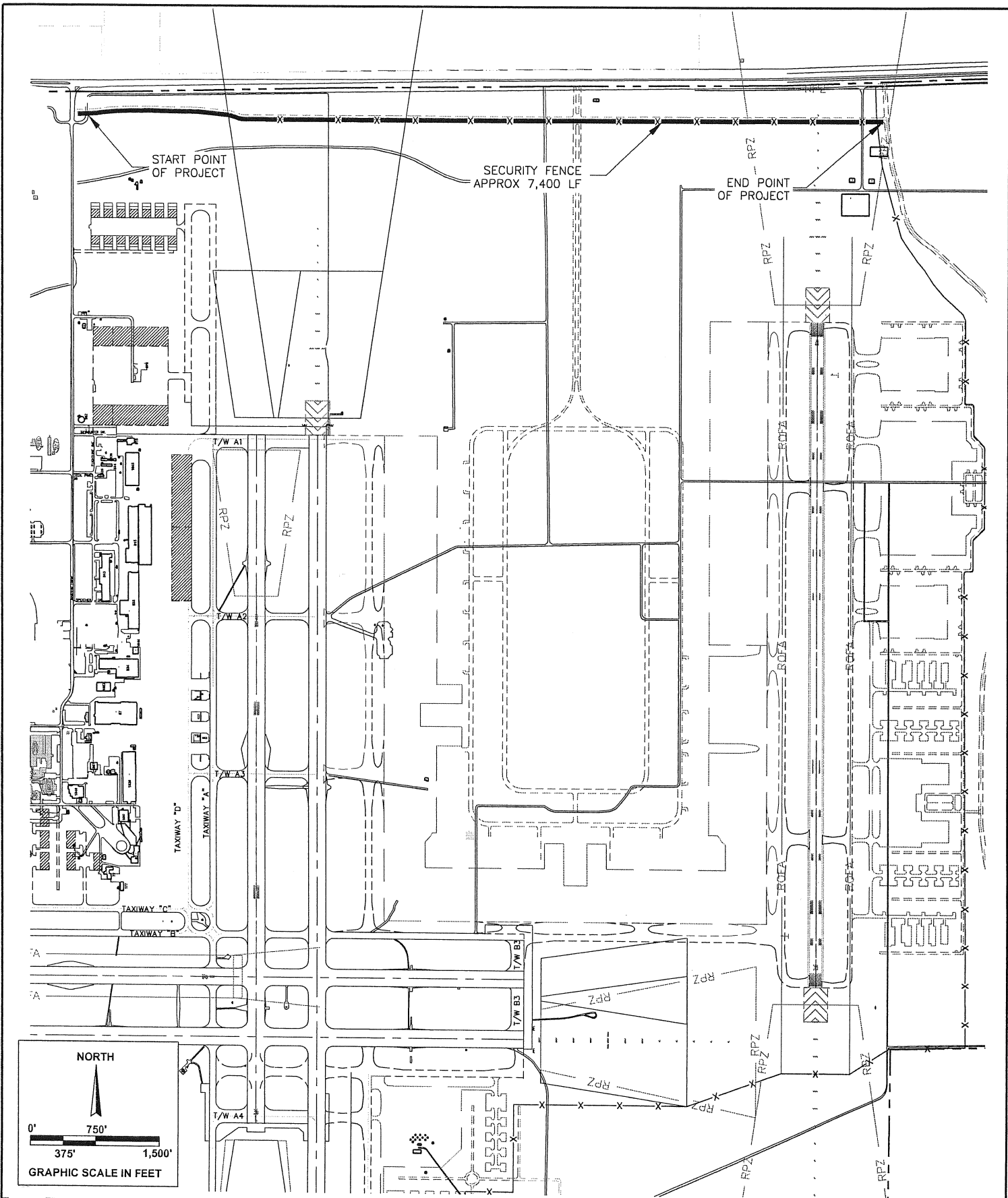
PROJECT #98
SOUTHEAST HANGAR & APRON - PHASE IV

CECIL FIELD AIRPORT



PROJECT # 99
SOUTHEAST PARALLEL TAXIWAY - PHASE II

CECIL FIELD AIRPORT



PROJECT #100
AIRPORT SECURITY
IMPROVEMENTS - PHASE III

CECIL FIELD AIRPORT

RUNWAY 18L-36R

6,200 SY TAXILANE

NORTH

200'

100'

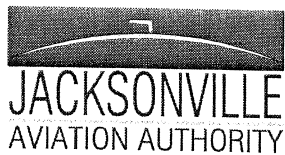
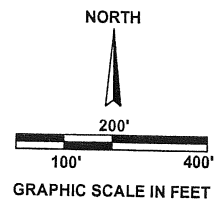
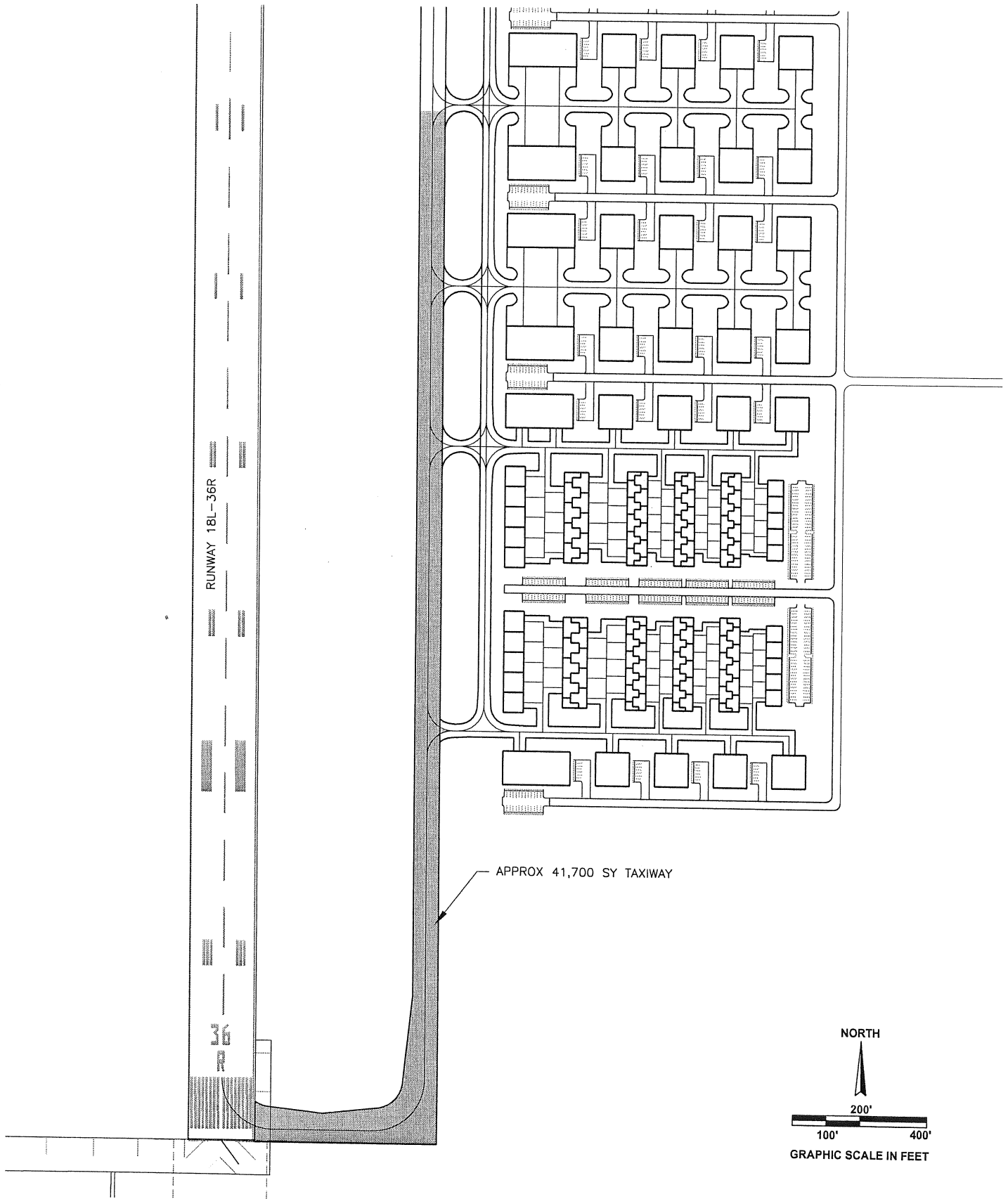
400'

GRAPHIC SCALE IN FEET



PROJECT #101
SOUTHEAST TAXILANE
PHASE V

CECIL FIELD AIRPORT



PROJECT #103
SOUTHEAST PARALLEL
TAXIWAY - PHASE III

CECIL FIELD AIRPORT

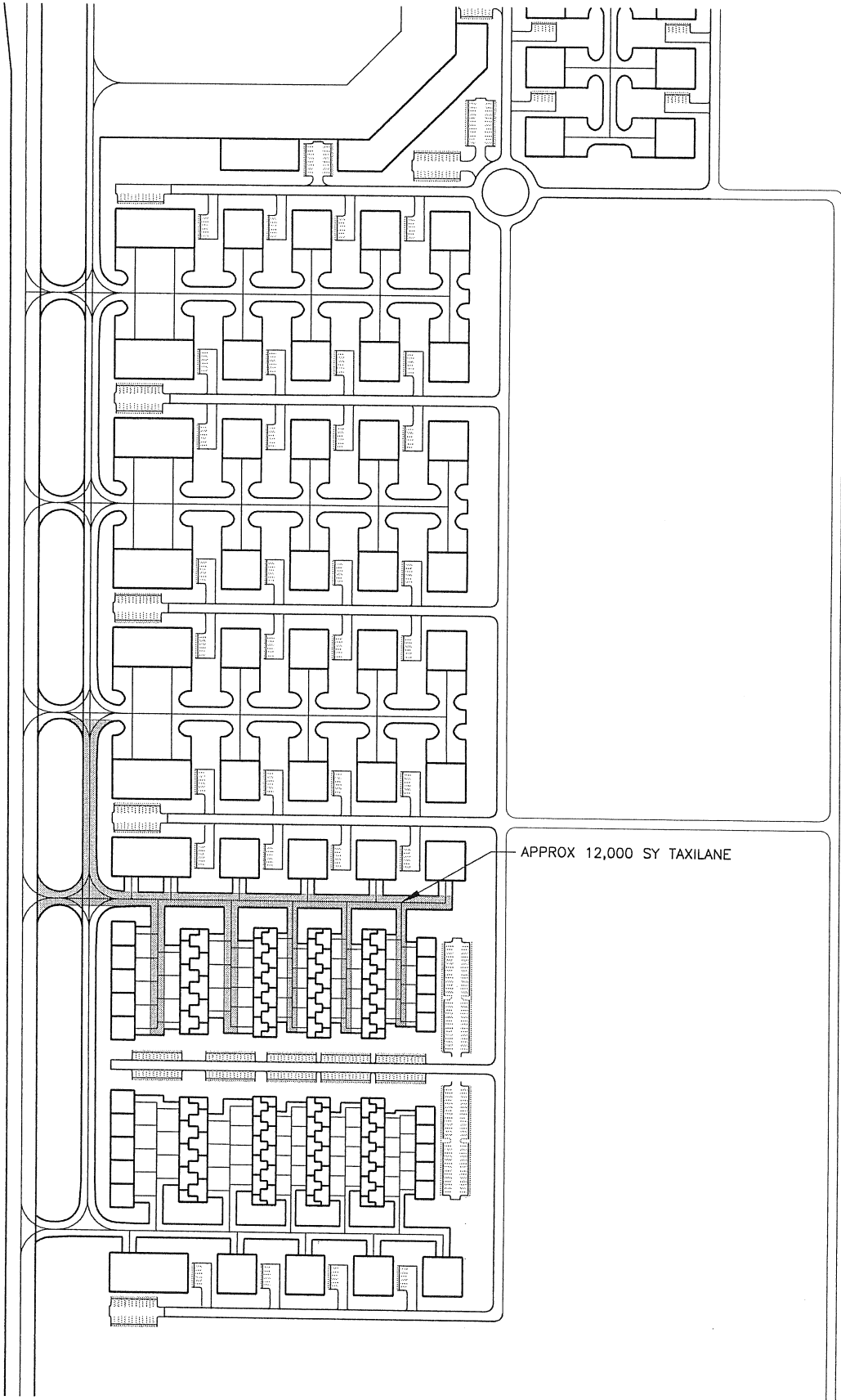
RUNWAY 18L-36R

NORTH

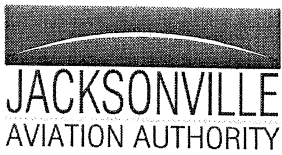
200'

100' 400'

GRAPHIC SCALE IN FEET



APPROX 12,000 SY TAXILANE



PROJECT #106

**SOUTHEAST TAXILANE
PHASE VI**

CECIL FIELD AIRPORT

RUNWAY 18L-36R

20,000 SF CORPORATE HANGAR, TYP (2)

APPROX 13,800 SY APRON

10,000 SF CORPORATE HANGAR TYP (8)

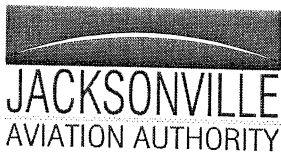
NORTH

200'

100'

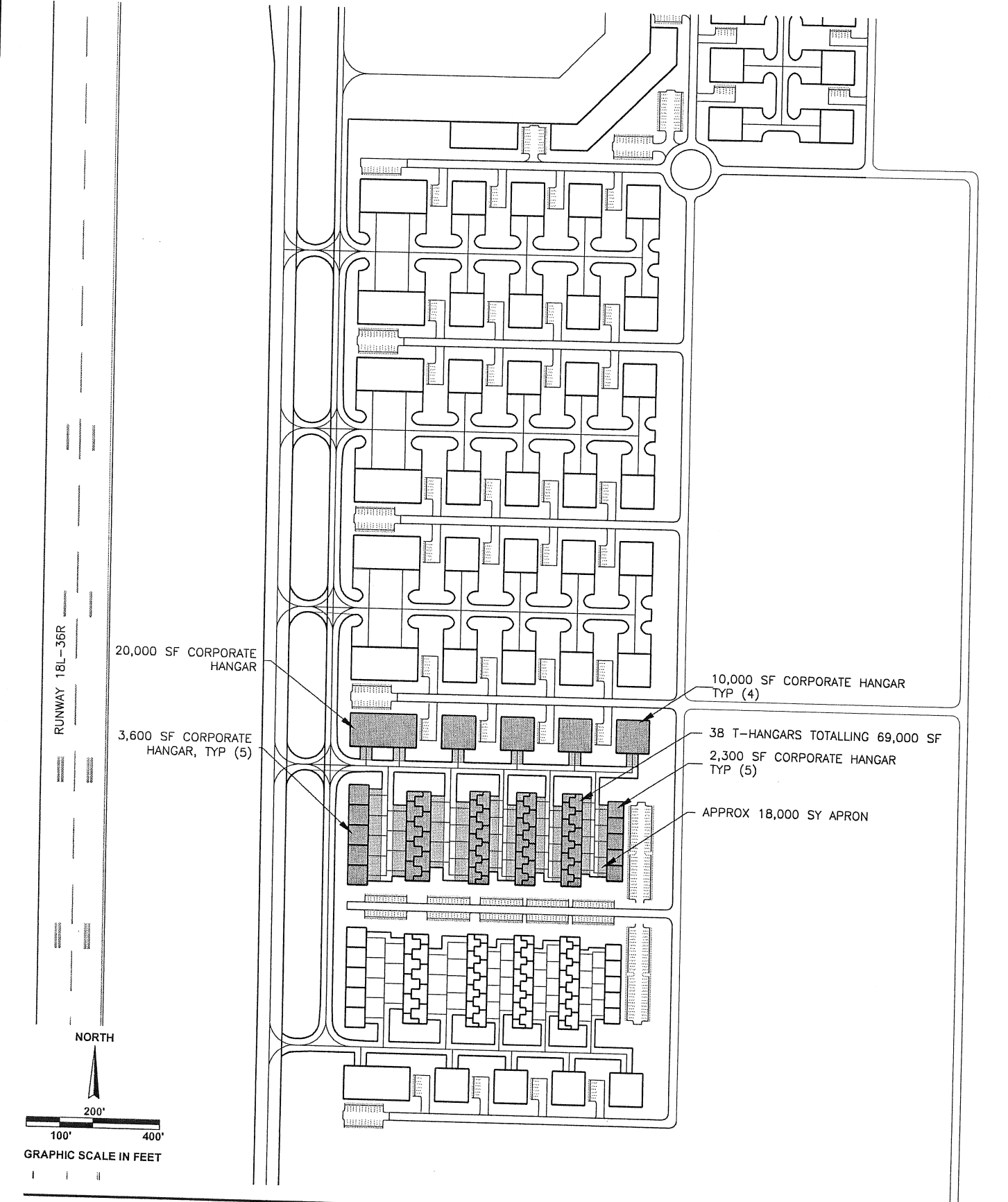
400'

GRAPHIC SCALE IN FEET



PROJECT #102
SOUTHEAST HANGAR & APRON - PHASE V

CECIL FIELD AIRPORT



RUNWAY 18L-36R

20,000 SF CORPORATE HANGAR

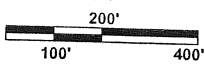
3,600 SF CORPORATE HANGAR, TYP (5)

10,000 SF CORPORATE HANGAR TYP (4)

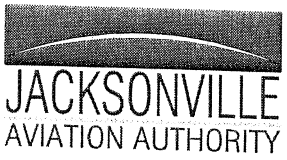
38 T-HANGARS TOTALLING 69,000 SF
2,300 SF CORPORATE HANGAR TYP (5)

APPROX 18,000 SY APRON

NORTH



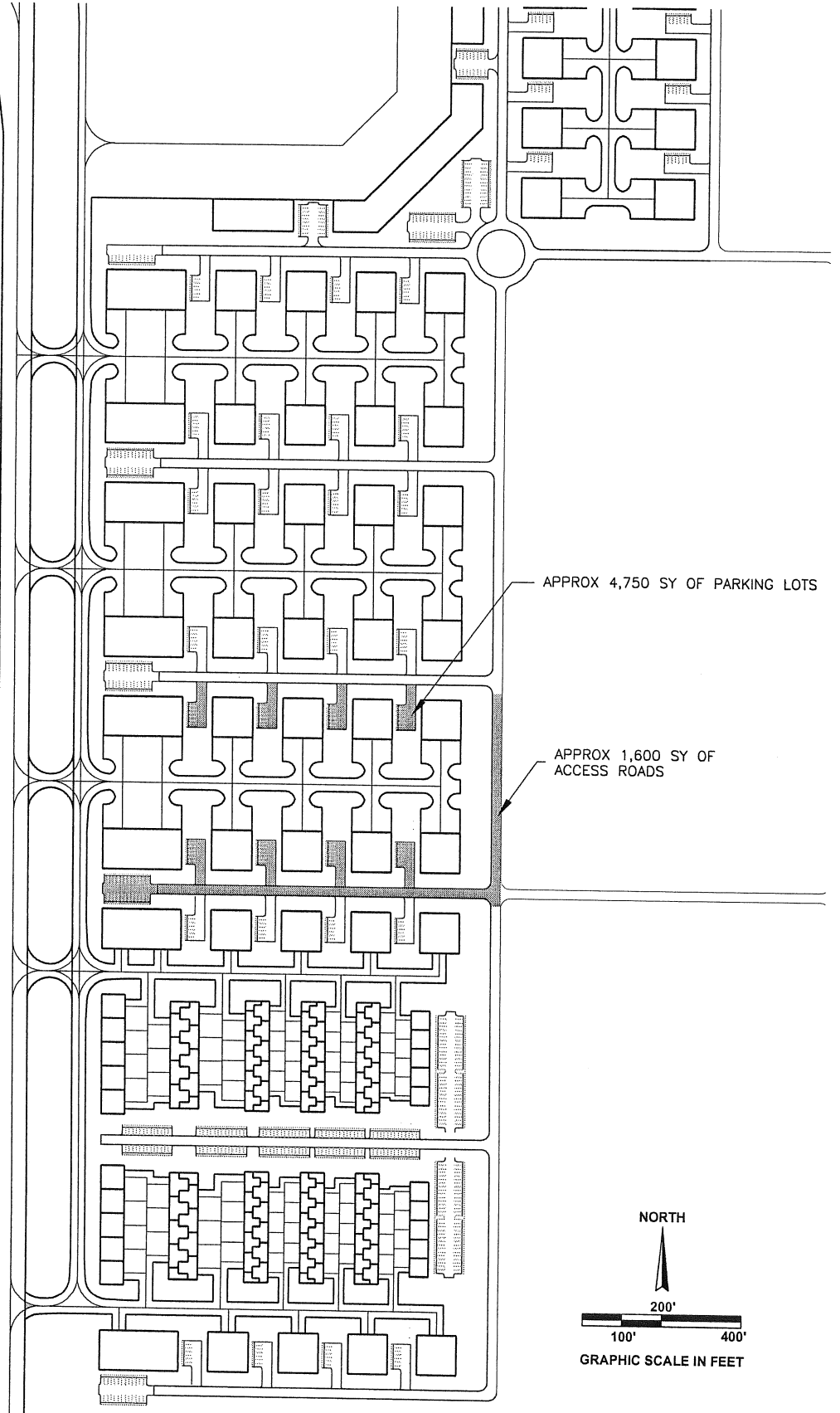
GRAPHIC SCALE IN FEET



PROJECT #107
SOUTHEAST HANGAR & APRON - PHASE VI

CECIL FIELD AIRPORT

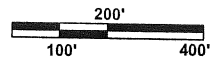
RUNWAY 18L-36R



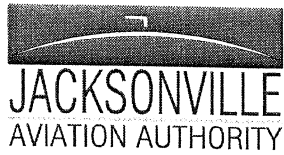
APPROX 4,750 SY OF PARKING LOTS

APPROX 1,600 SY OF ACCESS ROADS

NORTH



GRAPHIC SCALE IN FEET

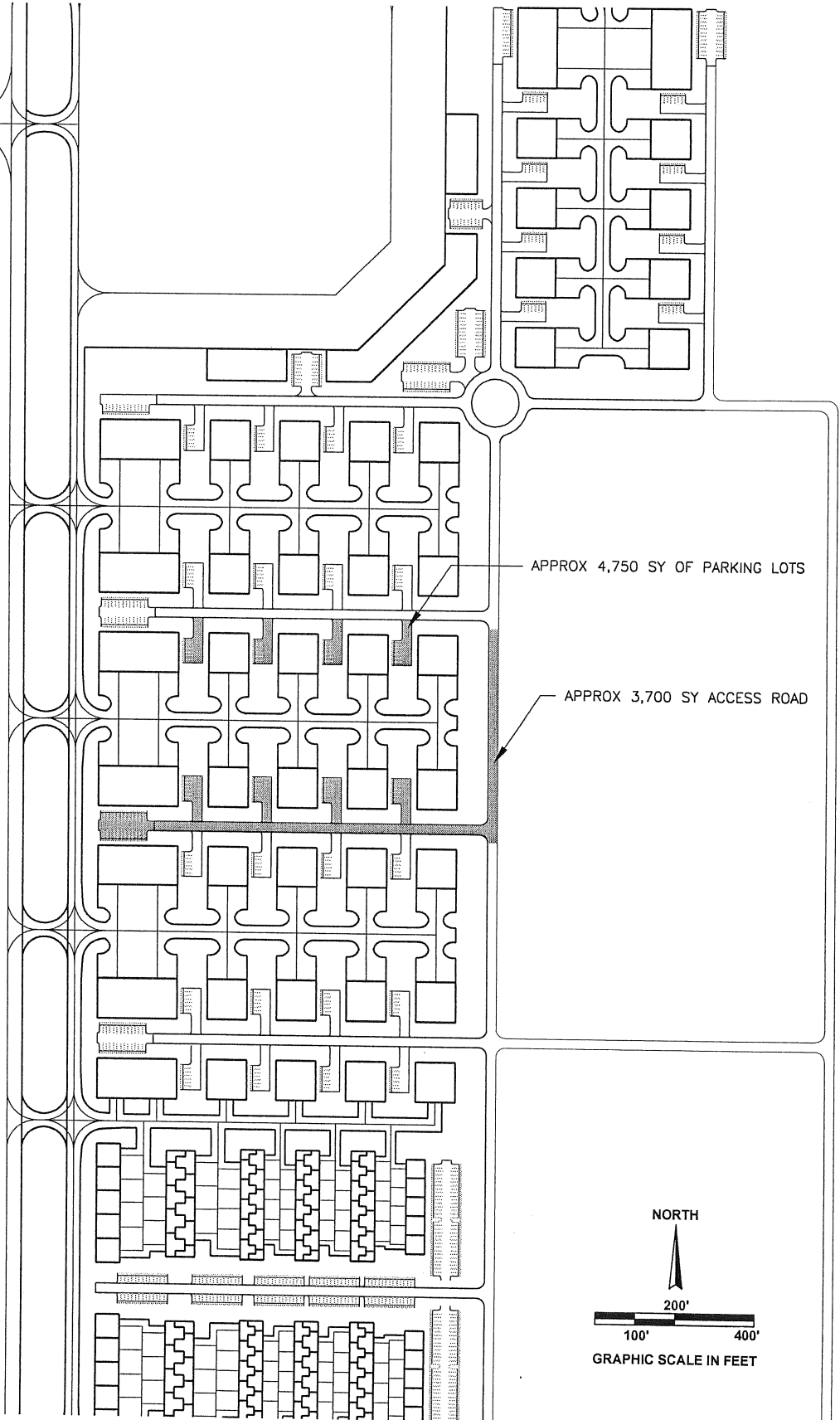


PROJECT #108

**SOUTHEAST ACCESS ROAD
& PARKING LOT - PHASE V**

CECIL FIELD AIRPORT

RUNWAY 18L-36R

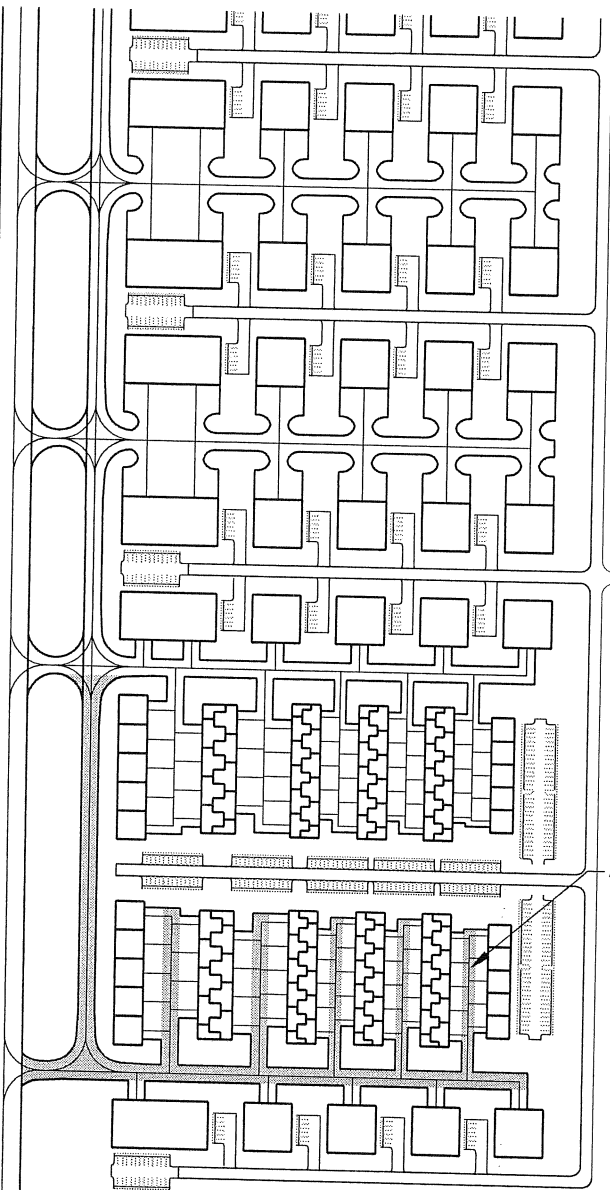


PROJECT #104
SOUTHEAST ACCESS ROAD
& PARKING LOT - PHASE IV

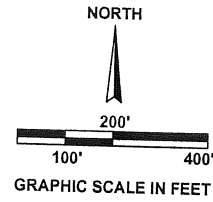
CECIL FIELD AIRPORT

RUNWAY 18L-36R

18
36

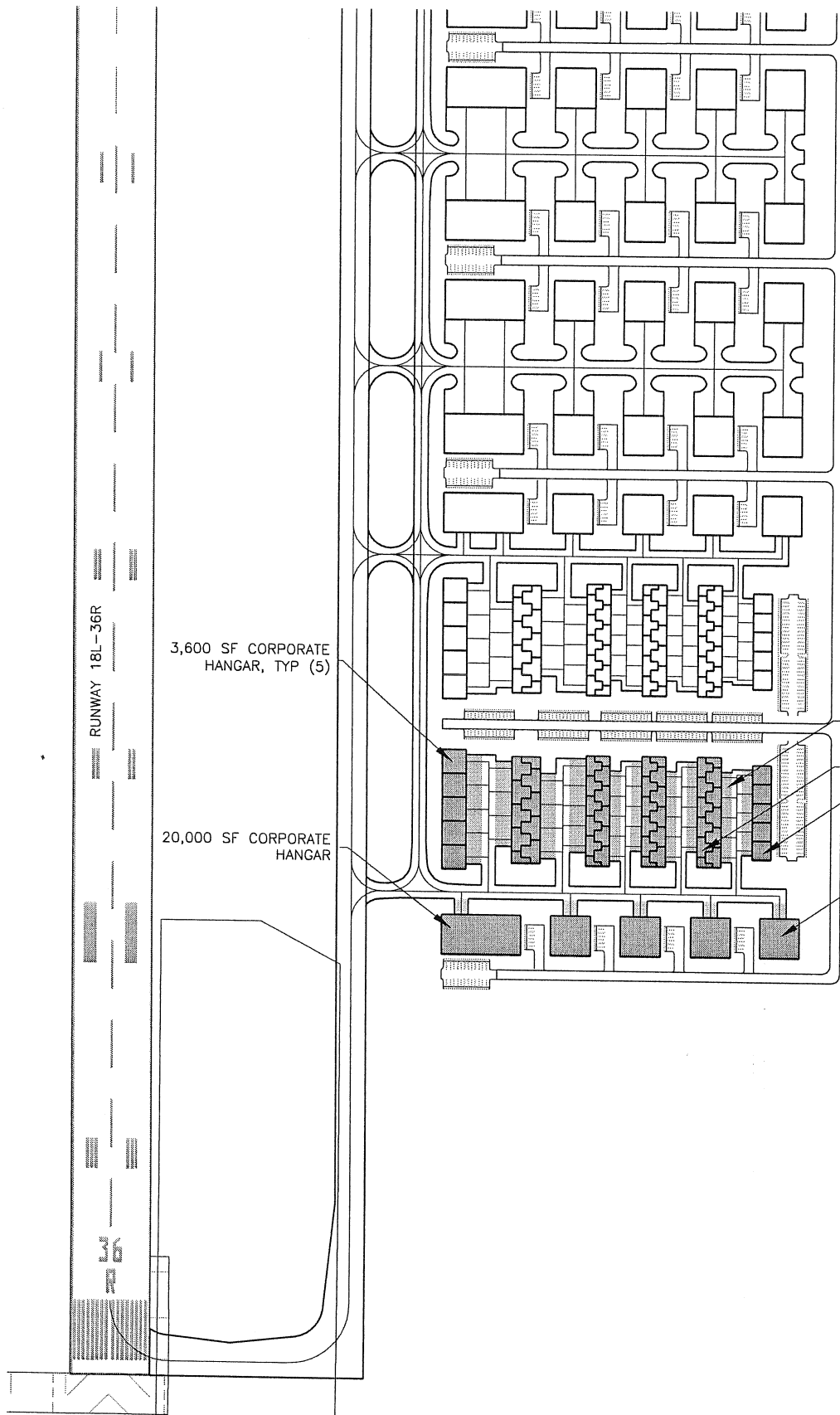


APPROX 14,000 SY TAXILANE



PROJECT #109
SOUTHEAST TAXILANE
PHASE VII

CECIL FIELD AIRPORT



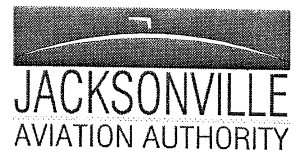
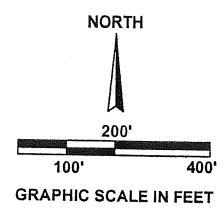
3,600 SF CORPORATE HANGAR, TYP (5)

20,000 SF CORPORATE HANGAR

APPROX 18,000 SY APRON

38 T-HANGARS TOTALLING 69,000 SF
2,300 SF CORPORATE HANGAR TYP (5)

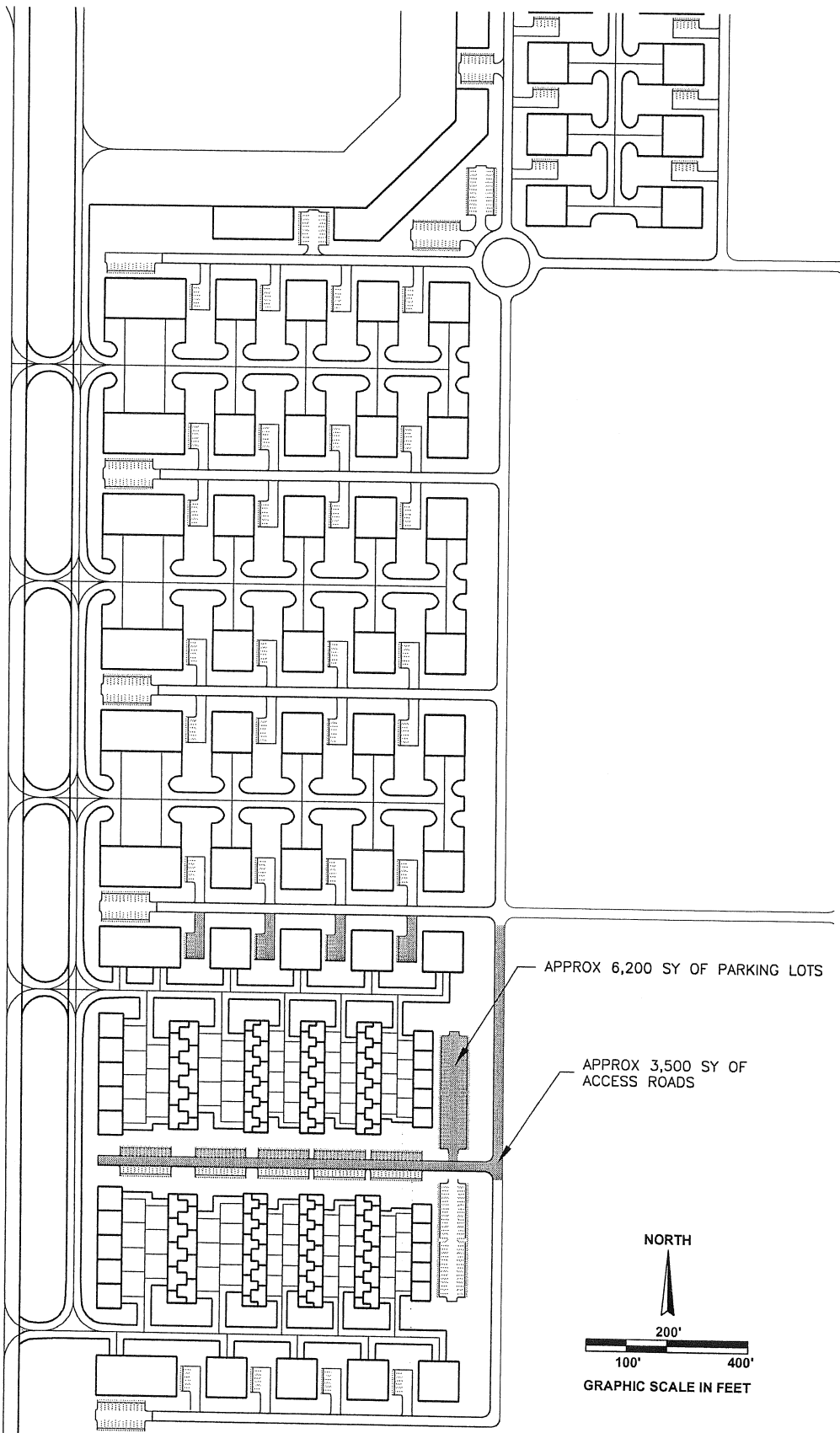
10,000 SF CORPORATE HANGAR TYP (4)



PROJECT #110
SOUTHEAST HANGAR & APRON - PHASE VII

CECIL FIELD AIRPORT

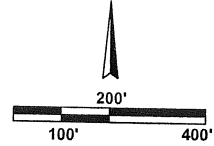
RUNWAY 18L-36R



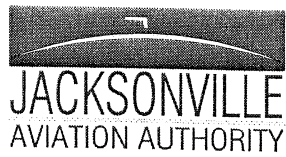
APPROX 6,200 SY OF PARKING LOTS

APPROX 3,500 SY OF ACCESS ROADS

NORTH



GRAPHIC SCALE IN FEET



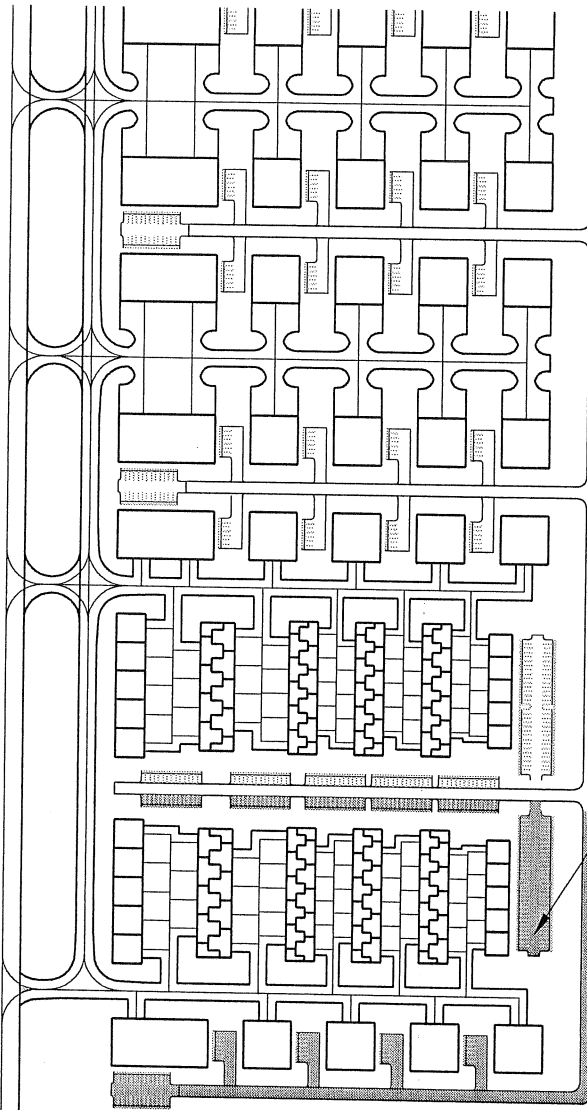
PROJECT #111

SOUTHEAST ACCESS ROAD & PARKING LOT - PHASE VI

CECIL FIELD AIRPORT

RUNWAY 18L-36R

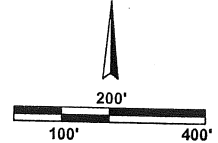
18L
36R



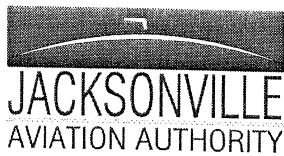
APPROX 6,500 SY OF
PARKING LOTS

APPROX 3,500 SY
ACCESS ROAD

NORTH



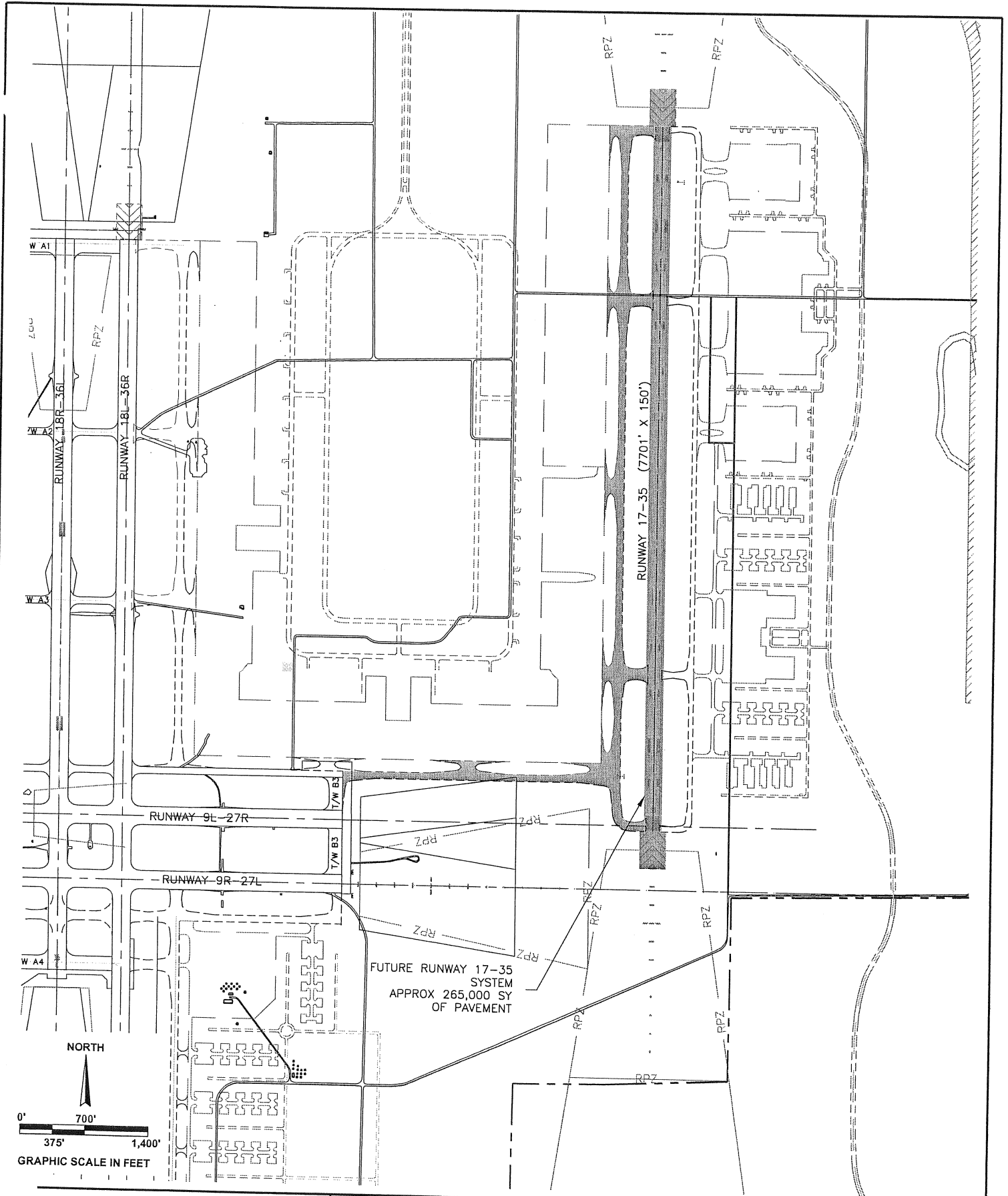
GRAPHIC SCALE IN FEET



PROJECT #112

SOUTHEAST ACCESS ROAD
& PARKING LOT - PHASE VII

CECIL FIELD AIRPORT



NORTH



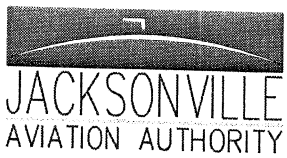
GRAPHIC SCALE IN FEET

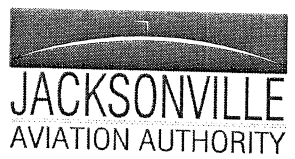
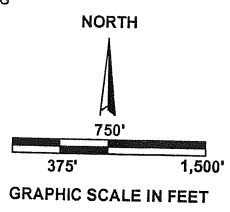
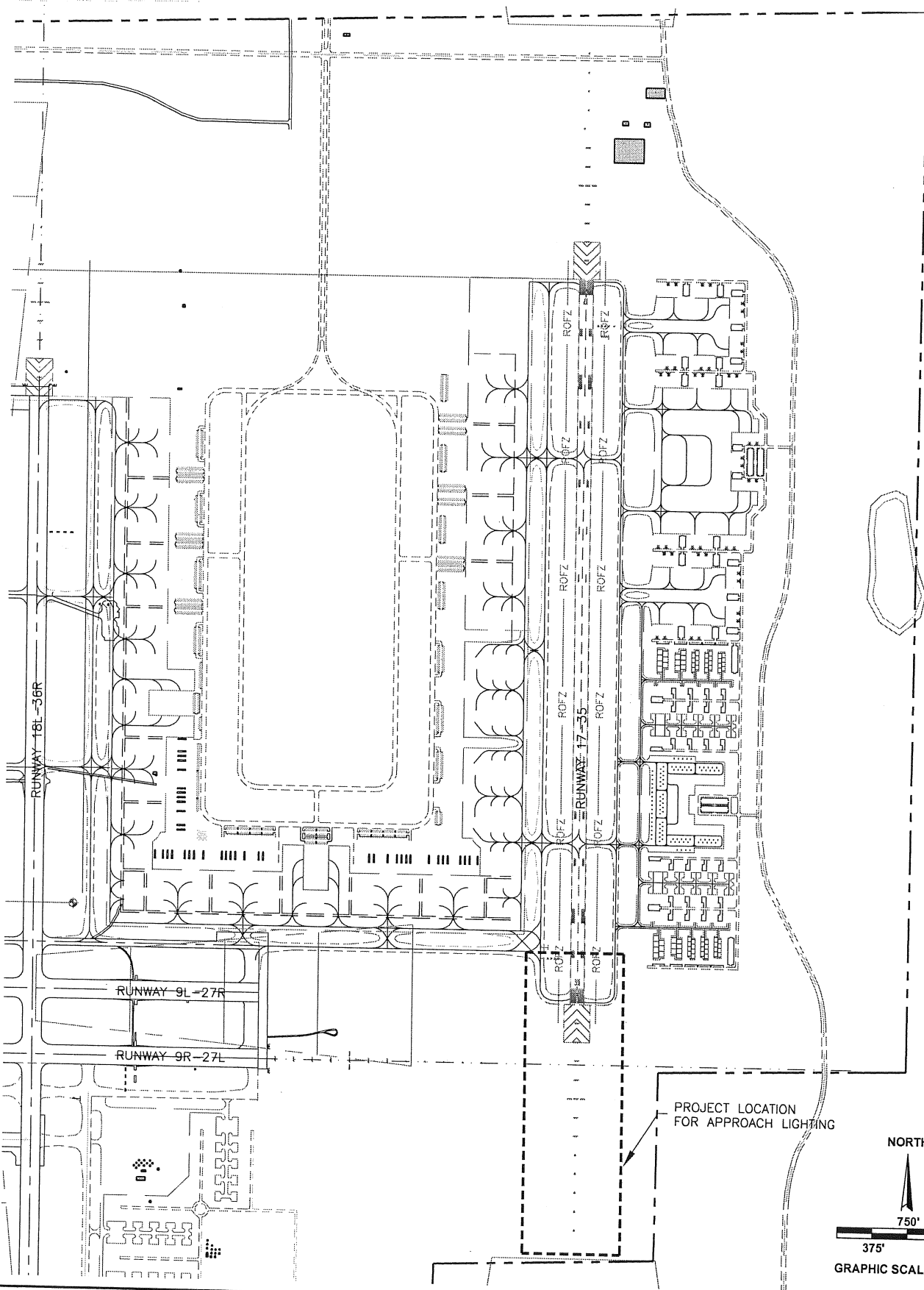
FUTURE RUNWAY 17-35 SYSTEM
APPROX 265,000 SY OF PAVEMENT

PROJECT #113

CONSTRUCT
RUNWAY 17/35

CECIL FIELD AIRPORT





PROJECT #114
APPROACH LIGHTING
SYSTEM ON PARALLEL
RUNWAY 17/35

CECIL FIELD AIRPORT

CHAPTER 8 FINANCIAL PLAN

8.1 INTRODUCTION

This chapter examines the recent financial status of Cecil Field and general financial projections for the 20-year planning period. The airport operating budget is reviewed and the typical revenues and expenditures incurred in the operation of the facility are provided for analysis. The purpose of this analysis is to outline a strategy by which the construction, operation, and maintenance of the recommended development can be financed.

The findings of this chapter represent a preliminary financial analysis to support the cost of developing the proposed airport facilities. Information used to project future funding is based on airport financial records from fiscal year 2004 to 2007. The current accounting system at Cecil Field was implemented in 2004 and previous financial information is not available. A second purpose of this chapter is to identify the funding alternatives available for implementing the proposed improvements outlined in **Chapter 7**. Funding alternatives include federal Airport Improvement Program (AIP) funds, funds available from the Florida Department of Transportation (FDOT) for airport development, Jacksonville Aviation Authority (JAA), and other funding sources.

The financial plan will evaluate a funding scenario for the development of the proposed Short-Term (2007-2011), Mid-Term (2012-2016), and Long-Term (2017-2026) improvements. It is noted that although the projected range of years for these projects is listed for each of the three planning windows, the actual development of proposed airport improvements should correspond to the growth on the demand for aviation facilities through operations and not on time alone.

The funding necessary to meet the projected capital improvement needs of Cecil Field has been estimated in **Chapter 7**. A summary of the estimated cost, in 2007 dollars, for the short-, mid-, and long-term improvements is presented in **Table 8-1**.

8.2 FINANCIAL BACKGROUND

Cecil Field is operated and maintained by the Jacksonville Airport Authority (JAA). The JAA is

responsible for fiscal management and operation of the airport. Information used to calculate data represented in this chapter was provided by the airport and compiled from available airport financial records. As working numbers, the financial information and projections presented in the tables represent raw figures that have not been adjusted for inflation.

It is further emphasized that the budget data presented here do not purport to depict the airport's finances for accounting purposes. Rather, the information is used solely for the purpose of isolating certain trends that can serve as indicators for planning purposes to ascertain the airport's ability to sustain a capital development program and continued airport operation and maintenance.

**Table 8-1:
Twenty-Year Capital Improvement Program**

Development Period	Projected Costs
Short-term (2007-2011)	\$244,794,000
Mid-Term (2012-2016)	\$330,887,000
Long-Term (2017-2026)	\$336,581,000
Total for 20-Year CIP	\$912,262,000

Source: AVCON, Inc analysis, 2007

8.3 REVENUES AND EXPENSES

Table 8-2 presents airport revenue sources and amounts as recorded in airport financial documents for the four-year period ranging from October 2003 to September 2007, or fiscal years 2004 to 2007. Similarly, **Table 8-3** lists expenses incurred from operation and improvement of the airport for the same period.

The decrease in revenues for FY2006 is due, in part, to a decrease in operations. Three factors contributed to the operational decrease of nearly 8,000 operations from 2005 to 2006. First, the Defense Base Closure and Realignment Commission (BRAC) was considering the U.S. Navy's return to Cecil Field, which would restrict operations at Cecil Field to military use. This time of instability discouraged GA users from utilizing Cecil Field due to uncertainty of future availability of the airfield.

**Table 8-2:
Historical (Actual) Sources of Revenue**

Fiscal Year	2004	2005	2006	2007
Operations	83,920	84,110	76,181	76,835
Concessions	\$266,720	\$122,608	\$144,351	\$149,039
Landing Fees	0	590	2,342	1,961
Security User Fees - GA	9,273	1,618	4,446	5,808
Other Fees and Charges	185,122	140,414	179,260	199,551
Ground Rentals	534,377	388,187	263,578	213,660
Other Space and Facility Rentals	1,796,835	2,206,962	2,210,252	2,515,508
Sale of Utilities	42,995	4,464	11,698	9,900
Other Miscellaneous Operation Revenue	95,007	151,638	11,595	19,931
Total Revenue	\$2,930,329	\$3,016,479	\$2,827,522	\$3,115,358

Source: JAA financial records, February 2008

**Table 8-3:
Historical (Actual) Sources of Expenses**

Fiscal Year	2004	2005	2006	2007
Operations	83,920	84,110	76,181	76,835
Wages and Benefits	\$441,565	\$891,676	\$931,117	\$1,517,645
Contractual Services, Materials & Supplies	232,727	486,778	521,700	430,273
Repairs and Maintenance	319,245	222,240	263,435	344,661
Promotion, Advertising and Dues	3,129	46,821	4,068	15,350
Registration and Travel	1,964	1,881	4,335	11,872
Utilities, Taxes and Government Fees	222,521	204,895	213,680	201,136
Total Expenses	\$1,221,151	\$1,854,291	\$1,938,335	\$2,520,937

Source: JAA financial records, February 2008.

Second, GA fuel prices increased dramatically, which reduced many of the operations occurring at Cecil Field. Lastly, the U.S. Navy reduced its operating budget, which reduced the number of military operations. Prior to this budget decrease, military operations averaged approximately 3,000 per month. After the budget decrease, military operations in 2006 numbered approximately 1,900 in April and 1,700 in May through August. In early 2008, operations seem to be rebounding with 7,318 in January, compared to only 6,750 in January of 2007.

In typical financial plans, historical financial data is analyzed to determine future trends with respect to revenue and expenses. An analysis of the historical data for Cecil Field yielded little correlation between operations and revenue and expenses. The time period for the historical data is a poor indicator of future trends due to the unusual circumstances with BRAC, the aviation fuel increase and the U.S. Navy budget cuts. Additionally, Cecil Field is still developing as a civilian facility since its transfer from the U.S. Navy in 1999.

In an attempt to project future revenues and expenses, the FAA-approved Forecasts developed in **Chapter 3** will be used. It is reasonable to assume that an increase in operations will provide an increase in revenues and expenses. Future operation projections are based on two growth rates, the Terminal Area Forecast (TAF) and the Compounded Annual Growth Rate (CAGR). The FAA TAF forecasts an average annual growth rate of 1.02% and the CAGR projected rate is 2.23%. Since it is assumed that the revenues and expenses will increase with operations, the TAF and CAGR growth rates will be applied to the revenues and expenses respectively. The projections should be conservative to account for unexpected changes in trends. For conservatism, the revenues will be projected using

the TAF of 1.02% and the expenses will be projected using a conservative CAGR of 2.00%. Applying these reasonable growth factors to future revenue and expenses provides a means to determine the amount of revenue that the airport can be expected to generate over the forecast period. The 20-year revenue and expense projection is presented in **Table 8-4**.

**Table 8-4: 20-Year Revenue Projection (1.02% Annual Growth)
Cecil Field, 2003 Airport Master Plan**

Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annual Operations	86,616	87,451	88,302	89,170	90,055	90,956	91,875	92,811	93,765	94,737
Operating Revenue										
Concessions	\$ 150,559	\$ 152,095	\$ 153,646	\$ 155,213	\$ 156,797	\$ 158,396	\$ 160,012	\$ 161,644	\$ 163,292	\$ 164,958
Landing Fees	1,981	2,001	2,022	2,042	2,063	2,084	2,105	2,127	2,149	2,170
Security User Fees - GA	5,867	5,927	5,988	6,049	6,110	6,173	6,236	6,299	6,363	6,428
Other Fees and Charges	201,586	203,643	205,720	207,818	209,938	212,079	214,242	216,428	218,635	220,865
Ground Rentals	215,839	218,041	220,265	222,512	224,781	227,074	229,390	231,730	234,094	236,481
Other Space and Facility Rentals	2,541,166	2,567,086	2,593,270	2,619,722	2,646,443	2,673,437	2,700,706	2,728,253	2,756,081	2,784,193
Sale of Utilities	10,001	10,103	10,206	10,310	10,415	10,522	10,629	10,737	10,847	10,957
Other Miscellaneous Operation Revenue	20,134	20,340	20,547	20,757	20,968	21,182	21,398	21,617	21,837	22,060
Total Revenue	3,147,135	3,179,235	3,211,664	3,244,423	3,277,516	3,310,946	3,344,718	3,378,834	3,413,298	3,448,114

Fiscal Year	2018	2019	2020	2021	2022	2023	2024	2025	2026
Annual Operations	95,729	96,739	97,768	98,761	99,765	100,778	101,802	102,840	103,889
Operating Revenue									
Concessions	\$ 166,641	\$ 168,340	\$ 170,057	\$ 171,792	\$ 173,544	\$ 175,314	\$ 177,103	\$ 178,909	\$ 180,734
Landing Fees	2,193	2,215	2,238	2,260	2,283	2,307	2,330	2,354	2,378
Security User Fees - GA	6,494	6,560	6,627	6,695	6,763	6,832	6,902	6,972	7,043
Other Fees and Charges	223,118	225,394	227,693	230,015	232,362	234,732	237,126	239,545	241,988
Ground Rentals	238,893	241,330	243,792	246,278	248,790	251,328	253,892	256,481	259,097
Other Space and Facility Rentals	2,812,592	2,841,280	2,870,261	2,899,538	2,929,113	2,958,990	2,989,172	3,019,661	3,050,462
Sale of Utilities	11,069	11,182	11,296	11,411	11,528	11,645	11,764	11,884	12,005
Other Miscellaneous Operation Revenue	22,285	22,512	22,742	22,974	23,208	23,445	23,684	23,926	24,170
Total Revenue	3,483,285	3,518,814	3,554,706	3,590,964	3,627,592	3,664,593	3,701,972	3,739,732	3,777,878

**20-Year Expense Projection (2.00% Annual Growth)
Cecil Field, 2003 Airport Master Plan**

Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annual Operations	86,616	87,451	88,302	89,170	90,055	90,956	91,875	92,811	93,765	94,737
Operational Expenses										
Wages and Benefits	\$ 1,547,998	\$ 1,578,958	\$ 1,610,537	\$ 1,642,748	\$ 1,675,603	\$ 1,709,115	\$ 1,743,297	\$ 1,778,163	\$ 1,813,726	\$ 1,850,001
Contractual Services, Materials & Supplies	438,878	447,656	456,609	465,741	475,056	484,557	494,248	504,133	514,216	524,500
Repairs and Maintenance	351,554	358,585	365,757	373,072	380,534	388,144	395,907	403,825	411,902	420,140
Promotion, Advertising and Dues	15,657	15,970	16,290	16,615	16,948	17,287	17,632	17,985	18,345	18,712
Registration and Travel	12,109	12,352	12,599	12,851	13,108	13,370	13,637	13,910	14,188	14,472
Utilities, Taxes and Government Fees	205,159	209,262	213,447	217,716	222,070	226,512	231,042	235,663	240,376	245,184
Total Expenses	2,571,356	2,622,783	2,675,239	2,728,743	2,783,318	2,838,985	2,895,764	2,953,679	3,012,753	3,073,008

Fiscal Year	2018	2019	2020	2021	2022	2023	2024	2025	2026
Annual Operations	95,729	96,739	97,768	98,761	99,765	100,778	101,802	102,840	103,889
Operational Expenses									
Wages and Benefits	\$ 1,887,001	\$ 1,924,741	\$ 1,963,236	\$ 2,002,500	\$ 2,042,550	\$ 2,083,401	\$ 2,125,069	\$ 2,167,571	\$ 2,210,922
Contractual Services, Materials & Supplies	534,990	545,690	556,604	567,736	579,091	590,673	602,486	614,536	626,827
Repairs and Maintenance	428,543	437,113	445,856	454,773	463,868	473,146	482,609	492,261	502,106
Promotion, Advertising and Dues	19,086	19,468	19,857	20,254	20,659	21,072	21,494	21,924	22,362
Registration and Travel	14,761	15,057	15,358	15,665	15,978	16,298	16,624	16,956	17,295
Utilities, Taxes and Government Fees	250,087	255,089	260,191	265,395	270,703	276,117	281,639	287,272	293,017
Total Expenses	3,134,468	3,197,158	3,261,101	3,326,323	3,392,849	3,460,706	3,529,920	3,600,519	3,672,529

Source: Airport Financial Records, 2004 to 2007; AVCON INC., Analysis 2008

The 20-year planning period for the Capital Improvement Program extends from 2007 to 2026; however, at the time the financial data was compiled, actual revenues and expenses for FY2007 were available. The projected revenues and expenses contain information for the period FY2008 to FY2026.

Therefore, the difference between the airport expenses and the amount of revenue the airport generates through concessions, landing fees, user fees, rentals, and other revenues is net airport income. This quantity represents funds which can be used to help finance additional operation and maintenance costs for the facility or contribute to airport reserve funds. This portion may also contribute to the amount of funding that can be allocated towards implementing projects in the updated short-term Capital Improvement Program. The difference between the capital required to execute the CIP and net airport income will represent the funding the airport must seek from other sources, such as those described in this chapter.

This chapter devotes particular attention to the short-term financial projects due to their importance to the airport's immediate development and operation needs. The following analysis shows the airport's capital budgeting position at the outset of the CIP implementation. It is emphasized that the figures obtained from this analysis are preliminary. This analysis is based on information supplied by the airport and is developed only for planning purposes.

It should be noted that all such projections are subject to fluctuation in economic conditions. These may in turn be influenced by future events that cannot be reasonably predicted. Therefore, the actual financial conditions and performance of the airport may vary substantially from results based on information available at the time of this study.

8.4 FINANCING ALTERNATIVES

Several funding possibilities are available for most projects. The possibilities vary depending on the type and purpose of the proposed projects. Generally, state and federal participation is available on projects directly related to airfield expansion or improvement and for public-use terminal facilities. Typical funding sources for Cecil Field are the FAA, Florida Department of Transportation (FDOT), Jacksonville Aviation Authority (JAA), and others. **Table 8-5** illustrates historical funding sources for Cecil Field. The following subsections discuss possible funding sources for the projects identified in this Master Plan Update for Cecil Field.

8.4.1 FAA AIRPORT IMPROVEMENT PROGRAM

The Airport Improvement Program (AIP) provides funding for airport planning and development projects at airports included in the National Plan of Integrated Airport Systems (NPIAS). Cecil Field is included in the NPIAS and is classified as a non-primary airport. This classification defines the funding category set up by Congress within which the airport will be placed and compete for federal funds to assist in airport development. The goal of this funding is to develop and maintain a nationwide system of public-use airports adequate to meet current and projected growth in civil aviation.

According to FAA Order 5100.38C, *Airport Improvement Program Handbook*, the Airport and Airway Trust Fund, which was established by the Airport and Airway Revenue Act of 1970, provides the revenues used to fund AIP projects.

The trust fund concept guarantees a stable funding

**Table 8-5:
Historical Funding Sources**

Fiscal Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
FAA	\$1,907,979	\$10,145,259	\$1,209,009	\$2,041,984	\$3,433,187	\$ 892,589	3,192,298	\$ 851,323	4,106,053
FDOT	393,461	805,492	67,485	1,699,913	701,719	63,121	290,857	1,189,832	558,054
JAA	1,052,533	4,585,676	104,254	2,496,919	774,452	5,030,859	444,349	1,224,124	2,608,054
EDA						2,000,000			
OTTED	770,00	198,896						750,000	
Total	4,123,973	21,974,139	1,380,748	6,238,816	4,909,358	7,986,569	3,927,504	4,015,279	7,272,161

Source: JAA Financial Records, February, 2008.

source whereby users pay for the services they receive. The Airport and Airway Revenue Act of 1970 authorizes the use of funds from the Airport and Airway Trust Fund to make grants under the AIP on an annual fiscal year basis.

The NPIAS lists Cecil Field's estimated five-year cost for airport improvements that are eligible for Federal grants under the AIP as \$32,276,319. This amount represents the costs eligible for AIP participation, not available funds. Two categories of FAA funding exist which could assist in funding part is these AIP eligible improvements, entitlement and discretionary funds. According to FAA Order 5100.38C, entitlement determinations are based on airport classification. As mentioned above, Cecil Field is classified as a non-primary reliever airport. A reliever airport is defined as an airport designated by the FAA to relieve congestion at Commercial Service Airports and to provide improved general aviation access to the overall community. Cecil Field is a reliever airport for Jacksonville International Airport. In the event that AIP is funded at \$3.2 billion or more, a portion of the funds are apportioned directly to sponsors of Non-primary airports. This individual non-primary airport apportionment is capped at \$150,000.

In addition to entitlement funds, the FAA distributes discretionary funding, which is made up of two types: "set-aside" funds and "remaining" funds. The "set-aside" funds are allocated solely for noise compatibility and the military airport program (MAP). The "remaining" discretionary funds are used primarily for projects that enhance capacity, safety, security, and noise compatibility programs at primary and reliever airports. However, a portion of these remaining discretionary funds are purely discretionary, which may be used for any AIP eligible project at any airport. Projects funded with discretionary funds compete for eligibility based largely on the national priority rating system. Ordinarily, a project with a high numerical score will not be deferred in order to fund lower priority work. Eligible projects at General Aviation airports may receive up to 95% of their funding from the federal government under the AIP program.

As mentioned above, the MAP is a grant set-aside from the AIP. Through this program, the FAA awards grants to current or former military airfields to assist in converting them to civil use and to reduce congestion at existing airports experiencing significant delays. The MAP provides financial assistance to the civilian sponsors who are converting, or have already converted, military airfields to civilian or joint

military/civilian use. To aid in this process, MAP grants may be used for projects not generally funded by the AIP, such as building or rehabilitating surface parking lots, fuel farms, hangars, utility systems, access roads, and cargo buildings. A total of 15 airports may participate in the program at any one time, including one general aviation airport and the airport may receive financial assistance for up to five years. Cecil Field has participated in the MAP since 2000 and receives between \$2.5 million to \$4 million per year. Cecil Field's participation in MAP will expire at the end of 2008; however, the airport is planning to re-apply for an additional 3 years, which would extend MAP funding through 2011. If funding is extended, it is reasonable to expect that the funding levels would be similar to what has been experienced in past years.

8.4.2 FLORIDA DEPARTMENT OF TRANSPORTATION

The authority for the State of Florida, Department of Transportation (FDOT) to fund Florida airport projects comes from Florida Statutes, Sections 332.006 and 322.007. FDOT personnel are authorized to identify funding for master planning projects, eligible aviation development projects, aviation discretionary capacity improvements, and to commit state aviation grant funds to publicly owned, public-use airports in Florida. The FDOT offers airports many different ways to provide funding for airport improvement projects. The Five-Year Work Program consists of projects identified on an Airport Layout Plan or in an Airport Master Plan. State funding for these projects has a priority order with federally funded projects being the first to receive state funding. The State will provide up to one-half of the non-federal share. In addition, other projects not receiving federal funding can receive state funding in order of priority.

FDOT Strategic Intermodal System (SIS) funding is available for projects that will enhance airport capacity and economic development as well as increasing safety, security, facility preservation, and environmental impact. The SIS program is designed to provide funding to a statewide system of high-priority transportation facilities. The goals of SIS include safety and security, system preservation, intermodal mobility, economic development, and sustaining quality of life. In addition to many of the short-term proposed projects at Cecil Field meeting several of the criteria listed above, the current facilities at Cecil Field, along with expansion capabilities provide potential for economic development which could facilitate economic growth in

the region. These factors would allow Cecil Field to be eligible for this program.

Since 1999, Cecil Field has received an average of approximately \$641,000 from the FDOT each year. Although this funding is not guaranteed, it is reasonable to expect similar funding in the future.

8.4.3 JACKSONVILLE AVIATION AUTHORITY (JAA)

The JAA will cover the local portion of project funding. Typically, if a project is fully AIP eligible, the FAA will fund 95% of the overall project cost, with the FDOT and local funds providing 2.5% each. Since 1999, the JAA has provided an average of approximately \$2,036,000 per year towards CIP improvements at Cecil Field. It is reasonable to assume a similar level of funding over the next several years as long as funds are available.

8.4.4 PRIVATE SOURCES

This group of potential funds could include funds provided by private businesses as well as non-profit grant agencies. The use of private funds might be possible to cover a portion of development costs associated with large corporate hangars, T-Hangar areas, or other commercial developments. The availability of developable land adjacent to airfield pavements provides opportunity for a private organization to finance construction of large hangars to be used for MRO or cargo development. The FAA and FDOT could potentially fund construction of associated taxiways and the private monies would fund non-eligible items, such as hangars and utility improvements.

A large portion of the proposed development involves large hangar developments at the Mid-Field, Northeast, and Southeast Development Areas, and funding for these developments is projected to come from private sources. It is difficult to project private funding without the availability of historical trends. These planned large hangar developments may be difficult to fund without these private sources.

8.4.5 OTHER SOURCES

Other sources of revenue have been provided to Cecil Field in the past for capital improvement projects. The Economic Development Authority (EDA) provided \$2,000,000 in 2004 for the Hangar 815 Expansion. The mission of the EDA is to promote economic development in Jacksonville. Future projects many

also qualify for an EDA grant based on job creation or potential positive economic impact to the region.

Additionally, the Office of Tourism, Trade & Economic Development (OTTED) provided \$770,000 in 1999, \$198,896 in 2000, and \$750,000 in 2006 for access road improvements, Florida Air National Guard Infrastructure improvements, and Hangar 13 improvements. Although OTTED funding is not guaranteed, it could be a possible funding source for hangar developments in 2008 and 2009.

8.5 FEASIBILITY ASSESSMENT

This financial feasibility assessment focuses on the short-term development period, 2007-2011, at Cecil Field. Many factors at Cecil Field continue to change, such as funding sources and capital improvement projects, due to its relatively recent transition from military to civil use. At the end of the short-term planning period, Cecil Field will be in operation as a civil airport for over ten years, and funding sources should have less volatility and the CIP needs should be more established.

It is important to note that this cursory financial feasibility assessment reflects various assumptions. For example, project costs are estimates and are not actual bid amounts. If significant changes occur in the actual construction costs, the JAA may have to find alternate funding or defer certain parts of the proposed project until funding becomes available. Another important assumption in this assessment is that all requested FAA AIP and FDOT funding amounts would be received. Traditionally, this has not been experienced and there are no guarantees that these governmental funds would in fact be available. A change in governmental leadership or in priorities could lead to fewer grant funds. The JAA would then have to arrange other strategies to cover any funding sources.

Based on the assumptions presented throughout this chapter, it appears feasible for the JAA to cover anticipated expenses related to the proposed CIP through 2011. According to the revenue versus expense analysis, as illustrated in Table 8-4, Cecil Field will continue to operate with a surplus of approximately \$575,000 in 2008, decreasing linearly to approximately \$105,000 in 2026. This allows revenue created by the airport to fund future airport projects.

The projected capital required to implement the short-term CIP is \$244,794,000. A significant portion of this capital, approximately \$207,188,000, is anticipated to be provided by private sources, which would involve

large commercial hangar developments. The required capital excluding privately funded projects is approximately \$37,606,000, yielding an annual funding requirement of approximately \$7.5 million.

For the airport to experience similar funding as in past years, Cecil Field must remain in the FAA MAP. Assuming the historical levels of funding can be experienced over the short-term planning period, the airport can expect approximately \$5.7 million per year from the FAA, FDOT, and JAA. The difference between the CIP capital required, excluding private funds, and the projected funding is just under \$2 million. This shortfall in funding may be supplemented by seeking other funding sources, such as the EDA or

OTTED, or by the revenue surplus. Abnormally high, short-term, funding spikes have been experienced in past years, such as 2000, and may also occur in upcoming years to fund additional CIP projects. If adequate funding levels do not exist, projects may be deferred until the following year, or until funding is available.

If private funds are not available for the large commercial hangar developments, these projects will also have to be deferred until appropriate funding is established. Once the short-term planning period has been completed, the mid- and long-term planning periods can be re-assessed based on current funding sources and operational demand.

CHAPTER 9

AIRPORT LAYOUT PLANS

9.1 INTRODUCTION

The improvement concepts recommended in a Master Plan Update are generally illustrated in a separate set of drawings, called the Airport Layout Plan (ALP) set, which accompanies the Master Plan report. The current airport improvement recommendations presented in **Chapter 4** (Facility Requirements) and **Chapter 5** (Planning Alternatives) of this report are summarized pictorially in a current set of ALP drawings. In addition to depicting the proposed airport improvements, the ALP set also illustrates existing runways, taxiways, hangars, the airport property boundary, and other existing facilities discussed in **Chapter 2** (Inventory of Existing Conditions).

The purpose of the ALP set is to provide airport management with a scaled, graphic presentation of the locations for existing facilities and future improvements. The ultimate configuration of airport facilities should demonstrate a feasible improvement plan that provides safe, compatible, and efficient airport operations. Dimensional information provided in the drawings demonstrates compliance with minimum airport design standards established by federal, state, and local criteria.

To provide uniformity in the development of the ALP set and to simplify agency review of the documents, the Federal Aviation Administration (FAA) requests that planners follow a general format for the presentation of specified information. This recommended format is outlined in FAA AC 150/5070-6B (Airport Master Plans).

9.2 AIRPORT LAYOUT PLAN SET

To clearly present the recommended airport improvement information, the ALP set includes a number of individual drawings. Several of these drawings are necessary for the set to be eligible to receive conditional approval from the FAA, whereas some additional drawings may be included in the ALP set to provide detailed illustrations of areas with complex improvement recommendations. The 16 individual drawings included in the current ALP set for Cecil Field include the following:

- Cover Sheet
- Data Sheet
- Airport Layout Plan
- Facility Plan – Northwest
- Facility Plan – Northeast
- Facility Plan – Southeast
- Airport Airspace Drawing (Sheet 1 of 2)
- Airport Airspace Drawing (Sheet 2 of 2)
- R/W 18L-36R Inner Approach Drawing
- R/W 18R Inner Approach Drawing
- R/W 36L Inner Approach Drawing
- R/W 9R-27L Inner Approach Drawing
- R/W 9L Inner Approach Drawing
- R/W 27R Inner Approach Drawing
- Ultimate R/W 17-35 Inner Approach Drawing
- On-Airport Land Use Plan
- Existing & Future Land Use Plan
- Property Map

These drawings are developed and produced as a set on 42-inch by 30-inch sheets using AutoCAD 2007. Reduced reproductions of the plan drawings are included in **Appendix 48** for illustration purposes. The drawings included in the appendix are for review and decision making purposes. Full-size sets of the drawings are submitted to the FAA and FDOT for approval. An approved ALP is perhaps the single most important planning tool for an airport.

9.3 AIRPORT LAYOUT PLAN CHECKLIST AND SUMMARY

The Airport Layout Plan Drawing Set Checklist – Orlando Airport District Office (Revised 12/01) contains a list of issues to be addressed in the ALP. This section addresses these issues as they pertain to this updated plan set.

- **Significant Development Changes Since Previous ALP Approval** – Several changes/additions have been made to this ALP as compared to the previous ALP (1998). Major changes include:

- Incorporation of additional aviation related and non-aviation related development areas.
- Revised property acquisition limits in northwest quadrant
- Revised INM contours reflecting current forecast projections
- Identification of AIP-eligibility limits for existing runway system
- Planned reductions in runway lengths for secondary runways; (6) incorporation of proposed spaceport facilities.

- **List of existing and proposed waivers to Federal Aviation Administration (FAA) airport design standards** – No waivers to FAA standards are proposed at this time.

- **Discuss any structures located on the plan which in your opinion may:**

1. **Adversely affect the flight or movement of aircraft** – It is not anticipated that any of the proposed structures will adversely affect the flight or movement of aircraft.
2. **Cause electro-magnetic interference at air navigation aids** – It is not anticipated that any of the proposed structures will cause electromagnetic interference with air navigational aids. It is recommended, however, that the FAA conduct a review of any proposed facilities for potential interference prior to construction of any new facilities.
3. **Derogate line-of-sight feasibility from a control tower** – Building 177 is currently located within the Runway Visibility Zone (RVZ) as defined in Chapter 5 of FAA Advisory Circular 150/5300-13. This building currently violates line-of-site

requirements but is proposed to be relocated and demolished.

- **List any development which could be a potential noise problem** – As proposed in the Airport Layout Plan (ALP), Runway 18R-36L and 9L-27R are proposed to be shortened. The reduction in length would result in Runway End 18R and Runway End 27R relocated away from the current property boundary, which would raise the departure and approach surfaces above the surrounding communities. This development may decrease current noise levels to the north and east of the airport. Proposed Runway 17-35, located parallel and east of the Runway 18-36 system, may introduce potential noise concerns. Detailed noise analyses are recommended prior to initiating development related to proposed Runway 17-35.

Forecasts indicate that airport operations are anticipated to experience continued growth. However, many of the future operations expected at the airport will be conducted in improved and quieter aircraft, which would help to mitigate the potential for future noise impacts.

Many of the properties surrounding the airport include residential development. Changes to the City of Jacksonville zoning and land development regulations are recommended in this ALP Update project.

- **Does the ALP show anticipated Nav aids?** – Anticipated Nav aids include the addition of an ILS/LPV precision approach for Runway 9R and a GPS/LPV precision approach for Runway 27L. It is proposed that Runway 18L remain a non-precision approach but will be improved with an LPV approach. Similarly, Runway 36R will remain a precision approach but will be improved with a GPS-based approach. In addition, the plan recommends a precision GPS instrument approach on each end of Runway 17-35. It is anticipated that these approaches may be based on future GPS procedures in lieu of traditional ILS-based approaches.
- **Provide any applicable comments on the proximity of urban congestion or any**

potential problem related to safety of persons and property on the ground -

Avigation easements are in place in the vicinity of the Airport and reach as far north as Interstate 10. These easements will ensure compatibility between precision instrument approach operations by providing control of structure heights, etc. in these regions. Residential development is occurring south of the proposed location of Runway 17-35. Changes to the City of Jacksonville zoning and land development regulations are recommended to ensure compatibility with the strategies of this ALP Update project.

- **Discuss staging of construction as is applicable to the Master Plan** - An overview of the proposed construction schedule for airport development is provided in the tables following pp. 7-2 of the Master Plan Update narrative report. **Exhibit 7-1** (p. 7-19) illustrates the projected short-term (0-5 years) improvements. A discussion of short term improvements for the Northwest development area is provided on pp. 5-30. Mid- to long-term projects are discussed on pp. 5-44 through 5-48.

Improvements to future hangar facilities, vehicular parking facilities, and future property acquisition projects have been scheduled in phases to correspond with the projected demand for these facilities. The proposed development in each phase has been estimated to accommodate future growth, and to avoid excess costs associated with the over-development of the facilities.

Typically, development of the proposed airport improvements should occur as needed to accommodate demand and to match funding availability. The construction of any of the individual proposed improvements may be staged based on the availability of funding.

- **Discuss any changes to non-aviation use property** - This Master Plan Update and ALP proposes the acquisition of approximately 140 acres bordering the northwest property line of the airport. These parcels are to be acquired to facilitate the development of MRO/Cargo/Maintenance hangar development in the Northwest Development

Area. This hangar development will cause this property to become “aviation-use.”

This Master Plan Update and ALP also proposes that approximately 335 acres located at the northeast corner of the Airport, be reserved for non-aviation commercial development to address airport self-sufficiency goals.

- **Discuss if the circulation of the proposal would in any way compromise the sponsor’s position in land acquisition** - The circulation of the Master Plan Update and ALP should not compromise the sponsor’s position in land acquisition. The sponsor’s proposals have been coordinated with appropriate City, County, State, and Federal governmental agencies.

9.4 SHEET 1: COVER SHEET

The first sheet in the ALP set states the official airport name (Cecil Field), the official airport operator (Jacksonville Aviation Authority), and the plan preparers. This cover sheet depicts the general location of Cecil Field in relation to the state of Florida and within the Duval County/Jacksonville Area. A full index of the 18 drawings in this ALP set is also provided on Sheet 1. Additionally, a “Revisions” box is included so that future changes can be properly documented.

9.5 SHEET 2: DATA SHEET

This sheet provides the “Runway Data Table”, “Taxiway/Taxilane Data Table”, “Airport Data Table” and the appropriate windroses based on the airport layout. The data table provides the appropriate FAA design standards for each existing and proposed runway.

The Runway Data Table summarizes the existing and ultimate designations for the primary FAA design criteria. This includes items such as pavement dimensions and operational safety criteria (RSA, ROFZ, ROFA, RPZ, and separation distances). The data table details other airfield characteristics such as lighting and marking; NAVAIDS; runway threshold data (coordinates and elevation); and taxiway parameters. Additionally, data is provided regarding the planned instrument approaches to each runway end, including the type of approach, the approach minima, and the approach slope.

The “Taxiway/Taxilane Data Table” provides FAA design criteria for Aircraft Design Groups (ADG) II, III and IV. The “Airport data Table” describes key characteristics of the airport. This table notes the applicable Airport Reference Code (ARC), the NPIAS role and classification, and the overall acreage of the property.

Additionally, the Data Sheet includes a legend presenting the various symbols used for both the existing and ultimate developments at Cecil Field. A statement regarding the requirement for FAA notification prior to construction is also included on this drawing.

This Data Sheet also presents three windroses as well as tables showing the percent wind coverage for the area. The three conditions are based on the following criteria:

- *All Weather*: This includes all recorded observations no matter the visibility or cloud ceiling height.
- *Visual Flight Rule (VFR)*: This includes observations when the visibility was greater than or equal to three miles and/or the cloud ceiling was greater than or equal to 1,000 feet.
- *Instrument Flight Rule (IFR)*: This condition includes the recorded observations when the visibility was less than three miles and/or the cloud ceiling ranged from 200 to 1,000 feet.

This analysis was based on wind observation data from the National Climatic Data Center for the period of July 1989 to June 1999.

9.6 SHEET 3: AIRPORT LAYOUT PLAN

The Airport Layout Plan (ALP) drawing graphically presents at a scale of 1 inch = 800 feet the existing condition of Cecil Field. Additionally, this drawing shows other ultimate developments planned through 2026. These long-term developments serve to preserve areas for their designated uses. Thus, this ALP drawing will function as effective guidance to airport management in future development decisions. This ALP drawing will also be utilized by the FAA and FDOT in reviewing future grant funding decisions.

Most of the information presented on the ALP drawing has been analyzed in preceding chapters, justifying the need for each recommended development. The primary airfield developments as depicted on the ALP include runways, taxiways, navigational aids, and FAA

safety-related clearance areas (such as the RPZ and RSA). The ALP depicts the primary vehicular access route (Aviation Avenue) from 103rd Street as well as showing the airport interior roads. Additionally, the ALP drawing identifies the existing runway end elevations.

9.7 SHEETS 4-6: FACILITY PLAN – NORTHWEST, NORTHEAST AND SOUTHEAST

These three facility plan sheets provide greater detail in the Northwest, Northeast and Southeast development areas. Each of these sheets provide a “Facility Information” table which presents building numbers, building descriptions, approximate sizes and years constructed.

9.8 SHEETS 7-8: AIRPORT AIRSPACE DRAWINGS

Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*, sets forth criteria defining the airport’s navigable airspace to ensure that aircraft approaches to each runway are free from hazards that could affect the safe and efficient operation at airports in the U.S. The Part 77 criteria define imaginary surfaces in the airspace surrounding an airport that no manmade or natural object should penetrate. The dimensions of these imaginary surfaces vary based upon the most critical existing or planned aircraft projected to use a runway and the most critical existing or planned aircraft approach to each runway end.

This airspace drawing, having a graphic scale of 1 inch = 2,000 feet, is presented on two sheets in the ALP set. Sheet 7 shows the airport with the imaginary conical surface. Sheet 8 presents the approach surfaces where they extend beyond sheet 7, in particular Runway Ends 35, 36R, 17, 18L, 9R and 27L. A U.S.G.S. digital quadrangle map from 2006 serves as the background for these drawings. The following list describes the Part 77 surfaces applicable for Cecil Field.

- Primary Surface: This defined area includes a rectangular area symmetrically located about each runway centerline and extended a distance of 200 feet beyond each runway threshold. The primary surface width is based on the type of approach to a particular runway. The elevation of the primary surface is the same as the runway centerline elevation. The

primary surface width is 500 feet for the visual approach runways and 1000 feet for the precision approach runways.

- Approach Surfaces: These surfaces begin at the end of the Primary Surface (200 feet beyond the runway threshold) and slope upward at a ratio determined by the runway category and the approach type available to the runway end. The width and elevation of the inner end of the approach surface and the outer end of the primary surface are the same. The approach surface length and width at its outmost edge are governed by the runway category and approach procedure available.
- Horizontal Surface: A level, oval-shaped area situated 150 feet above the airport elevation, with an elevation of 235.1 feet above AMSL at Cecil Field. The horizontal surface is created by extending an arc with a 10,000-foot radius from the center of the primary surface for each runway having an instrument approach. Tangents between the arcs are then connected forming the full horizontal surface.
- Conical Surfaces: Extends outward for a distance of 4,000 feet beginning at the outer edge of the horizontal surface and sloping upward at a ratio of 20:1. For the new airport site, the conical surface begins at an elevation of 235.1 feet AMSL and ends at 435.1 feet AMSL.
- Transitional Surfaces: These surfaces begin at the edges of the primary and approach surfaces and slope outward at a ratio of 7:1.

To ensure that future developments do not penetrate these surfaces, this airspace drawing should become a key tool in future land use and development decisions for property located near Cecil Field.

The Part 77 surfaces, presented on Sheets 7 and 8, are based off the current runway lengths. Traditionally, the Part 77 surfaces are based off the ultimate runway configuration however, to reserve the airspace required for current airport operations, the existing runway configuration is utilized. This situation provides the most demanding surfaces for the surrounding areas. Considering the most demanding surfaces during planning efforts will ensure airspace compliance in the future. Basing the Part 77 surfaces on the ultimate runway configuration would raise the approach surface off the Runway 18R and 27R Ends, which may allow for penetrations into the current airspace. Once the runway ends have been relocated,

the Part 77 surfaces can be revised to reflect the current configuration.

9.9 SHEETS 9-15: INNER APPROACH DRAWINGS

In contrast to the Airport Airspace Plan, which presents the Part 77 surfaces, each Inner Approach Drawing shows a close-in view near each runway end. Each sheet shows a plan and profile view of the inner approach areas and identifies the estimated elevations of roads, fences, buildings, etc. under or near the approach surface. These drawings depict both the initial and ultimate inner approach surfaces. The Inner Approach Drawings also provide a detailed view of the Runway Protection Zone at each runway end, which should remain clear of all incompatible objects. Each sheet also includes a table identifying any obstructions.

9.10 SHEET 16: ON-AIRPORT LAND USE PLAN

The On Airport Land Use Plan sheet depicts existing and ultimate airport developments. It identifies areas reserved ultimately for land acquisition, the Natural and Recreational Corridor, RPZs, and non-aviation related development.

9.11 SHEET 17: EXISTING AND FUTURE LAND USE PLAN

The Existing and Future Land Use Plan sheet presents land uses surrounding Cecil Field, which include residential, commercial, agriculture, etc. The Cecil Field property boundary is shown along with the existing and ultimate 60, 65, 70, 75, and 80 DNL contour lines. Ordinance 2006-1225-E (March 27, 2007) outlines which types of land uses are allowed within different noise exposure zones and this sheet should be used in making future development decisions.

9.12 SHEET 18: PROPERTY MAP

The final drawing in the ALP set for Cecil Field identifies the existing and proposed airport boundary, encompassing planned developments, wetlands, natural and recreational corridor, and property acquisition. Curve data is presented for the property boundary near Lake Fretwell.

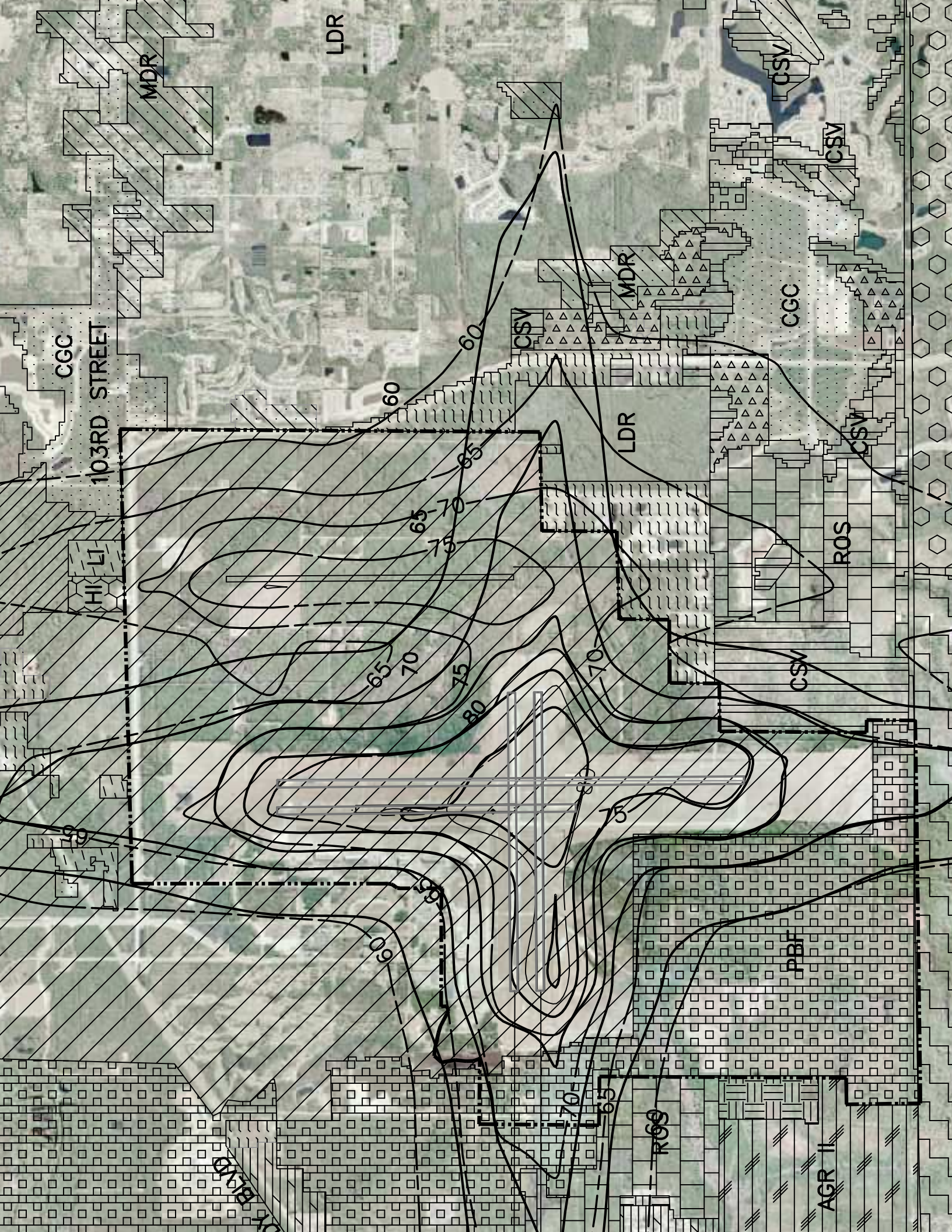
9.13 SUMMARY

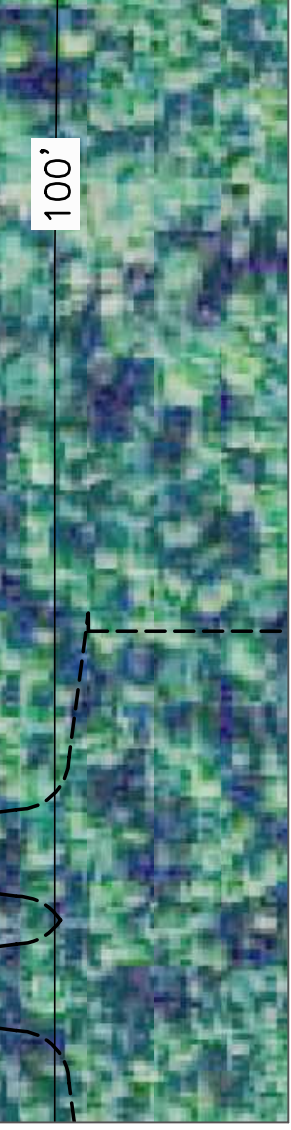
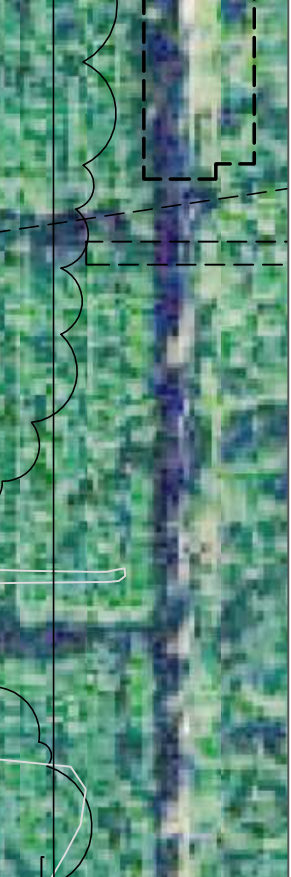
The ALP set for Cecil Field provides a graphic presentation of the existing and ultimate developments. As the airport develops Cecil Field,

these drawings should be revised to reflect what is constructed. These revisions should be noted on the appropriate ALP sheet with a description of the change being documented in the respective Revision Tables. These interim changes should then be incorporated in the next master plan update.

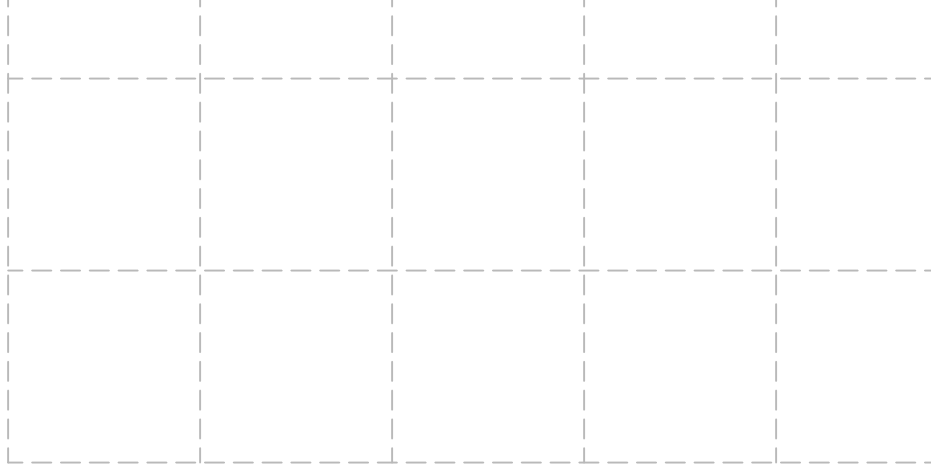
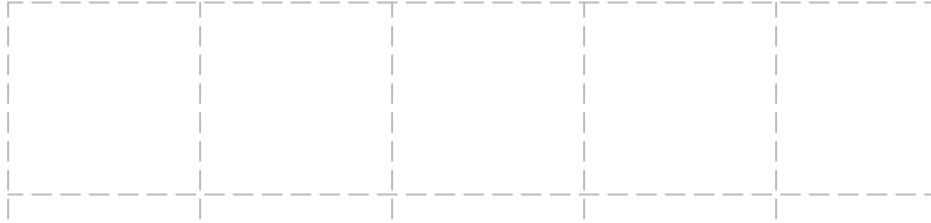
- 1. COVER SHEET**
- 2. DATA SHEET**
- 3. AIRPORT LAYOUT PLAN**
- 4. FACILITY PLAN - NORTHWEST**
- 5. FACILITY PLAN - NORTHEAST**
- 6. FACILITY PLAN - SOUTHEAST**
- 7. AIRPORT AIRSPACE DRAWING (SHEET 1 OF 2)**
- 8. AIRPORT AIRSPACE DRAWING (SHEET 2 OF 2)**
- 9. R/W 18L-36R INNER APPROACH DRAWING**
- 10. R/W 18R INNER APPROACH DRAWING**
- 11. R/W 36L INNER APPROACH DRAWING**
- 12. R/W 9R-27L INNER APPROACH DRAWING**
- 13. R/W 9L INNER APPROACH DRAWING**





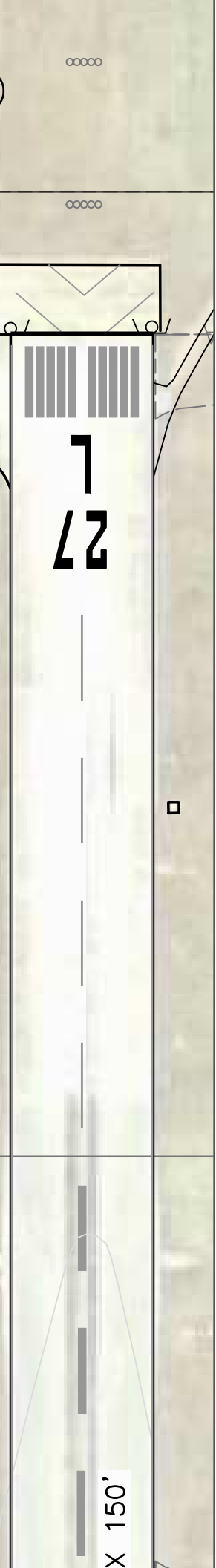


PLAN VIEW



RUNWAY END 35
EL. 70' MSL (EST.)

RUNWAY END 17
EL. 70' MSL (EST.)

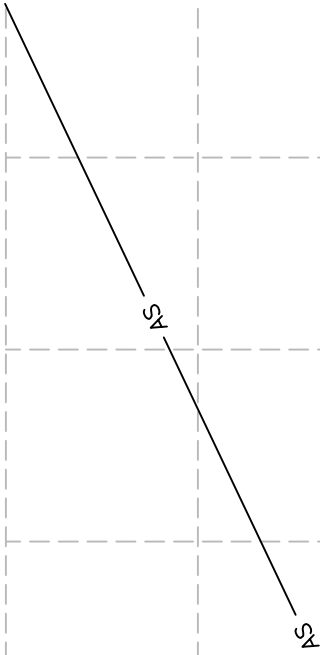


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27

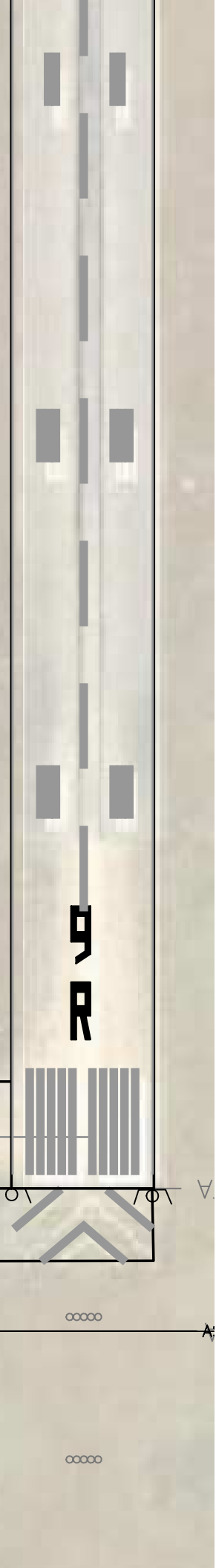
RUNWAY 27R

PLAN VIEW

①



EXISTING RUNWAY END 27R
EL. 67.6' MSL (EST.)



RUNWAY 9L

PLAN VIEW

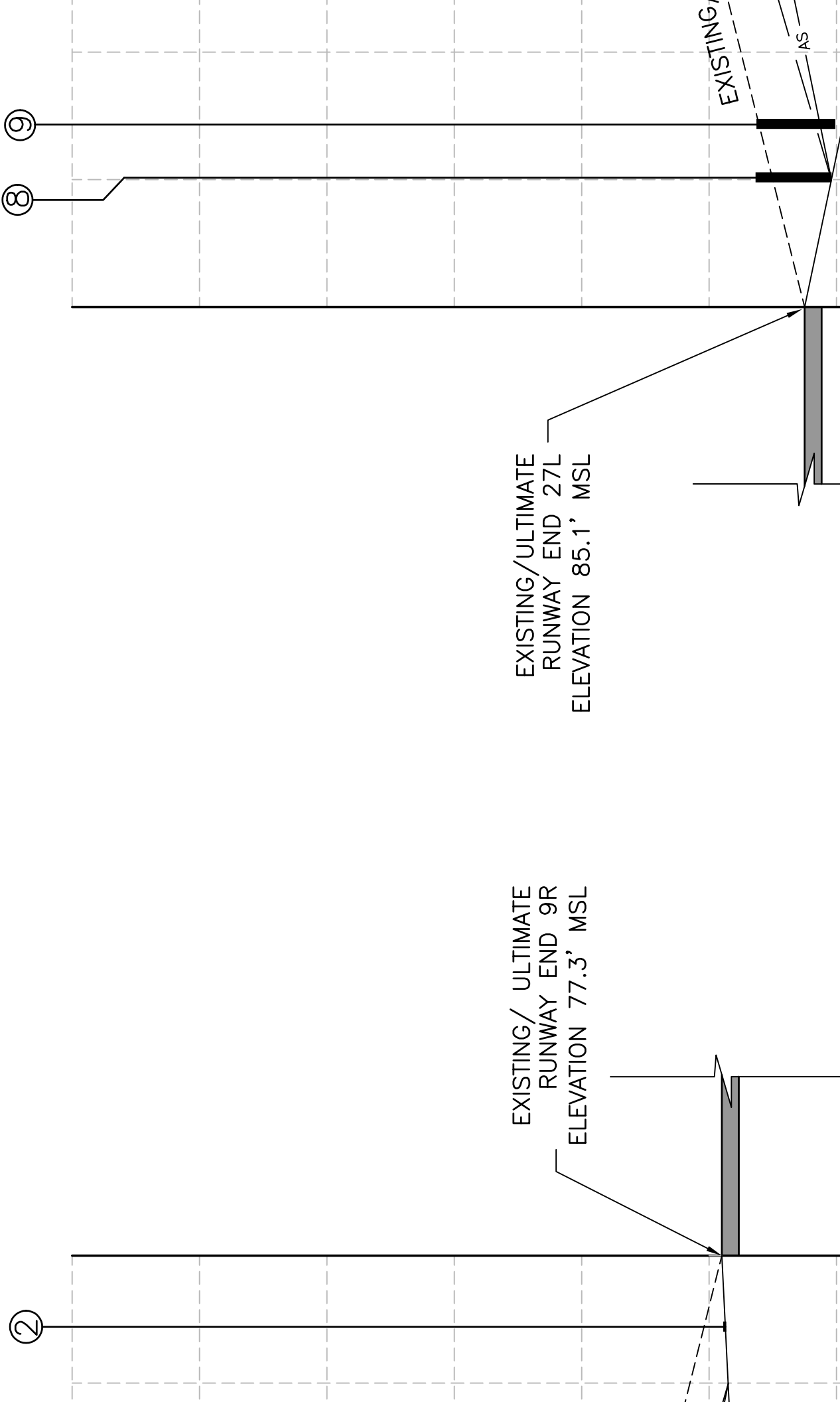
①

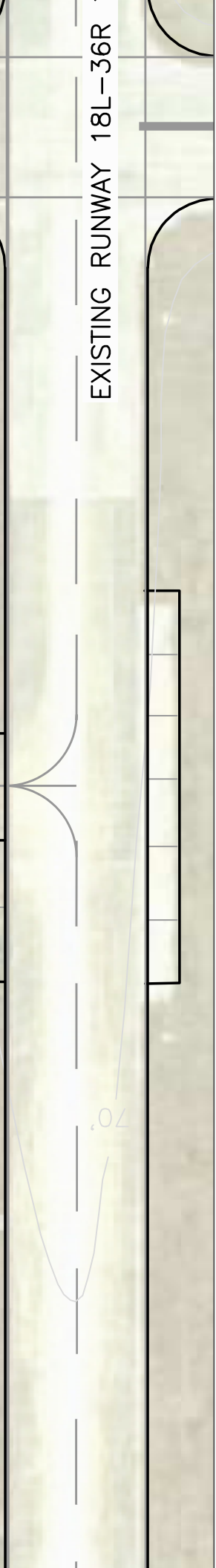
②

ULTIMATE/EXISTING
RUNWAY END 9L
EL. 80.9' MSL

AS

PLAN VIEW





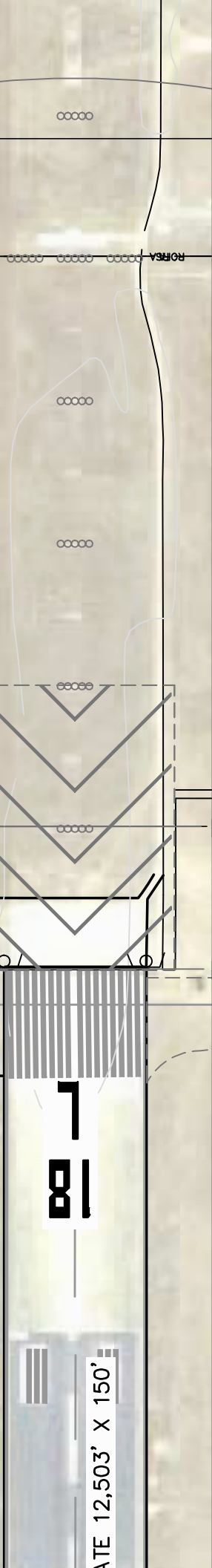
EXISTING RUNWAY 18L-36R

RUNWAY 36L PLAN VIEW

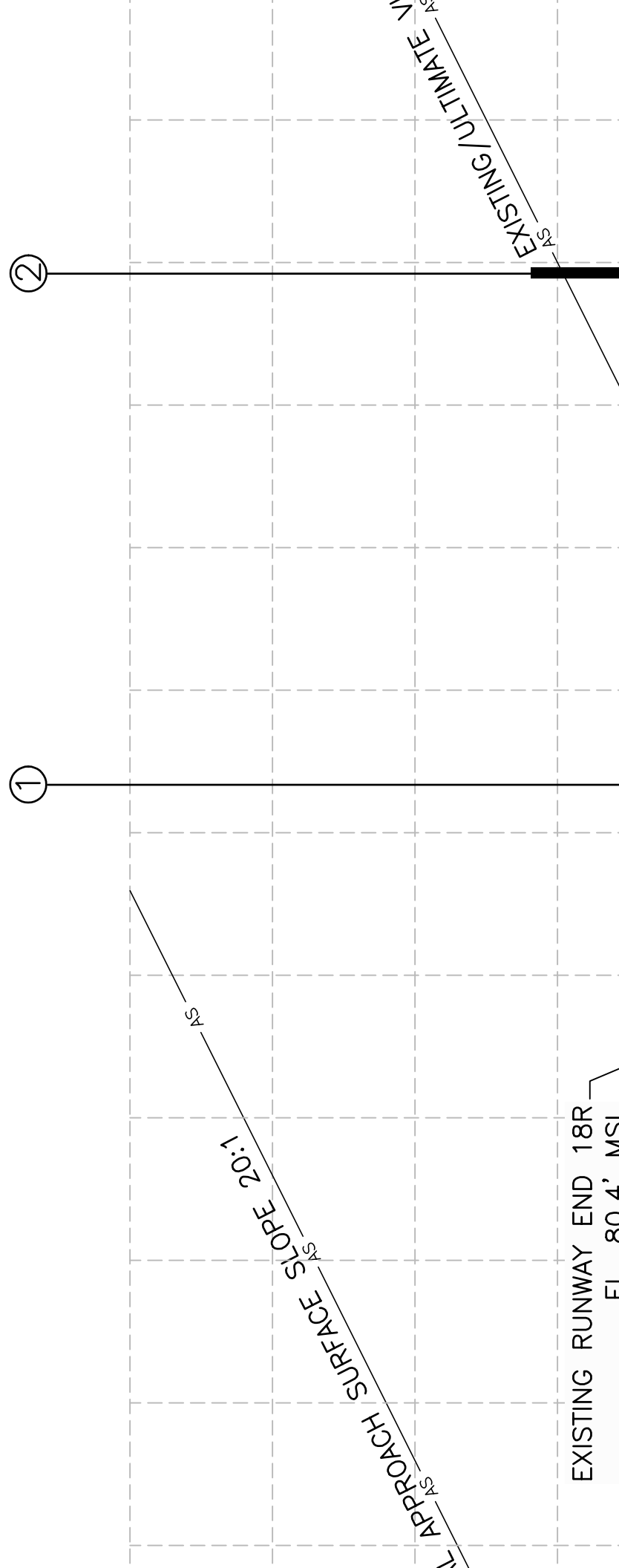
④

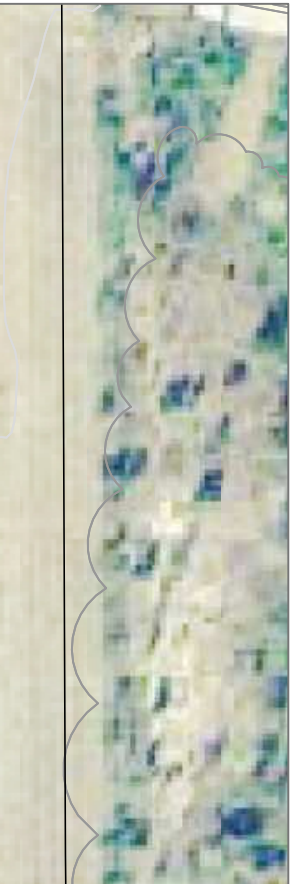
EXISTING RUNWAY END 36L
EL. 71.5' MSL

CH SURFACE SLOPE 20
AS



RUNWAY 18R PLAN VIEW

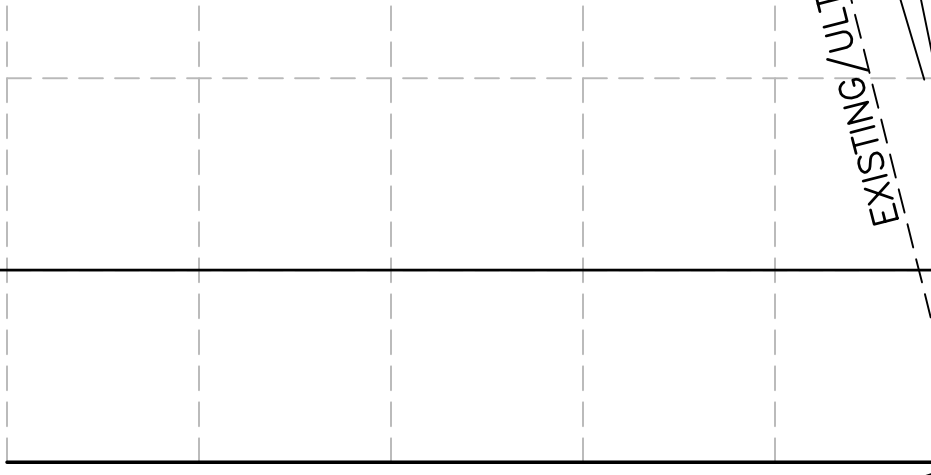
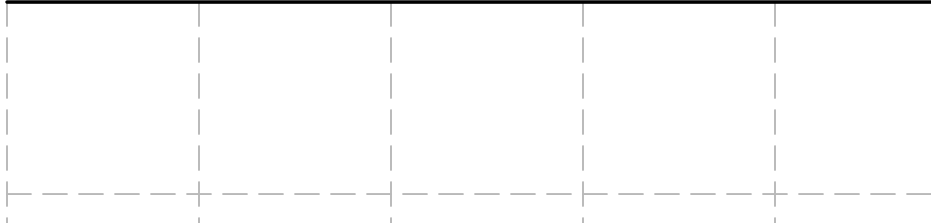




TRANSITIONAL SURFACE
SLOPE 7:1

PLAN VIEW

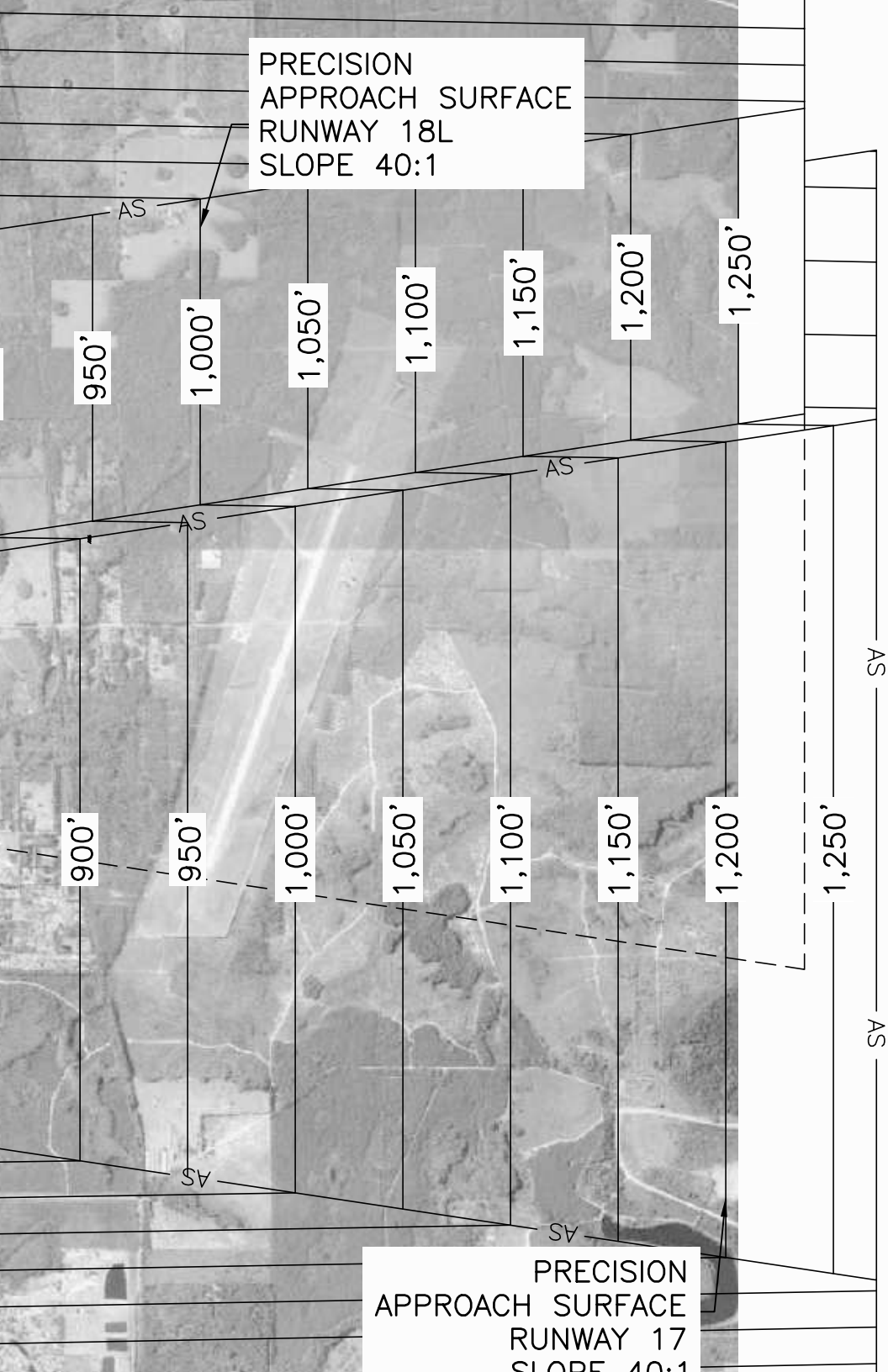
④ ⑤



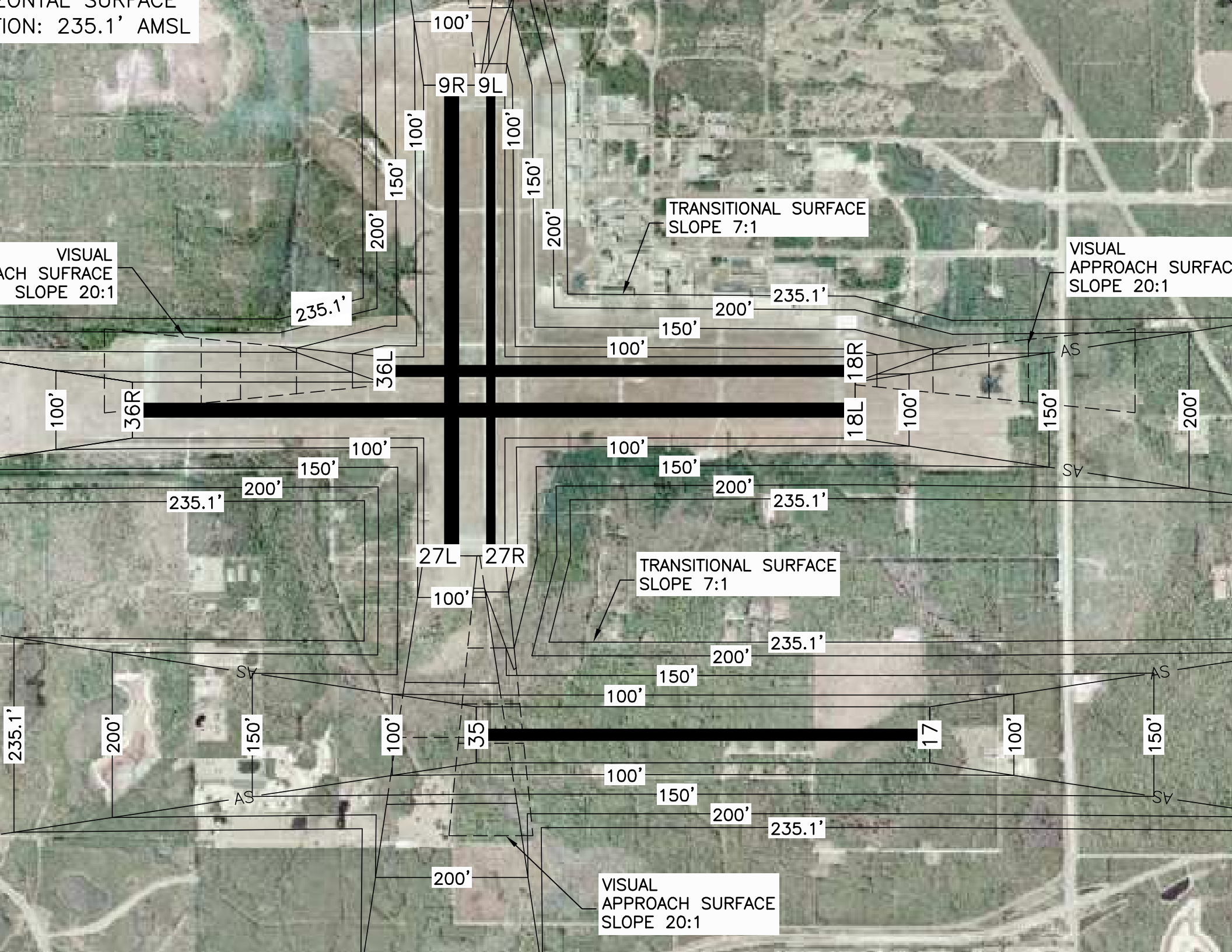
EXISTING/ULTIMATE
RUNWAY END 36R
EL. 72.7' MSL (EST.)

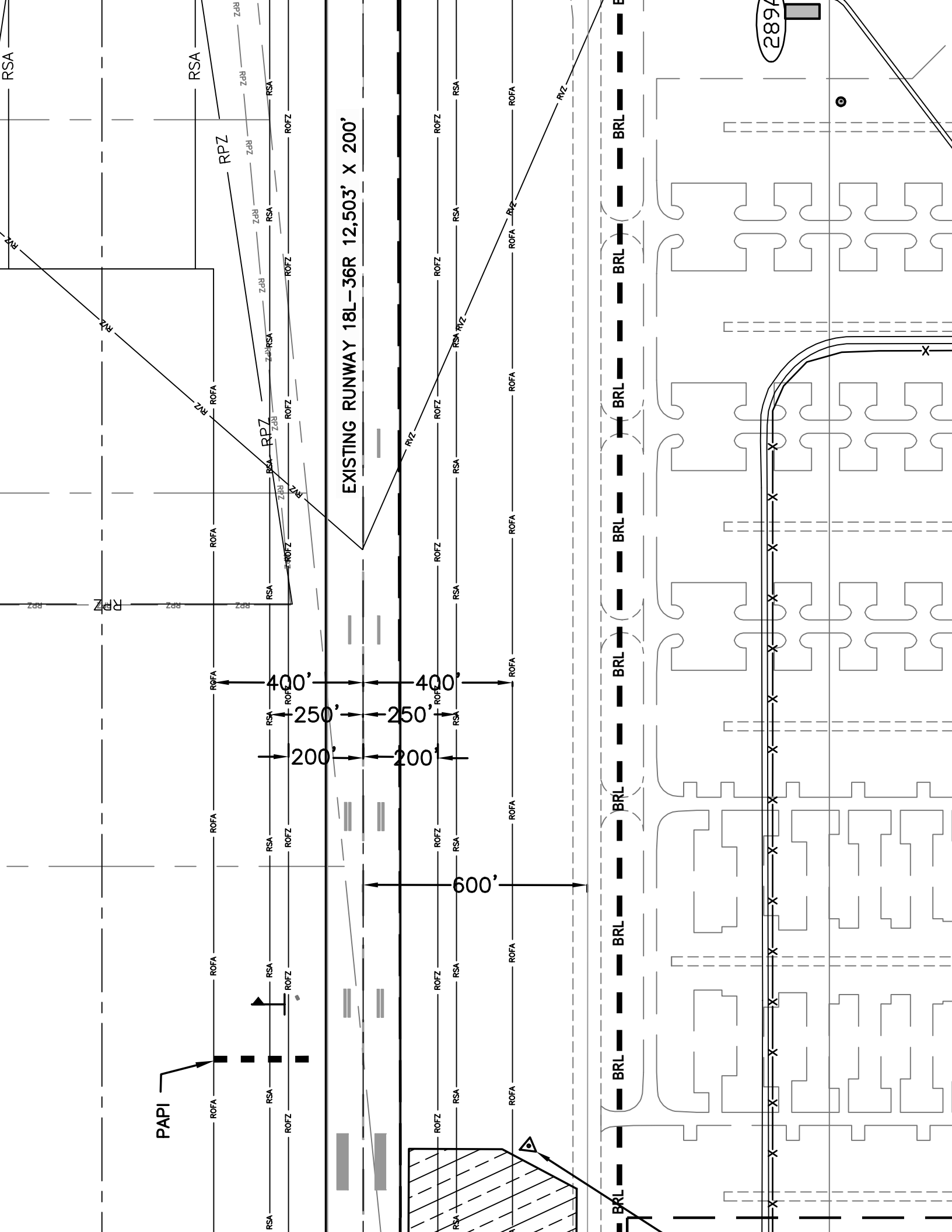
EXISTING/ULTIMATE
RUNWAY END 18L
EL. 80.7' MSL (EST.)

EXISTING/ULT



HORIZONTAL SURFACE
ELEVATION: 235.1' AMSL



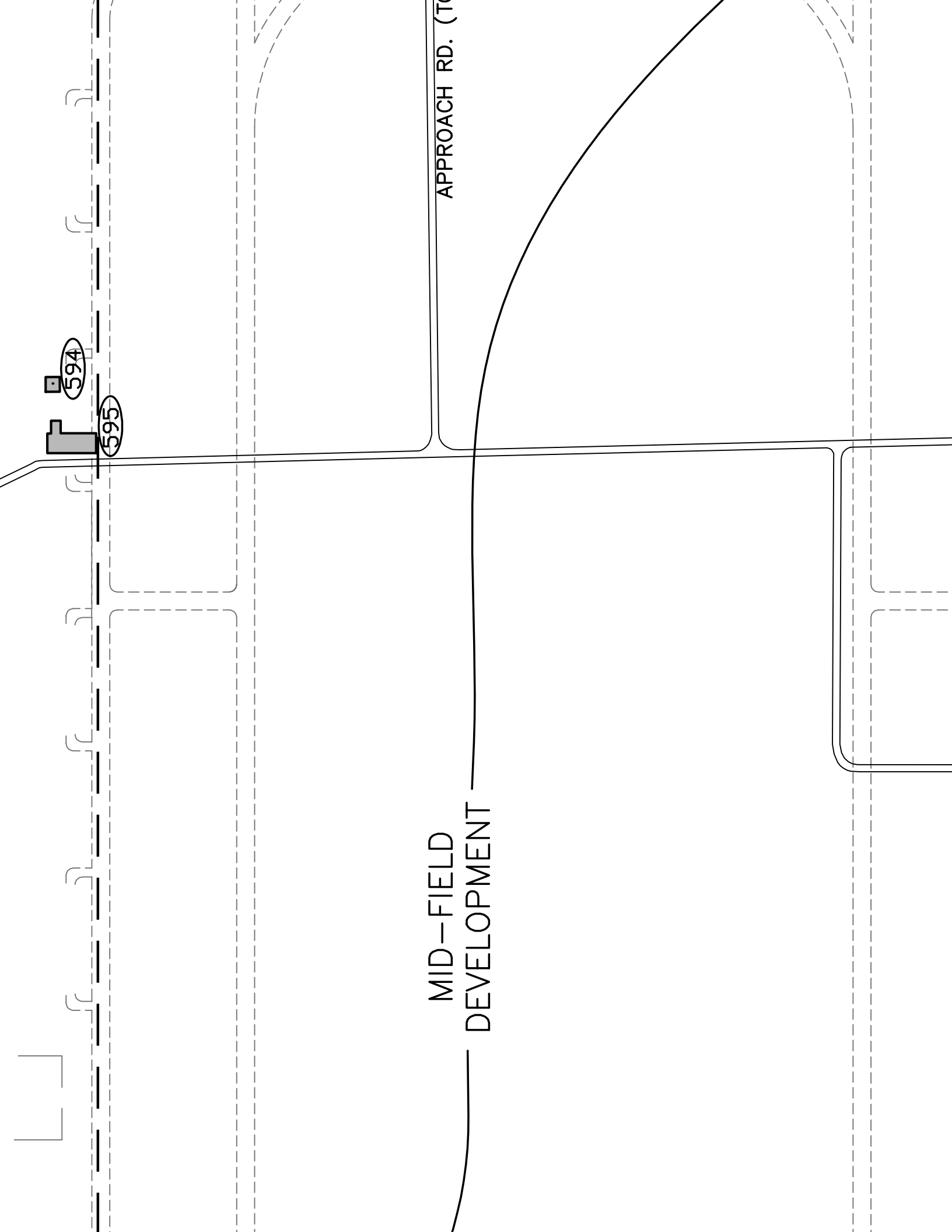


MID-FIELD
DEVELOPMENT

APPROACH RD. (T)

594

595



FUTURE PROPERTY ACQUISITION

AVIATION AVENUE

1847

328

334

339

815

825

1845

818

390'

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

BRL

EXISTING

ROFA

ROFA

ROFA

ROFA

ROFA

ROFA

ROFA

ROFA

ROFA

ZdB

ZdB

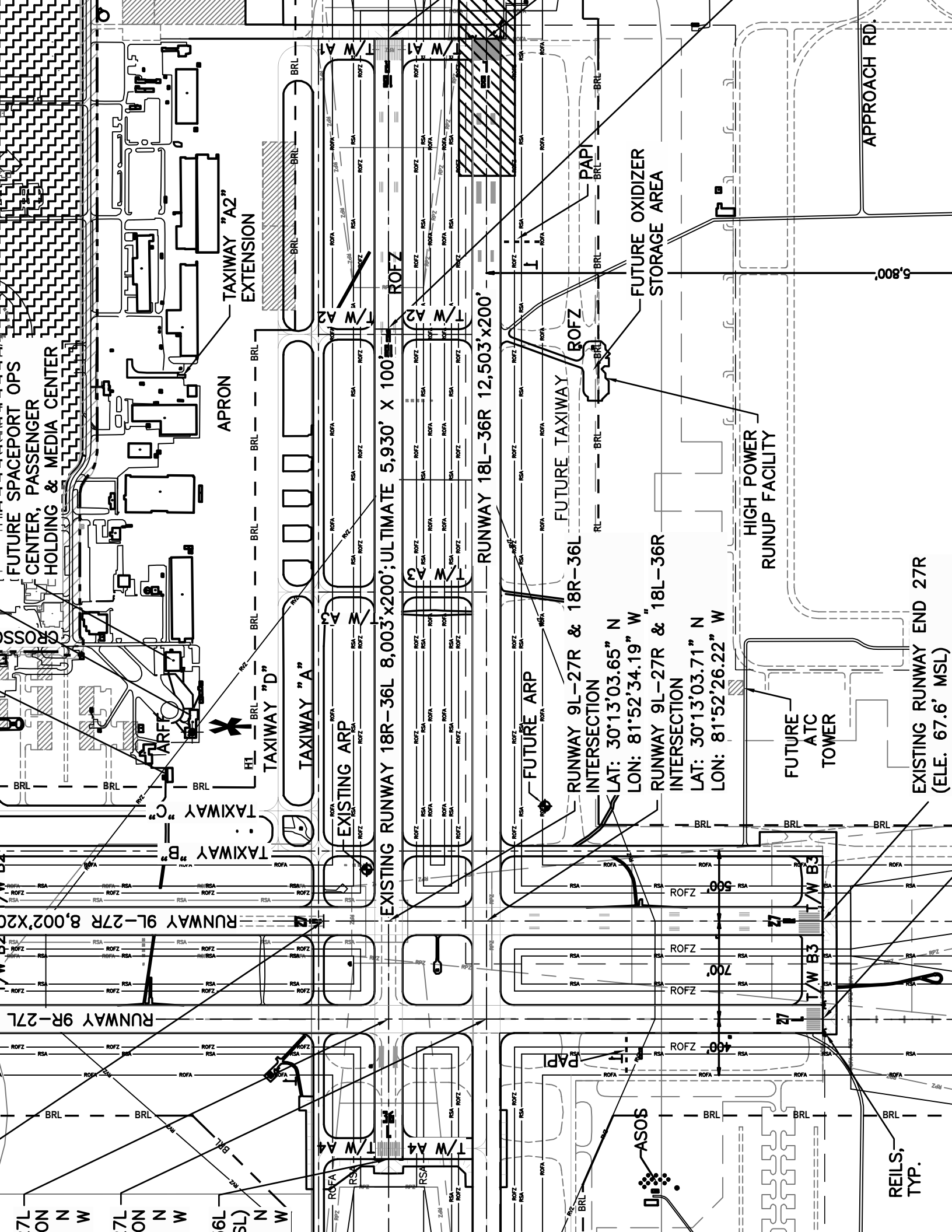
ZdB

ZdB

ZdB

ZdB

2



FUTURE SPACEPORT OPS
CENTER, PASSENGER
HOLDING & MEDIA CENTER

TAXIWAY "A2"
EXTENSION

APRON

TAXIWAY "D"

TAXIWAY "A"

EXISTING APR

EXISTING RUNWAY 18R-36L 8,003'x200'; ULTIMATE 5,930' X 100'

RUNWAY 18L-36R 12,503'x200'

FUTURE ARP

RUNWAY 9L-27R & 18R-36L
INTERSECTION
LAT: 30°13'03.65" N
LON: 81°52'34.19" W

RUNWAY 9L-27R & 18L-36R
INTERSECTION
LAT: 30°13'03.71" N
LON: 81°52'26.22" W

FUTURE OXIDIZER
STORAGE AREA

HIGH POWER
RUNUP FACILITY

FUTURE
ATC
TOWER

EXISTING RUNWAY END 27R
(ELE. 67.6' MSL)

APPROACH RD.

REILS,
TYP.

ASOS

5,800'S

7L ON N W
7L ON N W
6L (SL) ON N W

T/W B3
T/W B3
T/W B3

PAPI

	SAME		250'		SAME		
	SAME		700'		SAME		
	27L		18L		36R		
DATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING
TIME	30°12'56.96"	SAME	30°14'06.08"	SAME	30°12'02.32"	SAME	30°14'06.08"
TIME	81°51'58.78"	SAME	81°52'26.78"	SAME	81°52'25.67"	SAME	81°52'34.08"
TIME	85.1'	SAME	80.7'	SAME	72.7'	SAME	80.4'
TIME	100'	200'	100'	200'	400'	200'	100'
TIME	200'	SAME	200'	SAME	280'	200'	200'
TYPE	NP	SAME	NP	SAME	PREC	SAME	VISUAL
TYPE	GPS	GPS/LPV	GPS	GPS/LPV	ILS	ILS/GPS	NONE
TYPE	430' - 1mi	200' - 1/2mi	420' - 1mi	200' - 1/2mi	200' - 1/2mi	SAME	1,000' - 3mi
TYPE	34:1	50:1	34:1	50:1	50:1	SAME	20:1
TYPE	REILS	MALSR	REILS	MALSR	MALSR	SAME	NONE
TYPE	GPS/PAPI	GPS/VOR/PAPI	GPS/PAPI	SAME	ILS/GPS/PAPI	SAME	NONE
TYPE	1,700'	2,500'	1,700'	2,500'	2,500'	SAME	1,700'
TYPE	1,000'	SAME	1,000'	SAME	1,000'	SAME	500'
TYPE	1,510'	1,750'	1,510'	1,750'	1,750'	SAME	1,010'
TYPE	48.978	78.914	48.978	78.914	78.914	SAME	29.465

18

