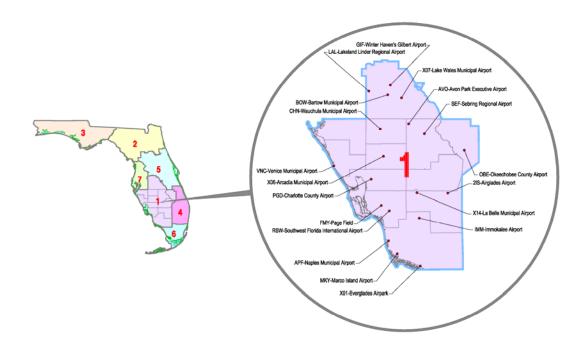


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AVIATION OFFICE

Statewide Airfield Pavement Management Program District 1 Report

May 21, 2008



by:

URS Corporation Inc. / MACTEC Engineering & Consulting, Inc. / Planning Technology, Inc. / ASC Geosciences, Inc.



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EXECUTIVE SUMMARY

URS Corporation, Inc. with team members MACTEC Engineering and Consulting, Inc. (MACTEC), Planning Technology, Inc. (PTI), and ASC Geosciences, Inc. (ASCG) was awarded a contract to provide services in support of the Florida Department of Transportation (FDOT) Aviation Office for Phase II of the Statewide Aviation Pavement Management Program. As part of this contract, MACTEC conducted pavement condition surveys for airside pavements for airports located in District 1, evaluated the conditions and developed a maintenance and rehabilitation program to improve conditions to prescribed minimum levels. District 1 has 2 Primary (PR), 1 Regional Reliever (RL), and 16 General Aviation (GA) airports participating in the Statewide Pavement Management Program.

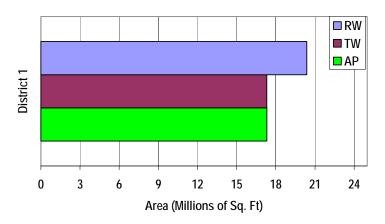
Pavement Area and Use

The total pavement area in 2006/2007 for airports located in District 1 is approximately 54,992,989 square feet. The breakdown of pavement area for each pavement use is provided as follows:

Table E-1: Pavement Area by Pavement Use - District 1

Use	Area, SqFt
Runway	20,373,155
Taxiway	17,304,043
Apron	17,315,791
Total	54,992,989

Figure E-1: Pavement Area by Use – District 1



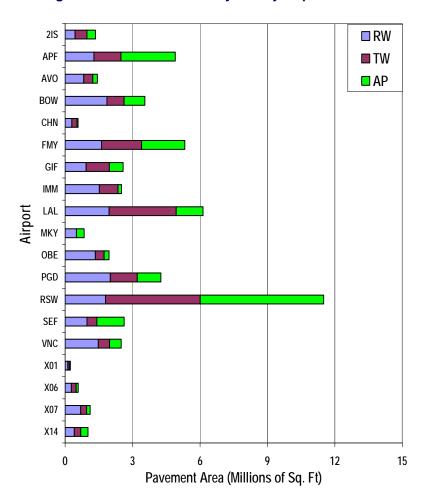


Figure E-2: Pavement Area by Use by Airport - District 1

Pavement Condition Index (PCI)

The overall area-weighted Pavement Condition Index (PCI) of the airports in District 1 in 2006/2007 is 75, representing a Satisfactory overall network condition.

Table E-2 provide list of participating airports within District 1 with weighted-PCI and pavement area.

Table E-3 and Figure E-3 provide the weighted-average PCI by pavement use for airports participating in the pro-gram from District 1. Figure E-4 provides the distribution PCI by pavement use by airport. Figure E-5 provides the area-weighted PCI by surface type.

The condition summary by pavement use table illustrates the area-weighted PCI computed individually for each use. On average, the runways, taxiways, and aprons are in Satisfactory condition.

Table E-2: Participating Airports Summary – District 1

Airport	Area-Weighted PCI	Pavement Area, SqFt
2IS	75	1,353,070
APF	62	4,896,924
AVO	84	1,434,199
BOW	73	3,549,006
CHN	88	577,920
FMY	78	5,325,129
GIF	72	2,578,604
IMM	47	2,512,284
LAL	70	6,134,611
MKY	49	842,669
OBE	59	1,953,241
PGD	87	4,262,074
RSW	93	11,505,495
SEF	54	2,628,305
VNC	64	2,496,552
X01	71	233,626
X06	79	579,668
X07	77	1,113,585
X14	92	1,016,027
District 1	75	54,992,989

Figure E-3: PCI by Pavement Use – District 1

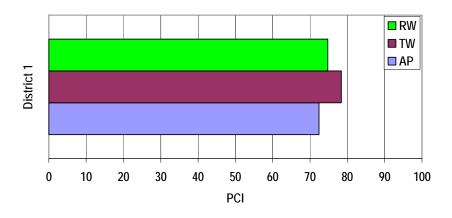
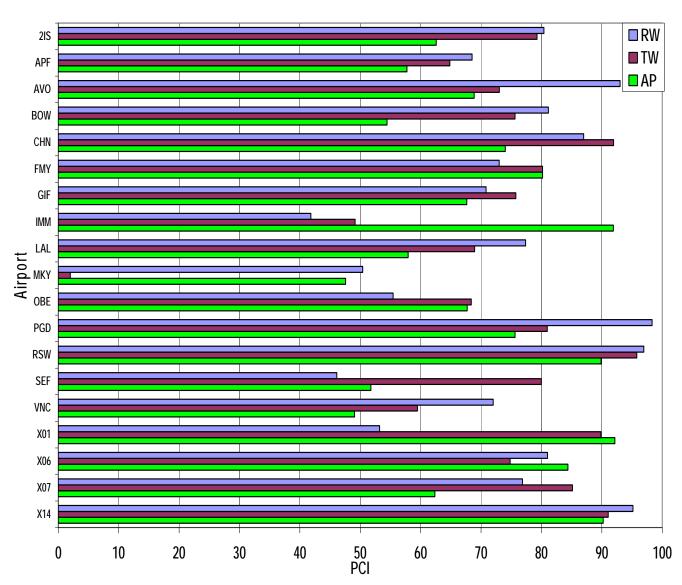


Table E-3: Condition Summary by Pavement Use – District 1

Use	Area-Weighted PCI
Runway	75
Taxiway	78
Apron	72
All	75

Figure E-4: PCI by Use by Airport – District 1



0 10 20 30 40 50 60 70 80 90 100

Figure E-5: PCI by Surface Type - District 1

Maintenance and Rehabilitation Costs

Airports in District 1 with immediate maintenance and rehabilitation (M&R) needs (2008 needs) include 2IS (Airglades Airport), APF (Naples Municipal Airport), AVO (Avon Park Municipal Airport), BOW (Bartow Municipal Airport), FMY (Page Field Airport), GIF (Winter Haven Municipal Airport), IMM (Immokalee Airport), LAL (Lakeland Linder Regional Airport), MKY (Marco Island Airport), OBE (Okeechobee County Airport), PGD (Charlotte County Airport), RSW (Southwest Florida International Airport), SEF (Sebring Regional Airport), VNC (Venice Municipal Airport), X01 (Everglades City Airport), X06 (Arcadia Municipal Airport), X07 (Lake Wales Municipal Airport) and X14 (La Belle Municipal Airport). Some of these needs may not be the highest priority for funding but would need to be programmed over several years. These immediate needs based on FDOT criteria are summarized in the following table.

Table E-4: Immediate Major M&R Cost - District 1

Airport	Avg PCI - Be- fore M&R	Immediate M&R Total **	Avg PCI -1st Year After M&R
2IS	75	\$1,668,000	88
APF	62	\$22,717,000	87
AVO	84	\$1,340,000	92
BOW	73	\$8,918,000	93
CHN	88	\$0	85
FMY	78	\$2,763,000	82
GIF	72	\$4,928,000	86
IMM	47	\$18,454,000	99
LAL	70	\$15,036,000	85
MKY	49	\$4,865,000	99
OBE	59	\$9,347,000	93
PGD	87	\$1,985,000	87
RSW	93	\$1,213,000	93
SEF	54	\$13,284,000	92
VNC	64	\$10,150,000	96
X01	71	\$522,000	91
X06	79	\$198,000	80
X07	77	\$1,968,000	94
X14	92	\$202,000	90
District 1	75	\$119,560,000	90

^{*} This table shows the area-weighted PCI before and after Major M&R and routine maintenance work for the first year of the 10-year plan. It includes all airports participating in the program from District 1.

A forecast of Major M&R cost for a 10-year period was developed using an unlimited budget. The analysis identified ongoing maintenance needs and major M&R during that interval. This is summarized in Table E-4 and Figures E-5 and E-6.

^{**} Cost figures are rounded to nearest \$1000. Sum may be different. Costs are adjusted for inflation.

Table E-5: 10 Year M&R Costs under Unlimited Funding Scenario – District 1

Year	Preventive	Major M&R >= Critical	Major M&R < Critical	Total
2008	\$1,012,000	\$383,000	\$119,177,000	\$120,572,000
2009	\$2,788,000	\$0	\$3,990,000	\$6,777,000
2010	\$2,724,000	\$0	\$6,003,000	\$8,727,000
2011	\$3,057,000	\$0	\$3,149,000	\$6,206,000
2012	\$3,331,000	\$0	\$5,387,000	\$8,719,000
2013	\$3,882,000	\$0	\$3,162,000	\$7,043,000
2014	\$4,609,000	\$0	\$3,220,000	\$7,829,000
2015	\$5,341,000	\$0	\$2,454,000	\$7,795,000
2016	\$6,009,000	\$0	\$5,529,000	\$11,538,000
2017	\$6,687,000	\$0	\$4,801,000	\$11,488,000
Total	\$39,441,000	\$383,000	\$156,872,000	\$196,696,000

Note: Cost figures are rounded to nearest \$1000. Sum may be different. Costs are adjusted to inflation

The 10 year analysis suggests an annual budget on the order of \$20 million would be expected to provide an improvement in the overall condition, where the area-weighted PCI would increase from 75 in 2006/2007 to 82 in 2017. However, as stated above, a number of large projects exist that would need to be programmed over multiple years.

It is important to note that although preventative and some major M&R activities would have to be conducted over several years, the area-weighted PCI value for all airport pavements in District 1 in 2017 may remain near 82. What is most important is that the pavement repair work (preventative and major M&R) that has been identified for airports in District 1 is conducted at some point in the 10-year plan.

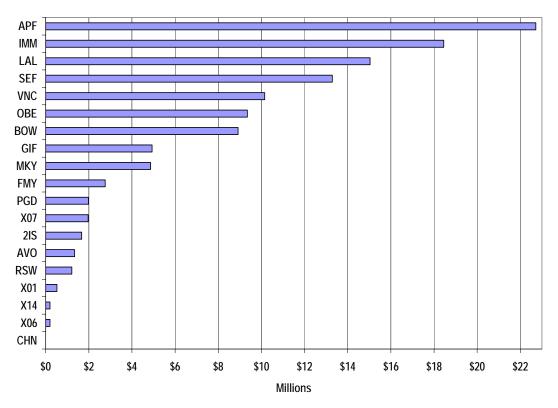
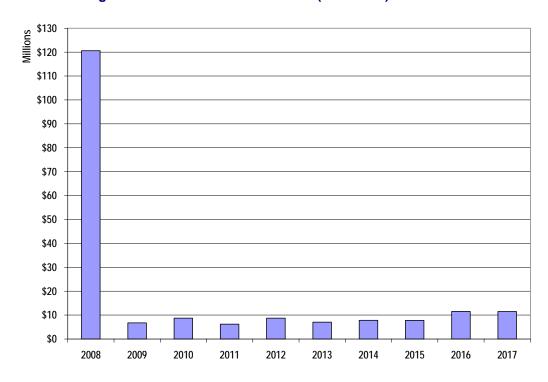


Figure E-6: Immediate M&R Costs by Airport – District 1





1. INTRODUCTION

The State of Florida has more than 100 public airports that are vital to the Florida economy as well as the economy of the United States. These public airports range from small general aviation airports to large international hub airports. These airports serve business travelers, tourism, and cargo operations crucial to the daily life of the people of Florida.

There are millions of square yards of pavement for the runways, taxiways, aprons and other areas that support aircraft operations. The timely and proper maintenance and rehabilitation (M&R) of these pavements allows the airports to operate efficiently, economically and without excessive down time. In order to support the planning, scheduling, and design of the M&R activities, FDOT has implemented pavement management system technology.

This report describes the procedures used to develop the appropriate engineering and scientific standards of care, quality, budget, and schedule requirements implemented at airports in District 1 as a result of their participation in the Statewide Aviation Pavement Management Program.

1.1 Purpose

This Florida Airport Pavement Evaluation Report is intended to:

- Describe, briefly, the Florida Department of Transportation (FDOT) Aviation Office Statewide Pavement Management Program and the roles and responsibilities of the program's participants
- Provide background information on pavement management principles, objectives, and benefits to the participating airports
- Outline the procedures used to collect, evaluate and report pavement inspection results at the airports
- Present the findings from the inspection and analysis of the needs for maintenance and rehabilitation activities for the airports in District 1 in this report.

1.2 FDOT Aviation PMS Program

In 1992, FDOT implemented a Pavement Management System (PMS) program to improve the knowledge of pavement conditions at public airports in the State system, identify maintenance needs at individual airports, automate information management, and establish standards to address future needs.

The FDOT Aviation Office participated in the development of a proprietary software pavement management system and developed and populated a pavement management database that provided valuable information for establishing M&R policies, estimating M&R costs, and developing recommendations for performing routine pavement maintenance. This system was implemented and condition surveys performed in 1992 and 1993 and again updated in 1998 and 1999. The proprietary system, AIRPAV, is no longer supported.

In 2004, the FDOT Aviation Office undertook a project to update the PMS Program software utilized for the PMS program. The Aviation Office selected a consultant team consisting of URS Corporation, Inc., MACTEC Engineering and Consulting, Inc. (MACTEC), Planning Technology, Inc. (PTI), and ASC Geosciences, Inc. (ASCG) to aid with the implementation of the program update. This project involved a review of the AIRPAV software and other available

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PMS software. As a result of this review, MicroPAVER was selected as the software for the update project. Condition data from the 1998/1999 surveys were converted to the MicroPAVER system.

The inventory of the pavement systems and drawings of the pavements were updated to reflect maintenance, rehabilitation, and construction activities since 1998/1999 to the extent that information was available. Detailed, specific procedures for the inspection and collection of pavement data were developed for this project. A web-site (www.floridaairportpavement.com) was developed for the input of data under secure procedures. The site also has a public section for dissemination of information to the general public.

1.3 Organization

The FDOT Aviation Office manages the day-to-day details of the Statewide PMS and the updates. The Aviation Office Airport Engineering Manager serves as the Program Manager (PM) monitoring the work of the Consultant. The Aviation Office has review and approval authority for each program task.

1.3.1 Consultant Role

The Consultant (MACTEC Engineering and Consulting/URS Corporation/Planning Technology/ASC Geosciences) developed the PMS based upon procedures outlined in FAA Advisory Circular 150/5380-6B Guidelines and Procedures for Maintenance of Airport Pavements (FAA/AC) and ASTM D 5340 Standard Test Method for Airport Pavement Condition Index Surveys (2004).

The Consultant provided technical and administrative assistance to the Aviation Office PM, during the execution of this program, which involves the continuing evaluation of airport pavements and updating of the PMS. A website is available to view and update airport information, including construction activities and pavement condition data. In addition, pavement evaluation reports will be available for viewing and download from the site (www.floridaairportpavement.com).

1.3.2 Airport Role

The airports are the ultimate client for each of the field inspections and reports. Individual airports were provided final deliverables prepared by the Consultant that have been reviewed and approved by the FDOT Aviation Office. The airport should review system inventory drawings in their folder in the pavement management website and add maintenance and rehabilitation activities conducted on airside pavements on the website system inventory form.

1.4 Pavement Types and Pavement Management

1.4.1 Pavement basics

A pavement is a prepared surface designed to provide a continuous smooth ride at a certain speed and to support an estimated amount of traffic for a certain number of years. Pavements are constructed of a combination of subgrade soils, subbases, bases and surfacing. There are mainly two types of pavements;

- Flexible pavement, composed of asphalt concrete (AC) surface, and
- Rigid pavement composed of Portland cement concrete (PCC) surface.

Both pavement types use a combination of layered materials and thicknesses in order to support the traffic loads and protect the underlying subgrade soil. Flexible pavements (AC) dissipate the load from layer to layer until the load magnitude is small enough to be supported by the subgrade soil. In rigid pavements (PCC), the Portland cement concrete supports most of the load, the base or subbase layer is mainly constructed to provide a smooth and continuous platform for the concrete.

Due to the different nature of both pavement types and their materials, flexible and rigid pavements have different distresses and failure mechanisms. Understanding the mechanics and failure modes of both pavement types will assist engineers in making adequate and long lasting repairs or rehabilitation to the pavement structures.

1.4.2 Pavement Management System Concept

A pavement management system (PMS) is a tool to assist engineers, planners and managing agencies in making decisions when planning pavement M&R. The management of pavements involves scheduling pavement maintenance and rehabilitation before pavements deteriorate to a condition where reconstruction (the most expensive alternative) is the only solution. Figure 1-1, taken from FAA/AC 5380-7A Pavement Management System, illustrates how a pavement generally deteriorates and the relative cost of rehabilitation at various times throughout its life. Note that during the first 75 percent of a pavement's life, it performs relatively well. After that, however, it begins to deteriorate rapidly.

The number of years a pavement stays in "Satisfactory" condition depends on how well it is maintained. The illustration demonstrates the cost of maintaining the pavement above a critical condition before rapid deterioration occurs is much less compared to maintaining pavements after substantial deterioration has occurred.

Pavements deteriorate at an accelerated rate with increasing traffic and limited M&R resources. Planned maintenance and rehabilitation, essentially preventing pavements from reaching deteriorated conditions, helps managers/owners/ agencies stretch and maximize the use of their budgets and prolong the life of the pavements. A PMS provides a tool to schedule and plan maintenance and rehabilitation based on engineering information and existing and predicted conditions of pavements.

There are several components or elements that are essential to a PMS. The first steps in the implementation of a PMS are to know and clearly identify what needs to be managed, the limits of the managing agency's responsibilities and the condition of the existing pavements. Once the

cause and the extent of pavement problems are known, the appropriate maintenance and/or rehabilitation can be planned. By using local unit costs and expected yearly budgets, a multi year M&R plan can be developed.

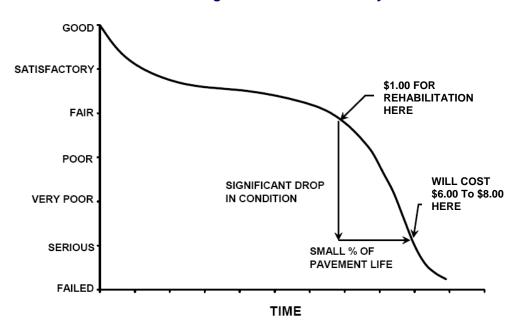


Figure 1-1: Pavement Life Cycle

Pavements deteriorate even if they do not carry any traffic. Pavement distresses may be attributed to climate, environment, materials, construction or traffic. Knowing the cause, extent and predominance of pavement distresses helps determine the most appropriate maintenance or rehabilitation work needed. Planning and applying preventive maintenance prolongs pavement life and minimizes future pavement repair costs. By projecting the rate of deterioration, a life cycle cost analysis can be performed for various alternatives, and the optimal time of application of appropriate feasible alternatives can be determined. Such a decision is critical in order to avoid higher M&R costs at a later date.

A PMS enables the managing agency to identify and maintain the pavement conditions, keeping them at the upper end of the service life-condition curve. At this point, the total annual costs between maintaining a good pavement above a critical condition is much less than rehabilitating a poor pavement that has rapidly deteriorated beyond a critical condition level.

A PMS is a long-term planning tool that will result in an overall improvement of the pavement network condition and will also result in savings by applying the appropriate maintenance and rehabilitation activity at the appropriate time. Accurate estimates and timely M&R decisions and budgeting are of great importance when managing approximately 300 million square feet of Florida airside pavements.

1.4.3 Pavement Inspection Methodology for PMS

Pavement condition assessment is one of the primary decision variables in any airport pavement management system. Pavement condition assessments generally include visual surveys in accordance with ASTM D 5340, Standard Test Method for Airport Pavement Condition Index Surveys and structural evaluation. Pavement condition surveys assess the functional condition of the pavement surface. Typically, most problems within a pavement structure will eventually reflect to the pavement surface. The structural condition and relative support of the pavement layers can be assessed utilizing non-destructive deflection testing (NDT) as well as other indepth engineering evaluation or sampling and testing methods.

Pavement sections are broken down into sample units as established in FAA AC 150/5380-6B and ASTM D 5340. Sample unit sizes are approximately 5000 ± 2000 square feet (3000 to 7000 square feet) for AC-surfaced pavements and 20 ± 8 slabs (12 to 28 slabs) for PCC-surfaced pavements. Before the field inspections, the sampling plan was developed based on previous sampling and modified based on the available knowledge of branches, sections, use patterns, construction types and history. The sampling rate used for FDOT Statewide Pavement Management Program is provided in Table 1-1 below.

AC Pavements PCC Pavements n n Ν Ν Runway Others Runway Others 1-4 1-3 5-10 2 1 4-6 2 1 11-15 3 2 7-10 3 2 16-30 5 3 11-15 4 2 7 5 3 31-40 4 16-20 7 3 41-50 8 5 21-30 20% but <20 10% but ≤10 31-40 8 4 <u>></u>51 41-50 10 5 10% but <u><</u>10 20% but <20 <u>></u>51

Table 1-1: Sampling Rate for FDOT Condition Surveys

Where N = total number of sample units in section n = number of sample units to inspect

The sample units to inspect are determined by a systematic random sampling technique. This means that the locations are determined such that they are distributed evenly throughout the section. In the case when nonrepresentive distresses are observed in the field, additional sample units were added.

The distress quantities and severity levels from the sample units are used to compute the PCI value for each section. PCI values range from 0 to 100. MicroPAVER provides a rating scale that relates PCI to pavement condition, with a PCI between 0 and 10 considered 'Failed' pavement and a PCI between 86 and 100 considered 'Good' pavement, with five other conditions for PCI values between 11 and 85. Figure 1-2 shows the PCI scale.

 $86-100 \qquad \text{Good}$ $71-85 \qquad \text{Satisfactory}$ $56-70 \qquad \text{Fair}$ $41-55 \qquad \text{Poor}$ $26-40 \qquad \text{Very Poor}$ $11-25 \qquad \text{Serious}$ $0-10 \qquad \text{Failed}$

Figure 1-2: PCI Rating Scale

1.5 Definitions

Aviation Office - The Aviation Office is charged with responsibility for promoting the safe development of aviation to serve the people of the State of Florida. The Aviation Office worked closely with FDOT District Aviation Specialists, during development of this project. District Aviation Specialists will consult with airport owners in implementation of project recommendations.

<u>Base Course</u> - Base Course is a layer of manufactured material, usually crushed rock (aggregate) or stabilized material (asphalt or concrete or Florida Limerock), immediately beneath the surface course of a pavement, which provides support to the surface course.

<u>Branch</u> – (Facility in prior system) - A runway, taxiway or apron is called a Branch. This is an easy reference to a recognizable component of airport pavement. In this report, Branch ID maintains the original AirPAV identification where 100 series through 3000 series facilities are taxiways, 4000 and 5000 series facilities are aprons (the 5000 series represent runup aprons and turnarounds), and 6000 series facilities are runways. It also includes the common designation for the item e.g. RW 18-36.

<u>Category</u> - The Category classifies the airport according to the type and volume of aircraft traffic, as follows:

• GA – for general aviation or community airports

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- RL for regional relievers or small hubs
- PR for primary

<u>Critical PCI</u> – The PCI value considered to be the threshold for M&R decisions. PCI above the Critical generate economical activities expected to preserve and prolong acceptable condition. M&R for PCI values less than Critical make sense only for reasons of safety or to maintain a pavement in operable condition. A pavement section is expected to deteriorate very quickly once it reaches the Critical PCI and the unit cost of repair increases significantly.

<u>Distress Type</u> - A distress type is a defined visible defect in pavement evidenced by cracking, vertical displacement or deterioration of material. In PCI technology, 16 distinct distress types for asphalt surfaced and 15 for Portland cement concrete surfaced pavements have been described and rated according to the impact their presence has on pavement condition.

<u>Florida DOT (FDOT)</u> - Florida Department of Transportation was represented in this project by the Office of Aviation.

<u>Localized M&R (Maintenance and Repair)</u> – Localized M&R is a temporizing activity performed on existing pavement to extend its serviceability and/or to improve rideability. Localized M&R can be applied either as a safety (stop-gap) measure or preventive measure. Common localized maintenance methods include crack sealing, joint sealing, and patching.

<u>Global M&R</u>- Global M&R is defined as activities applied to entire pavement sections with the primary objective of slowing the rate of deterioration. These activities are primary for asphalt surfaced pavements, e.g. surface treatments.

<u>MicroPAVER</u> – A commercially available software subsidized by FAA and agencies in the US Department of Defense developed to support engineered management of pavement assets using a condition based approach. This software has the functionality such that if properly implemented, maintained and operated it meets the pavement management system requirements described by FAA in Advisory Circular 150/5380-7A.

<u>Minimum Condition Level</u> - A threshold PCI value established by FDOT to represent the targeted minimum pavement condition that is desirable in the Florida Airport System. These values were established with consideration of pavement function and airport type. For instance, runways have higher minimum condition levels than aprons, and Primary airports have higher minimum condition levels than General Aviation airports.

<u>Major M&R (e.g. Rehabilitation)</u> – Activities performed over the entire area of a pavement section that are intended to restore and/or maintain serviceability. This includes asphalt overlays, milling and replacing asphalt pavement, reconstruction with asphalt, reconstruction with Portland Cement Concrete (PCC) pavements, and PCC overlays.

<u>Network Definition</u> – (Airport Sketch in prior system) – A Network Definition is a CAD drawing which shows the airport pavement outline with Branch and Section boundaries. This sketch is intended to assist the user of the report to quickly associate information from the text to a location on the airport. This drawing also includes the PCI sample units and is used to identify those sample units to be surveyed, i.e. the sampling plan. The Network Definition for the airport in this report is in Appendix A along with a table of inventory data.

<u>Pavement Condition Index (PCI)</u> – The Pavement Condition Index is a number which represents the condition of a pavement segment at an instant in time. It is based on visual identification and measurement of specific distress types commonly found in pavement which has been in service for a period of time. The definitions and procedures for determining the PCI are found in ASTM D 5340-04, "Standard Test Method for Airport Pavement Condition Index Surveys," published by ASTM International.

<u>Pavement Evaluation</u> – A systematic approach undertaken by trained and experienced personnel intended for determination of the condition, serviceability, and best corrective action for pavement. Techniques to standardize pavement evaluation include the Pavement Condition Index procedures.

<u>Pavement Management</u> – Pavement management is a broad function that uses pavement evaluation and pavement performance trends as a basis for planning, programming, financing, and maintaining a pavement system.

<u>Rank</u> – Pavement rank in MicroPAVER determines the priority to be assigned to a pavement section when developing an M&R plan. Pavement sections are ranked as follows according to their use:

- P for Primary pavements, such as primary runways, primary taxiways, and primary aprons
- S or Secondary pavements, such as secondary runways, secondary taxiways, and secondary aprons
- T for Tertiary pavements such as "T' hangars and slightly used aprons

<u>Reconstruction</u> – Reconstruction includes removal of existing pavement, preparation of subgrade, and construction of new pavement with new, or recycled materials. Reconstruction is indicated when distress types evident at the surface indicate failure in the pavement structure or subgrade of a type, and to an extent, not correctable by less extensive construction.

<u>Rehabilitation</u> – Rehabilitation represents construction using existing pavement for a foundation. Rehabilitation most commonly consists of an overlay of existing pavement with a new asphalt or concrete surface. Recently, technology has expanded the options to include recycling of existing pavement, and incorporating engineering fabrics or thin layers of elasticized materials to retard reflection of distress types through the new surface.

<u>Sample Unit</u> – Uniformly sized portions of a Section as defined in ASTM D 5340. Sample units are a means to reduce the total amount of pavement actually surveyed using statistics to select and survey enough area to provide a representative measure of Section PCI. Sample Unit sizes are $5{,}000 \pm 2{,}000$ square feet for AC-surfaced pavements and 20 ± 8 slabs for PCC-surfaced pavements.

<u>Section</u> – (Feature in prior system) - Sections subdivide Branches into portions of similar pavement. Sections are prescribed by pavement structure, age, condition and use. Sections are identified on the airport Network Definition. They are the smallest unit used for determining M&R requirements based on condition.

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<u>Section ID</u> – A short form identification for the pavement Section that maintains the original AirPAV identification where 100 series through 3000 series sections are taxiways, 4000 and 5000 series sections are aprons (the 5000 series represent run-up aprons and turnarounds), and 6000 series sections are runways.

<u>Use</u> – In MicroPAVER use is the term for the function of the pavement area. This is either Runway, Taxiway, or Apron for purposes of the FDOT Statewide Aviation Pavement Management System.

2. NETWORK DEFINITION

The airports inspected in District 1 include:

- Airglades Airport (2IS)
- Naples Municipal Airport (APF)
- Avon Park Municipal Airport (AVO)
- Bartow Municipal Airport (BOW)
- Wauchula Municipal Airport (CHN)
- Page Field Airport (FMY)
- Winter Haven Municipal Airport (GIF)
- Immokalee Airport (IMM)
- Lakeland Linder Regional Airport (LAL)
- Marco Island Airport (MKY)
- Okeechobee County Airport (OBE)
- Charlotte County Airport (PGD)
- Southwest Florida Airport (RSW)
- Sebring Regional Airport (SEF)
- Venice Municipal Airport (VNC)
- Everglades City Airport (X01)
- Arcadia Municipal Airport (X06)
- Lake Wales Municipal Airport (X07)
- La Belle Municipal Airport (X14)

The District 1 airports are categorized as 2 Primary (PR), 1 Regional Reliever (RL), and 16 General Aviation (GA).

The pavements within each airport network are defined in MicroPAVER in terms of manageable units that help to organize the data into similar groups. An organizational hierarchy is used to establish these units. The airport pavement network is subdivided into separate branches (runways, taxiways, or aprons) that have distinctly different uses. Branches are then divided into sections with similar pavement construction and performance that may share other common attributes. Sections are manageable units used to organize the data collection and are treated individually during the rehabilitation planning stage.

The network definition was used to identify changes in the network since the most recent update in 1998/1999 and also to plan the field inspection activities for 2006/2007 surveys. Prior to the field inspection process, the network definition drawing was updated. The purpose of this update is to compare the previous airport configuration and history with the current airport configuration and history and update the existing drawing showing network branch, section and sample unit designations to match the current configuration. This drawing serves not only as a primary guide for the airfield inspectors but also as an important history record.

The updated network definition fields and network definition drawings for airports participating from District 1 are included in Appendix A of each individual airport report.

3. PAVEMENT INVENTORY

The detailed pavement inventory was updated to reflect the network definition update and field inspection results.

The total pavement area in 2006/2007 for airports participating in the program from District 1 is approximately 54,992,989 square feet. The breakdown of pavement area for each pavement use is provided in Table 3-1.

Table 3-1: Pavement Area by Pavement Use – District 1

Use	Area, SqFt
Runway	20,373,155
Taxiway	17,304,043
Apron	17,315,791
Total	54,992,989

Figure 3-1 presents the breakdown of the pavement area for airports in District 1 by pavement use.

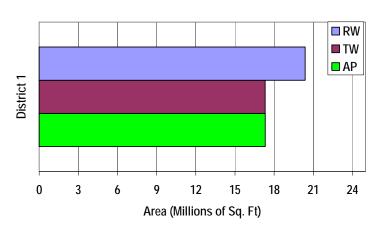


Figure 3-1: Pavement Area by Use – District 1

Details of pavement section information including section dimensions, rank, surface type, last construction date and last inspection date are given in Appendix A of each individual airport report.

4. PAVEMENT CONDITION

Pavement conditions were inspected in accordance with the methods outlined in FAA AC 150/5380-6B and ASTM D 5340 "Standard Practice for Airport Pavement Condition Index Surveys." These procedures define distress type, severity and quantity for sampling areas within each section to determine the Pavement Condition Index (PCI).

Pavement condition inspections for airports in District 1 were performed in 2006/2007. Data were recorded in the field using hand-held PDA (personal digital assistant) technology. The identifying information for each sample unit was pre-loaded into the PDA, and the survey results were entered directly, at the time of inspection. This simplified data handling and management.

During the inspections Global Positioning System (GPS) coordinates were recorded at the centroid of each sample unit. The centroid is usually the geometric center of the area but in cases where sample units are irregular in shape this is the center of mass. These data are presented in tables on updated Network Definition drawings available from the website.

After the completion of data collection, the data were imported into MicroPAVER and PCI values were calculated for the pavement sections.

According to the 2006/2007 survey, the overall the average area-weighted PCI for airports in District 1 is 75, representing a Satisfactory overall network condition.

Table 4-1 and Figure 4-1 provide the PCI distribution by rating and surface type for District 1.

Table 4-1: Airport Pavement PCI by Use and Rating Category – District 1

AIRPORT	RW	TW	AP	AVG PCI	PCI Category
2IS	80	79	63	75	Satisfactory
APF	69	65	58	62	Fair
AVO	93	73	69	84	Satisfactory
BOW	81	76	54	73	Satisfactory
CHN	87	92	74	88	Good
FMY	73	80	80	78	Satisfactory
GIF	71	76	68	72	Satisfactory
IMM	42	49	92	47	Poor
LAL	77	69	58	70	Fair
MKY	50	2	48	49	Poor
OBE	55	68	68	59	Fair
PGD	98	81	76	87	Good
RSW	97	96	90	93	Good
SEF	46	80	52	54	Poor
VNC	72	59	49	64	Fair
X01	53	90	92	71	Satisfactory
X06	81	75	84	79	Satisfactory
X07	77	85	62	77	Satisfactory
X14	95	91	90	92	Good
District 1	75	78	72	75	Satisfactory

Figure 4-1: PCI by Surface Type – District 1

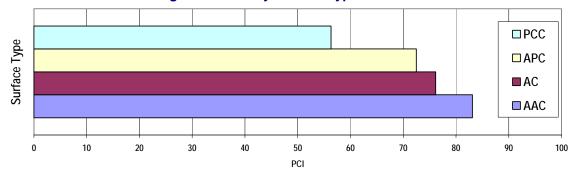


Table 4-2 illustrates the area-weighted PCI computed individually for each pavement use.

Table 4-2: Condition by Pavement Use – District 1

Use	Area-Weighted PCI
Runway	75
Taxiway	78
Apron	72
All	75

On average, the runways, taxiways, and aprons are in Satisfactory condition.

5. PAVEMENT CONDITION PREDICTION

Performance prediction models or deterioration curves for PCI were used to develop a condition forecast. The performance models were developed for combinations of variables such as pavement use (runway, taxiway or apron), surface type (AC or PCC) and airport category (GA, RL, or PR). Figures 5-1 to 5-3 illustrates the predicted performance of pavements at airports participating in the program from District 1 based on current condition, age since last construction and the deterioration model appropriate for the type of pavement. The figure presents the forecast for each pavement use and displays the FDOT minimum condition criteria for District 1 airports.

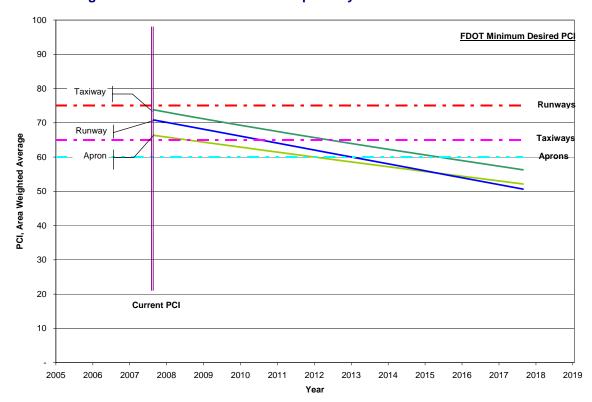


Figure 5-1: Predicted PCI for GA Airports by Pavement Use - District 1

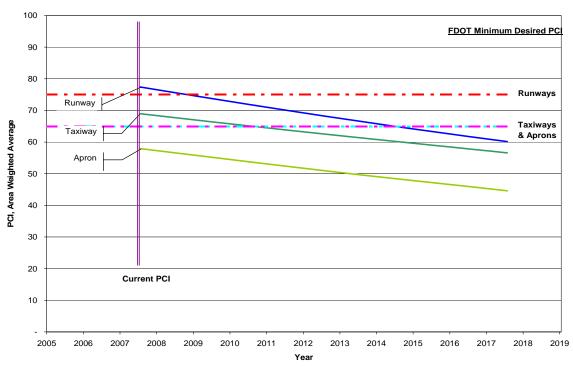
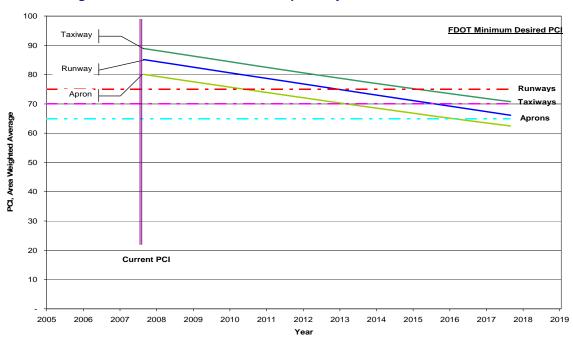


Figure 5-2: Predicted PCI for RL Airports by Pavement Use – District 1





6. MAINTENANCE POLICIES AND COSTS

6.1 Policies

Maintenance and rehabilitation (M&R) policies are sets of rules used to develop repair recommendations for distresses encountered during the visual inspections.

Maintenance refers to repair-type activities that are applied to specific distress types on the pavement. These activities are preventative and/or corrective in nature, and are recommended to help achieve the performance goal.

Table 6-1 provides the list of the maintenance activities used in MicroPAVER to treat specific distress types. These repairs are used in an analysis only if there is an inspection within one year prior to the first year of the analysis period. MicroPAVER applies repairs to these distresses and adjusts the PCI based on specific rules.

Table 6-1: Routine Maintenance Activities for Airfield Pavements

Surface	Distress	Severity*	Work Type	Code	Work Unit
	Alligator Crack	M, H	Patching - AC Deep	PA-AD	SqFt
	Bleeding	N/A	No Localized M&R	NONE	SqFt
	Block Crack	M, H	Crack Sealing – AC	CS-AC	SqFt
	Corrugation	L, M, H	Patching - AC Deep	PA-AD	SqFt
	Depression	M, H	Patching - AC Deep	PA-AD	SqFt
	Jet Blast	N/A	Patching - AC Deep	PA-AD	SqFt
	Joint Ref. Crack	M, H	Crack Sealing – AC	CS-AC	Ft
	L & T Crack	M, H	Crack Sealing – AC	CS-AC	Ft
AC	Oil Spillage	N/A	Patching - AC Shallow	PA-AS	SqFt
7.0	Patching	M, H	Patching - AC Deep	PA-AD	SqFt
	Polished Agg.	N/A	No Localized M&R	NONE	SqFt
		L	Surface Sealing - Rejuvenating	SS-RE	SqFt
	Raveling	M	Surface Seal - Coal Tar	SS-CT	SqFt
		Н	Microsurfacing	MI-AC	SqFt
	Rutting	M, H	Patching - AC Deep	PA-AD	SqFt
	Shoving	M, H	Grinding (Localized	GR-LL	SqFt
	Slippage Crack	N/A	Patching - AC Shallow	PA-AS	SqFt
	Swelling	M, H	Patching - AC Deep	PA-AD	SqFt
	Blow-Up	L, M, H	Patching - PCC Full Depth	PA-PF	SqFt
	Corner Break	M, H	Patching - PCC Full Depth	PA-PF	SqFt
	Linear Crack	M, H	Crack Sealing – PCC	CS-PC	Ft
	Durability Crack	Н	Slab Replacement – PCC	SL-PC	SqFt
	Durability Orack	M	Patching - PCC Full Depth	PA-PF	SqFt
	Jt. Seal Damage	M, H	Joint Seal (Localized)	JS-LC	Ft
	Small Patch	M, H	Patching - PCC Partial Depth	PA-PP	SqFt
PCC	Large Patch	M, H	Patching - PCC Full Depth	PA-PF	SqFt
100	Popouts	N/A	No Localized M&R	NONE	SqFt
	Pumping	N/A	No Localized M&R	NONE	SqFt
	Scaling	Н	Slab Replacement – PCC	SL-PC	SqFt
	Faulting	M, H	Grinding (Localized)	GR-PP	Ft
	Shattered Slab	M, H	Slab Replacement – PCC	SL-PC	SqFt
	Shrinkage Crack	N/A	No Localized M&R	NONE	Ft
	Joint Spall	M, H	Patching - PCC Partial Depth	PA-PP	SqFt
	Corner Spall	M, H	Patching - PCC Partial Depth	PA-PP	SqFt

^{*}L = Low, M = Medium, H = High

Rehabilitation is warranted when the pavement condition decreases below a critical point such that the deterioration is extensive or rate of deterioration is so great that routine maintenance is no longer cost-efficient. This critical point is called "Critical PCI." The Critical PCI levels for different pavement and branch types established in Phase I of Statewide Pavement Management Program were reviewed and updated for development of the M&R plan for the airport. Sections above critical PCI levels receive routine maintenances while pavements predicted to deteriorate below their respective critical PCI level during the analysis period will be identified for Major M&R. Based on the existing condition, the Critical PCI levels for all pavements are set at 65.

It should be noted that critical PCI is not the same as Minimum PCI or Minimum Condition. The Minimum PCI is a value set by the user so pavement sections are rehabilitated before they fall below the set minimum. Table 6-2 gives the targeted, or desired, Minimum PCI values for runways, taxiways, and aprons of the three categories of airports.

Use	Min	imum	PCI
USC	GA RL PR		
Runway	75	75	75
Taxiway	65	65	70
Apron	60	65	65

Table 6-2: Desired Minimum PCI for Airports By Pavement Use

Typical Major M&R activities range from overlays to reconstruction. Based on the critical PCI values in Table 6-2 and our experience with pavement management systems, the PCI trigger range when the likely activity would be a mill and resurface was 31 to 55 and reconstruction at a PCI of 30 or lower. One important concept of pavement management systems is that it is cost effective to maintain pavements that are already in good condition rather than wait for them to get worse and require more expensive rehabilitation. With this objective, microsurfacing has been recommended to maintain pavements that have a PCI from 56 and 79. Microsurfacing is a surface treatment suggested for pavements in Fair to Satisfactory condition to extend the pavement life by five to seven years.

Crack sealing and full-depth patching are the M&R activities recommended to repair pavements with PCI values between 80 and 90. MicroPAVER considers these as preventative M&R with their primary objective being to slow the rate of pavement deterioration. While the trigger PCI for mill and overlay has been set to 55, MicroPAVER also assigns mill and overlay to sections with a PCI greater than 55 if they exhibit some structural distress. Table 6-3 summarizes the M&R activities for the three categories of airports based on PCI value.

	Activity	PCI Range
Maintenance	Maintenance Crack Sealing and Full-Depth Patching	
	Microsurfacing (AC) or Concrete Pavement Restoration (PCC)	56 to 79
Rehabilitation	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	31 to 55
	Reconstruction	30 and less

Table 6-3: M&R Activities for Airports

6.2 Unit Costs

FDOT cost databases for airports and highway pavement maintenance and rehabilitation were reviewed in Phase I of Statewide Pavement Mangement Program in order to determine meaningful costs for the program. Table 6-4 presents the unit costs summary.

Table 6-4: Maintenance Unit Costs for FDOT

Code	Name	Cost	Unit
PA-AL	Patching – AC Leveling	\$2.00	SqFt
PA-AS	Patching – AC Shallow	\$4.00	SqFt
PA-PF	Patching – PCC Full Depth	\$50.00	SqFt
PA-PP	Patching – Partial Depth	\$35.00	SqFt
SL-PC	Slab Replacement	\$15.00	SqFt
CS-PC	Crack Sealing – PCC	\$2.00	Ft
UN-PC	Undersealing – PCC	\$3.00	Ft
CS-AC	Crack Sealing – AC	\$2.00	Ft
GR-PP	Grinding (Localized for PCC)	\$20.00	Ft
GR-LL	Grinding (Localized for AC)	\$6.00	SqFt
JS-LC	Joint Seal (Localized)	\$1.75	Ft
JS-SI	Joint Seal - Silicon	\$2.50	Ft
PA-AD	Patching – AC Deep	\$7.00	SqFt
OL-AT	Overlay – AC Thin	\$1.50	SqFt
SS-CT	Surface Seal – Coal Tar	\$0.20	SqFt
SS-RE	Surface Seal – Rejuvenating	\$0.15	SqFt
ST-SS	Surface Treatment – Slurry Seal	\$0.25	SqFt
ST-ST	Surface Treatment – Sand Tar	\$0.25	SqFt
MI-AC	Microsurfacing	\$0.90	SqFt

The improvement in condition due to maintenance actions applied to specific distresses is only performed when an inspection is recent and only in the first year of the M&R analysis. In subsequent years MicroPAVER calculates M&R costs based on expected unit costs for pavements in a range of PCI. That is, for low PCI it is expected that the repair would be significant (e.g. reconstruction) and therefore very costly. Using available unit cost data the Major M&R Cost By Condition table was set up as shown in Table 6-5. The cost assigned to each range of PCI is based on a Transportation Cost Report provided by Office of Planning Policy of FDOT where the unit costs of reconstruction and resurfacing of airfield pavements were included. These costs were then assigned to the appropriate PCI range to arrive at a cost per square foot necessary to restore pavements at that PCI level to new condition, i.e. a PCI of 100.

A 3% inflation rate per year was applied to the unit costs during the M&R analysis.

Table 6-5: M&R Activities and Unit Costs by Condition for Airports

	Activity	PCI Trigger	Cost/SqFt		
	Activity		GA	RL	PR
Maintenance	Crack Sealing and Full-Depth Patching	90	\$0.06	\$0.10	\$0.20
		80	\$0.24	\$0.40	\$0.80
Rehabilitation	Microsurfacing (AC) or Concrete Pavement Restoration (PCC)	70	\$0.69	\$0.90	\$1.40
		60	\$3.42	\$3.68	\$4.23
	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	50	\$6.29	\$7.61	\$8.55
		40	\$6.29	\$7.61	\$8.55
	Reconstruction	30	\$13.62	\$18.57	\$20.88
		20	\$13.62	\$18.57	\$20.88

7. PAVEMENT REHABILITATION NEEDS ANALYSIS

Maintenance and Rehabilitation (M&R) analyses were performed after the condition data were calculated and MicroPAVER was customized with the maintenance policies and cost settings described in the previous section.

The objective of the M&R analysis is to observe the effect of different fiscal scenarios on the network condition, over a period of ten years. The analysis was conducted using an unlimited budget. An unlimited budget allows all M&R needs to be identified along with the associated cost regardless of priority.

Table 7-1 presents the M&R needs list of immediate needs for Major M&R, i.e. Year 1 of the forecast. The importance of this listing is that it points out the major activities triggered by the current condition of the pavements.

The 10 year forecast results are shown in Figure 7-1, illustrating the effect on pavement condition (PCI) of doing no maintenance versus having unlimited funds and performing all M&R actions based on the policies.

The following network level observations can be made from the figure above:

- The average PCI for airports in District 1 will deteriorate from 75 to 57 in ten years if no M&R activities are performed.
- The PCI will remain at or above 82 through the 10-year analysis period under the unlimited budget scenario. A 2017 PCI of 82 with this scenario is 25 PCI points higher than a "No M&R" scenario. The total cost for Major M&R over this 10-year period is about \$157 million.

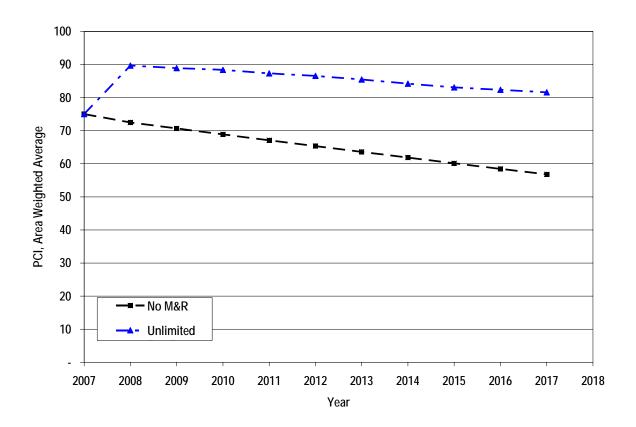
Table 7-1: Summary of Immediate Major M&R Needs - District 1

Airport	Avg PCI - Be- fore M&R	Immediate M&R Total **	Avg PCI -1st Year After M&R
2IS	75	\$1,668,000	88
APF	62	\$22,717,000	87
AVO	84	\$1,340,000	92
BOW	73	\$8,918,000	93
CHN	88	\$0	85
FMY	78	\$2,763,000	82
GIF	72	\$4,928,000	86
IMM	47	\$18,454,000	99
LAL	70	\$15,036,000	85
MKY	49	\$4,865,000	99
OBE	59	\$9,347,000	93
PGD	87	\$1,985,000	87
RSW	93	\$1,213,000	93
SEF	54	\$13,284,000	92
VNC	64	\$10,150,000	96
X01	71	\$522,000	91
X06	79	\$198,000	80
X07	77	\$1,968,000	94
X14	92	\$202,000	90
District 1	75	\$119,560,000	90

^{*} This table shows the area-weighted PCI before and after Major M&R and routine maintenance work for the first year of the 10-year plan. It includes all airports participating in the program from District 1.

^{**} Cost figures are rounded to nearest \$1000. Sum may be different. Costs are adjusted for inflation.

Figure 7-1: Budget Scenario Analysis – District 1



8. MAINTENANCE AND REHABILITATION PLAN

The M&R analysis results include activities that likely exceed a typical annual budget level. These activities would need to be evaluated for feasibility and desirability based on the district's future plans. In an effort to identify appropriate budget levels the 10 year M&R analysis was evaluated to determine levels needed to address several specific areas: preventive maintenance, major activities for pavements in poor condition (Major M&R for PCI less than Critical), and activities that would be desirable to preserve good pavement conditions where they exist (Major M&R for PCI greater than or equal to Critical).

Table 8-1 provides the summary results under the critical PCI scenario.

Approximately 76% of the total Major M&R cost is required in the first year (2008). This is a consequence of several large areas of pavement at 2IS (Airglades Airport), APF (Naples Municipal Airport), AVO (Avon Park Municipal Airport), BOW (Bartow Municipal Airport), FMY (Page Field Airport), GIF (Winter Haven Municipal Airport), IMM (Immokalee Airport), LAL (Lakeland Linder Regional Airport), MKY (Marco Island Airport), OBE (Okeechobee County Airport), PGD (Charlotte County Airport), RSW (Southwest Florida International Airport), SEF (Sebring Regional Airport), VNC (Venice Municipal Airport), X01 (Everglades City Airport), X06 (Arcadia Municipal Airport), X07 (Lake Wales Municipal Airport) and X14 (La Belle Municipal Airport) airports being below Critical PCI.

CHN (Wauchula Municipal Airport), PGD (Charlotte County Airport), RSW (Southwest Florida International Airport) and X14 (La Belle Municipal Airport) are currently in overall Good condition with an average PCI value of 88, 87, 93 and 92 respectively, while 2IS (Airglades Airport), AVO (Avon Park Municipal Airport), BOW (Bartow Municipal Airport), FMY (Page Field Airport), GIF (Winter Haven Municipal Airport), X01 (Everglades City Airport), X06 (Arcadia Municipal Airport) and X07 (Lake Wales Municipal Airport) are currently in overall Satisfactory condition with an average PCI value of 75, 84, 73, 78, 72, 71, 79 and 77 respectively. APF (Naples Municipal Airport), LAL (Lakeland Linder Regional Airport), OBE (Okeechobee County Airport), and VNC (Venice Municipal Airport) are currently in overall Fair condition with an average PCI value of 62, 70, 59, and 64 respectively, while IMM (Immokalee Airport), MKY (Marco Island Airport), and SEF (Sebring Regional Airport), are currently in Poor condition with an average PCI value of 47, 49 and 54, respectively. Majority of the repair needs in 2008 are identified from the following airports: APF (Naples Municipal Airport), IMM (Immokalee Airport), LAL (Lakeland Linder Regional Airport), and SEF (Sebring Regional Airport. The unlimited budget scenario provides the basis for estimating the total repair cost. In reality, it is neither operationally nor fiscally prudent.

Appendix B provides details of M&R plan by year under the unlimited funding scenario. It is important to understand that a PMS is a network level tool and the M&R costs provided in this report are only for planning purposes.

Table 8-1: M&R Costs under Unlimited Funding Scenario – District 1

Year	Preventive	Major M&R >= Critical	Major M&R < Critical	Total
2008	\$1,012,000	\$383,000	\$119,177,000	\$120,572,000
2009	\$2,788,000	\$0	\$3,990,000	\$6,777,000
2010	\$2,724,000	\$0	\$6,003,000	\$8,727,000
2011	\$3,057,000	\$0	\$3,149,000	\$6,206,000
2012	\$3,331,000	\$0	\$5,387,000	\$8,719,000
2013	\$3,882,000	\$0	\$3,162,000	\$7,043,000
2014	\$4,609,000	\$0	\$3,220,000	\$7,829,000
2015	\$5,341,000	\$0	\$2,454,000	\$7,795,000
2016	\$6,009,000	\$0	\$5,529,000	\$11,538,000
2017	\$6,687,000	\$0	\$4,801,000	\$11,488,000
Total	\$39,441,000	\$383,000	\$156,872,000	\$196,696,000

Note: Cost figures are rounded to nearest \$1000. Sum may be different. Costs are adjusted to inflation

9. VISUAL AIDS

9.1 GIS Linked Shape File

The pavement inventory data and pavement condition were linked to the airport's shape file to graphically show the inventory and condition of the airport via color coding shown on the shape file. The coding provides a visual representation that illustrates the PCIs for each pavement section.

During the inspections Global Positioning System (GPS) coordinates were recorded at the centroid of each sample unit. The centroid is usually the geometric center of the area but in cases where sample units are irregular in shape this is the center of mass. These data are presented in tables on updated Network Definition drawings of each individual airport report.

Selected digital photographs taken during the pavement inspection were provided in Appendix G of each individual airport report. These photographs may provide visual support to special pavement conditions or distress observed during the inspection of the facility. As requested by the Aviation Office, these photographs are not linked to the airport's database.

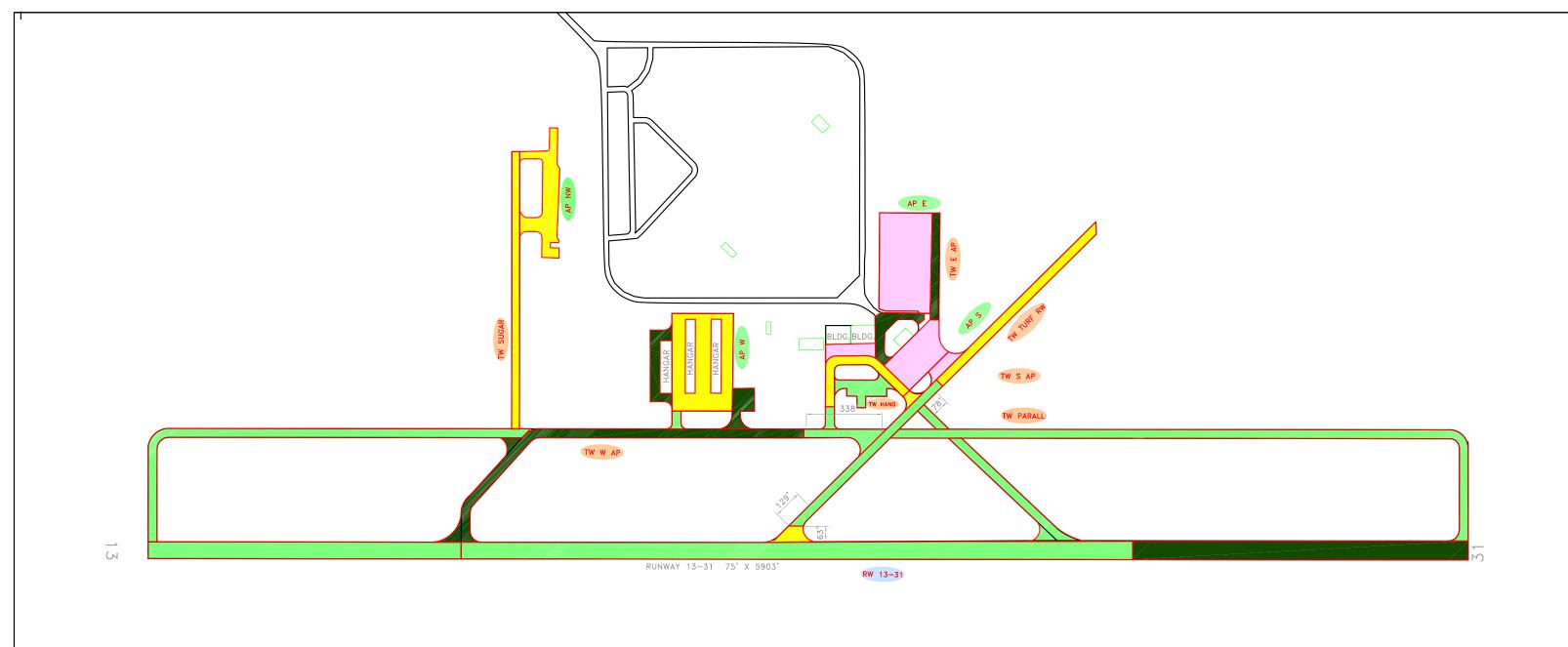
10. **RECOMMENDATIONS**

Pavement condition inspections were performed at airports participating in the program from District 1 and a 10-year M&R plan was developed based on the unlimited funding scenario.

Based on 2006/2007 condition inspections and M&R analysis results, some key M&R repair projects identified for each airport for the next 3 years are:

- 21S Airglades Airport: Areas of Apron East, South, and West.
- APF Naples Municipal Airport: Runway 14-32, areas of Apron GA, Apron North West, Apron West, part of Taxiways.
- AVO Avon Park Municipal Airport: Apron South
- BOW Bartow Municipal Airport: Runway 9R-27L, Apron North, Apron T-Hangars, part of Taxiway A.
- CHN: None
- FMY Page Field Airport: part of Taxiway A and areas of Apron Southwest
- GIF Winter Haven Municipal Airport: Runway 4-22, Apron, Taxiway Apron, part of Taxiway B and C.
- IMM Immokalee Airport: Runway 18-36, Runway 9-27, part of Taxiways A and B.
- LAL Lakeland Linder Regional Airport: part of Taxiways B, E, F, G, H, S, Areas of Apron North, Apron Northwest, Apron Southeast
- MKY Marco Island Airport: Runway 17-35 and Apron N.
- OBE Okeechobee County Airport: Runway 14-32, Runway 5-23, part of Taxiway A, areas of Apron North.
- PGD Charlotte County Airport: part of Taxiway G, areas of Apron North and Apron Main.
- RSW Southwest Florida International Airport: part of Taxiway A.
- SEF Sebring Regional Airport: Runway 14-32, part of Taxiway C, and Apron West.
- VNC Venice Municipal Airport: Runway 4-22, part of Taxiway A and Apron.
- X01 Everglades City Airport: Runway 13-31.
- X06 Arcadia Municipal Airport: Hangar Taxiway.
- X07 Lake Wales Municipal Airport: Runway 6-24.
- X14 La Belle Municipal Airport: Taxiway Northwest apron.

APPENDIX A 2006/2007 CONDITION MAPS











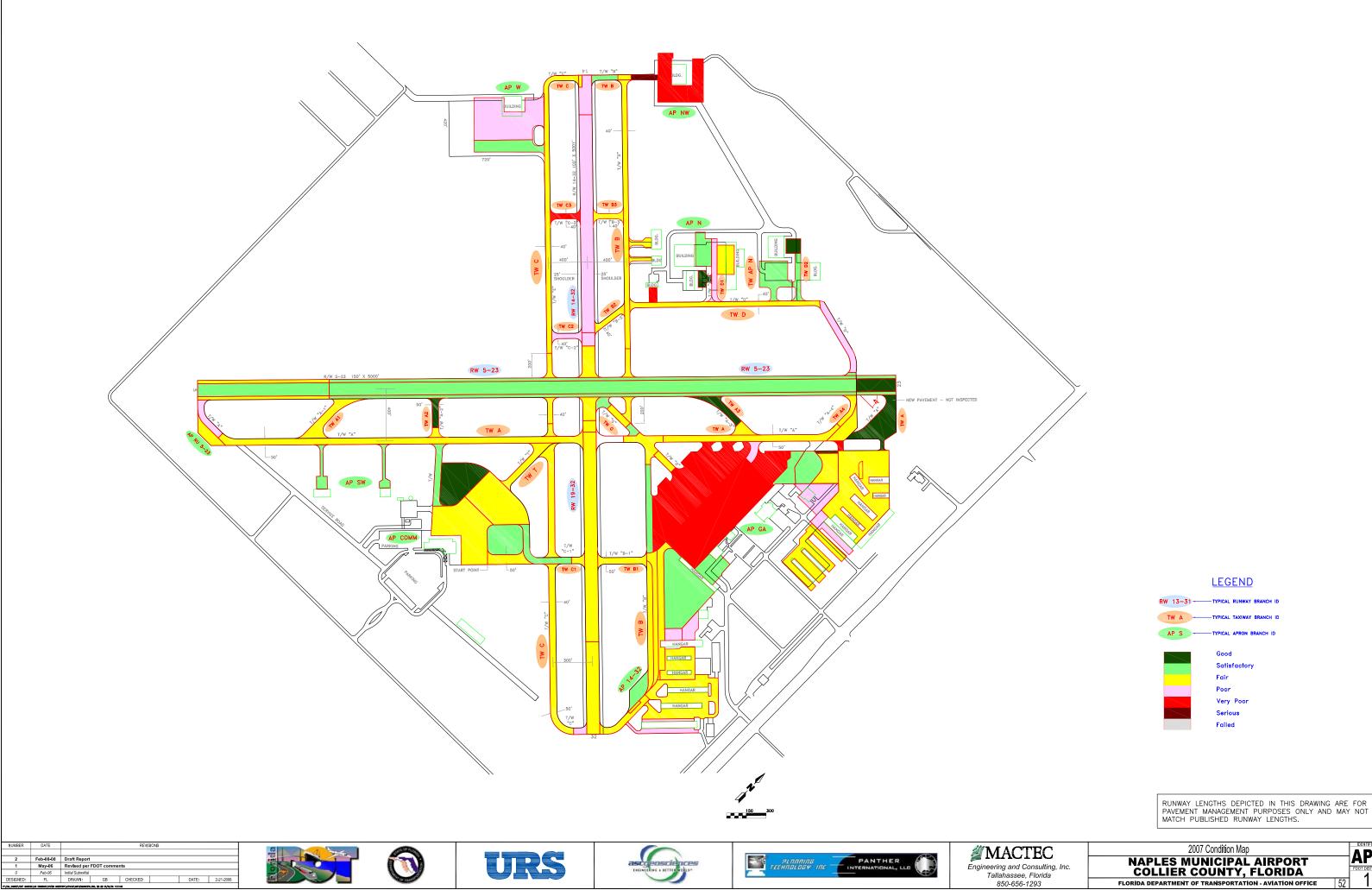


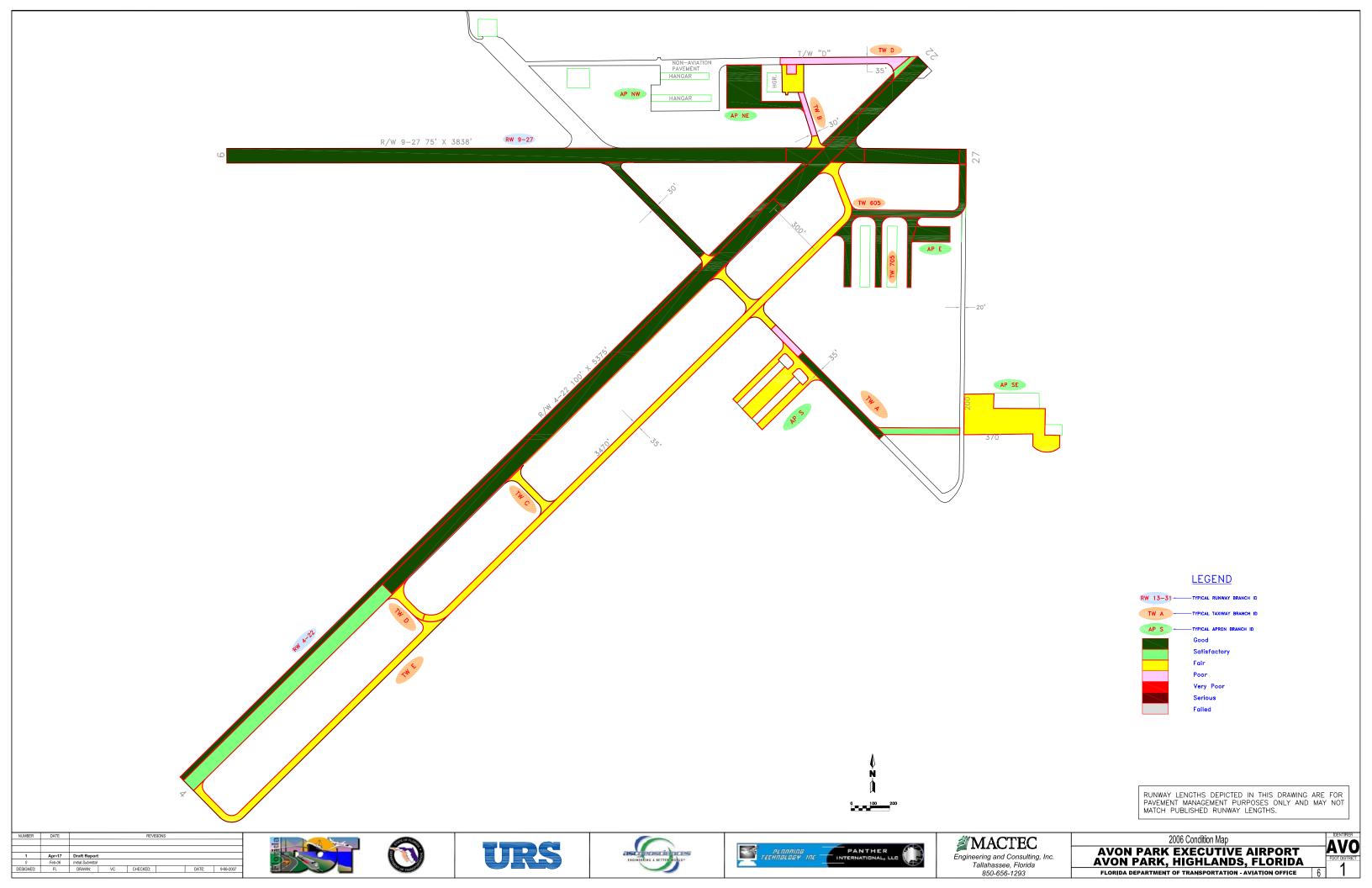


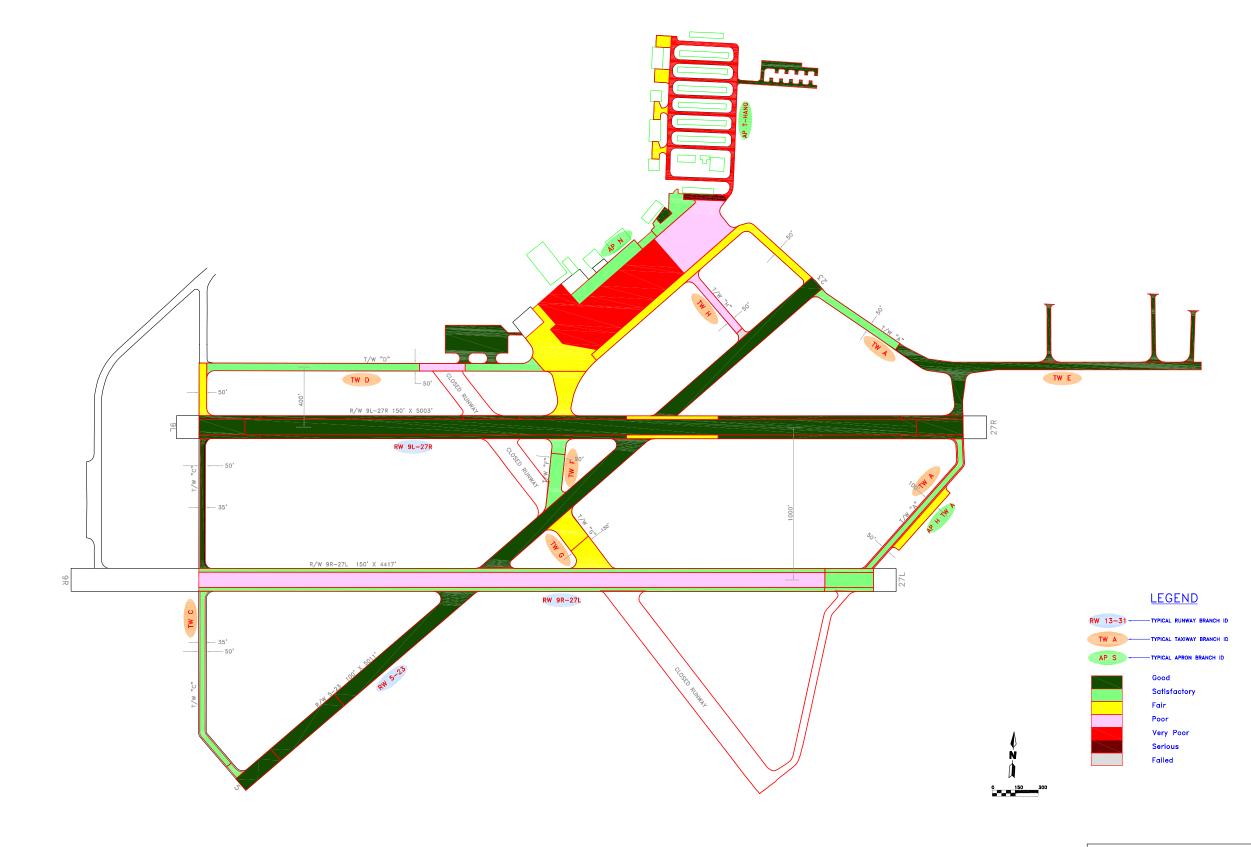


2006 Condition Map AIRGLADES AIRPORT HENDRY COUNTY, FLORIDA









BOW







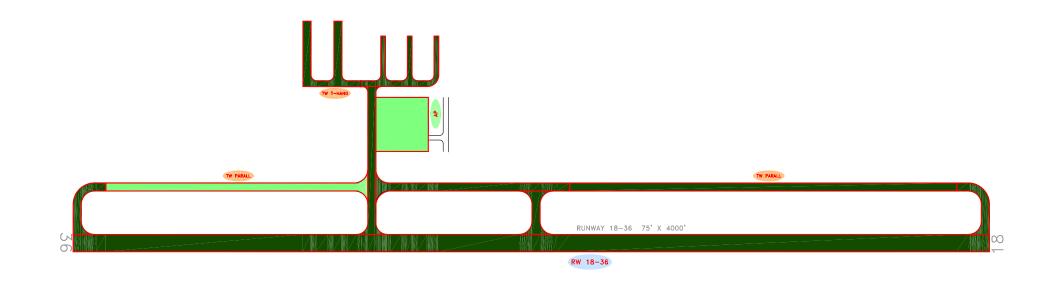






2006 Condition Map BARTOW MUNICIPAL AIRPORT POLK COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE



<u>LEGEND</u>





RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.

CHN

 2
 Apr-09
 Draft Report

 1
 May-06
 Revised per FDOT comments

 0
 Feb-06
 Intital Submittal

 DESIGNED:
 FL
 DRAWIN:
 GB
 CHECKED:
 DATE:
 9-07-2007





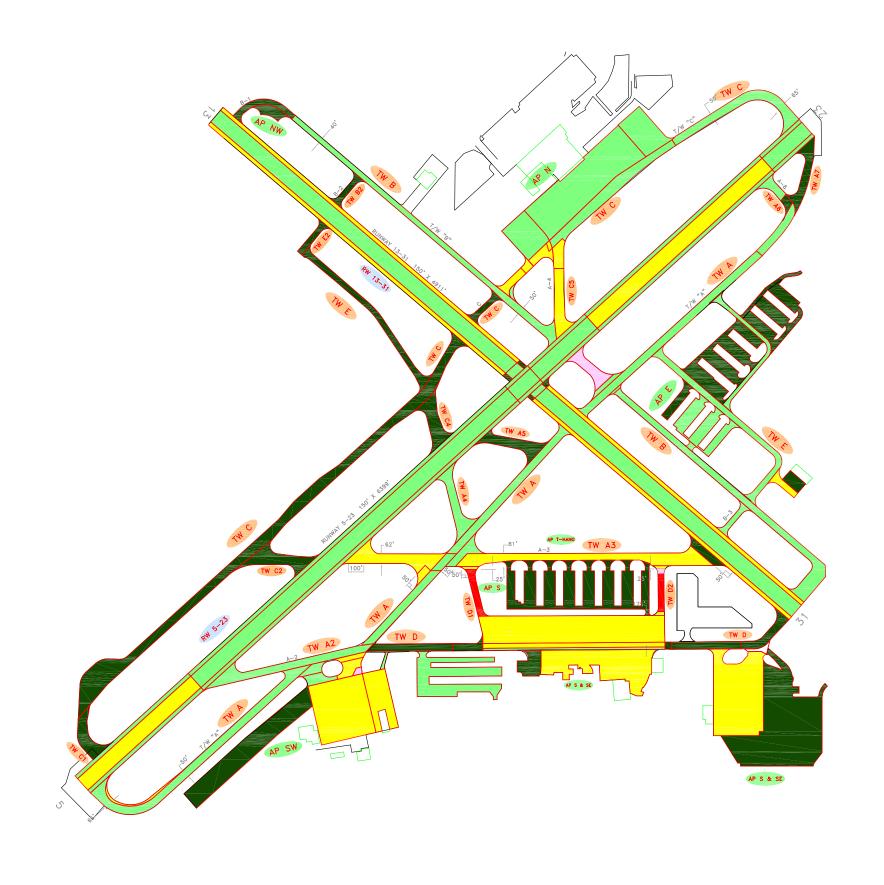








2006 Condition Map WAUCHULA MUNICIPAL AIRPORT HARDEE COUNTY, FLORIDA



<u>LEGEND</u>

Very Poor

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.











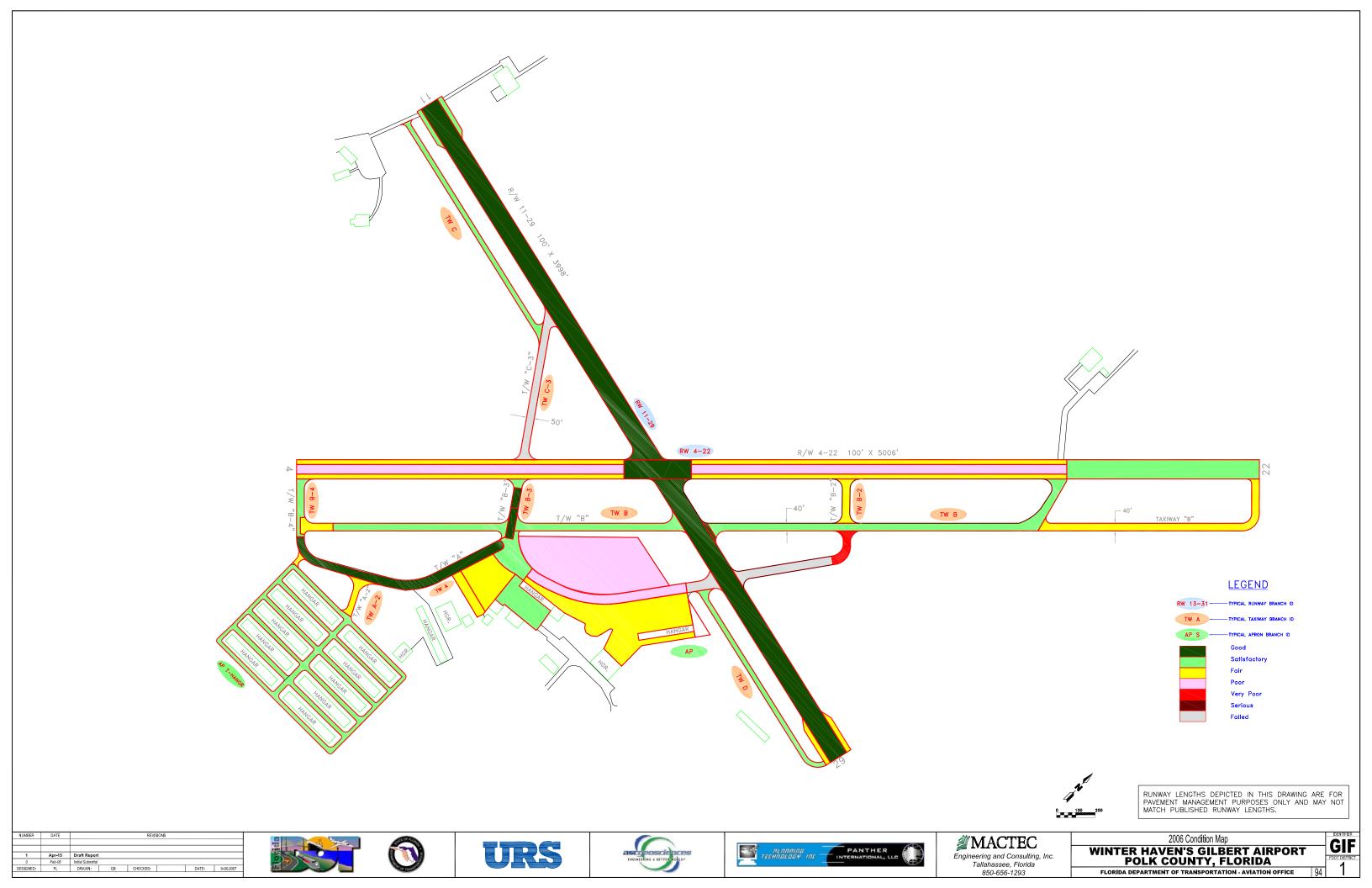


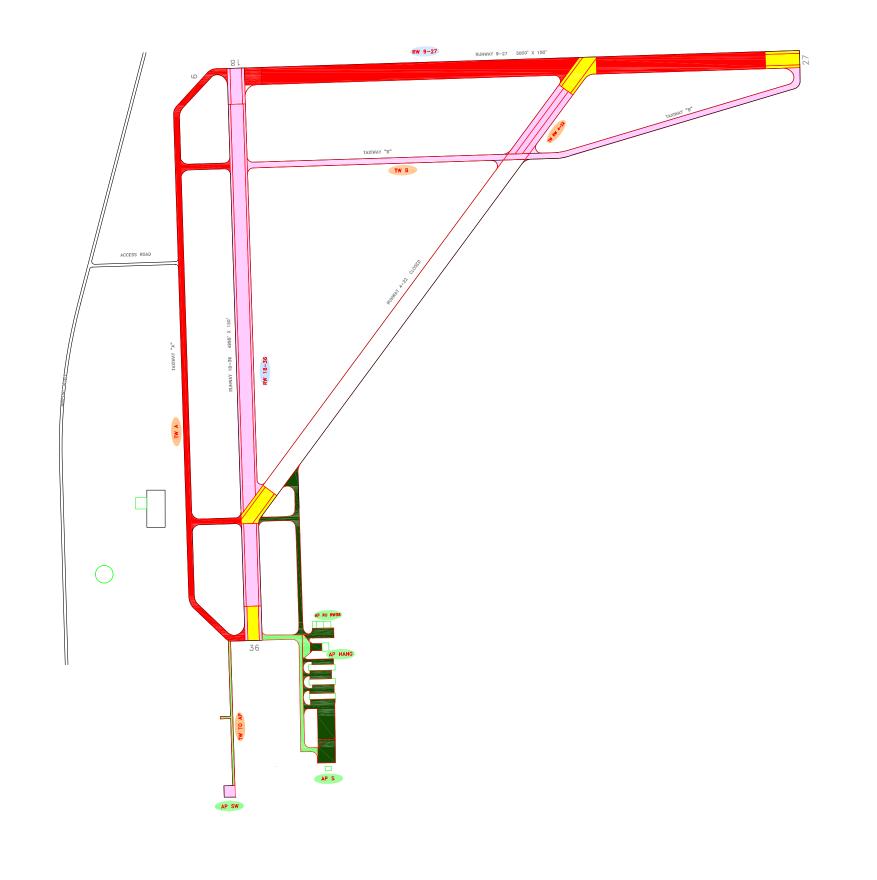
0 150 300

2007 Condition Map

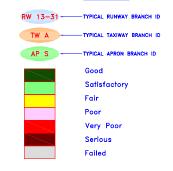
PAGE FIELD AIRPORT FORT MYERS, LEE, FLORIDA FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE







LEGEND





RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.

 1
 Apr-21
 Draft Report

 0
 Feb-06
 Initial Submittal

 DESIGNED:
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 DATE:
 9-06-2007









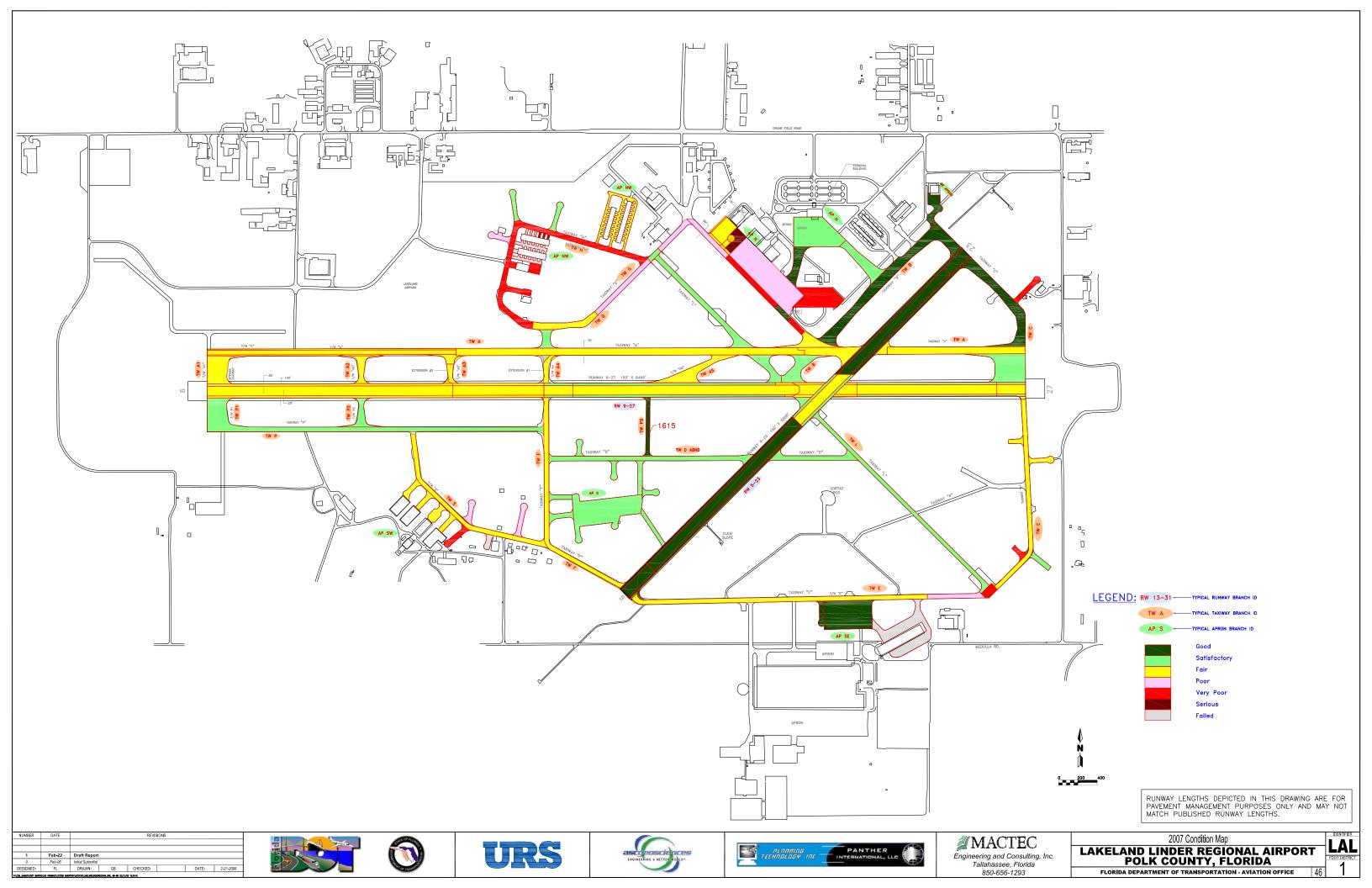


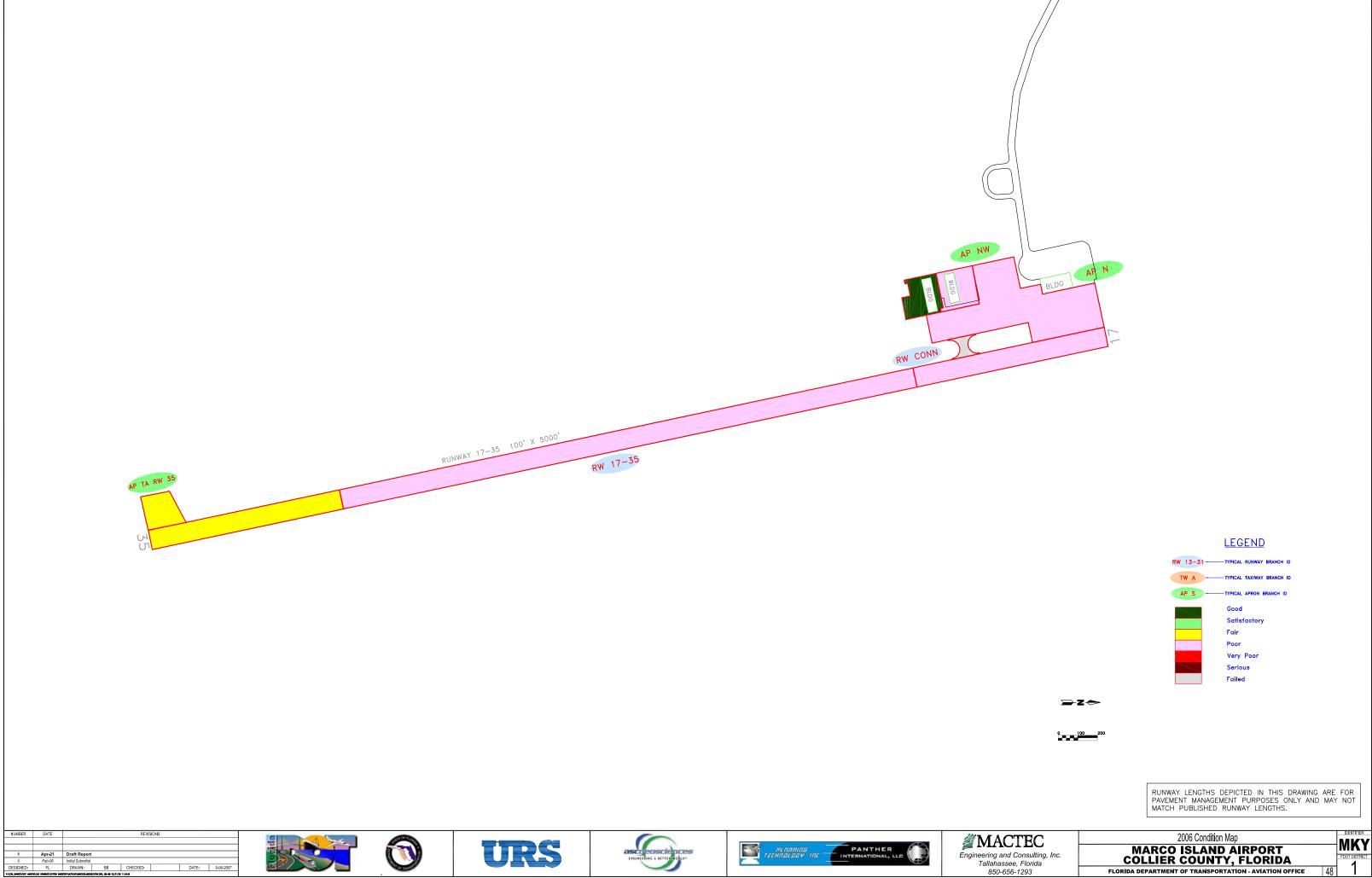


2006 Condition Map Engineering and Consulting, Inc. Tallahassee, Florida 850-656-1293

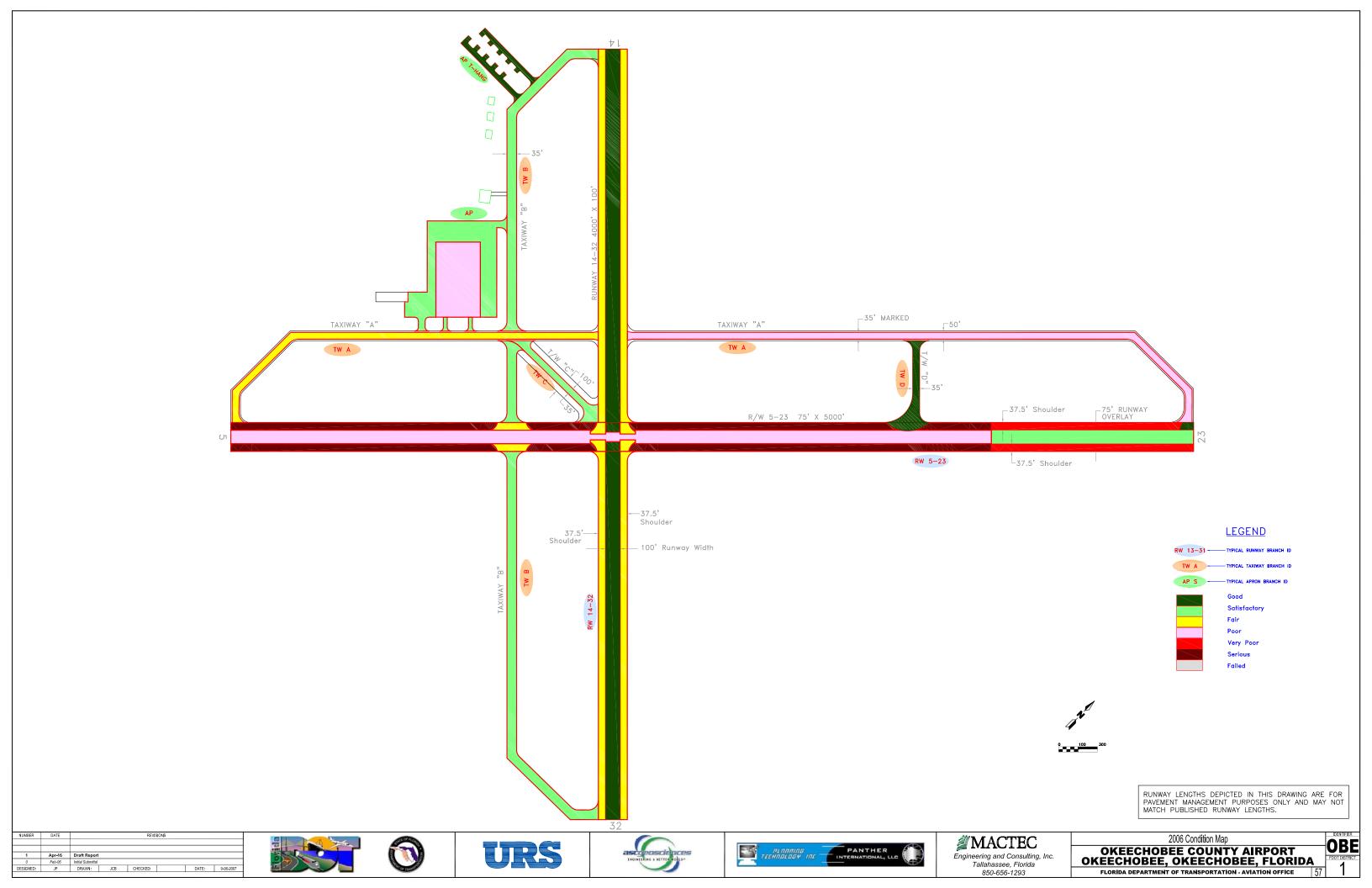
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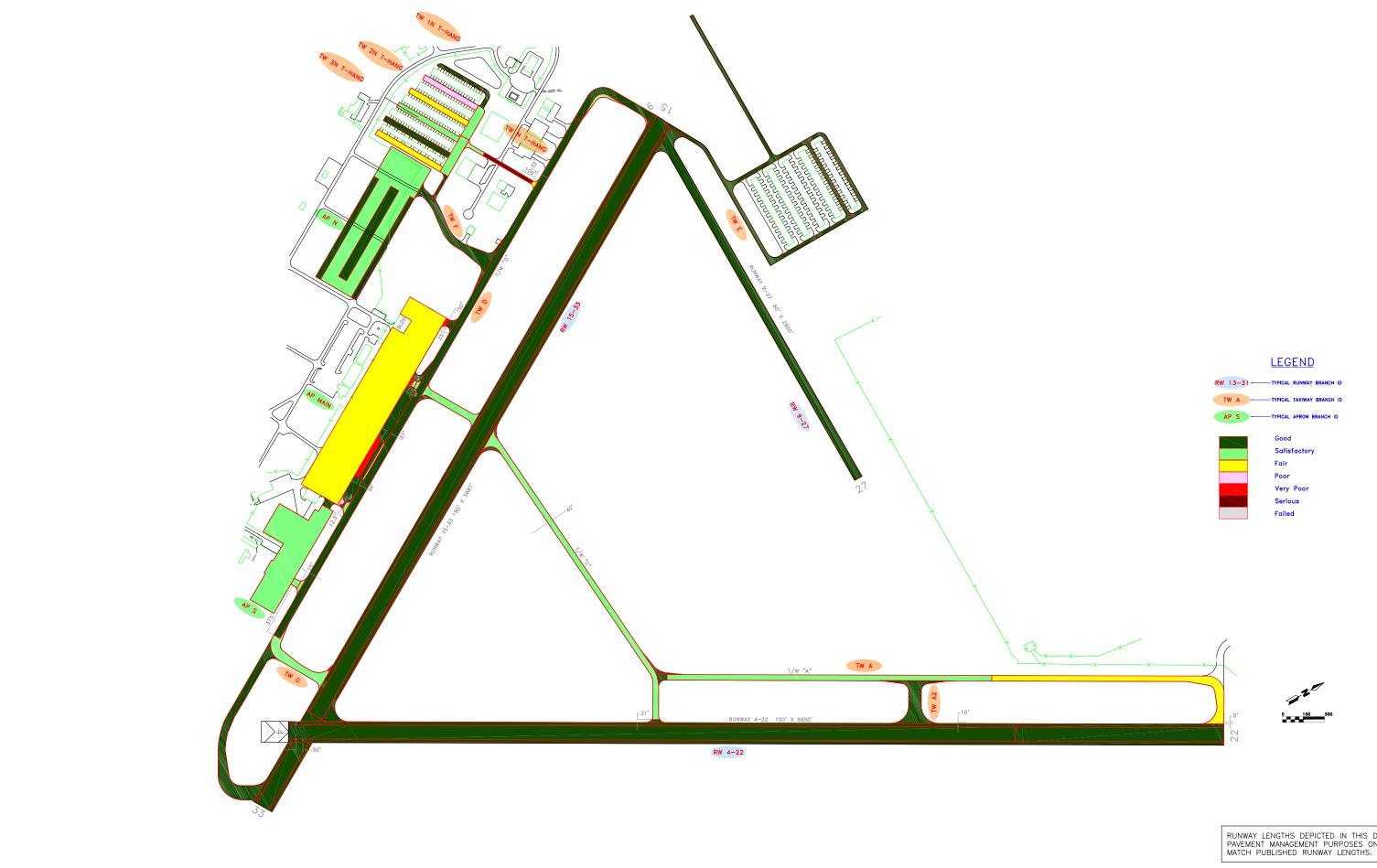






MARCO ISLAND AIRPORT COLLIER COUNTY, FLORIDA





NUMBER	DATE			REVIS	SIONS		
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0	Feb-06	Initial Submittal					
DESIGNED:	FL	DRAWN:	GB	CHECKED:		DATE:	9-06-2007









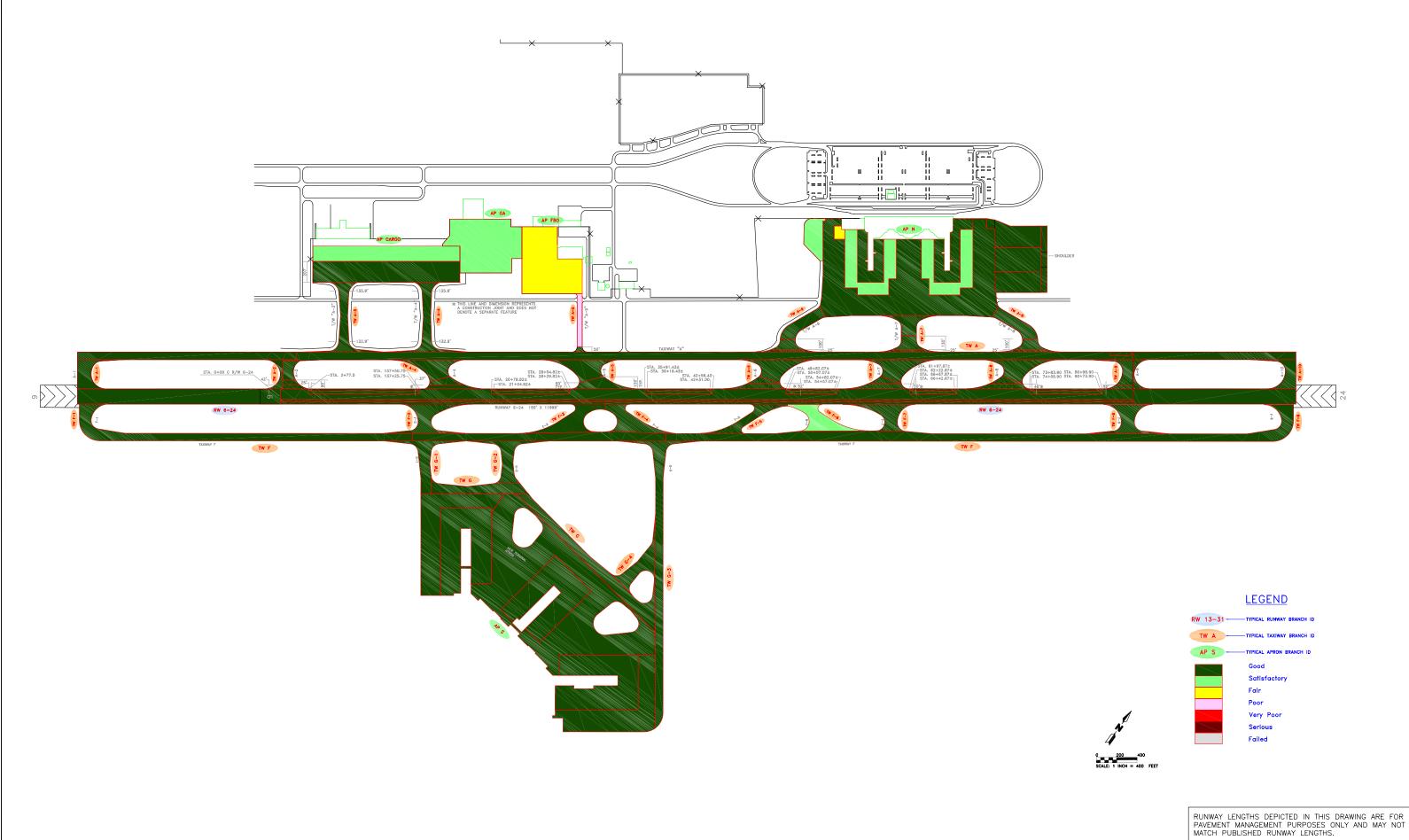




2006 Condition Map

CHARLOTTE COUNTY AIRPORT CHARLOTTE COUNTY, FLORIDA
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE













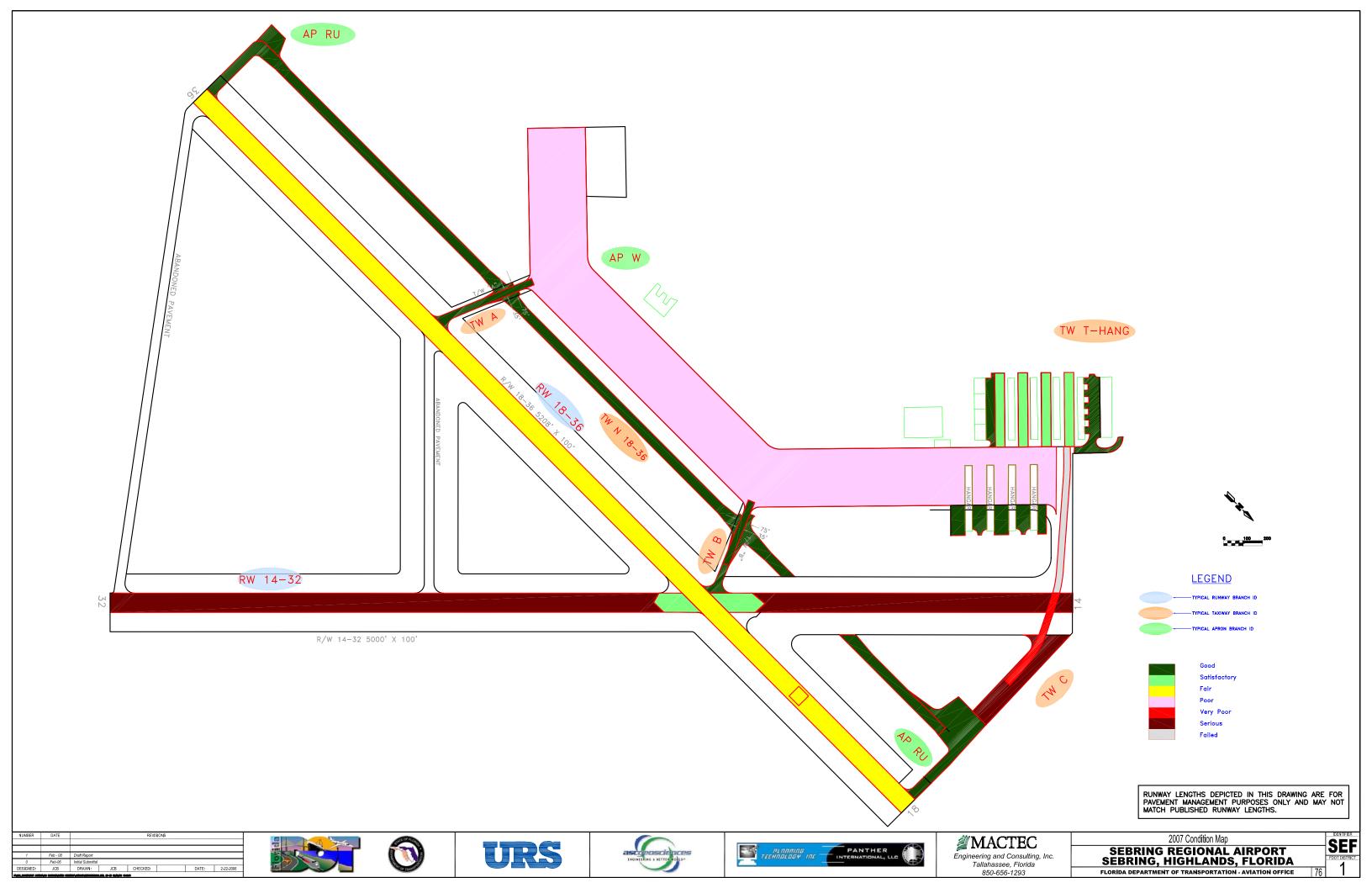


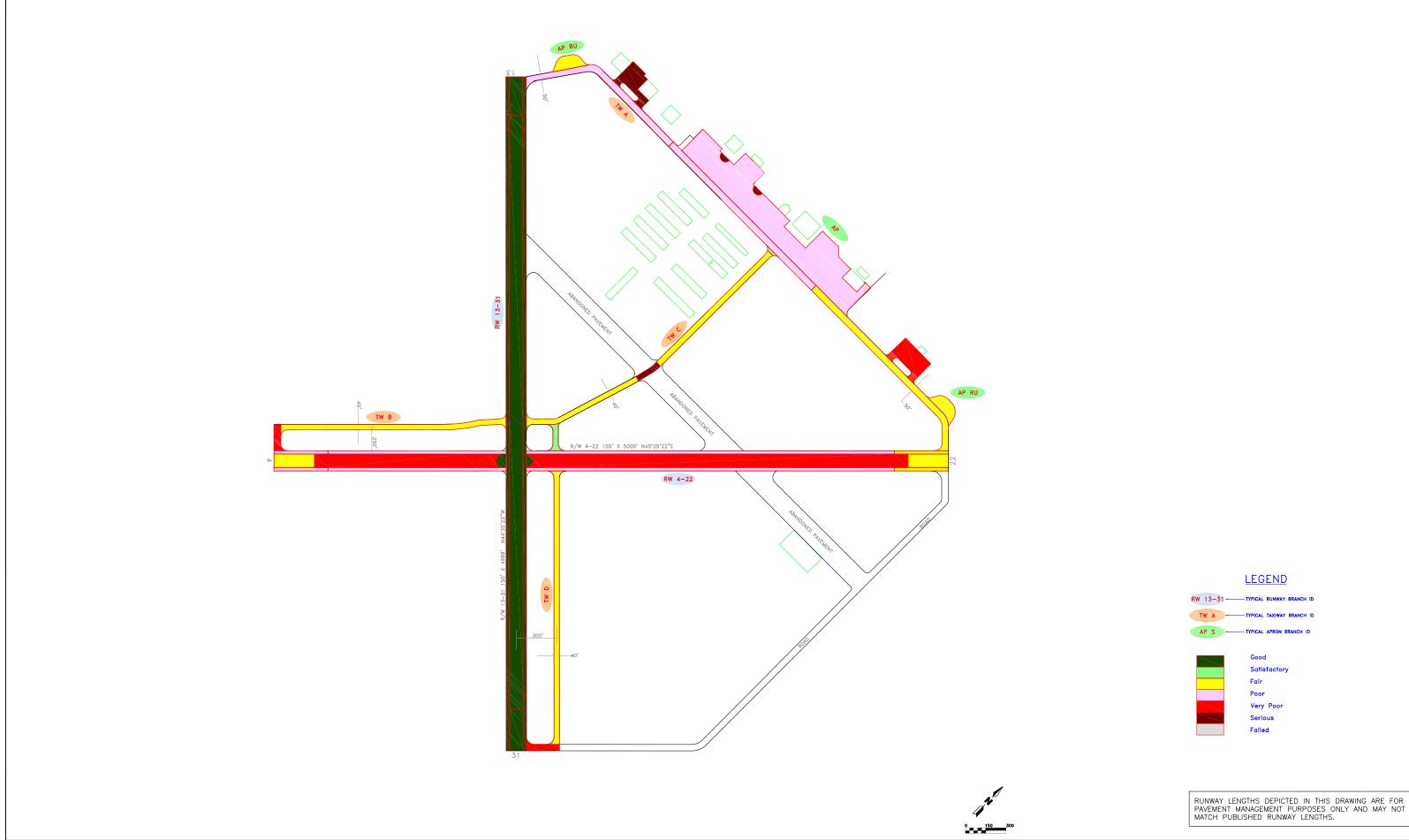


SOUTHWEST FLORIDA INTERNATIONAL
LEE COUNTY, FLORIDA
FLORIDA DEPARTMENT DE TRANSCORT 2007 Condition Map



















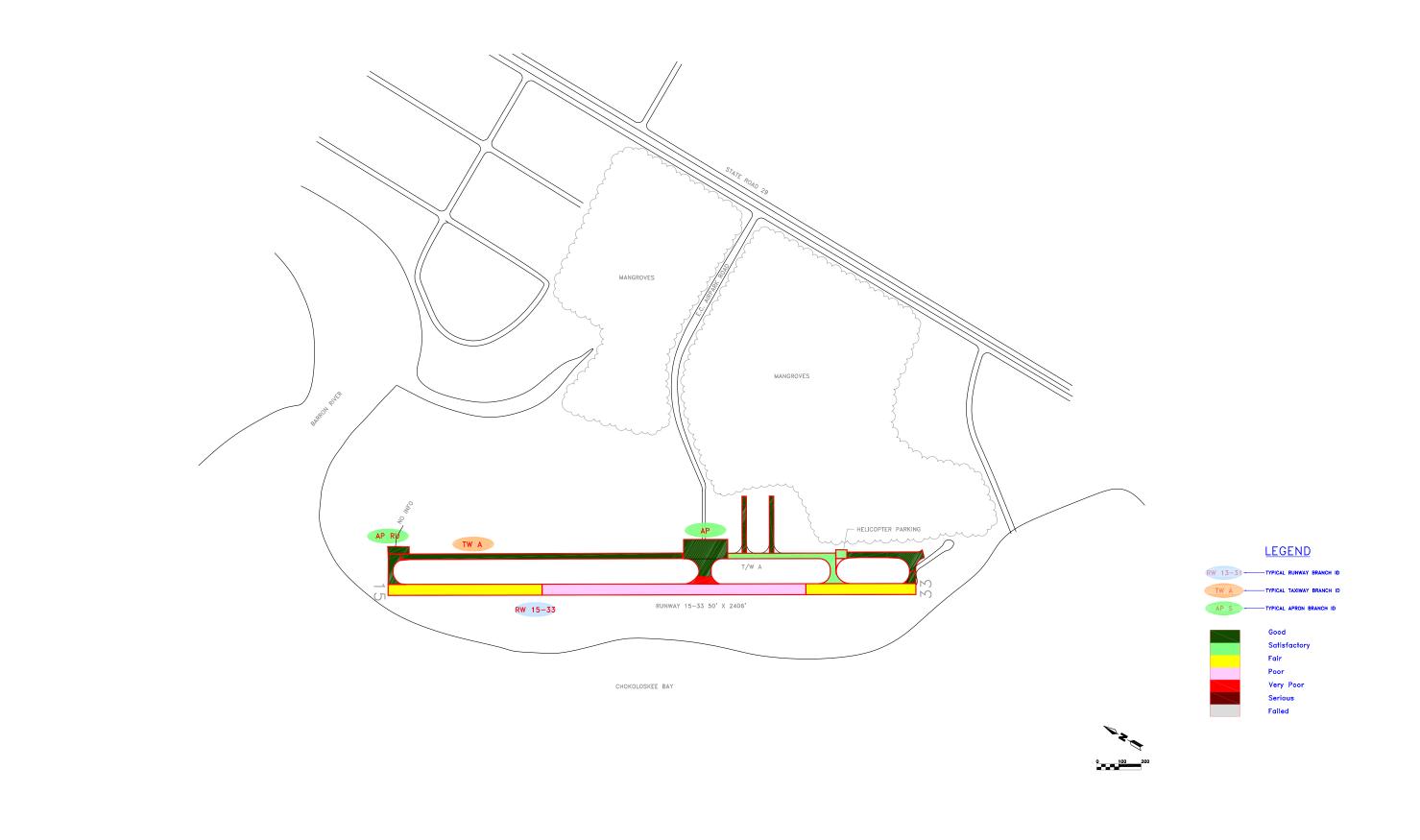


Engineering and Consulting, Inc. Tallahassee, Florida 850-656-1293

2007 Condition Map

VENICE MUNICIPAL AIRPORT SARASOTA COUNTY, FLORIDA





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NUMBER	DATE			REVIS	SIONS		
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DESIGNED:	FL	DRAWN:	GB	CHECKED:		DATE:	9-06-2007







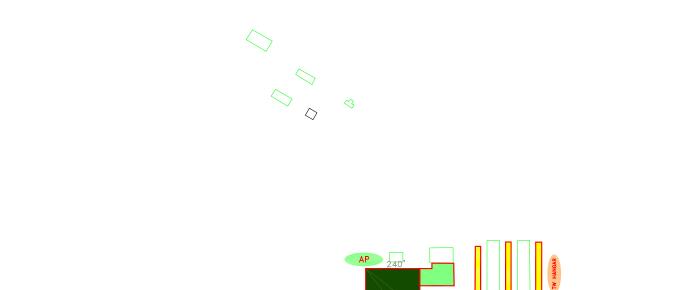


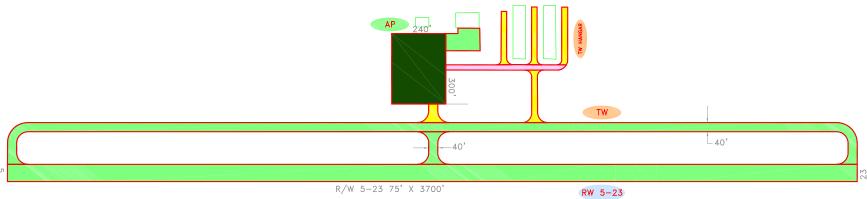




2006 Condition Map

EVERGLADES AIRPARK COLLIER COUNTY, FLORIDA
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

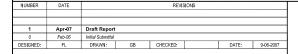




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RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.











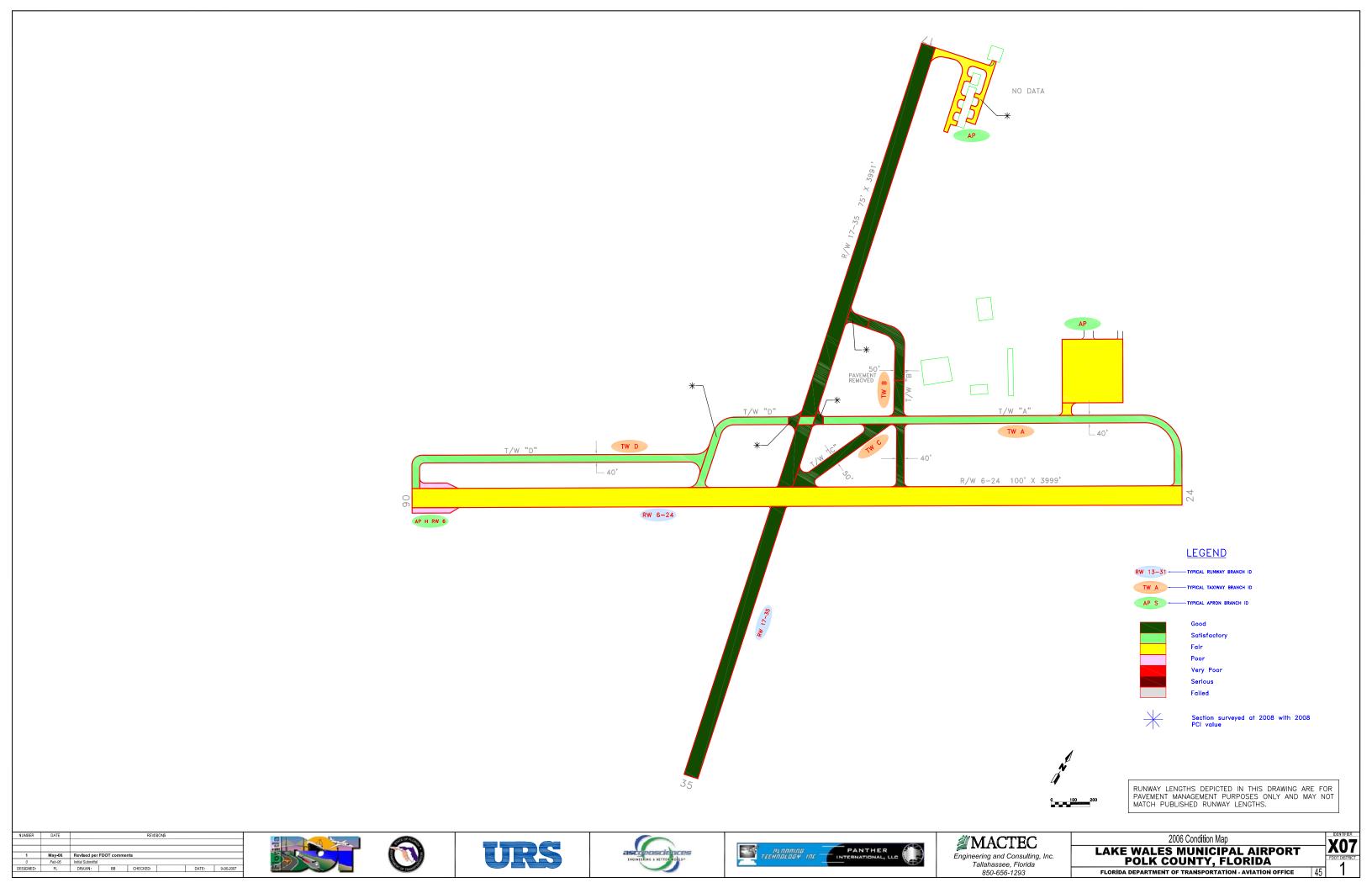


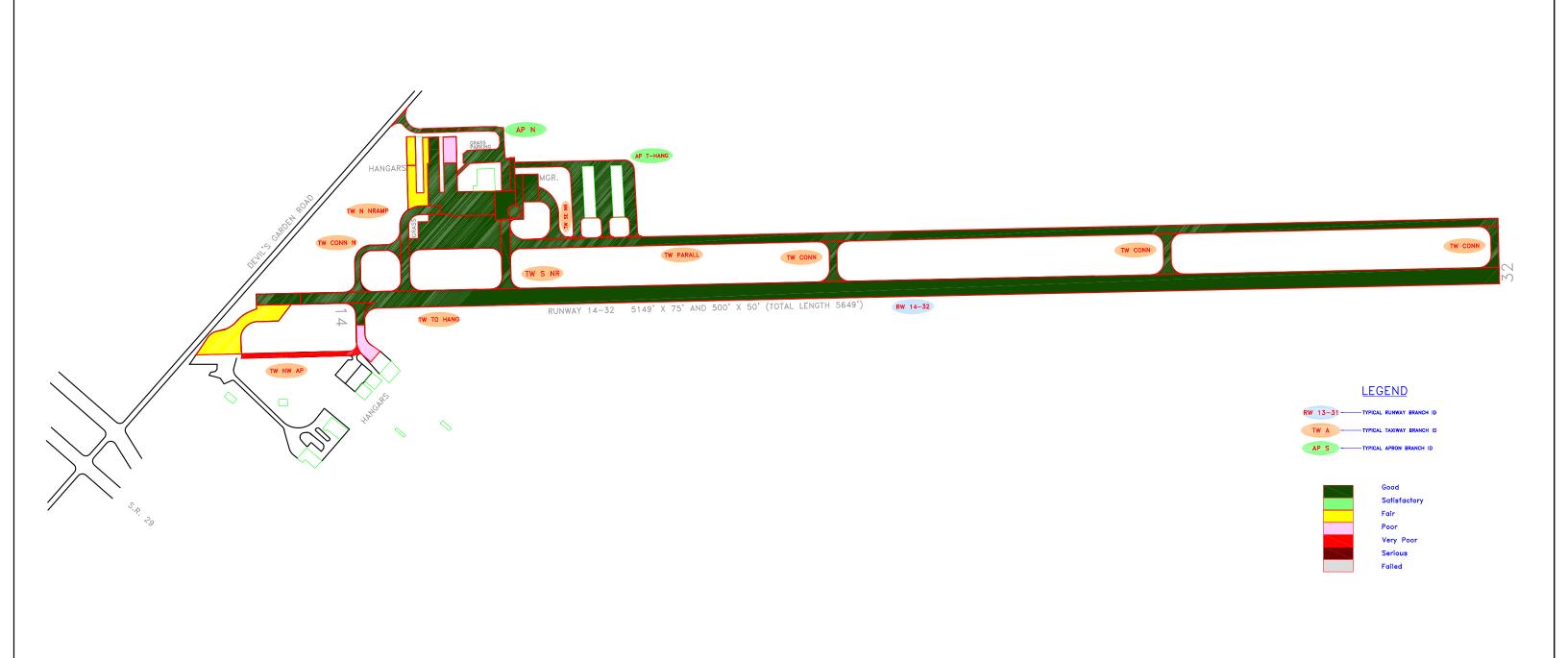


2006 Condition Map **ARCADIA MUNICIPAL AIRPORT** DESOTO COUNTY, FLORIDA























Engineering and Consulting, Inc.
Tallahassee, Florida
850-656-1293
FLOR

2006 Condition Map **LABELLE MUNICIPAL AIRPORT**

HENDRY COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE



APPENDIX B MAJOR M&R PLAN

Table B-1: 2IS Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
2IS	APRON	AP E	4505	AC	101,200	2008	48	Mill & Overlay	100	\$636,548
2IS	APRON	AP HANG	4205	PCC	11,000	2008	53	PCC Restoration	100	\$59,719
2IS	APRON	AP S	4305	AAC	42,340	2008	41	Mill & Overlay	100	\$266,319
2IS	APRON	AP W	4105	AAC	104,325	2008	59	Microsurfacing	100	\$386,733
2IS	RUNWAY	RW 13-31	6105	AAC	225,225	2008	72	Microsurfacing	100	\$135,135
2IS	TAXIWAY	TW HANG	405	AAC	25,950	2008	60	Microsurfacing	100	\$88,749
2IS	TAXIWAY	TW S AP	505	AAC	10,000	2008	48	Mill & Overlay	100	\$62,900
2IS	TAXIWAY	TW TURF RW	205	AAC	7,005	2008	56	Microsurfacing	100	\$31,999
2IS	APRON	AP NW	4405	AC	53,900	2009	64	Microsurfacing	100	\$129,244
2IS	TAXIWAY	TW TURF RW	215	AC	36,000	2009	64	Microsurfacing	100	\$86,322
2IS	TAXIWAY	TW PARALL	120	AAC	15,520	2010	64	Microsurfacing	100	\$38,331
2IS	TAXIWAY	TW W AP	305	AAC	2,640	2010	64	Microsurfacing	100	\$6,520
2IS	TAXIWAY	TW SUGAR	605	AC	43,435	2012	63	Microsurfacing	100	\$127,154
2IS	TAXIWAY	TW TURF RW	210	AAC	36,000	2015	64	Microsurfacing	100	\$103,073
2IS	APRON	AP HANG	4210	AC	18,800	2016	64	Microsurfacing	100	\$55,442
2IS	RUNWAY	RW 13-31	6110	AC	112,500	2017	64	Microsurfacing	100	\$341,720
2IS	TAXIWAY	TW PARALL	103	AAC	88,000	2017	63	Microsurfacing	100	\$298,647

Table B-2: APF Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
APF	APRON	AP COMMERC	4105	AC	138,500	2008	56	Microsurfacing	100	\$825,183
APF	APRON	AP GA	4205	PCC	261,900	2008	30	Reconstruction	100	\$5,468,471
APF	APRON	AP GA	4210	AC	118,800	2008	32	Mill & Overlay	100	\$2,187,583
APF	APRON	AP GA	4215	AC	123,600	2008	37	Mill & Overlay	100	\$1,513,976
APF	APRON	AP GA	4223	AAC	46,250	2008	55	Mill & Overlay	100	\$295,537
APF	APRON	AP GA	4225	AC	42,200	2008	34	Mill & Overlay	100	\$673,005
APF	APRON	AP GA	4240	AAC	29,650	2008	59	Microsurfacing	100	\$138,228
APF	APRON	AP GA	4242	AC	5,000	2008	55	Mill & Overlay	100	\$31,950
APF	APRON	AP GA	4245	AC	191,200	2008	62	Microsurfacing	100	\$700,556
APF	APRON	AP GA	4260	AC	12,150	2008	51	Mill & Overlay	100	\$98,634
APF	APRON	AP GA	4261	AAC	16,000	2008	40	Mill & Overlay	100	\$136,800
APF	APRON	AP GA	4280	AC	27,200	2008	48	Mill & Overlay	100	\$232,560
APF	APRON	AP GA	4295	AC	98,000	2008	49	Mill & Overlay	100	\$837,900
APF	APRON	AP N	4415	PCC	30,000	2008	63	PCC Restoration	100	\$101,430
APF	APRON	AP N	4430	AC	6,050	2008	38	Mill & Overlay	100	\$66,647
APF	APRON	AP NW	4505	AC	87,500	2008	31	Mill & Overlay	100	\$1,719,112
APF	APRON	AP NW	4510	AC	10,000	2008	22	Reconstruction	100	\$208,800
APF	APRON	AP RW 5-23	5105	AC	18,450	2008	62	Microsurfacing	100	\$67,601
APF	APRON	AP W	4610	PCC	142,000	2008	43	PCC Restoration	100	\$1,214,100
APF	RUNWAY	RW 14-32	6204	AC	2,250	2008	58	Microsurfacing	100	\$11,461
APF	RUNWAY	RW 14-32	6205	AAC	27,750	2008	44	Mill & Overlay	100	\$237,262
APF	RUNWAY	RW 14-32	6210	AAC	165,300	2008	48	Mill & Overlay	100	\$1,413,315
APF	RUNWAY	RW 14-32	6212	AAC	10,100	2008	40	Mill & Overlay	100	\$86,355
APF	RUNWAY	RW 14-32	6225	AAC	159,500	2008	64	Microsurfacing	100	\$494,131
APF	RUNWAY	RW 14-32	6230	AAC	70,000	2008	60	Microsurfacing	100	\$296,100
APF	TAXIWAY	TW A	105	AAC	17,295	2008	47	Mill & Overlay	100	\$147,872
APF	TAXIWAY	TW A	110	AC	125,000	2008	63	Microsurfacing	100	\$422,625
APF	TAXIWAY	TW A	115	AC	81,000	2008	64	Microsurfacing	100	\$250,938
APF	TAXIWAY	TW A	165	AC	9,300	2008	41	Mill & Overlay	100	\$79,515

Table B-2: APF Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
APF	TAXIWAY	TW A	175	AC	3,664	2008	30	Reconstruction	100	\$76,504
APF	TAXIWAY	TW B	205	AC	21,350	2008	64	Microsurfacing	100	\$66,142
APF	TAXIWAY	TW B	210	AC	36,000	2008	58	Microsurfacing	100	\$183,384
APF	TAXIWAY	TW B	215	AC	38,500	2008	59	Microsurfacing	100	\$179,487
APF	TAXIWAY	TW B	230	AAC	9,640	2008	63	Microsurfacing	100	\$32,593
APF	TAXIWAY	TW B	235	AAC	9,856	2008	59	Microsurfacing	100	\$45,949
APF	TAXIWAY	TW B	265	AAC	8,431	2008	57	Microsurfacing	100	\$46,590
APF	TAXIWAY	TW B-2	240	AC	11,830	2008	61	Microsurfacing	100	\$46,693
APF	TAXIWAY	TW B-3	245	AC	10,997	2008	59	Microsurfacing	100	\$51,268
APF	TAXIWAY	TW C	305	AAC	4,400	2008	48	Mill & Overlay	100	\$37,620
APF	TAXIWAY	TW C	320	AC	5,200	2008	61	Microsurfacing	100	\$20,524
APF	TAXIWAY	TW C	325	AAC	8,744	2008	63	Microsurfacing	100	\$29,563
APF	TAXIWAY	TW C	345	AC	92,550	2008	57	Microsurfacing	100	\$511,431
APF	TAXIWAY	TW C-1	350	AC	6,080	2008	58	Microsurfacing	100	\$30,972
APF	TAXIWAY	TW C-2	335	AC	10,960	2008	51	Mill & Overlay	100	\$88,973
APF	TAXIWAY	TW C-3	340	AC	10,960	2008	33	Mill & Overlay	100	\$188,304
APF	TAXIWAY	TW D	405	AAC	30,500	2008	54	Mill & Overlay	100	\$208,071
APF	TAXIWAY	TW D	410	AC	58,200	2008	57	Microsurfacing	100	\$321,613
APF	TAXIWAY	TW D-1	1110	AC	25,500	2008	52	Mill & Overlay	100	\$195,993
APF	TAXIWAY	TW G	705	AAC	16,750	2008	37	Mill & Overlay	100	\$205,171
APF	TAXIWAY	TW G	715	AC	28,400	2008	64	Microsurfacing	100	\$87,983
APF	TAXIWAY	TW T	2005	AC	24,700	2008	60	Microsurfacing	100	\$104,481
APF	RUNWAY	RW 14-32	6220	AAC	18,800	2009	64	Microsurfacing	100	\$59,990
APF	RUNWAY	RW 5-23	6110	AAC	50,000	2009	64	Microsurfacing	100	\$159,547
APF	TAXIWAY	TW A-1	106	AC	36,200	2009	64	Microsurfacing	100	\$115,512
APF	TAXIWAY	TW C	318	AC	48,800	2009	64	Microsurfacing	100	\$155,718
APF	APRON	AP GA	4255	AAC	140,400	2010	64	Microsurfacing	100	\$461,448
APF	APRON	AP GA	4290	AC	72,400	2010	64	Microsurfacing	100	\$237,955
APF	RUNWAY	RW 14-32	6215	AAC	24,940	2010	64	Microsurfacing	100	\$81,969

Table B-2: APF Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
APF	APRON	AP GA	4265	AC	52,000	2011	64	Microsurfacing	100	\$176,034
APF	APRON	AP RW 5-23	5110	AC	21,320	2011	64	Microsurfacing	100	\$72,174
APF	RUNWAY	RW 14-32	6221	AAC	7,600	2011	63	Microsurfacing	100	\$28,078
APF	TAXIWAY	TW A-4	120	AAC	15,800	2011	64	Microsurfacing	100	\$53,487
APF	TAXIWAY	TW B	255	AC	80,760	2011	64	Microsurfacing	100	\$273,394
APF	TAXIWAY	TW B-1	250	AC	21,600	2011	64	Microsurfacing	100	\$73,122
APF	TAXIWAY	TW C	310	AC	59,050	2011	64	Microsurfacing	100	\$199,900
APF	TAXIWAY	TW C	330	AAC	8,660	2011	64	Microsurfacing	100	\$29,316
APF	APRON	AP W	4605	PCC	44,400	2012	63	PCC Restoration	100	\$168,957
APF	RUNWAY	RW 5-23	6115	AAC	400,000	2012	64	Microsurfacing	100	\$1,394,730
APF	APRON	AP COMMERC	4110	AC	110,400	2013	64	Microsurfacing	100	\$396,494
APF	APRON	AP COMMERC	4113	AC	22,500	2013	64	Microsurfacing	100	\$80,807
APF	APRON	AP N	4435	AC	5,300	2013	64	Microsurfacing	100	\$19,035
APF	APRON	AP N	4440	AC	9,200	2013	64	Microsurfacing	100	\$33,041
APF	TAXIWAY	TW A-2	151	AC	4,680	2013	64	Microsurfacing	100	\$16,808
APF	TAXIWAY	TW A-3	161	AC	11,300	2013	64	Microsurfacing	100	\$40,583
APF	TAXIWAY	TW B	206	AC	1,650	2013	64	Microsurfacing	100	\$5,926
APF	TAXIWAY	TW G	725	AC	10,200	2013	64	Microsurfacing	100	\$36,633
APF	APRON	AP GA	4270	AC	117,200	2014	64	Microsurfacing	100	\$433,543
APF	RUNWAY	RW 5-23	6120	AAC	200,000	2014	63	Microsurfacing	100	\$807,418
APF	TAXIWAY	TW G	710	AC	9,250	2014	64	Microsurfacing	100	\$34,217
APF	APRON	AP GA	4230	AC	39,800	2015	64	Microsurfacing	100	\$151,644
APF	RUNWAY	RW 5-23	6105	AAC	100,000	2015	64	Microsurfacing	100	\$381,015
APF	TAXIWAY	TW B	225	AC	29,100	2016	64	Microsurfacing	100	\$114,202
APF	TAXIWAY	TW C	315	AC	26,500	2016	64	Microsurfacing	100	\$103,998
APF	TAXIWAY	TW D-2	1105	AC	21,000	2016	64	Microsurfacing	100	\$82,413
APF	TAXIWAY	TW G	730	AAC	7,470	2016	63	Microsurfacing	100	\$31,994

Table B-3: AVO Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
AVO	APRON	AP NE	4205	AC	3,150	2008	49	Mill & Overlay	100	\$19,814
AVO	APRON	AP NE	4210	AC	12,852	2008	57	Microsurfacing	100	\$55,019
AVO	APRON	AP S	4305	AC	56,000	2008	54	Mill & Overlay	100	\$287,952
AVO	APRON	AP SE	4405	AC	78,800	2008	58	Microsurfacing	100	\$314,727
AVO	TAXIWAY	TW A	107	AAC	4,012	2008	62	Microsurfacing	100	\$11,531
AVO	TAXIWAY	TW A	110	AC	15,415	2008	63	Microsurfacing	100	\$40,094
AVO	TAXIWAY	TW A	115	AC	8,050	2008	42	Mill & Overlay	100	\$50,635
AVO	TAXIWAY	TW B	202	AC	2,175	2008	62	Microsurfacing	100	\$6,251
AVO	TAXIWAY	TW B	205	AAC	7,350	2008	47	Mill & Overlay	100	\$46,232
AVO	TAXIWAY	TW C	305	AC	11,200	2008	62	Microsurfacing	100	\$32,189
AVO	TAXIWAY	TW D	405	AAC	23,002	2008	39	Mill & Overlay	100	\$161,543
AVO	TAXIWAY	TW D	415	AC	8,865	2008	58	Microsurfacing	100	\$35,407
AVO	TAXIWAY	TW E	505	AC	119,810	2008	64	Microsurfacing	100	\$278,918
AVO	RUNWAY	RW 4-22	6107	AC	14,250	2010	64	Microsurfacing	100	\$35,194
AVO	TAXIWAY	TW E	502	AC	63,000	2011	64	Microsurfacing	100	\$160,264
AVO	RUNWAY	RW 4-22	6102	AC	108,750	2013	63	Microsurfacing	100	\$327,911
AVO	TAXIWAY	TW D	402	AC	3,968	2014	64	Microsurfacing	100	\$11,030

Table B-4: BOW Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
BOW	APRON	AP H TW A	5105	AC	25,000	2008	59	Microsurfacing	100	\$92,675
BOW	APRON	AP N	4105	AAC	90,975	2008	62	Microsurfacing	100	\$261,462
BOW	APRON	AP N	4110	PCC	292,250	2008	38	PCC Restoration	100	\$2,266,692
BOW	APRON	AP N	4130	PCC	147,600	2008	51	PCC Restoration	100	\$886,043
BOW	APRON	AP N	4132	PCC	11,200	2008	24	Reconstruction	100	\$152,544
BOW	APRON	AP T-HANG	4205	AC	150,745	2008	35	Mill & Overlay	100	\$1,500,667
BOW	APRON	AP T-HANG	4210	PCC	3,125	2008	61	PCC Restoration	100	\$9,834
BOW	RUNWAY	RW 5-23	6315	AAC	372,500	2008	83	Microsurfacing	100	\$69,284
BOW	RUNWAY	RW 9L-27R	6124	AAC	27,500	2008	56	Microsurfacing	100	\$125,620
BOW	RUNWAY	RW 9R-27L	6205	AC	410,000	2008	48	Mill & Overlay	100	\$2,578,900
BOW	TAXIWAY	TW A	105	AAC	94,000	2008	54	Mill & Overlay	100	\$483,348
BOW	TAXIWAY	TW A	117	AC	13,200	2008	49	Mill & Overlay	100	\$83,028
BOW	TAXIWAY	TW D	407	AAC	9,250	2008	43	Mill & Overlay	100	\$58,183
BOW	TAXIWAY	TW F	615	AAC	40,000	2008	64	Microsurfacing	100	\$93,120
BOW	TAXIWAY	TW G	705	AAC	31,500	2008	64	Microsurfacing	100	\$73,332
BOW	TAXIWAY	TW H	802	AC	3,500	2008	0	Reconstruction	100	\$47,670
BOW	TAXIWAY	TW H	805	AC	25,000	2008	53	Mill & Overlay	100	\$135,725
BOW	TAXIWAY	TW C	305	AAC	17,250	2009	63	Microsurfacing	100	\$46,213
BOW	TAXIWAY	TW G	710	AAC	32,400	2009	64	Microsurfacing	100	\$77,690
BOW	APRON	AP N	4115	AAC	46,750	2010	64	Microsurfacing	100	\$115,462
BOW	APRON	AP N	4120	AAC	6,000	2010	64	Microsurfacing	100	\$14,819
BOW	TAXIWAY	TW A	115	AAC	43,000	2010	64	Microsurfacing	100	\$106,200
BOW	APRON	AP N	4125	AC	33,500	2011	64	Microsurfacing	100	\$85,220
BOW	RUNWAY	RW 9R-27L	6210	AC	205,000	2011	64	Microsurfacing	100	\$521,493
BOW	TAXIWAY	TW F	610	AAC	31,600	2012	63	Microsurfacing	100	\$92,507
BOW	TAXIWAY	TW A	110	AAC	64,250	2013	63	Microsurfacing	100	\$193,731
BOW	RUNWAY	RW 9R-27L	6215	PCC	30,000	2014	64	PCC Restoration	100	\$83,393
BOW	TAXIWAY	TW C	315	AAC	41,550	2014	63	Microsurfacing	100	\$129,043
BOW	TAXIWAY	TW D	405	AC	100,750	2014	63	Microsurfacing	100	\$312,902

Table B-4: BOW Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
BOW	TAXIWAY	TW C	320	AAC	4,800	2016	64	Microsurfacing	100	\$14,155
BOW	TAXIWAY	TW F	605	AAC	8,800	2016	63	Microsurfacing	100	\$28,995

Pavement Evaluation Report – District 1 Florida Statewide Pavement Management Program May 21, 2008

Table B-5: CHN Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
CHN	APRON	AP	4105	AC	54,000	2012	64	Microsurfacing	100	\$141,490

Table B-6: FMY Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
FMY	APRON	AP E	4510	PCC	10,660	2008	89	PCC Restoration	100	\$831
FMY	APRON	AP S & SE	4410	AAC	120,000	2008	64	Microsurfacing	100	\$279,360
FMY	APRON	AP SW	4215	AAC	148,000	2008	64	Microsurfacing	100	\$344,544
FMY	APRON	AP SW	4220	AAC	57,750	2008	55	Mill & Overlay	100	\$280,376
FMY	RUNWAY	RW 13-31	6210	AAC	242,350	2008	62	Microsurfacing	100	\$696,514
FMY	TAXIWAY	TW A	106	AC	11,000	2008	61	Microsurfacing	100	\$34,617
FMY	TAXIWAY	TW A	112	AAC	4,000	2008	61	Microsurfacing	100	\$12,588
FMY	TAXIWAY	TW A	113	AAC	7,500	2008	55	Mill & Overlay	100	\$36,413
FMY	TAXIWAY	TW A	114	AAC	3,000	2008	50	Mill & Overlay	100	\$18,870
FMY	TAXIWAY	TW A-3	145	AAC	47,000	2008	55	Mill & Overlay	100	\$228,185
FMY	TAXIWAY	TW A-3	150	AAC	129,600	2008	63	Microsurfacing	100	\$337,090
FMY	TAXIWAY	TW B	212	AC	16,000	2008	41	Mill & Overlay	100	\$100,640
FMY	TAXIWAY	TW C	192	AAC	2,530	2008	63	Microsurfacing	100	\$6,581
FMY	TAXIWAY	TW C-5	198	AC	28,000	2008	63	Microsurfacing	100	\$72,828
FMY	TAXIWAY	TW D-1	165	AAC	13,000	2008	33	Mill & Overlay	100	\$148,473
FMY	TAXIWAY	TW D-1	167	AAC	2,200	2008	35	Mill & Overlay	100	\$21,901
FMY	TAXIWAY	TW D-2	160	AAC	8,600	2008	28	Reconstruction	100	\$117,132
FMY	TAXIWAY	TW D-2	161	AAC	2,675	2008	62	Microsurfacing	100	\$7,688
FMY	TAXIWAY	TW D-2	162	AAC	2,200	2008	40	Mill & Overlay	100	\$13,838
FMY	TAXIWAY	TW D-2	163	AAC	1,200	2008	58	Microsurfacing	100	\$4,793
FMY	RUNWAY	RW 5-23	6105	AAC	100,000	2009	63	Microsurfacing	100	\$267,903
FMY	TAXIWAY	TW C	242	AAC	3,500	2009	64	Microsurfacing	100	\$8,392
FMY	APRON	AP S & SE	4415	AAC	170,802	2010	63	Microsurfacing	100	\$471,311
FMY	RUNWAY	RW 5-23	6135	AAC	49,500	2010	64	Microsurfacing	100	\$122,254
FMY	RUNWAY	RW 5-23	6140	AAC	24,750	2010	64	Microsurfacing	100	\$61,127
FMY	RUNWAY	RW 5-23	6145	AAC	155,000	2010	62	Microsurfacing	100	\$472,599
FMY	TAXIWAY	TW A-3	146	AAC	5,105	2010	63	Microsurfacing	100	\$14,087
FMY	TAXIWAY	TW C	190	AAC	10,200	2010	64	Microsurfacing	100	\$25,192
FMY	TAXIWAY	TW C-5	195	AAC	7,500	2010	64	Microsurfacing	100	\$18,523

Table B-6: FMY Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
FMY	TAXIWAY	TW D	137	AAC	42,000	2010	64	Microsurfacing	100	\$103,731
FMY	TAXIWAY	TW D-1	166	AAC	2,675	2010	64	Microsurfacing	100	\$6,607
FMY	APRON	AP S	4105	AAC	216,000	2011	63	Microsurfacing	100	\$613,912
FMY	RUNWAY	RW 5-23	6110	AAC	50,000	2011	64	Microsurfacing	100	\$127,194
FMY	RUNWAY	RW 5-23	6125	AAC	20,000	2011	64	Microsurfacing	100	\$50,877
FMY	TAXIWAY	TW D	139	AAC	18,000	2011	64	Microsurfacing	100	\$45,790
FMY	TAXIWAY	TW E	265	AC	7,000	2011	64	Microsurfacing	100	\$17,807
FMY	APRON	AP E	4505	AC	25,200	2012	63	Microsurfacing	100	\$73,772
FMY	APRON	AP S & SE	4405	AC	95,873	2012	63	Microsurfacing	100	\$280,663
FMY	RUNWAY	RW 5-23	6115	AAC	280,000	2012	62	Microsurfacing	100	\$905,720
FMY	RUNWAY	RW 5-23	6160	AAC	17,500	2012	63	Microsurfacing	100	\$51,230
FMY	TAXIWAY	TW A	109	AAC	9,500	2012	64	Microsurfacing	100	\$24,892
FMY	TAXIWAY	TW A-2	125	AAC	63,800	2012	63	Microsurfacing	100	\$186,771
FMY	TAXIWAY	TW C	245	AC	10,300	2012	64	Microsurfacing	100	\$26,988
FMY	RUNWAY	RW 5-23	6150	AAC	77,750	2013	63	Microsurfacing	100	\$234,438
FMY	RUNWAY	RW 5-23	6155	AAC	35,000	2013	64	Microsurfacing	100	\$94,458
FMY	TAXIWAY	TW A	111	AAC	2,300	2013	63	Microsurfacing	100	\$6,935
FMY	TAXIWAY	TW E	275	AC	56,000	2013	64	Microsurfacing	100	\$151,132
FMY	RUNWAY	RW 5-23	6120	AAC	65,000	2014	64	Microsurfacing	100	\$180,684
FMY	RUNWAY	RW 5-23	6130	AAC	10,000	2014	63	Microsurfacing	100	\$31,057
FMY	TAXIWAY	TW A	110	AAC	166,000	2014	63	Microsurfacing	100	\$515,552
FMY	TAXIWAY	TW B	210	AAC	7,500	2014	63	Microsurfacing	100	\$23,293
FMY	APRON	AP N	4305	AAC	206,250	2015	63	Microsurfacing	100	\$659,774
FMY	APRON	AP N	4310	AAC	102,400	2015	64	Microsurfacing	100	\$293,186
FMY	TAXIWAY	TW A	117	AAC	7,500	2015	63	Microsurfacing	100	\$23,992
FMY	TAXIWAY	TW B	270	AC	3,000	2015	64	Microsurfacing	100	\$8,589
FMY	RUNWAY	RW 13-31	6205	AC	484,000	2016	64	Microsurfacing	100	\$1,427,337
FMY	RUNWAY	RW 13-31	6207	AAC	10,000	2016	63	Microsurfacing	100	\$32,949
FMY	TAXIWAY	TW B	205	AC	185,000	2016	64	Microsurfacing	100	\$545,573

Table B-6: FMY Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
FMY	TAXIWAY	TW A-3	155	AAC	14,300	2017	64	Microsurfacing	100	\$43,436
FMY	TAXIWAY	TW A-6	180	AAC	12,000	2017	63	Microsurfacing	100	\$40,725
FMY	TAXIWAY	TW C	185	AC	48,000	2017	64	Microsurfacing	100	\$145,801
FMY	TAXIWAY	TW C	187	AAC	55,000	2017	64	Microsurfacing	100	\$167,063

Table B-7: GIF Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
GIF	APRON	AP	4105	AAC	172,125	2008	51	Mill & Overlay	100	\$1,033,266
GIF	APRON	AP	4125	AC	12,500	2008	62	Microsurfacing	100	\$35,925
GIF	APRON	AP RW11-29	5105	AAC	12,500	2008	63	Microsurfacing	100	\$32,513
GIF	APRON	AP T-HANG	4205	AC	146,961	2008	76	Microsurfacing	100	\$61,723
GIF	RUNWAY	RW 4-22	6105	AAC	200,000	2008	42	Mill & Overlay	100	\$1,258,000
GIF	RUNWAY	RW 4-22	6110	AAC	200,000	2008	54	Mill & Overlay	100	\$1,028,400
GIF	TAXIWAY	TW A	115	AC	2,200	2008	61	Microsurfacing	100	\$6,923
GIF	TAXIWAY	TW AP	405	AC	7,532	2008	0	Reconstruction	100	\$102,586
GIF	TAXIWAY	TW AP	410	AAC	44,000	2008	39	Mill & Overlay	100	\$309,012
GIF	TAXIWAY	TW B	217	AC	7,000	2008	63	Microsurfacing	100	\$18,207
GIF	TAXIWAY	TW B2	250	AC	10,646	2008	63	Microsurfacing	100	\$27,690
GIF	TAXIWAY	TW B2	310	AAC	3,102	2008	26	Reconstruction	100	\$42,249
GIF	TAXIWAY	TW B2	315	AC	6,192	2008	28	Reconstruction	100	\$84,335
GIF	TAXIWAY	TW B2	320	AC	26,000	2008	0	Reconstruction	100	\$354,120
GIF	TAXIWAY	TW C3	305	AAC	39,150	2008	0	Reconstruction	100	\$533,223
GIF	APRON	AP	4110	AAC	157,000	2009	63	Microsurfacing	100	\$420,608
GIF	APRON	AP	4120	AC	42,000	2010	63	Microsurfacing	100	\$115,895
GIF	TAXIWAY	TW B	210	AC	50,000	2010	64	Microsurfacing	100	\$123,489
GIF	TAXIWAY	TW A2	105	AC	7,659	2011	64	Microsurfacing	100	\$19,484
GIF	RUNWAY	RW 4-22	6115	AC	121,000	2013	63	Microsurfacing	100	\$364,848
GIF	TAXIWAY	TW B	215	AC	71,240	2013	64	Microsurfacing	100	\$192,262
GIF	APRON	AP	4115	AC	35,625	2014	64	Microsurfacing	100	\$99,029
GIF	APRON	AP	4117	AC	22,000	2014	63	Microsurfacing	100	\$68,326
GIF	APRON	AP RW11-29	5110	AAC	11,000	2016	63	Microsurfacing	100	\$36,244
GIF	RUNWAY	RW 11-29	6205	AAC	385,000	2016	64	Microsurfacing	100	\$1,135,381
GIF	TAXIWAY	TW B	205	AC	82,075	2016	64	Microsurfacing	100	\$242,043
GIF	TAXIWAY	TW B3	258	AAC	2,975	2016	64	Microsurfacing	100	\$8,773
GIF	TAXIWAY	TW C	330	AC	34,255	2017	64	Microsurfacing	100	\$104,050
GIF	TAXIWAY	TW D	420	AC	29,677	2017	64	Microsurfacing	100	\$90,144

Table B-8: IMM Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
IMM	APRON	AP SW	4105	AC	10,000	2008	53	Mill & Overlay	100	\$54,290
IMM	RUNWAY	RW 18-36	6105	PCC	30,000	2008	60	PCC Restoration	100	\$102,600
IMM	RUNWAY	RW 18-36	6110	PCC	15,000	2008	48	PCC Restoration	100	\$94,350
IMM	RUNWAY	RW 18-36	6115	AC	422,500	2008	40	Mill & Overlay	100	\$2,657,526
IMM	RUNWAY	RW 18-36	6120	AC	211,250	2008	42	Mill & Overlay	100	\$1,328,763
IMM	RUNWAY	RW 18-36	6125	PCC	30,000	2008	41	PCC Restoration	100	\$188,700
IMM	RUNWAY	RW 18-36	6130	PCC	15,000	2008	41	PCC Restoration	100	\$94,350
IMM	RUNWAY	RW 4-22	6305	PCC	15,000	2008	60	PCC Restoration	100	\$51,300
IMM	RUNWAY	RW 4-22	6310	PCC	35,000	2008	63	PCC Restoration	100	\$91,035
IMM	RUNWAY	RW 4-22	6325	PCC	35,000	2008	60	PCC Restoration	100	\$119,700
IMM	RUNWAY	RW 4-22	6330	PCC	15,000	2008	60	PCC Restoration	100	\$51,300
IMM	RUNWAY	RW 9-27	6205	PCC	15,000	2008	32	PCC Restoration	100	\$182,310
IMM	RUNWAY	RW 9-27	6210	PCC	7,500	2008	33	PCC Restoration	100	\$85,658
IMM	RUNWAY	RW 9-27	6215	AC	420,500	2008	34	Mill & Overlay	100	\$4,494,305
IMM	RUNWAY	RW 9-27	6220	AC	210,250	2008	34	Mill & Overlay	100	\$2,247,153
IMM	RUNWAY	RW 9-27	6225	PCC	30,000	2008	55	PCC Restoration	100	\$145,650
IMM	RUNWAY	RW 9-27	6230	PCC	15,000	2008	55	PCC Restoration	100	\$72,825
IMM	TAXIWAY	TW A	205	AC	277,550	2008	32	Mill & Overlay	100	\$3,373,344
IMM	TAXIWAY	TW A	210	AC	23,450	2008	30	Reconstruction	100	\$319,389
IMM	TAXIWAY	TW A	220	AC	23,450	2008	25	Reconstruction	100	\$319,389
IMM	TAXIWAY	TW B	105	AC	117,050	2008	43	Mill & Overlay	100	\$736,245
IMM	TAXIWAY	TW B	110	AC	132,650	2008	45	Mill & Overlay	100	\$834,369
IMM	TAXIWAY	TW B	115	AC	10,000	2008	45	Mill & Overlay	100	\$62,900
IMM	TAXIWAY	TW RW 4-22	405	AC	33,000	2008	49	Mill & Overlay	100	\$207,570
IMM	TAXIWAY	TW RW 4-22	410	AC	69,493	2008	38	Mill & Overlay	100	\$538,988
IMM	TAXIWAY	TW TO AP	305	AC	31,500	2016	64	Microsurfacing	100	\$92,895
IMM	APRON	AP RU RW36	4305	AC	8,000	2017	64	Microsurfacing	100	\$24,300
IMM	TAXIWAY	TW TO AP	310	AC	42,000	2017	64	Microsurfacing	100	\$127,576

Table B-9: LAL Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
LAL	APRON	AP N	4105	AAC	45,000	2008	55	Mill & Overlay	100	\$254,025
LAL	APRON	AP N	4110	APC	4,455	2008	56	Microsurfacing	100	\$23,398
LAL	APRON	AP N	4115	AAC	27,900	2008	20	Reconstruction	100	\$518,103
LAL	APRON	AP N	4120	PCC	212,500	2008	45	PCC Restoration	100	\$1,617,126
LAL	APRON	AP N	4125	AC	66,000	2008	33	Mill & Overlay	100	\$1,008,612
LAL	APRON	AP N	4130	PCC	16,200	2008	27	Reconstruction	100	\$300,834
LAL	APRON	AP NW	4605	AC	50,000	2008	64	Microsurfacing	100	\$128,400
LAL	APRON	AP NW	4610	AC	17,000	2008	32	Mill & Overlay	100	\$278,426
LAL	APRON	AP NW	4615	PCC	29,000	2008	0	Reconstruction	100	\$538,530
LAL	APRON	AP NW	4620	PCC	15,200	2008	34	PCC Restoration	100	\$215,627
LAL	APRON	AP NW	601	PCC	4,045	2008	0	Reconstruction	100	\$75,116
LAL	APRON	AP NW	602	PCC	3,483	2008	15	Reconstruction	100	\$64,679
LAL	APRON	AP SE	4315	PCC	117,500	2008	0	Reconstruction	100	\$2,181,975
LAL	APRON	AP SW	4405	AC	54,000	2008	63	Microsurfacing	100	\$153,684
LAL	APRON	AP SW	4410	AC	15,000	2008	29	Reconstruction	100	\$278,550
LAL	RUNWAY	RW 9-27	6115	AAC	95,000	2008	64	Microsurfacing	100	\$243,960
LAL	TAXIWAY	TW A	131	AC	58,750	2008	64	Microsurfacing	100	\$150,870
LAL	TAXIWAY	TW A1	105	AC	210,000	2008	62	Microsurfacing	100	\$656,040
LAL	TAXIWAY	TW A2	115	AC	25,000	2008	63	Microsurfacing	100	\$71,150
LAL	TAXIWAY	TW A3	126	AC	7,500	2008	58	Microsurfacing	100	\$33,495
LAL	TAXIWAY	TW B	215	AAC	4,750	2008	26	Reconstruction	100	\$88,207
LAL	TAXIWAY	TW B	220	PCC	36,250	2008	26	Reconstruction	100	\$673,162
LAL	TAXIWAY	TW B	225	AAC	12,500	2008	53	Mill & Overlay	100	\$80,388
LAL	TAXIWAY	TW C	320	AC	18,500	2008	35	Mill & Overlay	100	\$242,165
LAL	TAXIWAY	TW E	510	AC	160,000	2008	62	Microsurfacing	100	\$499,840
LAL	TAXIWAY	TW E	515	AC	20,000	2008	45	Mill & Overlay	100	\$152,200
LAL	TAXIWAY	TW E	520	PCC	15,000	2008	28	Reconstruction	100	\$278,550
LAL	TAXIWAY	TW E	525	AC	85,000	2008	57	Microsurfacing	100	\$413,015
LAL	TAXIWAY	TW E	530	AC	7,200	2008	64	Microsurfacing	100	\$18,490

Table B-9: LAL Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
LAL	TAXIWAY	TW E	545	AC	8,000	2008	37	Mill & Overlay	100	\$87,184
LAL	TAXIWAY	TW F	615	AC	121,500	2008	56	Microsurfacing	100	\$638,118
LAL	TAXIWAY	TW G	605	AC	65,000	2008	52	Mill & Overlay	100	\$443,560
LAL	TAXIWAY	TW G	620	AC	37,300	2008	62	Microsurfacing	100	\$116,525
LAL	TAXIWAY	TW H	805	AC	140,000	2008	36	Mill & Overlay	100	\$1,679,160
LAL	TAXIWAY	TW H	820	AC	12,500	2008	50	Mill & Overlay	100	\$95,125
LAL	TAXIWAY	TW S	905	AC	95,000	2008	61	Microsurfacing	100	\$323,190
LAL	TAXIWAY	TW S	915	AC	13,500	2008	40	Mill & Overlay	100	\$102,735
LAL	TAXIWAY	TW S	920	PCC	9,000	2008	7	Reconstruction	100	\$167,130
LAL	TAXIWAY	TW S	925	AC	19,000	2008	47	Mill & Overlay	100	\$144,590
LAL	APRON	AP N	4112	AAC	1,500	2009	64	Microsurfacing	100	\$3,968
LAL	APRON	AP N	4114	AAC	4,125	2009	64	Microsurfacing	100	\$10,911
LAL	APRON	AP N	4116	AAC	2,550	2009	64	Microsurfacing	100	\$6,745
LAL	APRON	AP N	4118	AAC	4,000	2009	64	Microsurfacing	100	\$10,580
LAL	RUNWAY	RW 5-23	6255	AC	70,000	2009	63	Microsurfacing	100	\$205,197
LAL	RUNWAY	RW 9-27	6105	AC	255,000	2009	64	Microsurfacing	100	\$674,485
LAL	RUNWAY	RW 9-27	6130	AC	30,000	2009	64	Microsurfacing	100	\$79,351
LAL	RUNWAY	RW 9-27	6110	AC	127,500	2010	64	Microsurfacing	100	\$347,360
LAL	RUNWAY	RW 9-27	6150	AC	380,000	2010	64	Microsurfacing	100	\$1,035,269
LAL	RUNWAY	RW 9-27	6165	AC	30,000	2010	64	Microsurfacing	100	\$81,732
LAL	TAXIWAY	TW A3	125	AC	13,200	2010	64	Microsurfacing	100	\$35,962
LAL	TAXIWAY	TW A5	155	AC	58,000	2010	64	Microsurfacing	100	\$158,015
LAL	TAXIWAY	TW E	535	AC	13,500	2010	64	Microsurfacing	100	\$36,779
LAL	RUNWAY	RW 9-27	6125	AAC	47,500	2011	64	Microsurfacing	100	\$133,291
LAL	RUNWAY	RW 9-27	6140	AAC	7,500	2011	63	Microsurfacing	100	\$23,324
LAL	RUNWAY	RW 9-27	6155	AAC	39,500	2011	63	Microsurfacing	100	\$122,841
LAL	RUNWAY	RW 9-27	6160	AAC	15,000	2011	64	Microsurfacing	100	\$42,092
LAL	RUNWAY	RW 5-23	6260	AC	32,000	2012	64	Microsurfacing	100	\$92,490
LAL	RUNWAY	RW 9-27	6135	AC	15,000	2012	64	Microsurfacing	100	\$43,355

Table B-9: LAL Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
LAL	RUNWAY	RW 9-27	6145	AAC	180,000	2012	64	Microsurfacing	100	\$520,255
LAL	RUNWAY	RW 9-27	6170	AC	15,000	2012	64	Microsurfacing	100	\$43,355
LAL	TAXIWAY	TW A	110	AC	65,000	2012	64	Microsurfacing	100	\$187,870
LAL	TAXIWAY	TW A	130	AC	256,125	2012	64	Microsurfacing	100	\$740,280
LAL	TAXIWAY	TW A	151	AC	10,200	2012	64	Microsurfacing	100	\$29,481
LAL	TAXIWAY	TW A3	120	AC	1,210	2012	64	Microsurfacing	100	\$3,497
LAL	TAXIWAY	TW A4	630	AAC	16,000	2012	64	Microsurfacing	100	\$46,245
LAL	TAXIWAY	TW B	207	AC	21,000	2012	64	Microsurfacing	100	\$60,696
LAL	TAXIWAY	TW A	150	AAC	8,000	2013	64	Microsurfacing	100	\$23,816
LAL	TAXIWAY	TW B	205	AC	56,500	2013	64	Microsurfacing	100	\$168,201
LAL	TAXIWAY	TW E	540	AC	12,500	2013	64	Microsurfacing	100	\$37,213
LAL	TAXIWAY	TW P	1605	AC	245,000	2013	64	Microsurfacing	100	\$729,369
LAL	TAXIWAY	TW G	625	AC	20,000	2014	64	Microsurfacing	100	\$61,327
LAL	TAXIWAY	TW P2	1610	AC	25,000	2014	64	Microsurfacing	100	\$76,658
LAL	TAXIWAY	TW A2	117	AAC	5,000	2015	64	Microsurfacing	100	\$15,792
LAL	TAXIWAY	TW G	610	AC	7,500	2015	64	Microsurfacing	100	\$23,687

Table B-10: MKY Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
MKY	APRON	AP N	4205	AC	238,075	2008	40	Mill & Overlay	100	\$1,497,492
MKY	APRON	AP NW	4105	AC	30,009	2008	41	Mill & Overlay	100	\$188,757
MKY	APRON	AP TA RW35	5105	AC	31,150	2008	56	Microsurfacing	100	\$142,293
MKY	RUNWAY	RW 17-35	6105	AC	100,000	2008	57	Microsurfacing	100	\$428,100
MKY	RUNWAY	RW 17-35	6110	AC	300,000	2008	45	Mill & Overlay	100	\$1,887,000
MKY	RUNWAY	RW 17-35	6115	AC	100,000	2008	50	Mill & Overlay	100	\$629,000
MKY	TAXIWAY	TW CONN	105	PCC	6,800	2008	1	Reconstruction	100	\$92,616

Table B-11: OBE Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
OBE	APRON	AP	4105	AC	93,296	2008	46	Mill & Overlay	100	\$586,832
OBE	RUNWAY	RW 14-32	6210	AAC	289,500	2008	56	Microsurfacing	100	\$1,322,437
OBE	RUNWAY	RW 5-23	6105	AAC	271,500	2008	39	Mill & Overlay	100	\$1,906,745
OBE	RUNWAY	RW 5-23	6108	AAC	13,600	2008	56	Microsurfacing	100	\$62,125
OBE	RUNWAY	RW 5-23	6110	AC	282,000	2008	20	Reconstruction	100	\$3,840,841
OBE	RUNWAY	RW 5-23	6112	AAC	14,800	2008	62	Microsurfacing	100	\$42,535
OBE	RUNWAY	RW 5-23	6120	AC	76,313	2008	37	Mill & Overlay	100	\$647,817
OBE	TAXIWAY	TW A	105	AAC	75,950	2008	58	Microsurfacing	100	\$303,344
OBE	TAXIWAY	TW A	110	AAC	111,020	2008	52	Mill & Overlay	100	\$634,590
OBE	RUNWAY	RW 5-23	6115	AAC	78,750	2014	64	Microsurfacing	100	\$218,906
OBE	RUNWAY	RW 14-32	6205	AAC	308,800	2016	64	Microsurfacing	100	\$910,664
OBE	RUNWAY	RW 5-23	6114	AAC	6,250	2016	64	Microsurfacing	100	\$18,432
OBE	TAXIWAY	TW A	120	AAC	2,400	2016	64	Microsurfacing	100	\$7,078
OBE	TAXIWAY	TW B	205	AC	151,900	2016	64	Microsurfacing	100	\$447,960
OBE	APRON	AP	4110	AC	105,000	2017	63	Microsurfacing	100	\$356,340
OBE	TAXIWAY	TW A	115	AAC	2,400	2017	64	Microsurfacing	100	\$7,290

Table B-12: PGD Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
PGD	TAXIWAY	TW 1 N T-H	805	AC	13,200	2008	50	Mill & Overlay	100	\$83,028
PGD	TAXIWAY	TW 4 N T-H	905	AC	21,760	2008	76	Microsurfacing	100	\$9,139
PGD	TAXIWAY	TW A	330	AC	92,861	2008	73	Microsurfacing	100	\$51,538
PGD	TAXIWAY	TW A	335	AC	87,455	2008	58	Microsurfacing	100	\$349,295
PGD	TAXIWAY	TW C	360	PCC	2,238	2008	36	PCC Restoration	100	\$20,639
PGD	TAXIWAY	TW D	170	PCC	1,593	2008	49	PCC Restoration	100	\$10,019
PGD	TAXIWAY	TW D	185	PCC	11,400	2008	32	PCC Restoration	100	\$138,556
PGD	TAXIWAY	TW D	198	PCC	1,450	2008	25	Reconstruction	100	\$19,749
PGD	TAXIWAY	TW G	105	AC	86,017	2008	28	Reconstruction	100	\$1,171,552
PGD	TAXIWAY	TW N T-HAN	210	AC	7,600	2008	18	Reconstruction	100	\$103,512
PGD	TAXIWAY	TW T-HANG	405	AC	15,900	2008	66	Microsurfacing	100	\$28,334
PGD	APRON	AP MAIN	4205	PCC	465,000	2009	64	PCC Restoration	100	\$1,114,996
PGD	TAXIWAY	TW 2 N T-H	705	AC	14,700	2009	64	Microsurfacing	100	\$35,248
PGD	TAXIWAY	TW N T-HAN	205	AAC	1,070	2009	64	Microsurfacing	100	\$2,566
PGD	APRON	AP N	4305	AC	245,212	2015	64	Microsurfacing	100	\$702,078
PGD	TAXIWAY	TW 4 N T-H	910	AC	14,280	2015	64	Microsurfacing	100	\$40,886
PGD	TAXIWAY	TW C	350	AAC	1,608	2015	64	Microsurfacing	100	\$4,604
PGD	TAXIWAY	TW D	125	AAC	2,900	2015	63	Microsurfacing	100	\$9,277
PGD	TAXIWAY	TW C	305	AAC	22,500	2016	64	Microsurfacing	100	\$66,353
PGD	TAXIWAY	TW C	355	AC	1,250	2016	64	Microsurfacing	100	\$3,686
PGD	TAXIWAY	TW D	175	AAC	3,636	2016	63	Microsurfacing	100	\$11,980
PGD	TAXIWAY	TW G	110	AAC	37,500	2016	64	Microsurfacing	100	\$110,589
PGD	APRON	AP S	4105	AC	188,300	2017	64	Microsurfacing	100	\$571,964
PGD	TAXIWAY	TW C	310	AC	97,000	2017	64	Microsurfacing	100	\$294,639
PGD	TAXIWAY	TW D	160	AAC	2,560	2017	63	Microsurfacing	100	\$8,688

Table B-13: RSW Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
RSW	APRON	AP FBO	4205	AC	320,718	2008	64	Microsurfacing	100	\$993,584
RSW	TAXIWAY	TW A-5	555	AC	27,000	2008	51	Mill & Overlay	100	\$219,186
RSW	APRON	AP N	4325	AAC	11,275	2010	62	Microsurfacing	100	\$43,827
RSW	APRON	AP CARGO	4110	PCC	217,500	2017	64	PCC Restoration	100	\$879,175
RSW	APRON	AP N	4315	PCC	316,000	2017	64	PCC Restoration	100	\$1,277,331

Table B-14: SEF Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
SEF	APRON	AP W	4105	PCC	1,105,646	2008	46	PCC Restoration	100	\$6,954,514
SEF	RUNWAY	RW 14-32	6205	PCC	400,000	2008	11	Reconstruction	100	\$5,448,002
SEF	RUNWAY	RW 14-32	6215	APC	3,600	2008	25	Reconstruction	100	\$49,032
SEF	TAXIWAY	TW C	305	APC	21,600	2008	5	Reconstruction	100	\$294,192
SEF	TAXIWAY	TW C	310	APC	14,400	2008	35	Mill & Overlay	100	\$143,352
SEF	TAXIWAY	TW C	315	PCC	29,000	2008	10	Reconstruction	100	\$394,980
SEF	RUNWAY	RW 18-36	6107	APC	1,100	2009	63	Microsurfacing	100	\$2,947
SEF	RUNWAY	RW 18-36	6105	APC	522,700	2010	63	Microsurfacing	100	\$1,442,340
SEF	RUNWAY	RW 14-32	6210	APC	43,500	2012	62	Microsurfacing	100	\$140,710
SEF	TAXIWAY	TW T-HANG	505	AC	31,385	2014	64	Microsurfacing	100	\$87,243

Table B-15: VNC Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
VNC	APRON	AP	4105	PCC	395,138	2008	51	PCC Restoration	100	\$2,372,014
VNC	APRON	AP	4110	PCC	5,555	2008	23	Reconstruction	100	\$75,659
VNC	APRON	AP	4115	PCC	35,500	2008	15	Reconstruction	100	\$483,510
VNC	APRON	AP	4120	PCC	43,500	2008	34	PCC Restoration	100	\$464,928
VNC	RUNWAY	RW 4-22	6205	AC	415,900	2008	37	Mill & Overlay	100	\$3,530,576
VNC	RUNWAY	RW 4-22	6210	AC	212,500	2008	48	Mill & Overlay	100	\$1,336,625
VNC	RUNWAY	RW 4-22	6215	PCC	30,000	2008	62	PCC Restoration	100	\$86,220
VNC	RUNWAY	RW 4-22	6220	PCC	15,000	2008	46	PCC Restoration	100	\$94,350
VNC	RUNWAY	RW 4-22	6225	PCC	30,000	2008	64	PCC Restoration	100	\$69,840
VNC	RUNWAY	RW 4-22	6230	PCC	15,000	2008	66	PCC Restoration	100	\$26,730
VNC	TAXIWAY	TW A	105	AAC	79,800	2008	61	Microsurfacing	100	\$251,131
VNC	TAXIWAY	TW A	110	APC	73,750	2008	47	Mill & Overlay	100	\$463,888
VNC	TAXIWAY	TW A	115	AAC	69,300	2008	52	Mill & Overlay	100	\$396,119
VNC	TAXIWAY	TW B	205	AC	67,240	2008	61	Microsurfacing	100	\$211,604
VNC	TAXIWAY	TW B	250	AC	10,070	2008	34	Mill & Overlay	100	\$107,628
VNC	TAXIWAY	TW C	215	AC	6,000	2008	15	Reconstruction	100	\$81,720
VNC	TAXIWAY	TW D	350	AC	12,550	2008	38	Mill & Overlay	100	\$97,338
VNC	APRON	AP RU	5110	AC	20,000	2009	64	Microsurfacing	100	\$47,957
VNC	TAXIWAY	TW D	305	AC	81,980	2009	64	Microsurfacing	100	\$196,575
VNC	APRON	AP RU	5105	AC	20,000	2010	64	Microsurfacing	100	\$49,396
VNC	TAXIWAY	TW C	210	AC	86,840	2011	64	Microsurfacing	100	\$220,910
VNC	TAXIWAY	TW C	220	AAC	1,656	2012	64	Microsurfacing	100	\$4,339
VNC	TAXIWAY	TW D	310	AC	9,423	2015	64	Microsurfacing	100	\$26,979

Table B-16: X01 Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
X01	APRON	AP	4103	AC	2,760	2008	32	Mill & Overlay	100	\$33,545
X01	RUNWAY	RW 15-33	6105	AC	32,800	2008	61	Microsurfacing	100	\$103,222
X01	RUNWAY	RW 15-33	6110	AC	61,300	2008	40	Mill & Overlay	100	\$385,577
X01	RUNWAY	RW 15-33	6115	AC	26,500	2009	63	Microsurfacing	100	\$70,994
X01	APRON	AP	4115	AC	2,640	2013	63	Microsurfacing	100	\$7,960
X01	TAXIWAY	TW A	105	AC	16,825	2014	64	Microsurfacing	100	\$46,769

Table B-17: X06 Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
X06	TAXIWAY	TW HANGAR	210	AC	15,900	2008	43	Mill & Overlay	100	\$100,011
X06	TAXIWAY	TW HANGAR	220	AC	7,050	2008	55	Mill & Overlay	100	\$34,228
X06	TAXIWAY	TW HANGAR	230	AC	22,200	2008	62	Microsurfacing	100	\$63,803
X06	APRON	AP	4110	AC	15,250	2011	64	Microsurfacing	100	\$38,794
X06	TAXIWAY	TW	115	AC	4,650	2011	64	Microsurfacing	100	\$11,829
X06	TAXIWAY	TW	110	AC	7,138	2017	64	Microsurfacing	100	\$21,682

Table B-18: X07 Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
X07	APRON	AP	4105	AC	108,800	2008	63	Microsurfacing	100	\$282,989
X07	APRON	AP	4110	AC	36,225	2008	59	Microsurfacing	100	\$134,286
X07	APRON	AP H RW 6	5102	AAC	10,800	2008	44	Mill & Overlay	100	\$67,932
X07	RUNWAY	RW 6-24	6105	AAC	400,000	2008	59	Microsurfacing	100	\$1,482,801
X07	TAXIWAY	TW A	110	AC	3,311	2011	64	Microsurfacing	100	\$8,423
X07	RUNWAY	RW 17-35	6206	AAC	3,300	2015	64	Microsurfacing	100	\$9,448

Table B-19: X14 Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
X14	APRON	AP N	4115	AC	7,151	2008	43	Mill & Overlay	100	\$44,980
X14	APRON	AP N	4135	AC	5,229	2008	62	Microsurfacing	100	\$15,028
X14	TAXIWAY	TW NW AP	605	AC	10,698	2008	37	Mill & Overlay	100	\$90,815
X14	TAXIWAY	TW TO HANG	505	AC	8,532	2008	51	Mill & Overlay	100	\$51,218
X14	APRON	AP N	4110	AC	16,812	2010	63	Microsurfacing	100	\$46,391
X14	APRON	AP N	4160	AAC	33,873	2010	63	Microsurfacing	100	\$93,469

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