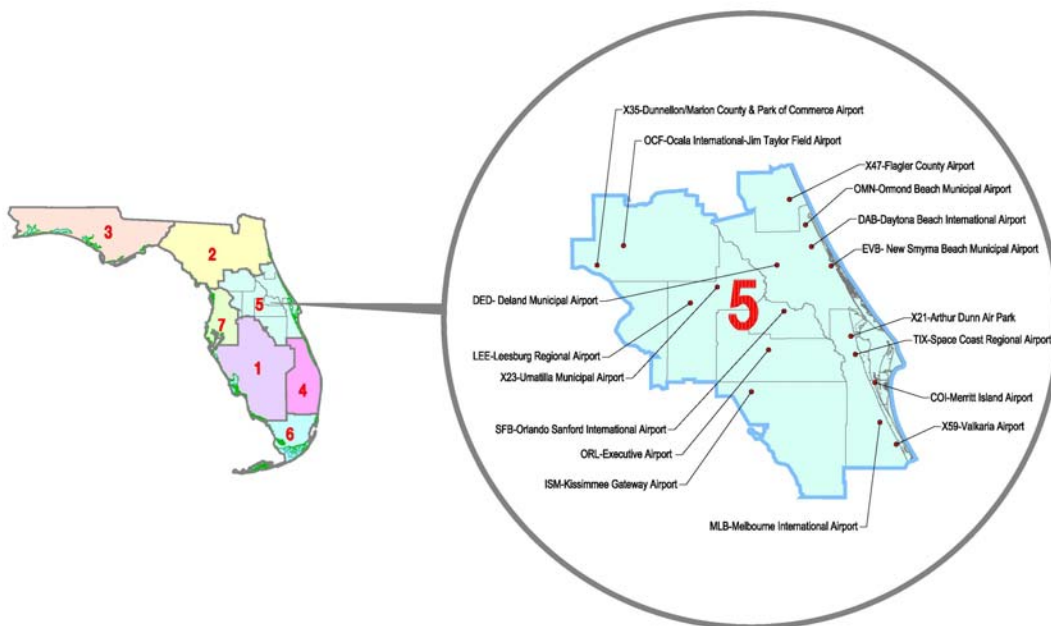


**STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION  
AVIATION OFFICE**

**Statewide Airfield Pavement Management Program  
District 5 Report**

**June 13, 2008**



*Prepared for:*  
**Florida Department of Transportation  
Aviation Office**

*by:*

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



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- Appendix A 2006/2007 Condition Maps
- Appendix B Major M&R Plan

## 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 5, evaluated the conditions and developed a maintenance and rehabilitation program to improve conditions to prescribed minimum levels. District 5 has 3 Primary (PR), 5 Regional Reliever (RL), and 9 General Aviation (GA) airports participating in the Statewide Pavement Management Program.

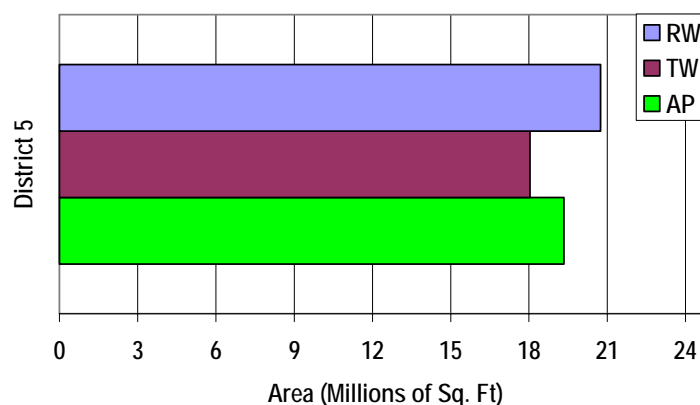
### Pavement Area and Use

The total pavement area in 2006/2007 for airports located in District 5 is approximately 58,115,204 square feet. The breakdown of pavement area for each pavement use is provided as follows:

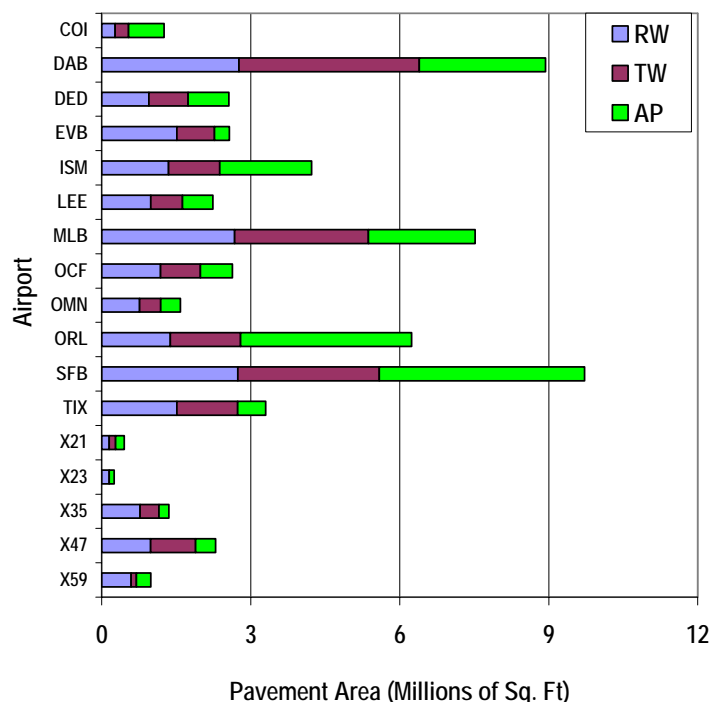
**Table E-1: Pavement Area by Pavement Use – District 5**

Use	Area, SqFt
Runway	20,738,869
Taxiway	18,035,324
Apron	19,341,011
<b>Total</b>	<b>58,115,204</b>

**Figure E-1: Pavement Area by Use – District 5**



**Figure E-2: Pavement Area by Use by Airport – District 5**



### Pavement Condition Index (PCI)

The overall area-weighted Pavement Condition Index (PCI) of the airports in District 5 in 2006/2007 is 70, representing a Fair overall network condition.

Table E-2 provide list of participating airports within District 5 with weighted-PCI and pavement area.

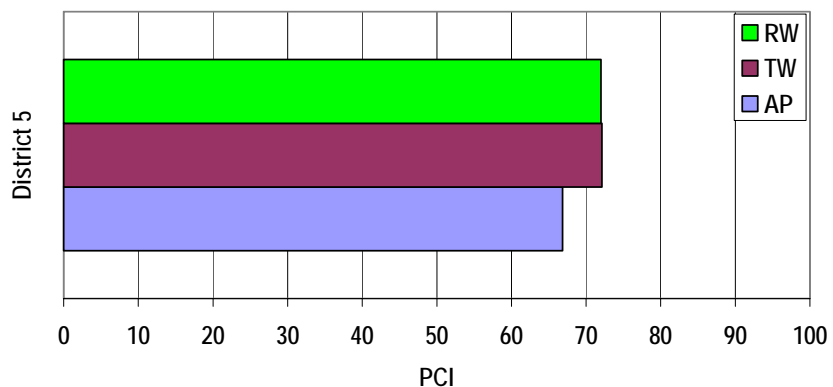
Table E-3 and Figure E-3 provide the weighted-average PCI by pavement use for airports participating in the program from District 5. Figure E-4 provides the distribution PCI by pavement use by airport. Figure E-5 provides the area-weighted PCI by surface type.

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, Satisfactory, and Fair condition, respectively.

**Table E-2: Participating Airports Summary– District 5**

<b>Airport</b>	<b>Area-Weighted PCI</b>	<b>Pavement Area, SqFt</b>
COI	82	1,252,971
DAB	66	8,936,965
DED	64	2,561,141
EVV	58	2,571,339
ISM	72	4,223,179
LEE	78	2,236,611
MLB	75	7,517,640
OCF	70	2,632,982
OMN	76	1,583,479
ORL	70	6,237,239
SFB	71	9,722,486
TIX	76	3,304,490
X21	73	454,981
X23	95	250,750
X35	67	1,348,950
X47	65	2,291,736
X59	63	988,265
<b>District 5</b>	<b>70</b>	<b>58,115,204</b>

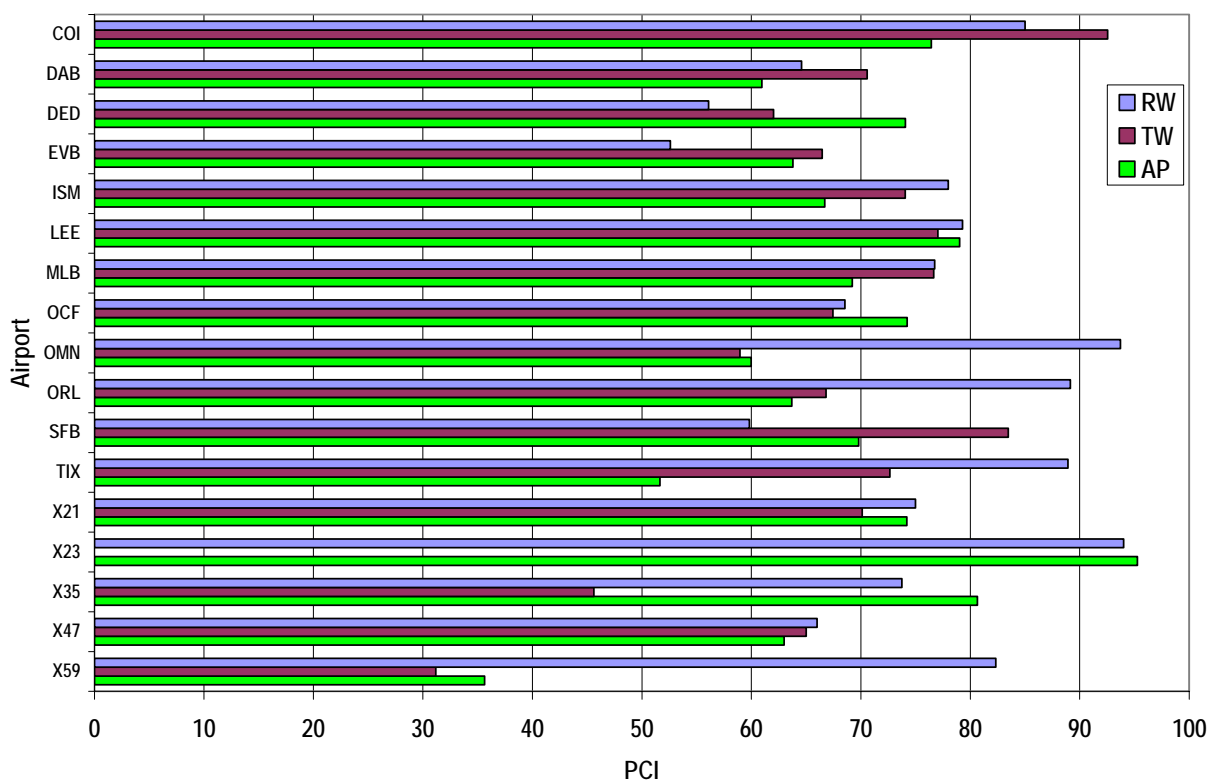
**Figure E-3: PCI by Pavement Use – District 5**



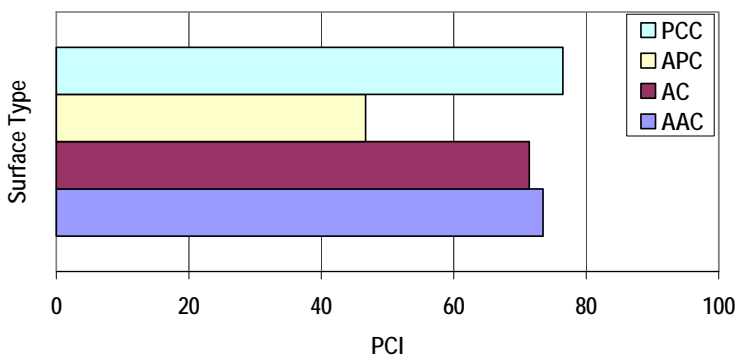
**Table E-3: Condition Summary by Pavement Use – District 5**

Use	Area-Weighted PCI
Runway	72
Taxiway	72
Apron	67
<b>All</b>	<b>70</b>

**Figure E-4: PCI by Use by Airport – District 5**



**Figure E-5: PCI by Surface Type – District 5**



## Maintenance and Rehabilitation Costs

Airports in District 5 with immediate M&R needs (2008 needs) include COI (Merritt Island Airport), DAB (Daytona Beach International Airport), DED (Deland Municipal Airport), EVB (New Smyrna Beach Municipal Airport), ISM (Kissimmee Gateway Airport), LEE (Leesburg International Airport), MLB (Melbourne International Airport), OCF (Ocala Municipal Airport), OMN (Ormond Beach Municipal Airport), ORL (Executive Airport), SFB (Orlando Sanford International Airport), TIX (Space Coast Regional Airport), X21 (Arthur Dunn Airpark), X35 (Dunnellon/Marion County Airport), X47 (Flagler County Airport), and X59 (Valkaria 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 5**

<b>Airport</b>	<b>Avg PCI - Before M&amp;R</b>	<b>Immediate M&amp;R Total **</b>	<b>Avg PCI -1st Year After M&amp;R</b>
COI	82	\$1,588,000	92
DAB	66	\$45,824,000	92
DED	64	\$8,531,000	91
EVB	58	\$16,885,000	94
ISM	72	\$13,967,000	93
LEE	78	\$3,322,000	92
MLB	75	\$15,131,000	86
OCF	70	\$5,021,000	87
OMN	76	\$5,309,000	92
ORL	70	\$18,204,000	86
SFB	71	\$34,491,000	91
TIX	76	\$6,144,000	90
X21	73	\$139,000	76
X23	95	\$0	92
X35	67	\$4,634,000	93
X47	64	\$7,206,000	91
X59	69	\$4,952,000	87
<b>District 5</b>	<b>70</b>	<b>\$191,347,000</b>	<b>90</b>

\* 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 5.

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

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.

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

Year	Preventive	Major M&R >= Critical	Major M&R < Critical	Total
2008	\$1,150,000	\$489,000	\$190,858,000	\$192,497,000
2009	\$3,307,000	\$0	\$1,375,000	\$4,682,000
2010	\$3,472,000	\$0	\$5,006,000	\$8,478,000
2011	\$3,969,000	\$0	\$2,893,000	\$6,861,000
2012	\$4,298,000	\$0	\$5,060,000	\$9,358,000
2013	\$4,810,000	\$0	\$4,922,000	\$9,732,000
2014	\$5,538,000	\$0	\$4,749,000	\$10,287,000
2015	\$6,131,000	\$0	\$6,674,000	\$12,805,000
2016	\$6,995,000	\$0	\$4,104,000	\$11,099,000
2017	\$7,710,000	\$0	\$5,970,000	\$13,680,000
<b>Total</b>	<b>\$47,380,000</b>	<b>\$489,000</b>	<b>\$231,611,000</b>	<b>\$279,480,000</b>

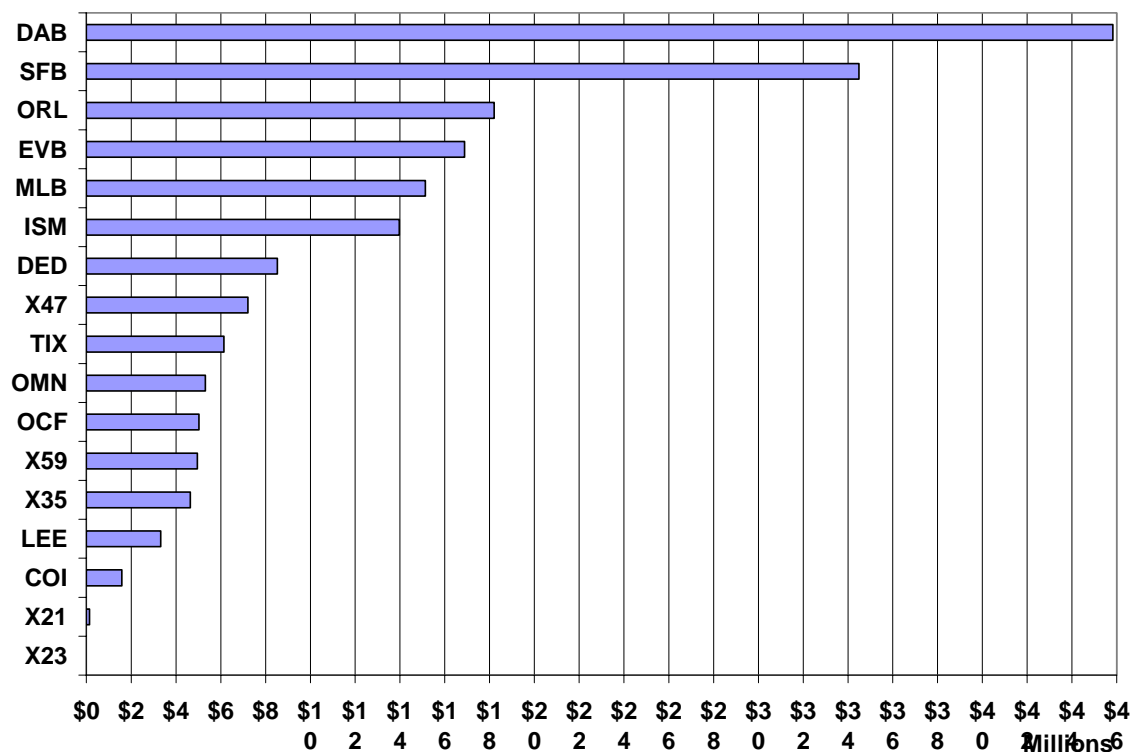
Note: Cost figures are rounded to nearest \$1000. Sum may be different. Costs are adjusted to inflation

The 10 year analysis suggests an annual budget on the order of \$28 million would be expected to provide an improvement in the overall condition, where the area-weighted PCI would increase from 70 in 2006/2007 to 81 in 2017. However, as stated above, a number of large projects exist that would need to be programmed over multiple years.

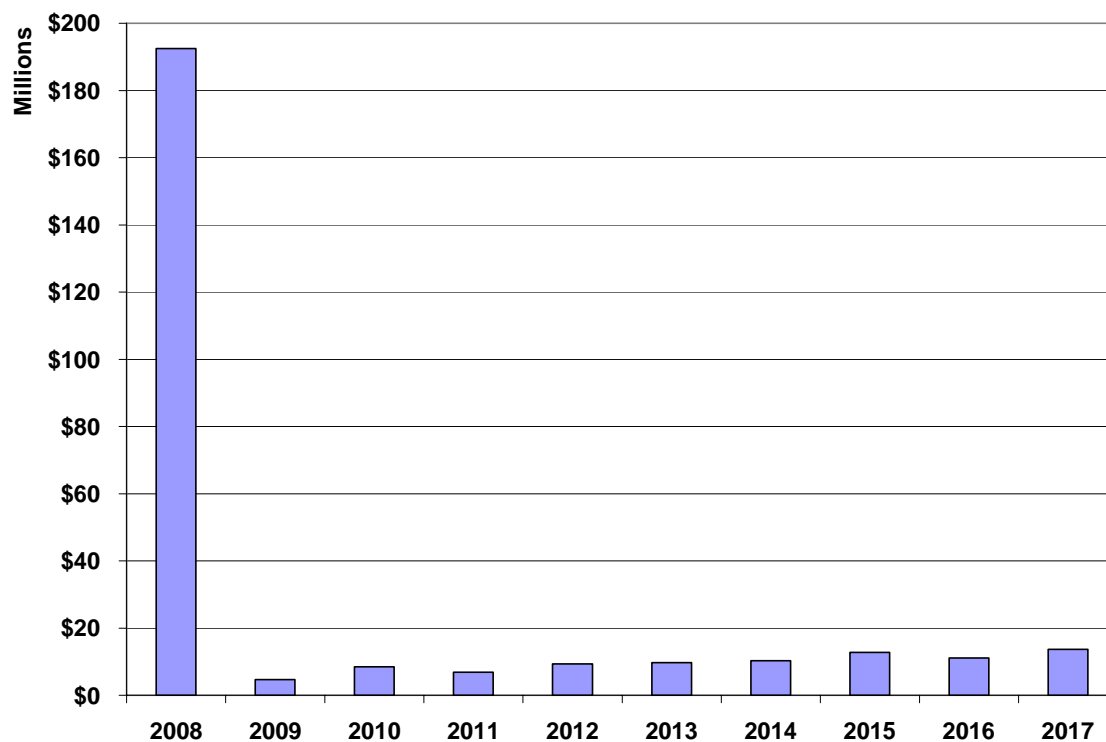
It is important to note that although preventative and some major M&R activities would have to be conducted over several years, the area-weighted PCI value for all airport pavements in District 5 in 2017 may remain near 81. What is most important is that the pavement repair work (preventative and major M&R) that has been identified for airports in District 5 is conducted at some point in the 10-year plan.



**Figure E-6: Immediate M&R Costs by Airport - District 5**



**Figure E-7: Estimated Annual Costs (2008-2017) - District 5**



## **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 5 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 5 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

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](http://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](http://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**

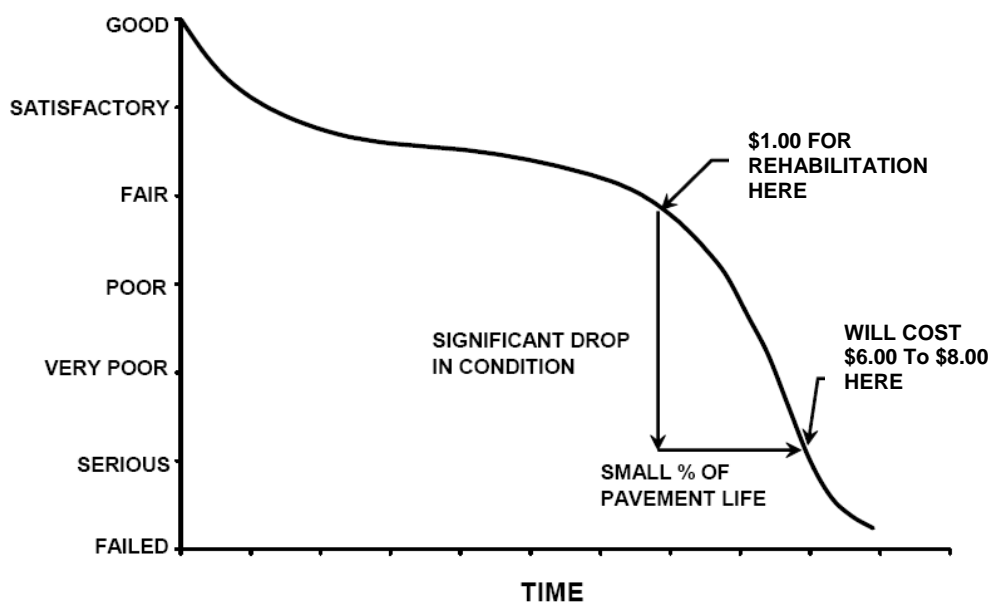
A pavement management system (PMS) is a tool to assist engineers, planners and managing agencies in making decisions when planning pavement M&R. The management of pavements involves scheduling pavement maintenance and rehabilitation before pavements deteriorate to a condition where reconstruction (the 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 in-depth 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  $5000 \pm 2000$  square feet (3000 to 7000 square feet) for AC-surfaced pavements and  $20 \pm 8$  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.

**Table 1-1: Sampling Rate for FDOT Condition Surveys**

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

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 nonrepresentative 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.

**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.

**Base Course** - 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.

**Branch** – (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.

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

- GA – for general aviation or community airports
- RL – for regional relievers or small hubs
- PR – for primary

Critical PCI – 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.

Distress Type - 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.

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

Localized M&R (Maintenance and Repair) – 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.

Global M&R- 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.

MicroPAVER – 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.

Minimum Condition Level - 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.

Major M&R (e.g. Rehabilitation) – 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.

Network Definition – (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.

Pavement Condition Index (PCI) – 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.

Pavement Evaluation – 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.

Pavement Management – 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.

Rank – 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

Reconstruction – 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.

Rehabilitation – 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.

Sample Unit – 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  $20 \pm 8$  slabs for PCC-surfaced pavements.

Section – (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.

Section ID – 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.

Use – 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 5 include:

- Merritt Island Airport (COI)
- Daytona Beach International Airport (DAB)
- Deland Municipal Airport (DED)
- New Smyrna Beach Municipal Airport (EVB)
- Kissimmee Gateway Airport (ISM)
- Leesburg International Airport (LEE)
- Melbourne International Airport (MLB)
- Ocala Municipal Airport (OCF)
- Ormond Beach Municipal Airport (OMN)
- Executive Airport (ORL)
- Orlando Sanford International Airport (SFB)
- Space Coast Regional Airport (TIX)
- Arthur Dunn Airpark (X21)
- Umatilla Municipal Airport (X23)
- Dunnellon/Marion County Airport (X35)
- Flagler County Airport (X47)
- Valkaria Airport (X59)

These airports are categorized as 3 Primary (PR), 5 Regional Reliever, and 9 General Aviation (GA) airports.

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 5 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.

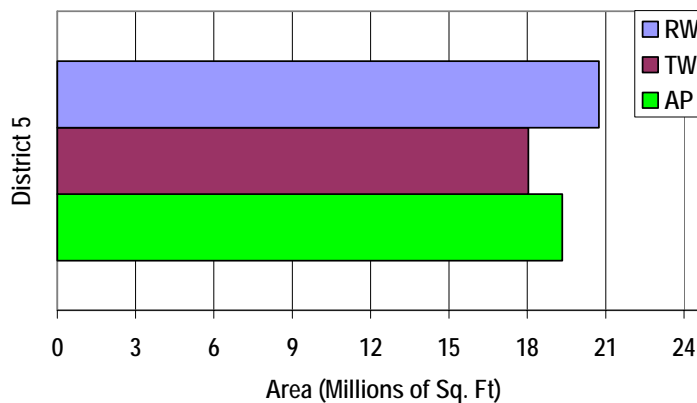
The total pavement area in 2006/2007 for airports participating in the program from District 5 is approximately 58,115,204 square feet. The breakdown of pavement area for each pavement use is provided in Table 3-1.

**Table 3-1: Pavement Area by Pavement Use - District 5**

Use	Area, SqFt
Runway	20,738,869
Taxiway	18,035,324
Apron	19,341,011
<b>Total</b>	<b>58,115,204</b>

Figure 3-1 presents the breakdown of the pavement area for airports in District 5 by pavement use.

**Figure 3-1: Pavement Area by Use - District 5**



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 5 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 5 is 70, representing a Fair overall network condition.

Table 4-1 and Figure 4 1 provide the PCI distribution by rating and surface type for District 5.

**Table 4-1: Airport Pavement PCI by Use and Rating Category - District 5**

<b>Airport</b>	<b>RW</b>	<b>TW</b>	<b>AP</b>	<b>AVG PCI</b>	<b>PCI Category</b>
COI	85	93	76	82	Good
DAB	65	71	61	66	Fair
DED	56	62	74	64	Fair
EVV	53	66	64	58	Fair
ISM	78	74	67	72	Satisfactory
LEE	79	77	79	78	Satisfactory
MLB	77	77	69	75	Satisfactory
OCF	69	67	74	70	Fair
OMN	94	59	60	76	Satisfactory
ORL	89	67	64	70	Fair
SFB	60	83	70	71	Satisfactory
TIX	88	73	52	76	Satisfactory
X21	75	70	74	73	Satisfactory
X23	94		95	95	Good
X35	74	46	81	67	Fair
X47	66	65	63	65	Fair
X59	82	31	36	63	Fair
<b>District 5</b>	<b>Satisfactory</b>	<b>Satisfactory</b>	<b>Fair</b>	<b>70</b>	<b>Fair</b>

**Figure 4-1: PCI by Surface Type - District 5**

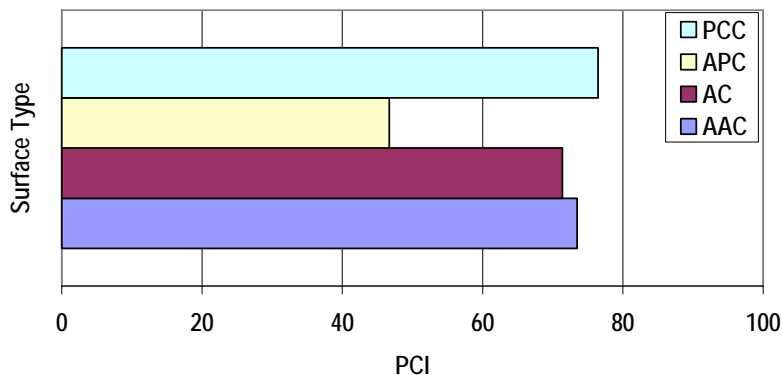


Table 4-2 illustrates the area-weighted PCI computed individually for each pavement use.

**Table 4-2: Condition by Pavement Use - District 5**

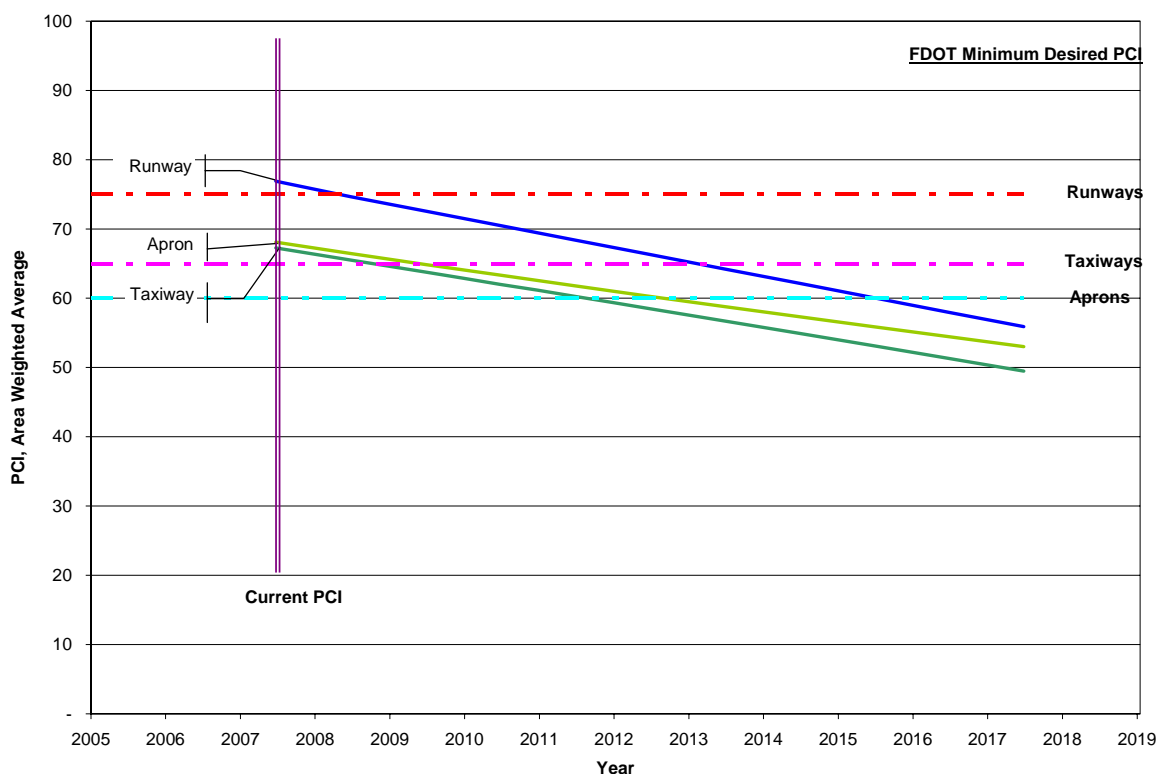
Use	Area-Weighted PCI
Runway	72
Taxiway	72
Apron	67
<b>All</b>	<b>70</b>

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

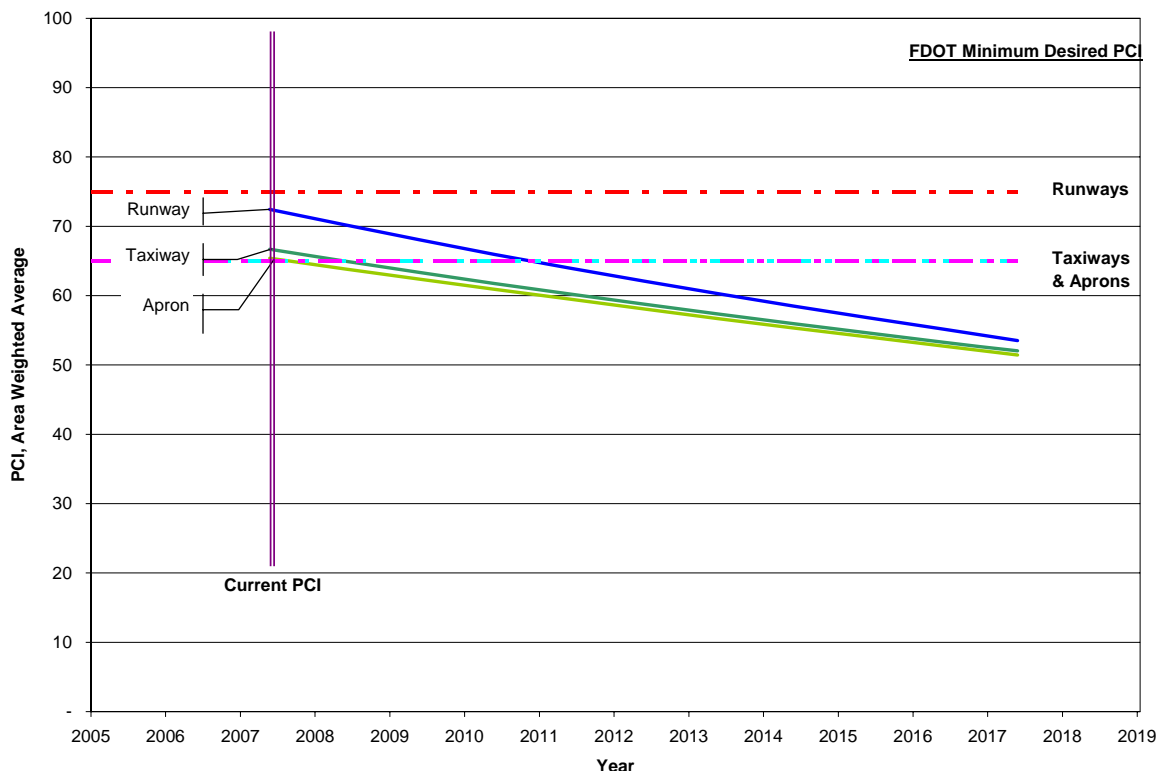
## 5. PAVEMENT CONDITION PREDICTION

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 illustrate the predicted performance of pavements at airports participating in the program from District 5 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 5 airports.

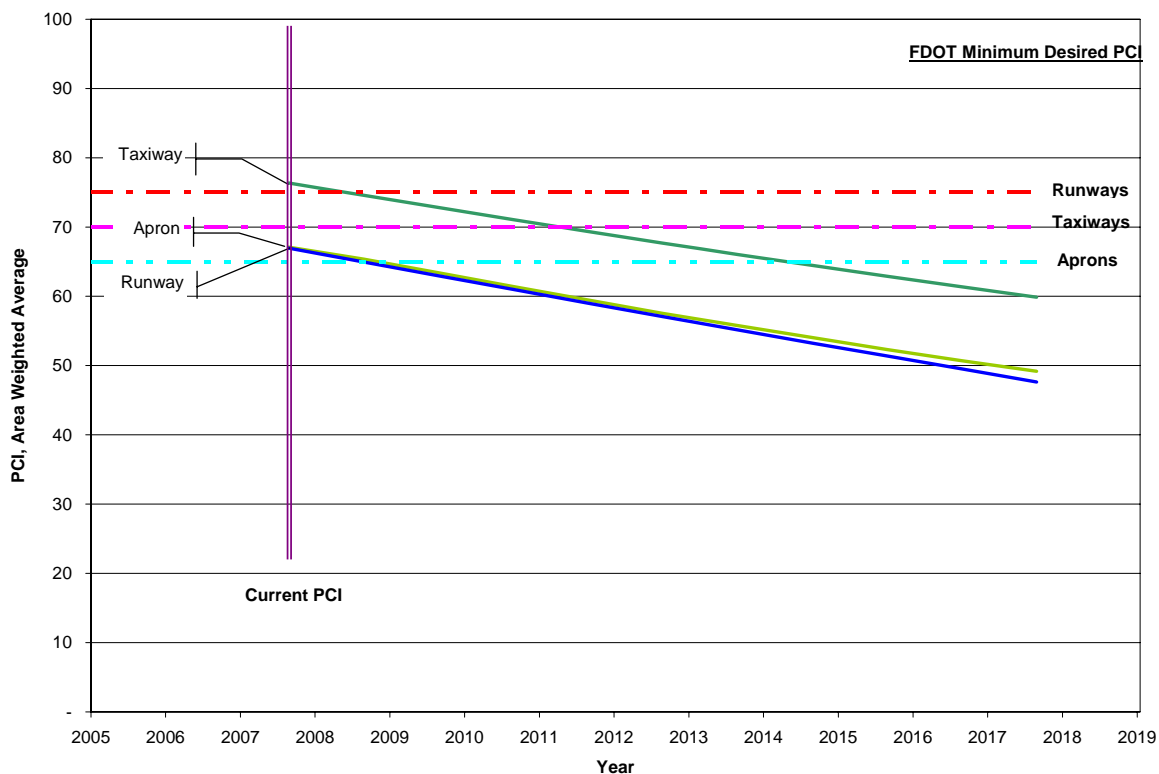
**Figure 5-1: Predicted PCI for GA Airports by Pavement Use – District 5**



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



**Figure 5-3: Predicted PCI for PR Airports by Pavement Use – District 5**





## 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
AC	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
	Oil Spillage	N/A	Patching - AC Shallow	PA-AS	SqFt
	Patching	M, H	Patching - AC Deep	PA-AD	SqFt
	Polished Agg.	N/A	No Localized M&R	NONE	SqFt
	Raveling	L	Surface Sealing - Rejuvenating	SS-RE	SqFt
		M	Surface Seal - Coal Tar	SS-CT	SqFt
		H	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
PCC	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	H	Slab Replacement – PCC	SL-PC	SqFt
		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
	Large Patch	M, H	Patching - PCC Full Depth	PA-PF	SqFt
	Popouts	N/A	No Localized M&R	NONE	SqFt
	Pumping	N/A	No Localized M&R	NONE	SqFt
	Scaling	H	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.

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

Use	Minimum PCI		
	GA	RL	PR
Runway	75	75	75
Taxiway	65	65	70
Apron	60	65	65

Typical Major M&R activities range from overlays to reconstruction. Based on the critical PCI values 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.

**Table 6-3: M&R Activities for Airports**

	Activity	PCI Range
Maintenance	Crack Sealing and Full-Depth Patching	80 and 90
Rehabilitation	Microsurfacing (AC) or Concrete Pavement Restoration (PCC)	56 to 79
	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	31 to 55
	Reconstruction	30 and less

## 6.2 Unit Costs

FDOT cost databases for airports and highway pavement maintenance and rehabilitation were reviewed in Phase I of Statewide Pavement Management 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		
			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 5 will deteriorate from 70 to 53 in ten years if no M&R activities are performed.
- The PCI will remain at or above 81 through the 10-year analysis period under the unlimited budget scenario. A 2017 PCI of 81 with this scenario is 28 PCI points higher than a “No M&R” scenario. The total cost for Major M&R over this 10-year period is about \$232 million.

**Table 7-1: Summary of Immediate Major M&R Needs - District 5**

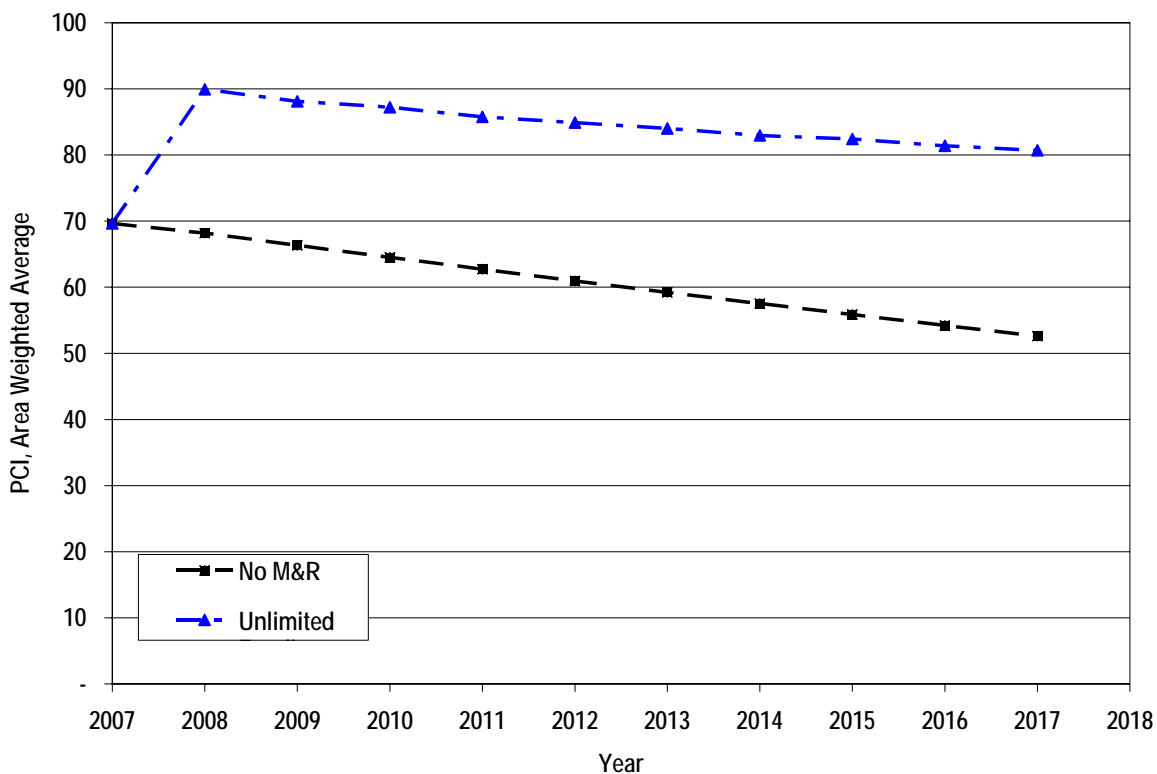
Airport	Avg PCI - Before M&R	Immediate M&R Total **	Avg PCI -1st Year After M&R
COI	82	\$1,588,000	92
DAB	66	\$45,824,000	92
DED	64	\$8,531,000	91
EVb	58	\$16,885,000	94
ISM	72	\$13,967,000	93
LEE	78	\$3,322,000	92
MLB	75	\$15,131,000	86
OCF	70	\$5,021,000	87
OMN	76	\$5,309,000	92
ORL	70	\$18,204,000	86
SFB	71	\$34,491,000	91
TIX	76	\$6,144,000	90
X21	73	\$139,000	76
X23	95	\$0	92

Airport	Avg PCI - Before M&R	Immediate M&R Total **	Avg PCI -1st Year After M&R
X35	67	\$4,634,000	93
X47	64	\$7,206,000	91
X59	69	\$4,952,000	87
<b>District 5</b>	<b>70</b>	<b>\$191,347,000</b>	<b>90</b>

\* 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 5.

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

**Figure 7-1: Budget Scenario Analysis - District 5**



## **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 82% 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 COI (Merritt Island Airport), DAB (Daytona Beach International Airport), DED (Deland Municipal Airport), EVB (New Smyrna Beach Municipal Airport), ISM (Kissimmee Gateway Airport), LEE (Leesburg International Airport), MLB (Melbourne International Airport), OCF (Ocala Municipal Airport), OMN (Ormond Beach Municipal Airport), ORL (Executive Airport), SFB (Orlando Sanford International Airport), TIX (Space Coast Regional Airport), X21 (Arthur Dunn Airpark), X35 (Dunnellon/Marion County Airport), X47 (Flagler County Airport), and X59 (Valkaria Airport) airports being below Critical PCI.

X23 (Umatilla Municipal Airport) is currently in overall Good condition with an average PCI value of 95. COI (Merritt Island Airport), ISM (Kissimmee Gateway Airport), LEE (Leesburg International Airport), MLB (Melbourne International Airport), OMN (Ormond Beach Municipal Airport), SFB (Orlando Sanford International Airport), TIX (Space Coast Regional Airport), X21 (Arthur Dunn Airpark) are currently in overall Satisfactory condition with an average PCI value of 82, 72, 78, 75, 76, 71, 76, and 73 respectively, while DAB (Daytona Beach International Airport), DED (Deland Municipal Airport), EVB (New Smyrna Beach Municipal Airport), OCF (Ocala Municipal Airport), ORL (Executive Airport), X35 (Dunnellon/Marion County Airport), X47 (Flagler County Airport), and X59 (Valkaria Airport) are currently in overall Fair condition with an average PCI value of 66, 64, 58, 70, 70, 67, 65 and 63 respectively. The majority of the repair need in 2008 are identified from the following airports: DAB (Daytona Beach International Airport), SFB (Orlando Sanford International Airport), ORL (Executive Airport), EVB (New Smyrna Beach Municipal Airport), MLB (Melbourne International Airport), ISM (Kissimmee Gateway Airport), DED (Deland Municipal Airport), X47 (Flagler County Airport), and TIX (Space Coast 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 5**

<b>Year</b>	<b>Preventive</b>	<b>Major M&amp;R &gt;= Critical</b>	<b>Major M&amp;R &lt; Critical</b>	<b>Total</b>
2008	\$1,150,000	\$489,000	\$190,858,000	\$192,497,000
2009	\$3,307,000	\$0	\$1,375,000	\$4,682,000
2010	\$3,472,000	\$0	\$5,006,000	\$8,478,000
2011	\$3,969,000	\$0	\$2,893,000	\$6,861,000
2012	\$4,298,000	\$0	\$5,060,000	\$9,358,000
2013	\$4,810,000	\$0	\$4,922,000	\$9,732,000
2014	\$5,538,000	\$0	\$4,749,000	\$10,287,000
2015	\$6,131,000	\$0	\$6,674,000	\$12,805,000
2016	\$6,995,000	\$0	\$4,104,000	\$11,099,000
2017	\$7,710,000	\$0	\$5,970,000	\$13,680,000
<b>Total</b>	<b>\$47,380,000</b>	<b>\$489,000</b>	<b>\$231,611,000</b>	<b>\$279,480,000</b>

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.

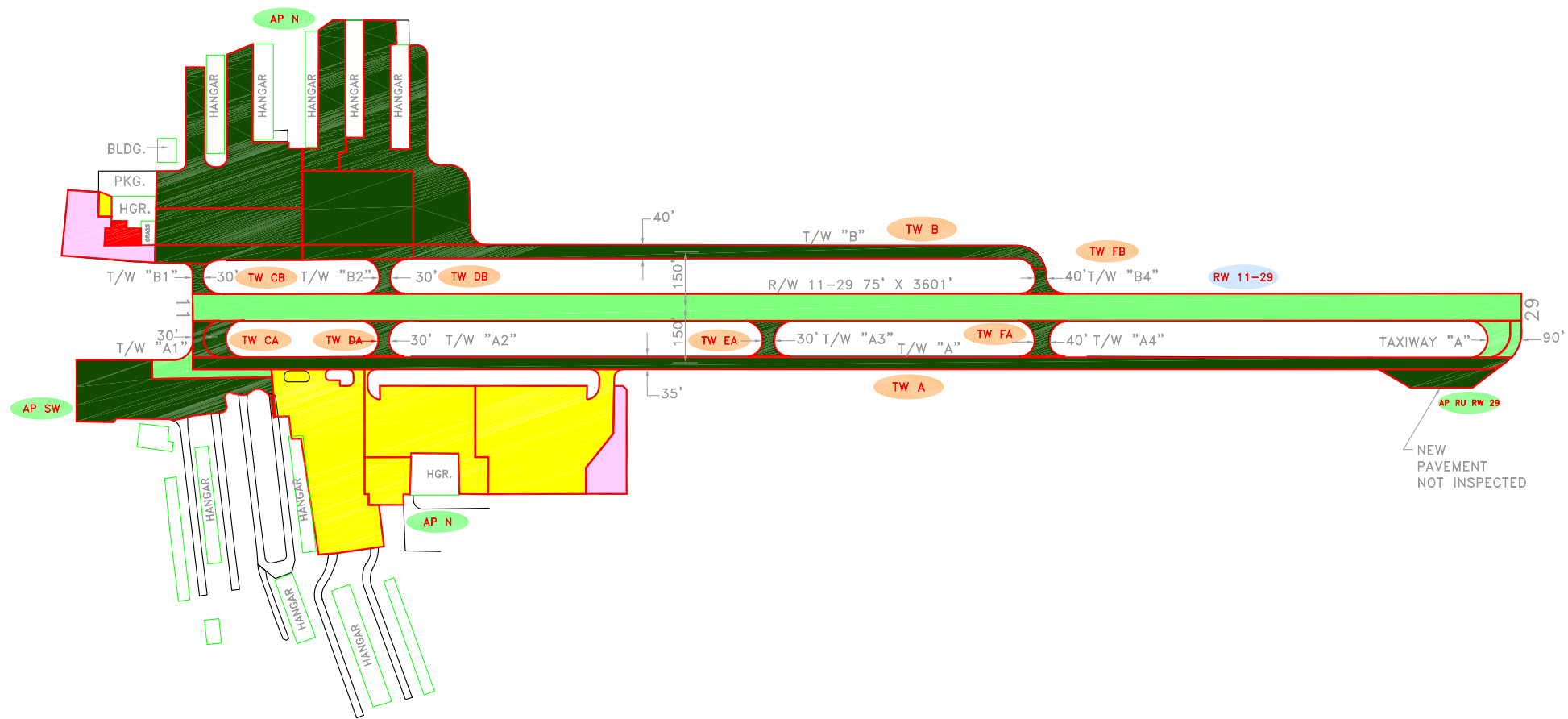
## **10. RECOMMENDATIONS**

Pavement condition inspections were performed at airports participating in the program from District 5 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:

- COI - Merritt Island Airport: South Apron
- DAB - Daytona Beach International Airport: Runway 7L-25R, Taxiway N, and Northeast Apron
- DED - Deland Municipal Airport: Runway 12-30, Runway 5-23, and Taxiway D
- EVB - New Smyrna Beach Municipal Airport: Runway 2-20, Runway 11-29, and Taxiway D
- ISM - Kissimmee Gateway Airport: Runway 6-24, North Apron
- LEE - Leesburg International Airport: Runway 3-21
- MLB - Melbourne International Airport: Taxiway A, West Apron, and East Apron
- OCF - Ocala Municipal Airport: Runway 18-36, Taxiway E, and Center Apron
- OMN - Ormond Beach Municipal Airport: Center Apron
- ORL - Executive Airport: Taxiway H, West Apron, and North Apron
- SFB - Orlando Sanford International Airport: Runway 18-36, Runway 9L-27R, and Southwest Apron
- TIX - Space Coast Regional Airport: Taxiway B and South Apron
- X21 - Arthur Dunn Airpark: Taxiway A
- X35 - Dunnellon/Marion County Airport: Runway 5-23 and Taxiway N
- X47 - Flagler County Airport: Runway 11-29 and Apron
- X59 - Valkaria Airport: Taxiway Between Runways

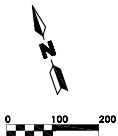
**APPENDIX A**  
**2006/2007 CONDITION MAPS**



LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID

- Good
- Satisfactory
- Fair
- Poor
- Very Poor
- Serious
- Failed



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

NUMBER	DATE	REVISIONS
1	Jan-30-08	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB CHECKED: DATE: 2-21-2006



2007 Condition Map

MERRITT ISLAND AIRPORT  
BREVARD COUNTY, FLORIDA

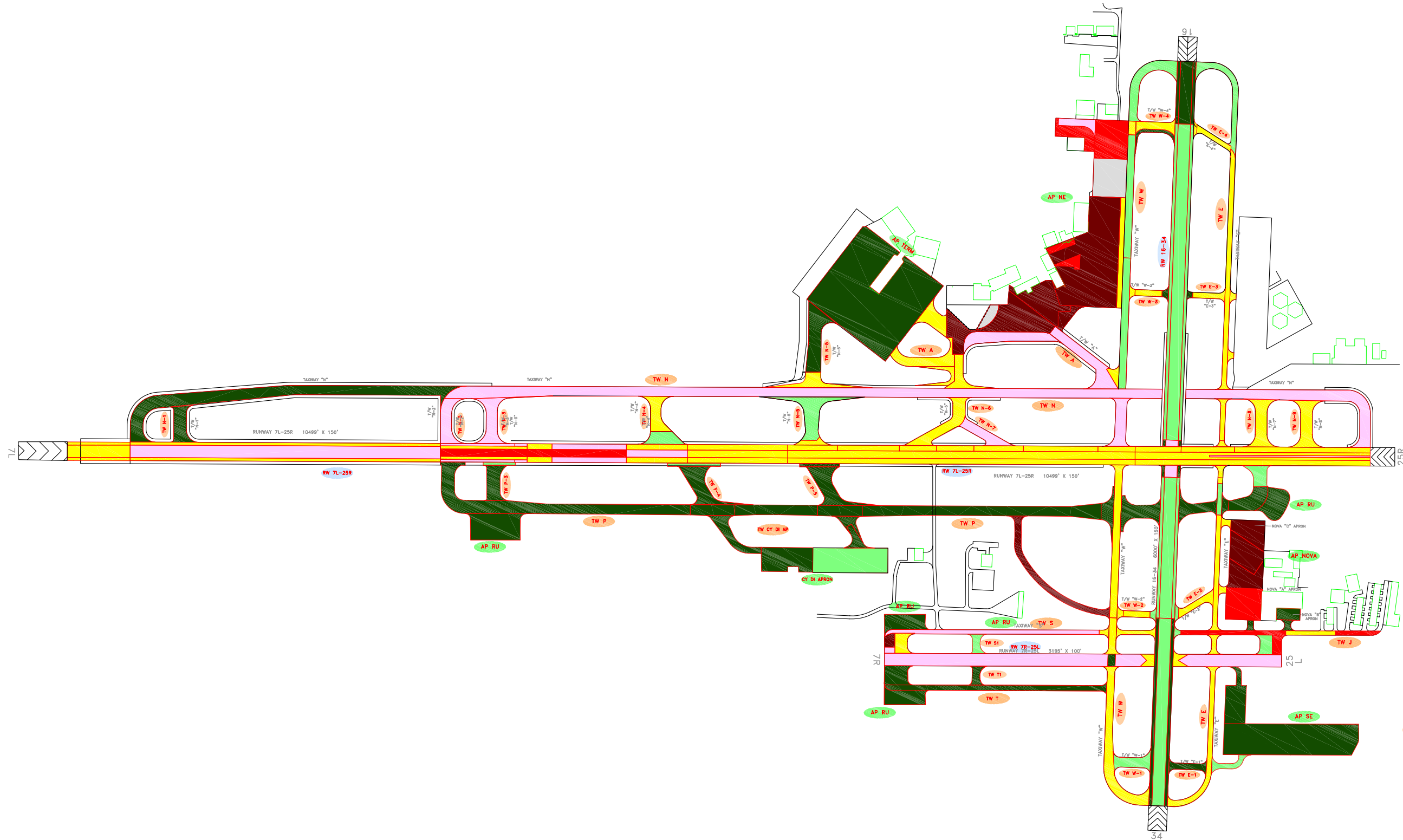
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER

COI

FOOT DISTRICT

5



LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID  
TW A — TYPICAL TAXIWAY BRANCH ID  
AP S — TYPICAL APRON BRANCH ID

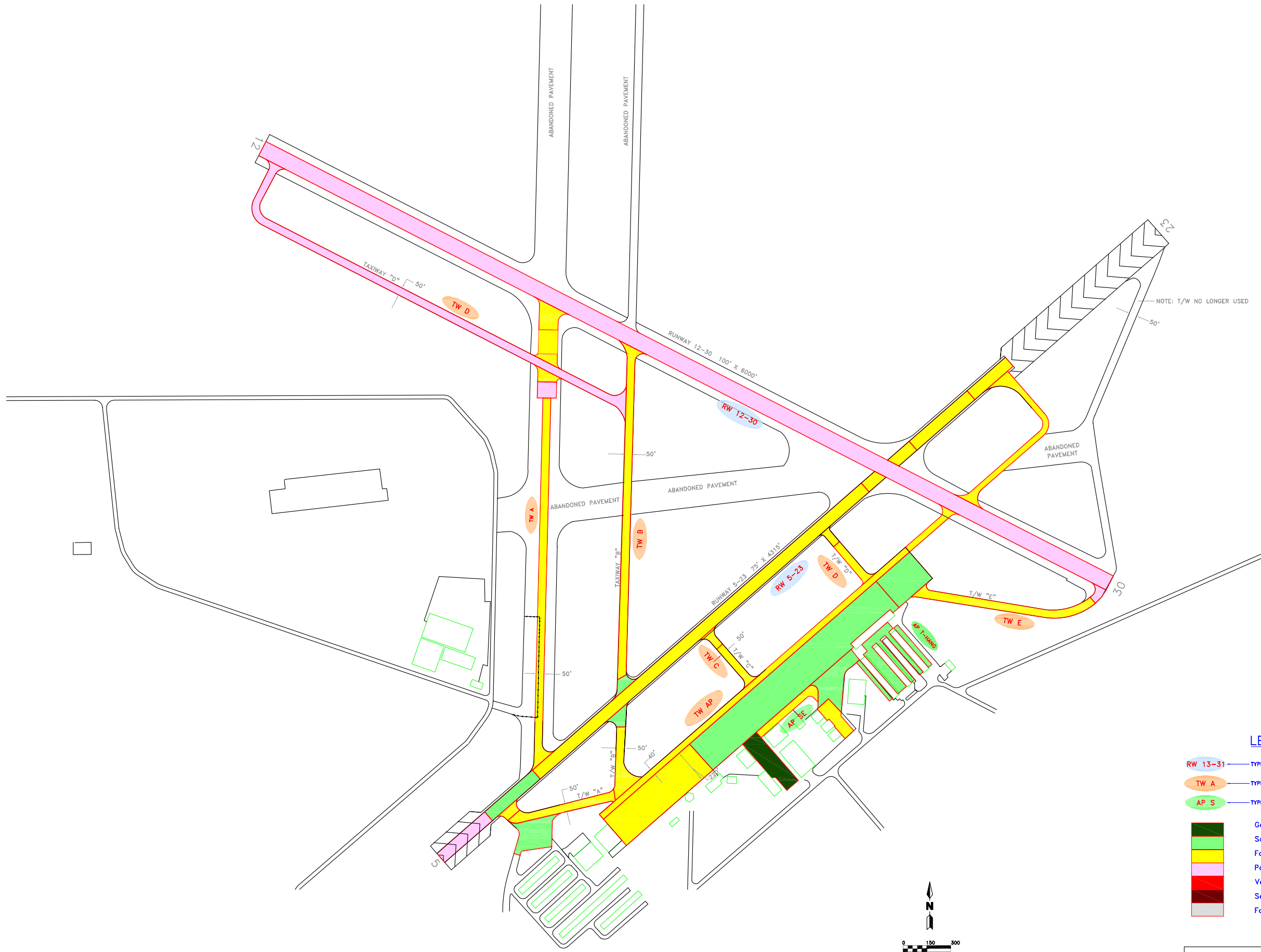
- Good  
Satisfactory  
Fair  
Poor  
Very Poor  
Serious  
Failed



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

NUMBER	DATE	REVISIONS
1	Jan-08	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB
CHECKED:		DATE: 9-07-2007





LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID  
TW A — TYPICAL TAXIWAY BRANCH ID  
AP S — TYPICAL APRON BRANCH ID
- Good  
Satisfactory  
Fair  
Poor  
Very Poor  
Serious  
Failed

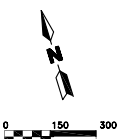
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NUMBER	DATE	REVISIONS
1	Jan-08	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB
CHECKED:		DATE: 9-07-2007




2007 Condition Map  
**DELAND MUNICIPAL AIRPORT**  
**VOLUSIA COUNTY, FLORIDA**  
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER  
**DED**  
FOOT DISTRICT  
**5**



RW 13-31 ← TYPICAL RUNWAY BRANCH ID  
TW A ← TYPICAL TAXIWAY BRANCH ID  
AP S ← TYPICAL APRON BRANCH ID

- |   |              |
|---|--------------|
|  | Good         |
|  | Satisfactory |
|  | Fair         |
|  | Poor         |
|  | Very Poor    |
|  | Serious      |
|  | Failed       |

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

NUMBER		DATE	REVISIONS			
1	Feb-08	Draft Report				
0	Feb-06	Initial Submittal				
DESIGNED:	JCB	DRAWN:	RWF	CHECKED:	DATE: 9-07-2007	



2007 Condition Map

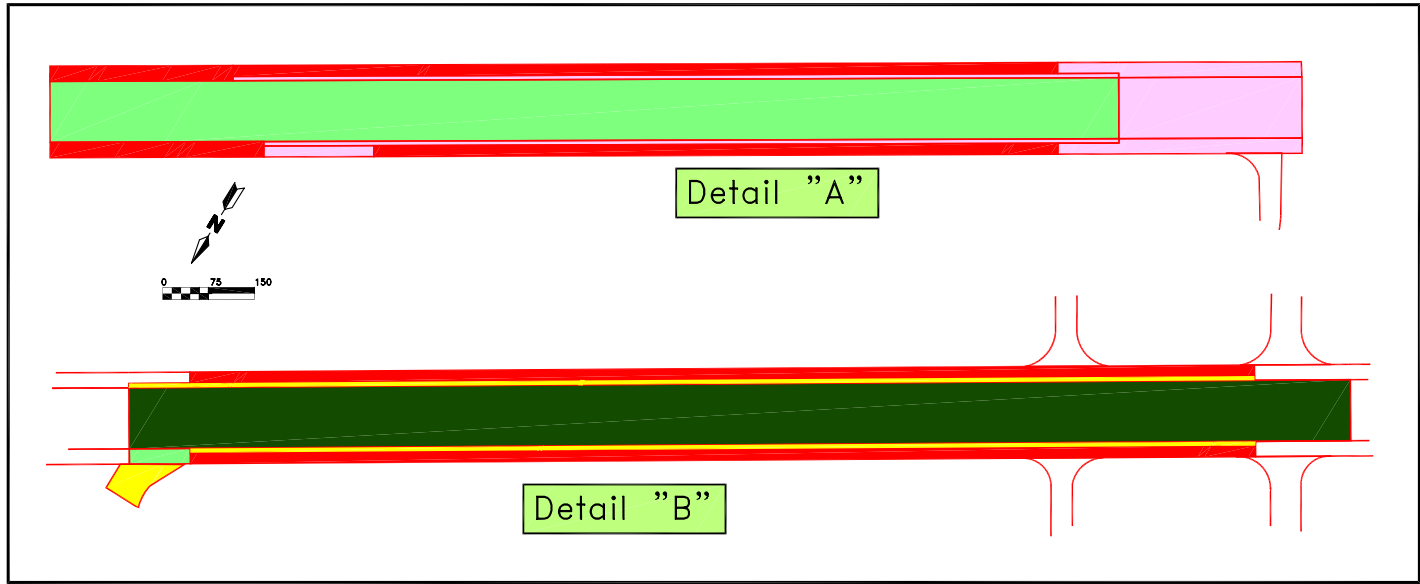
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**NEW SMYRNA BEACH MUNICIPAL AIRPORT**  
**NEW SMYRNA BEACH, VOLUSIA, FLORIDA**

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FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE





**LEGEND**

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

AP S — TYPICAL APRON BRANCH ID

Good

Satisfactory

Fair

Poor

Very Poor

Serious

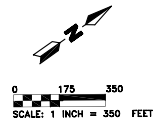
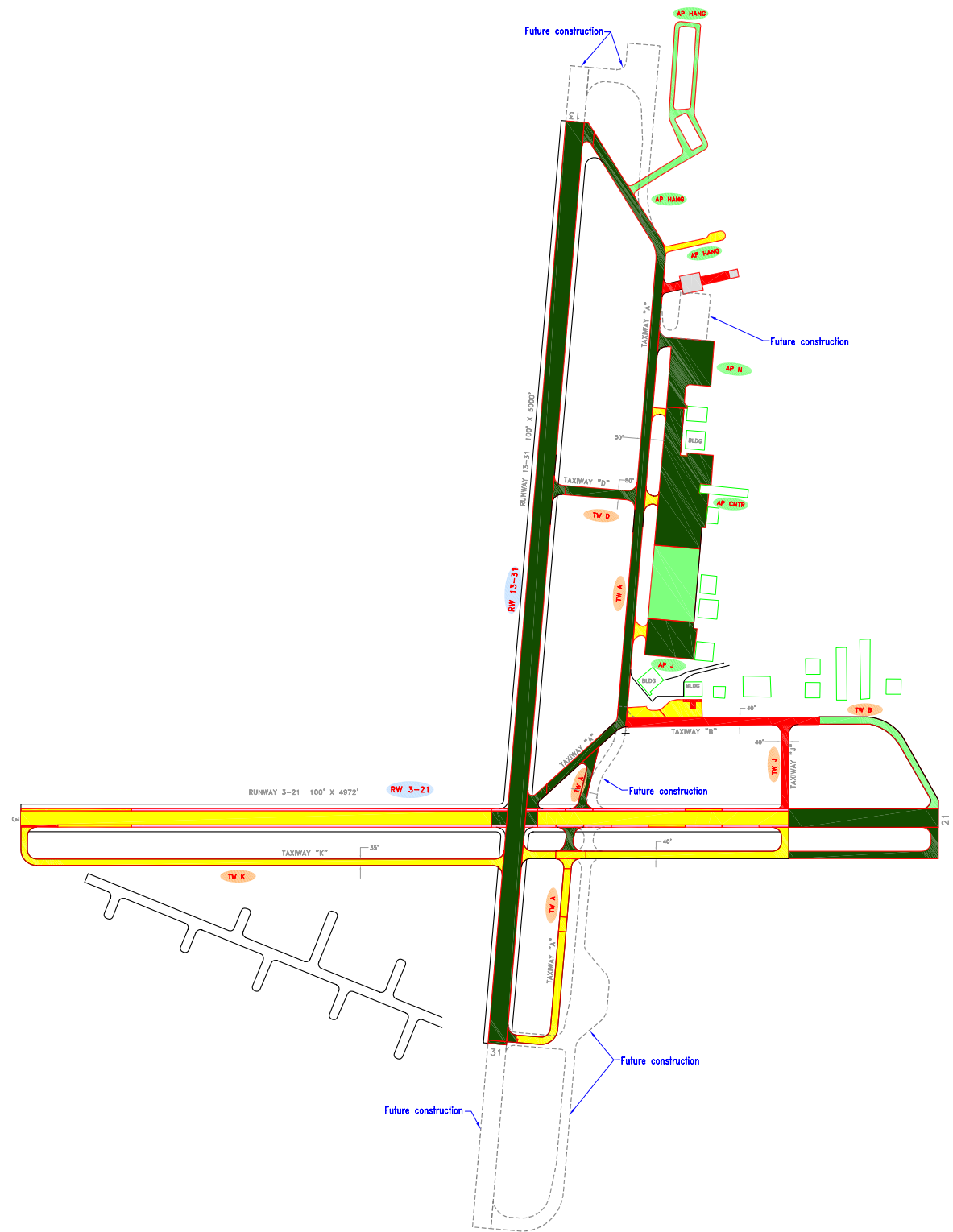
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NUMBER	DATE	REVISIONS
2	Feb-27	Draft Report
1	May-06	Revised per FDOT comments
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB CHECKED: DATE: 9-07-2007

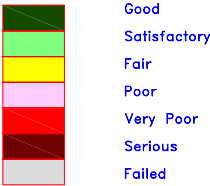






LEGEND

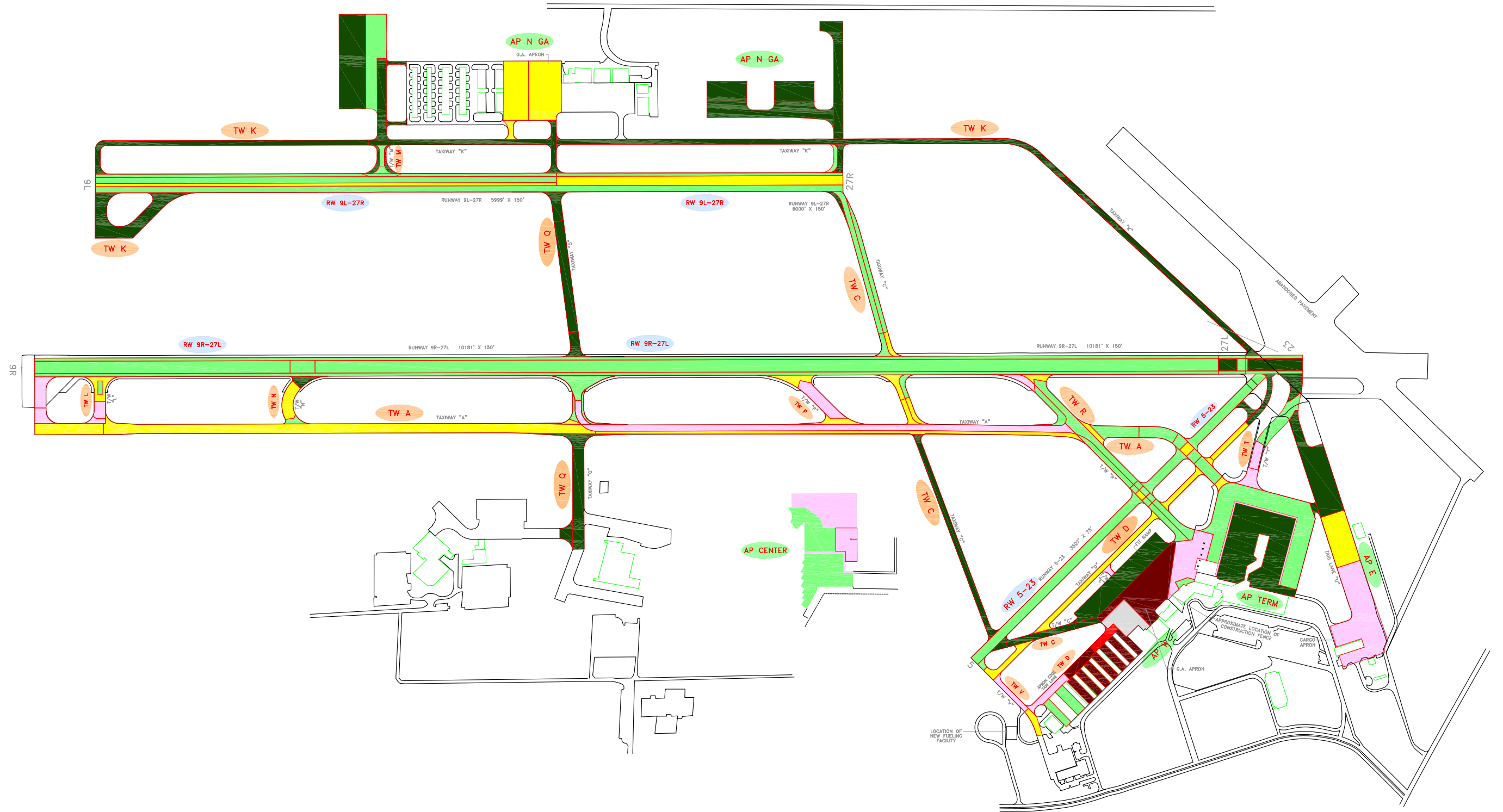
- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID



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

NUMBER	DATE	REVISIONS
1	Jan-28-08	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB
CHECKED:		DATE: 9-07-2007





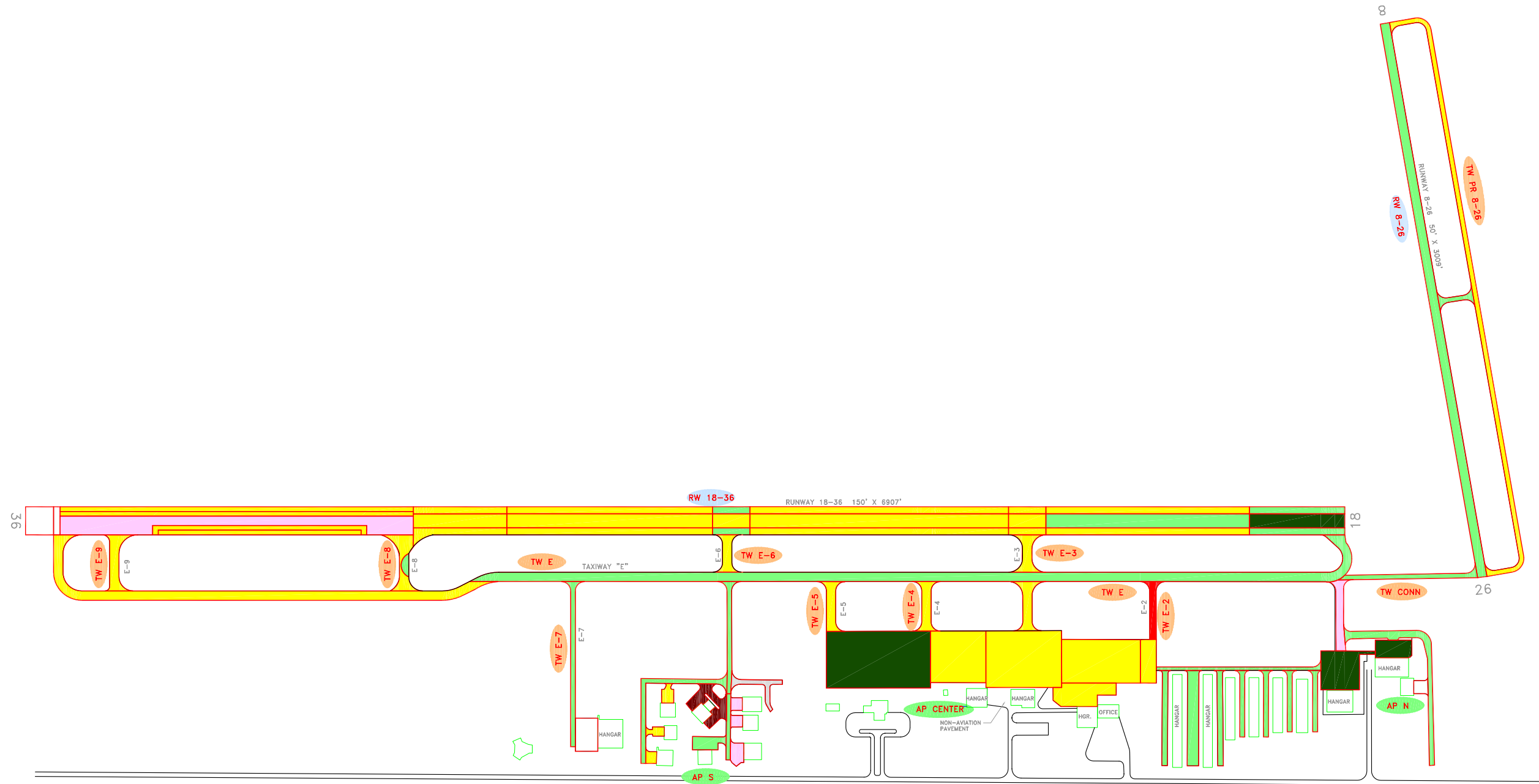
RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.

#### LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID  
TW A — TYPICAL TAXIWAY BRANCH ID  
AP S — TYPICAL APRON BRANCH ID
- Good  
Satisfactory  
Fair  
Poor  
Very Poor  
Serious  
Failed

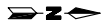
NUMBER	DATE	REVISIONS
1	Feb-27	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB CHECKED: DATE: 2-21-2006





LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID
- Good
- Satisfactory
- Fair
- Poor
- Very Poor
- Serious
- Failed



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

NUMBER	DATE	REVISIONS
2	Apr-10	Draft Report
1	May-06	Revised per FDOT comments
0	Feb-06	Initial Submittal
DESIGNED:	JP	DRAWN: JCB CHECKED: DATE: 9-06-2007



2006 Condition Map

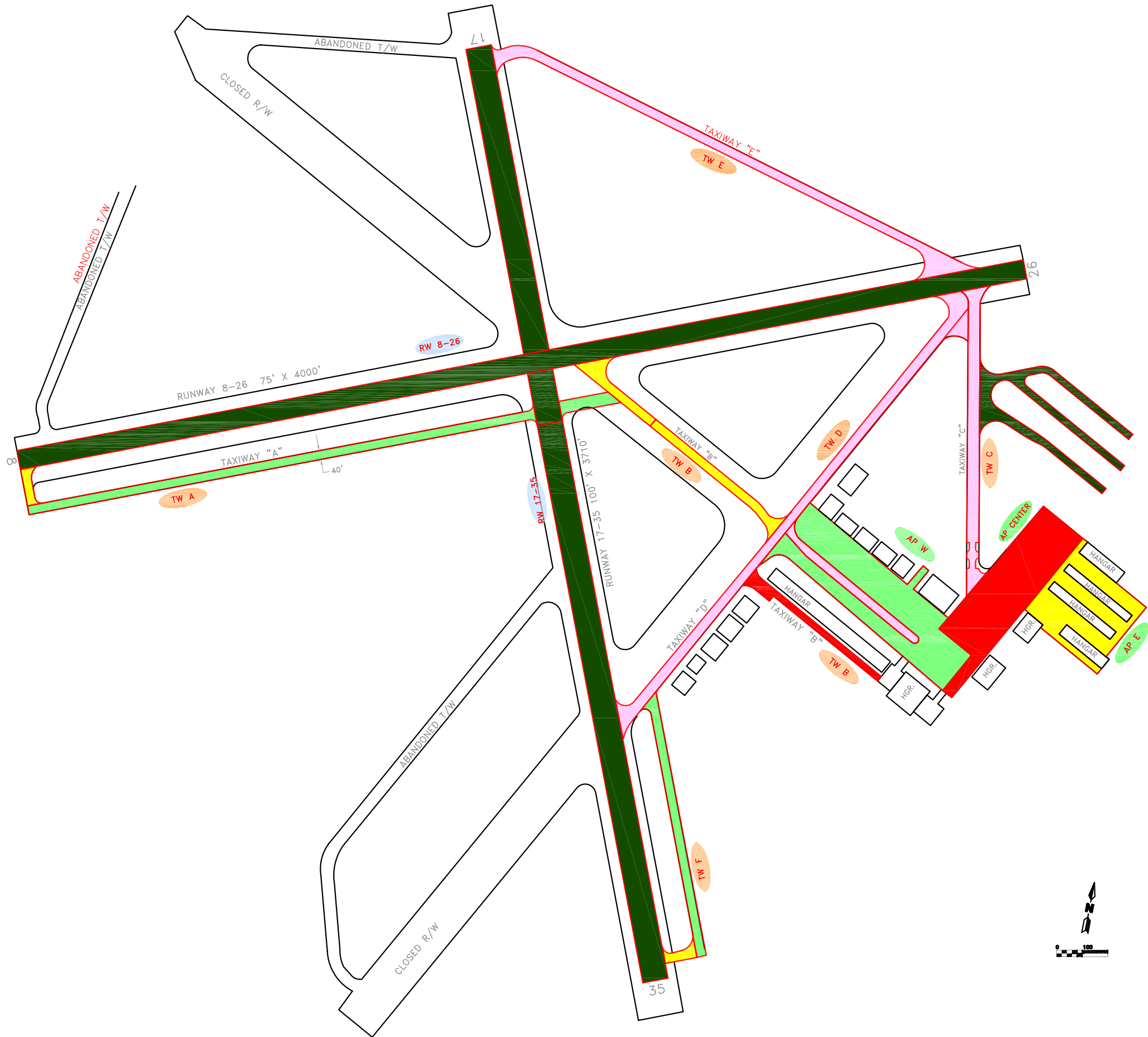
**OCALA INTERNATIONAL AIRPORT**  
**OCALA, MARION, FLORIDA**

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER

**OCF**  
FOOT DISTRICT

5



LEGEND

- RW 13-31

TYPICAL RUNWAY BRANCH ID
- TW A

TYPICAL TAXIWAY BRANCH ID
- AP S

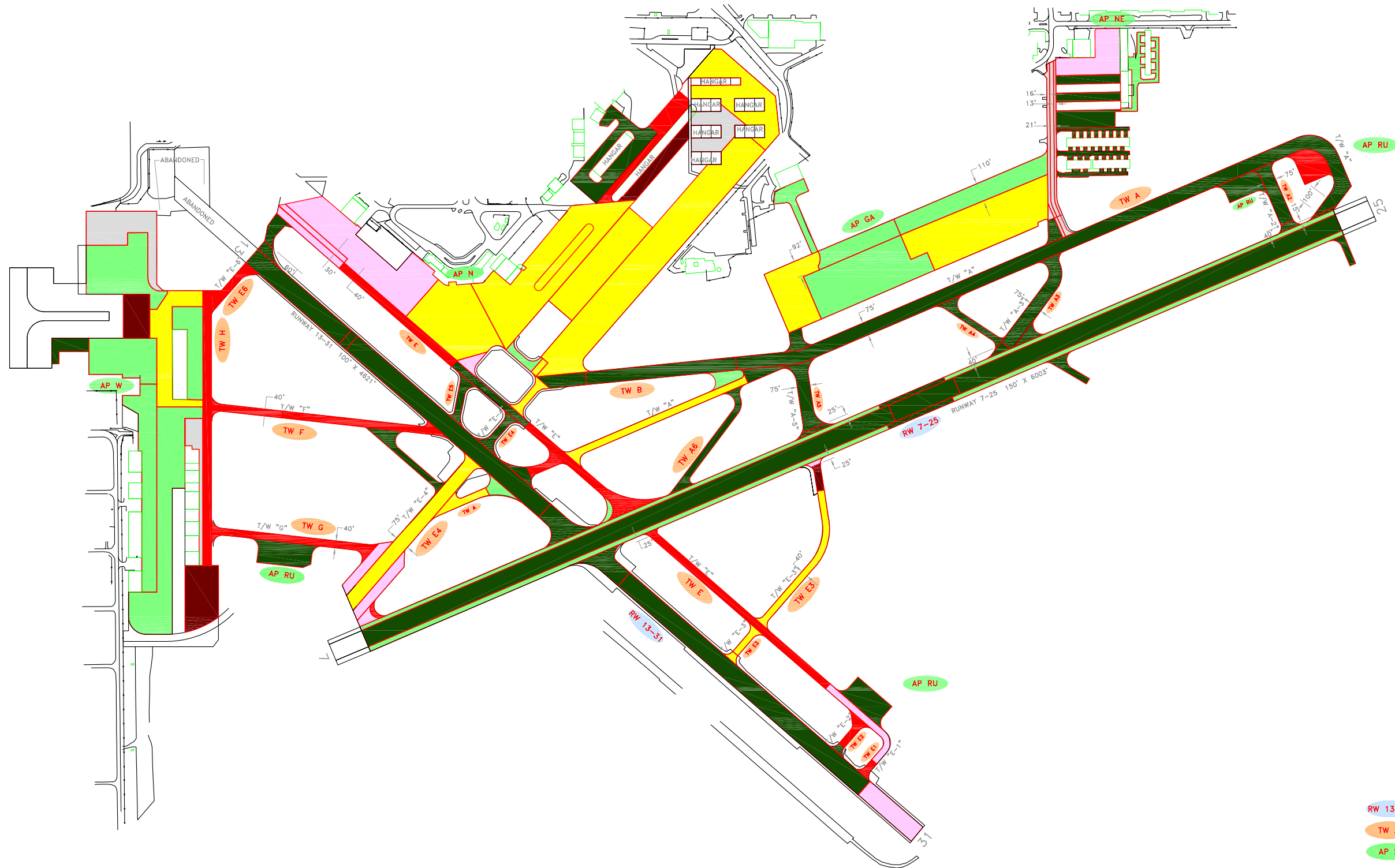
TYPICAL APRON BRANCH ID
- Good
- Satisfactory
- Fair
- Poor
- Very Poor
- Serious
- Failed

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

NUMBER	DATE	REVISIONS
1	Mar-26	Draft Report
0	Feb-06	Initial Submittal
DESIGNED: JCB	DRAWN: RWF	CHECKED: DATE: 9-07-2007







LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID

- Good
- Satisfactory
- Fair
- Poor
- Very Poor
- Serious
- Failed

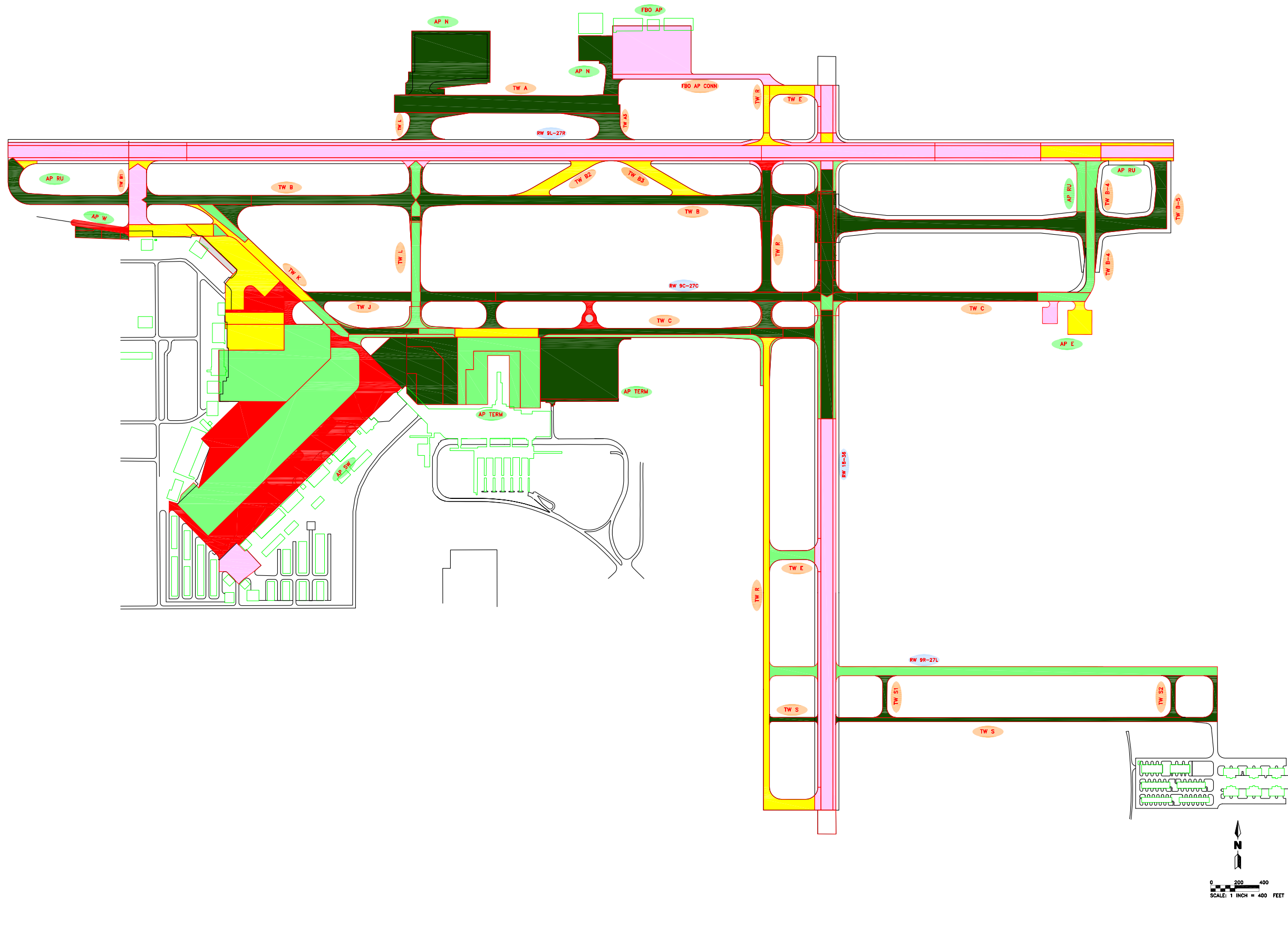
RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.

NUMBER	DATE	REVISIONS
1	Mar-06	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB CHECKED: DATE: 9-07-2007



2007 Condition Map  
**EXECUTIVE AIRPORT  
ORANGE COUNTY, FLORIDA**  
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER  
**ORL**  
FOOT DISTRICT  
**5**



**LEGEND**

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

AP S — TYPICAL APRON BRANCH ID

Good

Satisfactory

Fair

Poor

Very Poor

Serious

Failed

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

NUMBER	DATE	REVISIONS
1	Mar-03-08	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	JCB	DRAWN: RWF
CHECKED:		DATE: 2-23-2006



2007 Condition Map

**ORLANDO SANFORD INTERNATIONAL**

**ORLANDO, SEMINOLE, FLORIDA**

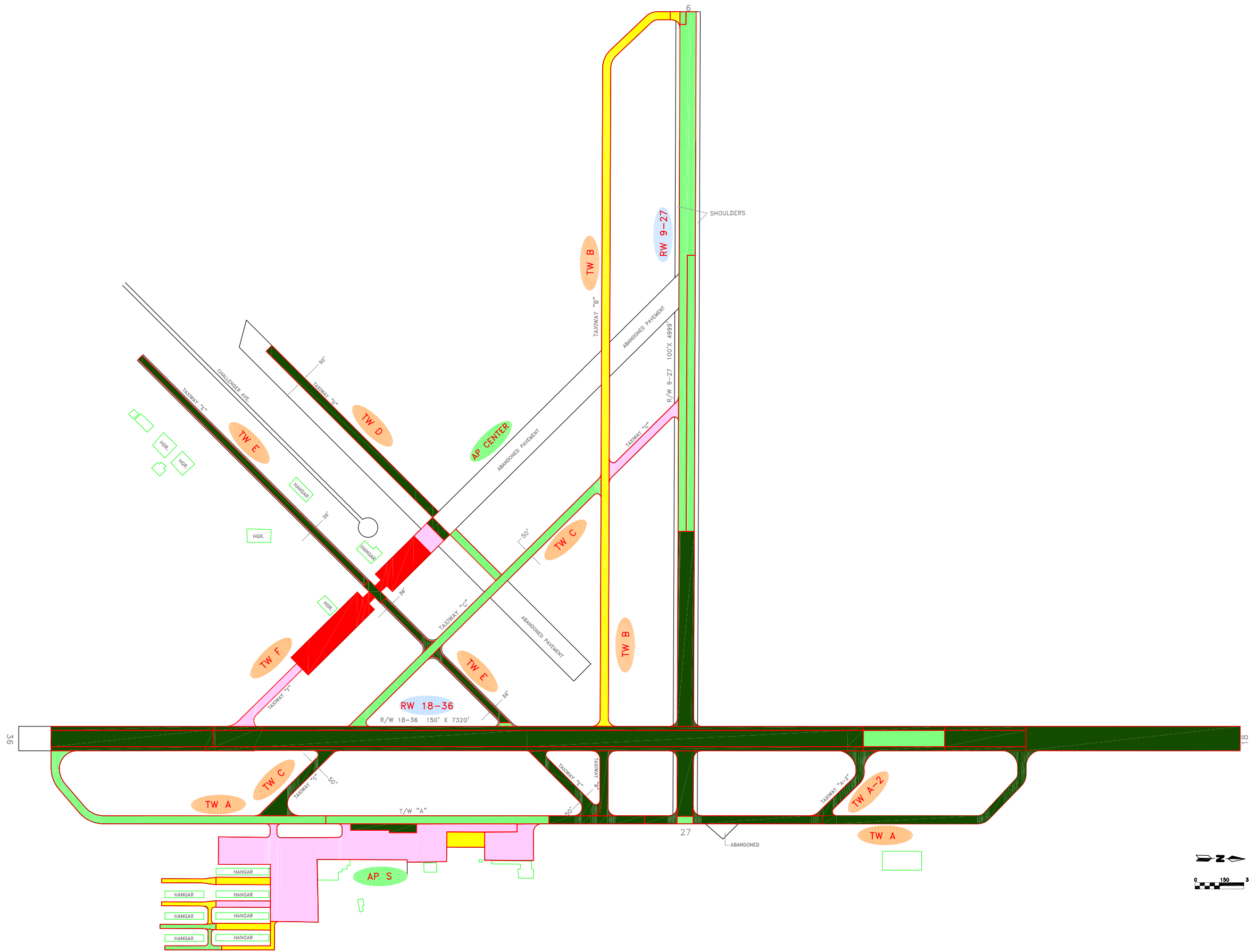
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER

**SFB**

FOOT DISTRICT

5



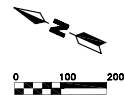
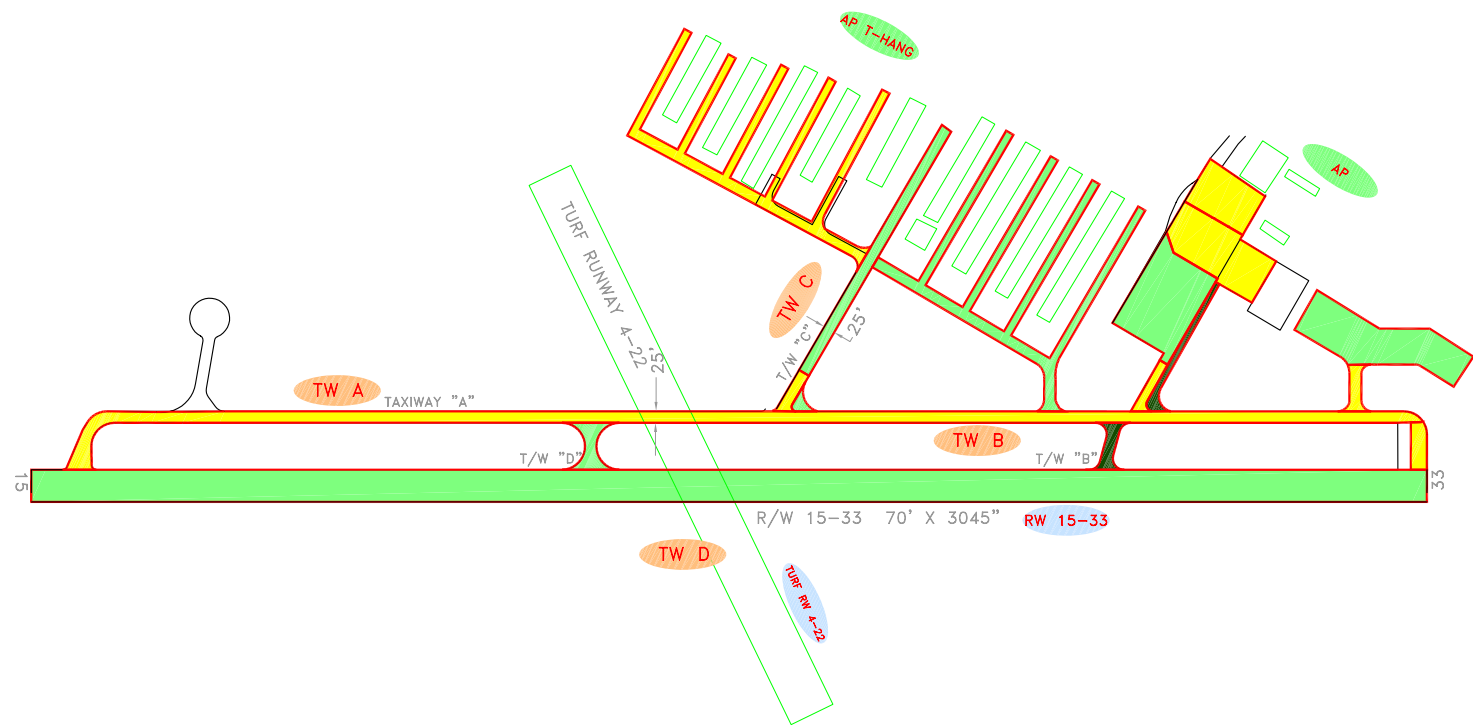
LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID
- Good
- Satisfactory
- Fair
- Poor
- Very Poor
- Serious
- Failed

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

NUMBER	DATE	REVISIONS
1	Feb-01-08	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	JCB	DRAWN: RWF
CHECKED:		DATE: 3-2-2006





# LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID

- Good
- Satisfactory
- Fair
- Poor
- Very Poor
- Serious
- Failed

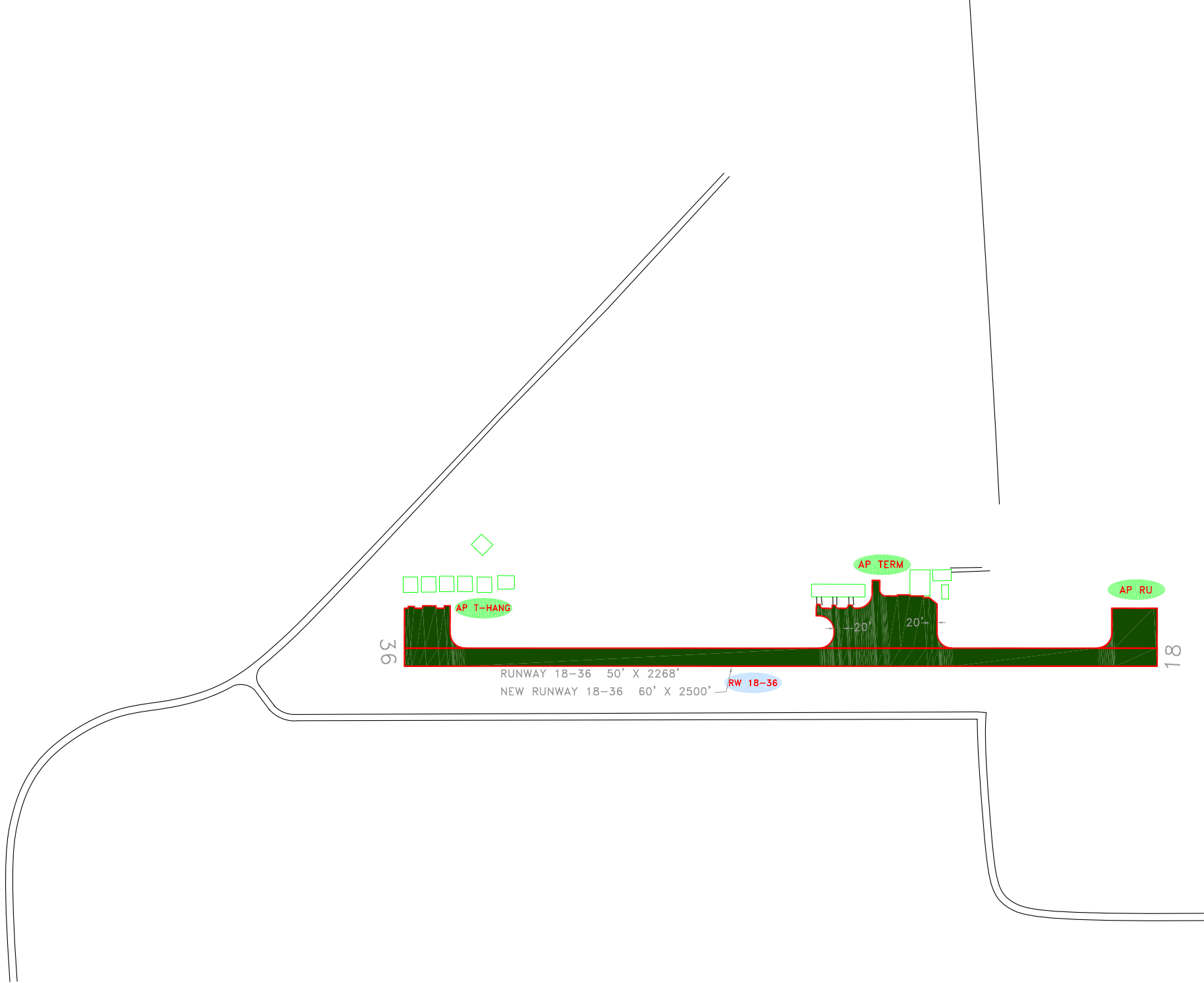
RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.

NUMBER	DATE	REVISIONS
1	Jan-30-08	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: VC CHECKED: DATE: 3-2-2006



2007 Condition Map		IDENTIFIER
<b>ARTHUR DUNN AIRPARK AIRPORT</b>		<b>X21</b>
<b>TITUSVILLE, BREVARD COUNTY, FLORIDA</b>		FOOT DISTRICT
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE		5





LEGEND

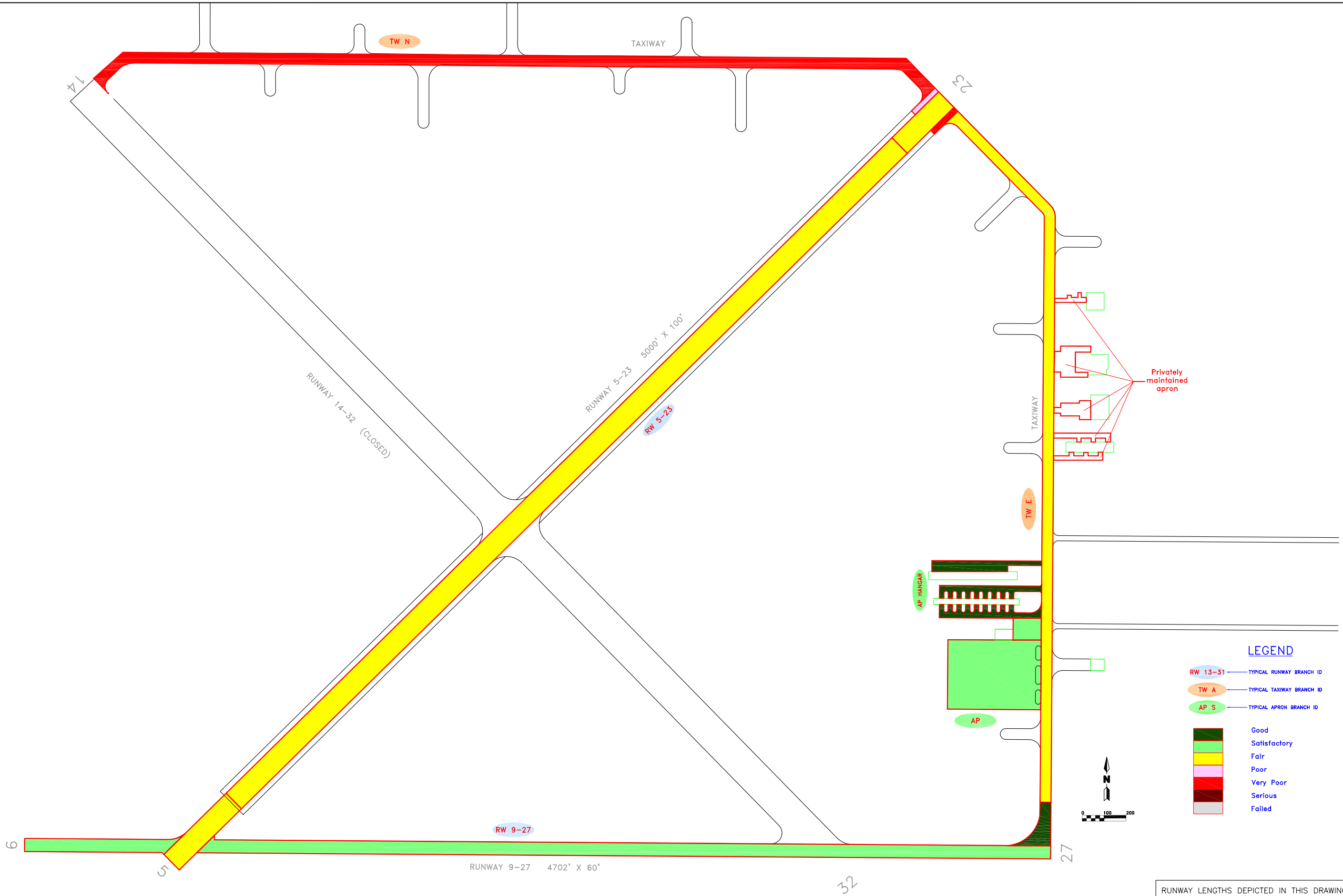
- RW 13-31 TYPICAL RUNWAY BRANCH ID
- TW A TYPICAL TAXIWAY BRANCH ID
- AP S TYPICAL APRON BRANCH ID
- Good
- Satisfactory
- Fair
- Poor
- Very Poor
- Serious
- Failed

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

NUMBER	DATE	REVISIONS
2	Apr-06	Draft Report
1	May-06	Revised per FDOT comments
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB CHECKED: DATE: 9-06-2007



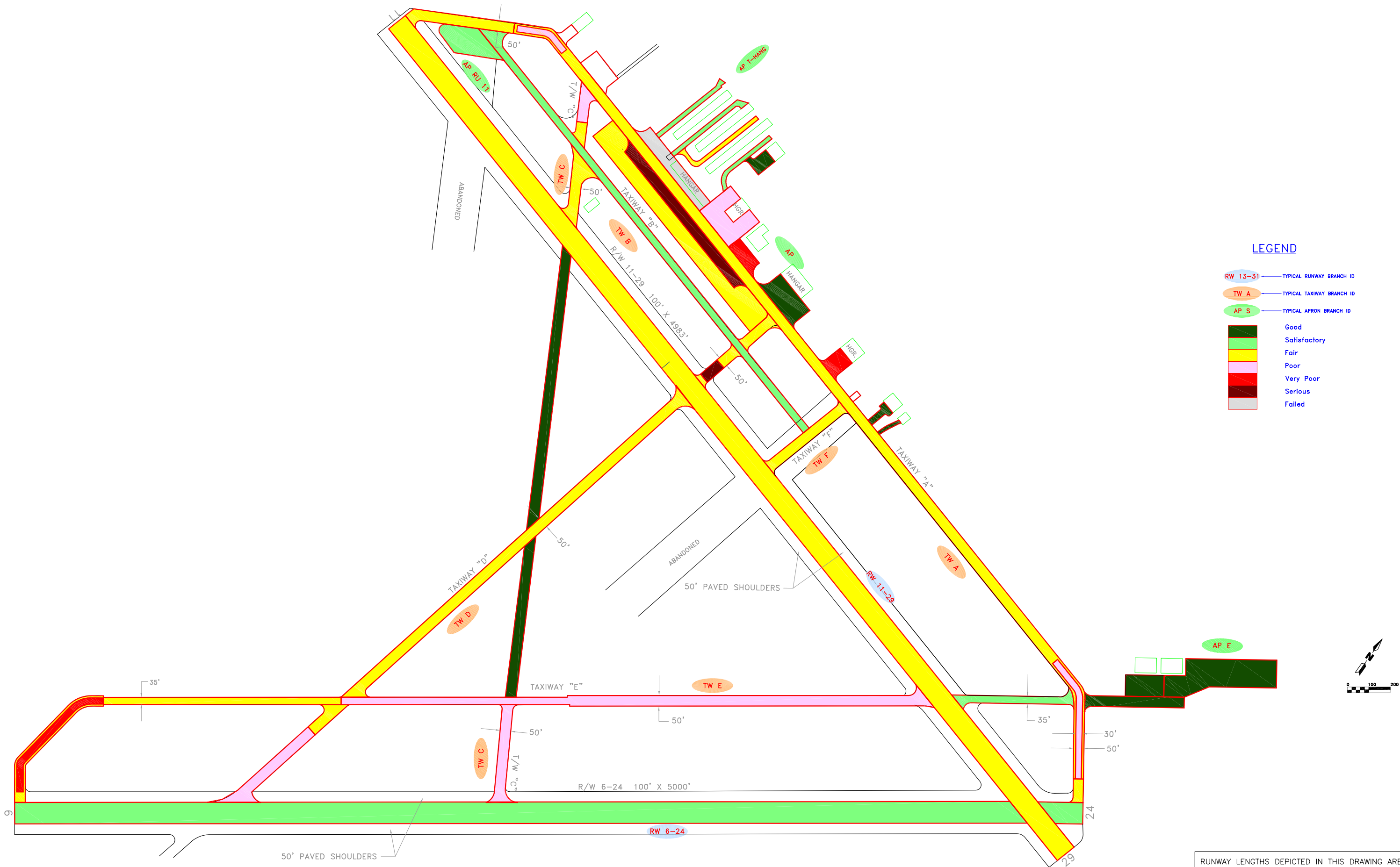
2006 Condition Map		IDENTIFIER
UMATILLA MUNICIPAL AIRPORT		X23
LAKE COUNTY, FLORIDA		FOOT DISTRICT
FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE		87 5



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

NUMBER	DATE	REVISIONS
1	Apr-07	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB CHECKED: DATE: 9-06-2007

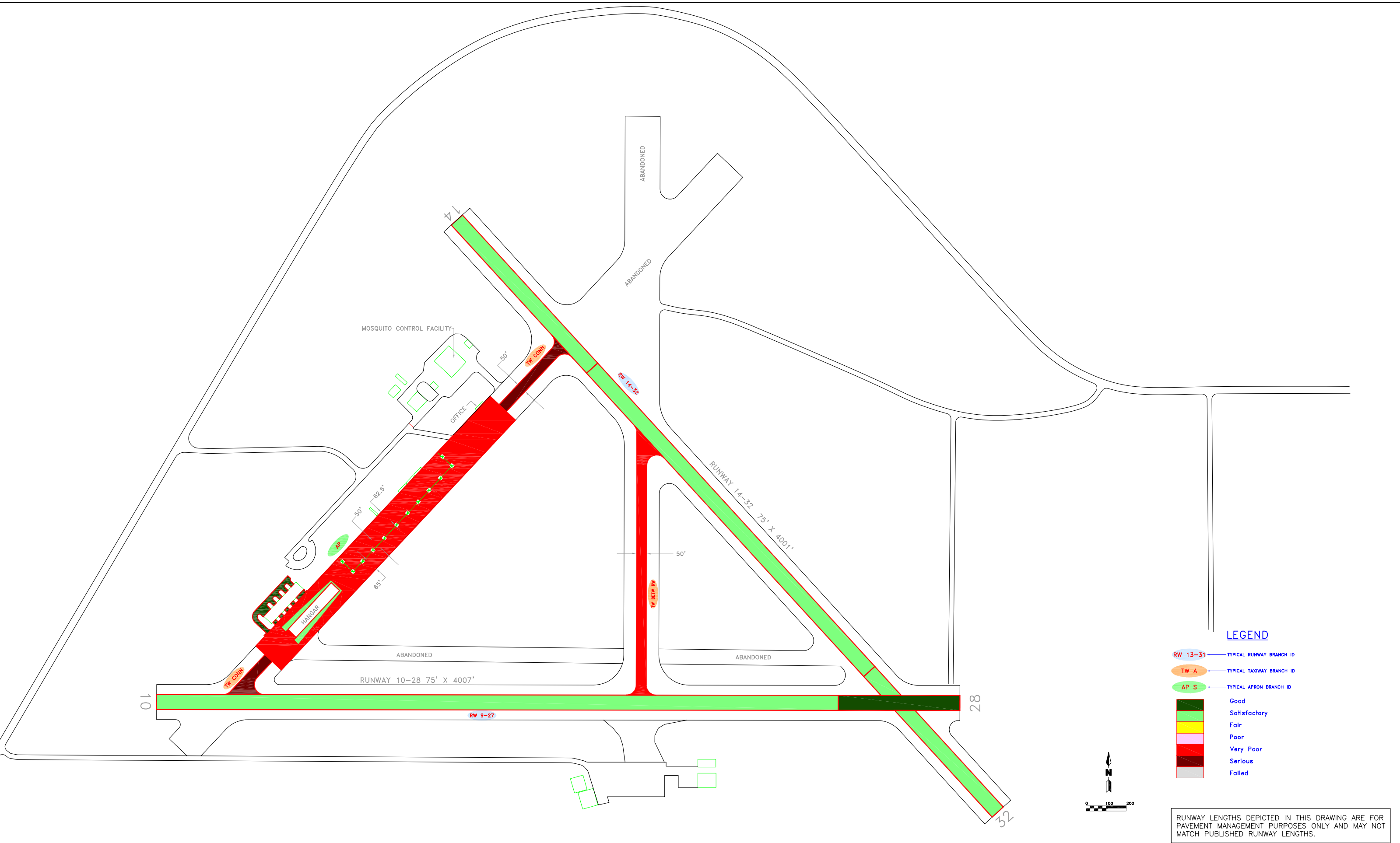




RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.

NUMBER	DATE	REVISIONS
2	Dec-07	Final Report. Checked by BX
1	Oct-07	Draft Report. Drawn by KJ. Checked by BX
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: BB CHECKED: DATE: 9-07-2007





NUMBER	DATE	REVISIONS
1	Mar-20	Draft Report
0	Feb-06	Initial Submittal
DESIGNED:	FL	DRAWN: GB CHECKED: DATE: 9-06-2007



2006 Condition Map

VALKARIA AIRPORT  
BREVARD COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER  
**X59**  
FOOT DISTRICT  
**5**

**APPENDIX B**

**MAJOR M&R PLAN**

**Table B-1: COI 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
COI	APRON	AP N	4203	PCC	1,904	2008	63	PCC Restoration	100	\$4,952
COI	APRON	AP N	4205	AAC	22,175	2008	40	Mill & Overlay	100	\$139,481
COI	APRON	AP N	4210	AAC	5,200	2008	36	Mill & Overlay	100	\$47,954
COI	APRON	AP S	4105	AAC	93,211	2008	61	Microsurfacing	100	\$293,335
COI	APRON	AP S	4106	AAC	20,000	2008	53	Mill & Overlay	100	\$108,580
COI	APRON	AP S	4110	AAC	89,230	2008	54	Mill & Overlay	100	\$458,821
COI	APRON	AP S	4111	AAC	14,000	2008	54	Mill & Overlay	100	\$71,988
COI	APRON	AP S	4115	AAC	90,000	2008	54	Mill & Overlay	100	\$462,780
COI	TAXIWAY	TW A	115	AAC	6,125	2011	63	Microsurfacing	100	\$17,408
COI	RUNWAY	RW 11-29	6105	AAC	270,000	2016	63	Microsurfacing	100	\$889,615
COI	TAXIWAY	TW A	110	AAC	3,200	2016	64	Microsurfacing	100	\$9,437

**Table B-2: DAB 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
DAB	APRON	AP NE	4205	AAC	20,200	2008	39	Mill & Overlay	100	\$197,617
DAB	APRON	AP NE	4210	AC	47,600	2008	31	Mill & Overlay	100	\$935,197
DAB	APRON	AP NE	4215	AAC	70,000	2008	24	Reconstruction	100	\$1,461,600
DAB	APRON	AP NE	4220	APC	80,300	2008	2	Reconstruction	100	\$1,676,664
DAB	APRON	AP NE	4230	APC	335,467	2008	22	Reconstruction	100	\$7,004,549
DAB	APRON	AP NE	4235	AC	23,023	2008	24	Reconstruction	100	\$480,720
DAB	APRON	AP NE	4240	APC	112,500	2008	14	Reconstruction	100	\$2,348,999
DAB	APRON	AP NE	4245	APC	11,000	2008	14	Reconstruction	100	\$229,680
DAB	APRON	AP NE	4250	AAC	124,000	2008	13	Reconstruction	100	\$2,589,119
DAB	APRON	AP NE	4255	APC	15,400	2008	0	Reconstruction	100	\$321,552
DAB	APRON	AP NE	4260	AC	59,550	2008	39	Mill & Overlay	100	\$582,577
DAB	APRON	AP NOVA	4305	AAC	92,800	2008	12	Reconstruction	100	\$1,937,664
DAB	APRON	AP NOVA	4310	APC	60,000	2008	9	Reconstruction	100	\$1,252,800
DAB	APRON	AP NOVA	4315	AC	72,000	2008	36	Mill & Overlay	100	\$970,704
DAB	RUNWAY	RW 16-34	6225	AAC	15,000	2008	45	Mill & Overlay	100	\$128,250
DAB	RUNWAY	RW 7L-25R	6102	AC	53,000	2008	64	Microsurfacing	100	\$164,194
DAB	RUNWAY	RW 7L-25R	6105	AC	250,000	2008	46	Mill & Overlay	100	\$2,137,499
DAB	RUNWAY	RW 7L-25R	6108	AC	26,500	2008	61	Microsurfacing	100	\$104,595
DAB	RUNWAY	RW 7L-25R	6110	AC	125,000	2008	62	Microsurfacing	100	\$458,000
DAB	RUNWAY	RW 7L-25R	6115	AAC	72,000	2008	31	Mill & Overlay	100	\$1,414,584
DAB	RUNWAY	RW 7L-25R	6120	AAC	12,600	2008	40	Mill & Overlay	100	\$107,730
DAB	RUNWAY	RW 7L-25R	6123	AC	35,000	2008	53	Mill & Overlay	100	\$253,890
DAB	RUNWAY	RW 7L-25R	6125	AAC	66,600	2008	43	Mill & Overlay	100	\$569,430
DAB	RUNWAY	RW 7L-25R	6127	AAC	18,000	2008	35	Mill & Overlay	100	\$264,870
DAB	RUNWAY	RW 7L-25R	6129	AAC	22,200	2008	57	Microsurfacing	100	\$122,677
DAB	RUNWAY	RW 7L-25R	6130	AAC	30,000	2008	51	Mill & Overlay	100	\$243,540
DAB	RUNWAY	RW 7L-25R	6135	AAC	45,000	2008	57	Microsurfacing	100	\$248,670
DAB	RUNWAY	RW 7L-25R	6138	AAC	72,000	2008	60	Microsurfacing	100	\$304,560
DAB	RUNWAY	RW 7L-25R	6140	AAC	63,000	2008	58	Microsurfacing	100	\$320,922



**Table B-2: DAB 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
DAB	RUNWAY	RW 7L-25R	6145	AAC	48,000	2008	56	Microsurfacing	100	\$285,984
DAB	RUNWAY	RW 7L-25R	6150	AAC	168,000	2008	64	Microsurfacing	100	\$520,464
DAB	RUNWAY	RW 7L-25R	6155	AAC	189,000	2008	56	Microsurfacing	100	\$1,126,061
DAB	RUNWAY	RW 7L-25R	6160	AAC	97,230	2008	58	Microsurfacing	100	\$495,289
DAB	RUNWAY	RW 7L-25R	6162	AC	16,770	2008	51	Mill & Overlay	100	\$136,139
DAB	RUNWAY	RW 7L-25R	6165	AAC	104,850	2008	61	Microsurfacing	100	\$413,843
DAB	RUNWAY	RW 7L-25R	6170	AAC	66,150	2008	61	Microsurfacing	100	\$261,094
DAB	RUNWAY	RW 7R-25L	6305	AAC	282,000	2008	50	Mill & Overlay	100	\$2,411,099
DAB	RUNWAY	RW 7R-25L	6310	AAC	18,000	2008	62	Microsurfacing	100	\$65,952
DAB	TAXIWAY	TW A	105	AAC	59,725	2008	40	Mill & Overlay	100	\$510,649
DAB	TAXIWAY	TW A	107	AAC	8,000	2008	57	Microsurfacing	100	\$44,208
DAB	TAXIWAY	TW A	115	AC	15,000	2008	63	Microsurfacing	100	\$50,715
DAB	TAXIWAY	TW A	125	AC	29,975	2008	61	Microsurfacing	100	\$118,311
DAB	TAXIWAY	TW E	519	AAC	8,160	2008	58	Microsurfacing	100	\$41,567
DAB	TAXIWAY	TW E	530	AC	3,138	2008	60	Microsurfacing	100	\$13,274
DAB	TAXIWAY	TW E2	520	AC	15,300	2008	63	Microsurfacing	100	\$51,729
DAB	TAXIWAY	TW N	1408	AAC	592,500	2008	45	Mill & Overlay	100	\$5,065,873
DAB	TAXIWAY	TW N	1457	AC	32,325	2008	59	Microsurfacing	100	\$150,699
DAB	TAXIWAY	TW N2	1420	AAC	37,520	2008	52	Mill & Overlay	100	\$288,379
DAB	TAXIWAY	TW N3	1430	AAC	41,200	2008	50	Mill & Overlay	100	\$352,260
DAB	TAXIWAY	TW N5	1455	AAC	4,130	2008	56	Microsurfacing	100	\$24,607
DAB	TAXIWAY	TW N6	1460	AAC	50,000	2008	60	Microsurfacing	100	\$211,500
DAB	TAXIWAY	TW N7	1465	AAC	30,000	2008	53	Mill & Overlay	100	\$217,620
DAB	TAXIWAY	TW N9	1480	AAC	46,960	2008	55	Mill & Overlay	100	\$300,074
DAB	TAXIWAY	TW P	820	AC	58,500	2008	11	Reconstruction	100	\$1,221,480
DAB	TAXIWAY	TW S	1905	AC	68,000	2008	41	Mill & Overlay	100	\$581,400
DAB	TAXIWAY	TW S	1910	AC	8,500	2008	21	Reconstruction	100	\$177,480
DAB	TAXIWAY	TW S	1912	AAC	4,250	2008	51	Mill & Overlay	100	\$34,501
DAB	TAXIWAY	TW S	1915	AC	16,850	2008	64	Microsurfacing	100	\$52,201



**Table B-2: DAB 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
DAB	TAXIWAY	TW S	1920	AAC	3,720	2008	57	Microsurfacing	100	\$20,557
DAB	TAXIWAY	TW S	1925	AAC	14,000	2008	64	Microsurfacing	100	\$43,372
DAB	TAXIWAY	TW S	1932	AC	32,000	2008	35	Mill & Overlay	100	\$470,880
DAB	TAXIWAY	TW S	1935	AC	10,500	2008	32	Mill & Overlay	100	\$193,347
DAB	TAXIWAY	TW S	1950	AC	16,500	2008	33	Mill & Overlay	100	\$283,486
DAB	TAXIWAY	TW W	2320	AAC	75,000	2008	64	Microsurfacing	100	\$232,350
DAB	TAXIWAY	TW W	2335	AAC	40,000	2008	42	Mill & Overlay	100	\$342,000
DAB	TAXIWAY	TW W	2365	AAC	6,900	2008	63	Microsurfacing	100	\$23,329
DAB	TAXIWAY	TW W2	2325	AAC	10,450	2008	63	Microsurfacing	100	\$35,331
DAB	TAXIWAY	TW W2	2330	AAC	3,620	2008	55	Mill & Overlay	100	\$23,132
DAB	TAXIWAY	TW W3	2345	AAC	3,838	2008	63	Microsurfacing	100	\$12,976
DAB	TAXIWAY	TW W4	2370	AAC	20,400	2008	60	Microsurfacing	100	\$86,292
DAB	APRON	AP NE	4225	APC	39,600	2009	63	Microsurfacing	100	\$137,904
DAB	TAXIWAY	TW E	523	AAC	3,455	2009	64	Microsurfacing	100	\$11,025
DAB	TAXIWAY	TW N4	1440	AAC	38,100	2009	63	Microsurfacing	100	\$132,681
DAB	TAXIWAY	TW E	505	AC	57,800	2010	64	Microsurfacing	100	\$189,969
DAB	TAXIWAY	TW E	515	AC	138,000	2010	64	Microsurfacing	100	\$453,560
DAB	TAXIWAY	TW E	522	AC	3,217	2010	64	Microsurfacing	100	\$10,573
DAB	TAXIWAY	TW N	1468	AC	25,800	2010	64	Microsurfacing	100	\$84,796
DAB	TAXIWAY	TW E	535	AC	2,685	2011	64	Microsurfacing	100	\$9,089
DAB	TAXIWAY	TW E3	540	AC	10,300	2011	64	Microsurfacing	100	\$34,868
DAB	TAXIWAY	TW N8	1470	AC	46,950	2011	64	Microsurfacing	100	\$158,938
DAB	TAXIWAY	TW S	1945	AC	16,500	2011	64	Microsurfacing	100	\$55,857
DAB	TAXIWAY	TW E4	548	AAC	2,700	2012	63	Microsurfacing	100	\$10,274
DAB	TAXIWAY	TW N4	1445	AAC	27,960	2012	64	Microsurfacing	100	\$97,492
DAB	TAXIWAY	TW W	2305	AC	111,000	2012	64	Microsurfacing	100	\$387,038
DAB	TAXIWAY	TW W	2340	AAC	63,000	2012	64	Microsurfacing	100	\$219,670
DAB	TAXIWAY	TW W3	2350	AAC	9,600	2012	63	Microsurfacing	100	\$36,531
DAB	TAXIWAY	TW E4	550	AC	13,300	2013	64	Microsurfacing	100	\$47,766

**Table B-2: DAB 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
DAB	TAXIWAY	TW A	120	AC	52,500	2014	64	Microsurfacing	100	\$194,207
DAB	RUNWAY	RW 16-34	6215	AAC	368,500	2015	63	Microsurfacing	100	\$1,532,297
DAB	TAXIWAY	TW E	507	AC	12,400	2015	64	Microsurfacing	100	\$47,246
DAB	TAXIWAY	TW W5	2380	AC	50,700	2015	64	Microsurfacing	100	\$193,174
DAB	TAXIWAY	TW N5	1450	AC	61,750	2017	64	Microsurfacing	100	\$249,605
DAB	TAXIWAY	TW S	1930	AAC	2,788	2017	63	Microsurfacing	100	\$12,299
DAB	TAXIWAY	TW W	2360	AC	59,400	2017	64	Microsurfacing	100	\$240,106
DAB	TAXIWAY	TW W2	2322	AAC	4,125	2017	63	Microsurfacing	100	\$18,197

**Table B-3: DED 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
DED	APRON	AP SE	4112	AC	158,400	2008	60	Microsurfacing	100	\$582,912
DED	APRON	AP SE	4125	AC	24,400	2008	58	Microsurfacing	100	\$108,970
DED	RUNWAY	RW 12-30	6105	AAC	600,000	2008	51	Mill & Overlay	100	\$4,330,202
DED	RUNWAY	RW 5-23	6205	AAC	30,000	2008	42	Mill & Overlay	100	\$228,300
DED	RUNWAY	RW 5-23	6215	AAC	206,250	2008	64	Microsurfacing	100	\$529,650
DED	RUNWAY	RW 5-23	6220	AAC	12,000	2008	61	Microsurfacing	100	\$40,824
DED	RUNWAY	RW 5-23	6225	AAC	36,375	2008	64	Microsurfacing	100	\$93,411
DED	RUNWAY	RW 5-23	6230	AAC	24,000	2008	58	Microsurfacing	100	\$107,184
DED	TAXIWAY	TW A & N-S	110	AC	102,400	2008	64	Microsurfacing	100	\$262,963
DED	TAXIWAY	TW A & N-S	150	AC	116,000	2008	58	Microsurfacing	100	\$518,056
DED	TAXIWAY	TW A & N-S	155	AAC	12,000	2008	40	Mill & Overlay	100	\$91,320
DED	TAXIWAY	TW A & N-S	162	AC	18,000	2008	60	Microsurfacing	100	\$66,240
DED	TAXIWAY	TW A & N-S	165	AC	18,000	2008	62	Microsurfacing	100	\$56,232
DED	TAXIWAY	TW B	205	AC	28,900	2008	60	Microsurfacing	100	\$106,352
DED	TAXIWAY	TW B	220	AC	107,100	2008	62	Microsurfacing	100	\$334,580
DED	TAXIWAY	TW C	305	AC	20,800	2008	64	Microsurfacing	100	\$53,414
DED	TAXIWAY	TW C	306	AAC	6,975	2008	63	Microsurfacing	100	\$19,851
DED	TAXIWAY	TW D	410	AAC	5,904	2008	61	Microsurfacing	100	\$20,085
DED	TAXIWAY	TW D	450	AC	154,450	2008	54	Mill & Overlay	100	\$932,570
DED	TAXIWAY	TW E	510	AC	6,250	2008	42	Mill & Overlay	100	\$47,563
DED	TAXIWAY	TW A & N-S	160	AC	15,000	2009	64	Microsurfacing	100	\$39,676
DED	TAXIWAY	TW D	405	AC	20,800	2009	64	Microsurfacing	100	\$55,017
DED	RUNWAY	RW 5-23	6218	AAC	9,550	2010	64	Microsurfacing	100	\$26,018
DED	APRON	AP SE	4135	AC	20,000	2011	64	Microsurfacing	100	\$56,122
DED	TAXIWAY	TW A & N-S	105	AC	31,000	2011	63	Microsurfacing	100	\$96,407
DED	TAXIWAY	TW A & N-S	115	AC	50,834	2011	64	Microsurfacing	100	\$142,646
DED	RUNWAY	RW 5-23	6210	AAC	30,000	2012	64	Microsurfacing	100	\$86,709
DED	TAXIWAY	TW E	505	AC	56,000	2012	64	Microsurfacing	100	\$161,857
DED	APRON	AP T-HANG	4305	AC	90,000	2013	64	Microsurfacing	100	\$267,931
DED	APRON	AP S	5105	AC	36,000	2015	64	Microsurfacing	100	\$113,699
DED	APRON	AP SE	4120	AC	49,500	2015	64	Microsurfacing	100	\$156,337
DED	TAXIWAY	TW A & N-S	106	AAC	7,208	2015	64	Microsurfacing	100	\$22,765
DED	TAXIWAY	TW B	206	AAC	9,645	2017	64	Microsurfacing	100	\$32,317

**Table B-4: EVB 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
EVB	APRON	AP	4102	PCC	31,042	2008	25	Reconstruction	100	\$576,450
EVB	APRON	AP	4105	PCC	11,550	2008	22	Reconstruction	100	\$214,483
EVB	APRON	AP	4110	PCC	2,080	2008	22	Reconstruction	100	\$38,626
EVB	APRON	AP	4115	PCC	8,700	2008	14	Reconstruction	100	\$161,559
EVB	APRON	AP	4130	PCC	11,600	2008	50	PCC Restoration	100	\$88,276
EVB	APRON	AP	4135	AC	4,950	2008	31	Mill & Overlay	100	\$86,496
EVB	APRON	AP	4140	AC	51,200	2008	38	Mill & Overlay	100	\$501,863
EVB	APRON	AP	4145	AC	17,500	2008	58	Microsurfacing	100	\$78,155
EVB	APRON	AP	4160	AAC	7,750	2008	48	Mill & Overlay	100	\$58,978
EVB	RUNWAY	RW 11-29	6105	AAC	430,500	2008	50	Mill & Overlay	100	\$3,276,107
EVB	RUNWAY	RW 15-33	6305	AC	127,500	2008	40	Mill & Overlay	100	\$970,275
EVB	RUNWAY	RW 15-33	6310	AAC	10,500	2008	39	Mill & Overlay	100	\$91,413
EVB	RUNWAY	RW 15-33	6320	AAC	22,500	2008	38	Mill & Overlay	100	\$220,545
EVB	RUNWAY	RW 15-33	6325	AC	18,750	2008	44	Mill & Overlay	100	\$142,688
EVB	RUNWAY	RW 15-33	6330	AAC	5,740	2008	45	Mill & Overlay	100	\$43,681
EVB	RUNWAY	RW 2-20	6405	AC	85,000	2008	35	Mill & Overlay	100	\$1,112,650
EVB	RUNWAY	RW 2-20	6425	AC	365,000	2008	37	Mill & Overlay	100	\$3,977,771
EVB	RUNWAY	RW 2-20	6430	AAC	14,000	2008	55	Mill & Overlay	100	\$79,030
EVB	RUNWAY	RW 2-20	6445	AC	36,000	2008	40	Mill & Overlay	100	\$273,960
EVB	RUNWAY	RW 2-20	6450	AAC	25,000	2008	45	Mill & Overlay	100	\$190,250
EVB	RUNWAY	RW 7-25	6202	AC	21,450	2008	41	Mill & Overlay	100	\$163,235
EVB	RUNWAY	RW 7-25	6210	AC	18,750	2008	19	Reconstruction	100	\$348,187
EVB	TAXIWAY	TW A	120	AC	24,000	2008	2	Reconstruction	100	\$445,680
EVB	TAXIWAY	TW A	125	AC	6,100	2008	22	Reconstruction	100	\$113,277
EVB	TAXIWAY	TW D	408	AC	4,570	2008	30	Reconstruction	100	\$84,865
EVB	TAXIWAY	TW D	410	AC	31,000	2008	19	Reconstruction	100	\$575,670
EVB	TAXIWAY	TW D	415	AC	160,000	2008	15	Reconstruction	100	\$2,971,200
EVB	APRON	AP	4165	PCC	8,500	2009	64	PCC Restoration	100	\$22,483
EVB	APRON	AP	4104	AC	4,187	2011	63	Microsurfacing	100	\$13,021
EVB	TAXIWAY	TW A	105	AAC	103,200	2012	64	Microsurfacing	100	\$298,280
EVB	RUNWAY	RW 7-25	6205	AAC	335,250	2017	64	Microsurfacing	100	\$1,123,308
EVB	TAXIWAY	TW C	310	AC	28,800	2017	64	Microsurfacing	100	\$96,499

**Table B-5: ISM 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
ISM	APRON	AP C NW	4305	AC	140,000	2008	60	Microsurfacing	100	\$515,200
ISM	APRON	AP C NW	4310	PCC	6,050	2008	56	PCC Restoration	100	\$31,775
ISM	APRON	AP CENTER	4205	AC	270,000	2008	61	Microsurfacing	100	\$918,540
ISM	APRON	AP N	4105	AAC	102,104	2008	56	Microsurfacing	100	\$536,250
ISM	APRON	AP N	4110	AC	45,577	2008	57	Microsurfacing	100	\$221,459
ISM	APRON	AP N	4112	AC	117,880	2008	39	Mill & Overlay	100	\$1,026,264
ISM	APRON	AP N	4125	AC	38,250	2008	21	Reconstruction	100	\$710,302
ISM	APRON	AP N	4130	AC	29,000	2008	36	Mill & Overlay	100	\$347,826
ISM	APRON	AP N	4150	PCC	18,000	2008	43	PCC Restoration	100	\$136,980
ISM	APRON	AP N	4151	AC	5,600	2008	63	Microsurfacing	100	\$15,938
ISM	APRON	AP N	4155	AC	13,600	2008	58	Microsurfacing	100	\$60,738
ISM	APRON	AP NW	4405	AC	37,500	2008	35	Mill & Overlay	100	\$490,875
ISM	APRON	AP NW	4410	PCC	43,500	2008	28	Reconstruction	100	\$807,795
ISM	APRON	AP RU15-33	5110	AC	21,000	2008	61	Microsurfacing	100	\$71,442
ISM	APRON	AP S	4608	AC	179,454	2008	53	Mill & Overlay	100	\$1,154,069
ISM	APRON	AP S T-HAN	4710	AC	78,800	2008	28	Reconstruction	100	\$1,463,316
ISM	RUNWAY	RW 6-24	6205	PCC	30,000	2008	50	PCC Restoration	100	\$228,300
ISM	RUNWAY	RW 6-24	6210	PCC	15,000	2008	40	PCC Restoration	100	\$114,150
ISM	RUNWAY	RW 6-24	6219	AAC	25,200	2008	58	Microsurfacing	100	\$112,543
ISM	RUNWAY	RW 6-24	6220	AC	64,800	2008	31	Mill & Overlay	100	\$1,132,315
ISM	RUNWAY	RW 6-24	6239	AAC	19,950	2008	47	Mill & Overlay	100	\$151,820
ISM	RUNWAY	RW 6-24	6240	AC	67,310	2008	37	Mill & Overlay	100	\$733,545
ISM	RUNWAY	RW 6-24	6241	AC	3,240	2008	41	Mill & Overlay	100	\$24,656
ISM	RUNWAY	RW 6-24	6245	PCC	30,300	2008	46	PCC Restoration	100	\$230,583
ISM	RUNWAY	RW 6-24	6250	PCC	15,150	2008	42	PCC Restoration	100	\$115,292
ISM	TAXIWAY	TW A	126	AC	61,000	2008	59	Microsurfacing	100	\$248,453
ISM	TAXIWAY	TW A	130	AC	70,000	2008	48	Mill & Overlay	100	\$532,700
ISM	TAXIWAY	TW A3	160	AAC	15,000	2008	61	Microsurfacing	100	\$51,030
ISM	TAXIWAY	TW B	212	AC	10,546	2008	64	Microsurfacing	100	\$27,082

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

<b>Network</b>	<b>Branch Use</b>	<b>Branch ID</b>	<b>Section ID</b>	<b>Surface</b>	<b>Area, SqFt</b>	<b>Year</b>	<b>PCI Before Maint.</b>	<b>Activities</b>	<b>PCI After Maint.</b>	<b>Cost</b>
ISM	TAXIWAY	TW B	215	AC	50,000	2008	50	Mill & Overlay	100	\$380,500
ISM	TAXIWAY	TW C	305	AAC	47,414	2008	52	Mill & Overlay	100	\$323,553
ISM	TAXIWAY	TW C	308	AAC	10,750	2008	64	Microsurfacing	100	\$27,606
ISM	TAXIWAY	TW C	310	AAC	15,000	2008	58	Microsurfacing	100	\$66,990
ISM	TAXIWAY	TW C	320	AC	50,000	2008	63	Microsurfacing	100	\$142,300
ISM	TAXIWAY	TW CONN NW	850	AC	20,000	2008	61	Microsurfacing	100	\$68,040
ISM	TAXIWAY	TW D	404	AC	2,550	2008	37	Mill & Overlay	100	\$27,790
ISM	TAXIWAY	TW D	405	AC	90,000	2008	60	Microsurfacing	100	\$331,200
ISM	TAXIWAY	TW D	410	AC	53,200	2008	57	Microsurfacing	100	\$258,499
ISM	TAXIWAY	TW F	610	AC	35,000	2008	64	Microsurfacing	100	\$89,880
ISM	TAXIWAY	TW N RAMP	905	AC	2,945	2008	53	Mill & Overlay	100	\$18,939
ISM	TAXIWAY	TW N RAMP	910	AC	3,700	2008	55	Mill & Overlay	100	\$20,887
ISM	APRON	AP N	4115	AAC	10,200	2011	63	Microsurfacing	100	\$31,721
ISM	APRON	AP S	4610	AC	34,600	2011	64	Microsurfacing	100	\$97,092
ISM	RUNWAY	RW 6-24	6235	AC	175,000	2011	63	Microsurfacing	100	\$544,233
ISM	TAXIWAY	TW C	309	AAC	7,600	2012	64	Microsurfacing	100	\$21,966
ISM	APRON	AP RU15-33	5105	AC	9,800	2015	64	Microsurfacing	100	\$30,952
ISM	RUNWAY	RW 6-24	6217	AAC	3,250	2017	64	Microsurfacing	100	\$10,890
ISM	TAXIWAY	TW B	210	AC	9,790	2017	64	Microsurfacing	100	\$32,803

**Table B-6: LEE 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
LEE	APRON	AP HANG	4305	PCC	12,500	2008	34	PCC Restoration	100	\$133,600
LEE	APRON	AP HANG	4310	PCC	13,200	2008	0	Reconstruction	100	\$179,784
LEE	APRON	AP S	4201	PCC	900	2008	26	Reconstruction	100	\$12,258
LEE	APRON	AP S	4205	AC	21,250	2008	59	Microsurfacing	100	\$78,774
LEE	APRON	AP S	4210	AC	100,000	2008	58	Microsurfacing	100	\$399,400
LEE	RUNWAY	RW 3-21	6102	AC	1,913	2008	39	Mill & Overlay	100	\$13,435
LEE	RUNWAY	RW 3-21	6104	AAC	27,850	2008	56	Microsurfacing	100	\$127,219
LEE	RUNWAY	RW 3-21	6105	AC	292,500	2008	63	Microsurfacing	100	\$760,793
LEE	RUNWAY	RW 3-21	6107	AC	64,650	2008	43	Mill & Overlay	100	\$406,649
LEE	RUNWAY	RW 3-21	6112	AC	3,750	2008	52	Mill & Overlay	100	\$21,435
LEE	TAXIWAY	TW A	105	AC	56,375	2008	60	Microsurfacing	100	\$192,803
LEE	TAXIWAY	TW A	108	AC	3,600	2008	60	Microsurfacing	100	\$12,312
LEE	TAXIWAY	TW B	205	AC	41,600	2008	34	Mill & Overlay	100	\$444,621
LEE	TAXIWAY	TW B	207	AC	9,800	2008	50	Mill & Overlay	100	\$61,642
LEE	TAXIWAY	TW D	506	AC	4,846	2008	64	Microsurfacing	100	\$11,282
LEE	TAXIWAY	TW J	1002	AAC	1,375	2008	37	Mill & Overlay	100	\$11,672
LEE	TAXIWAY	TW J	1005	AC	18,740	2008	32	Mill & Overlay	100	\$227,766
LEE	TAXIWAY	TW K	1105	AC	97,350	2008	64	Microsurfacing	100	\$226,631
LEE	TAXIWAY	TW D	507	AC	4,046	2009	64	Microsurfacing	100	\$9,702
LEE	TAXIWAY	TW K	1110	AC	50,270	2009	64	Microsurfacing	100	\$120,539
LEE	TAXIWAY	TW A	107	AC	3,658	2010	64	Microsurfacing	100	\$9,034
LEE	TAXIWAY	TW K	1112	AC	6,720	2010	64	Microsurfacing	100	\$16,597
LEE	APRON	AP HANG	4320	AC	10,200	2011	63	Microsurfacing	100	\$28,990
LEE	TAXIWAY	TW D	508	AC	2,934	2011	64	Microsurfacing	100	\$7,464
LEE	TAXIWAY	TW K	1115	AC	7,000	2011	64	Microsurfacing	100	\$17,807
LEE	APRON	AP HANG	4325	AC	52,500	2012	64	Microsurfacing	100	\$137,560
LEE	APRON	AP CNTR	4110	AC	100,000	2016	63	Microsurfacing	100	\$329,487



**Table B-7: MLB 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
MLB	APRON	AP CENTER	4992	APC	2,900	2008	45	Mill & Overlay	100	\$24,795
MLB	APRON	AP E	4406	APC	120,000	2008	54	Mill & Overlay	100	\$818,640
MLB	APRON	AP E	4410	APC	190,000	2008	43	Mill & Overlay	100	\$1,624,499
MLB	APRON	AP N GA	4105	AC	109,250	2008	63	Microsurfacing	100	\$369,374
MLB	APRON	AP TERM	4211	APC	16,600	2008	42	Mill & Overlay	100	\$141,930
MLB	APRON	AP TERM	4215	APC	23,000	2008	40	Mill & Overlay	100	\$196,650
MLB	APRON	AP TERM	4217	APC	11,600	2008	48	Mill & Overlay	100	\$99,180
MLB	APRON	AP W	4310	AC	43,680	2008	19	Reconstruction	100	\$912,038
MLB	APRON	AP W	4315	AC	57,500	2008	20	Reconstruction	100	\$1,200,600
MLB	APRON	AP W	4325	PCC	50,150	2008	0	Reconstruction	100	\$1,047,132
MLB	APRON	AP W	4330	PCC	150,100	2008	9	Reconstruction	100	\$3,134,087
MLB	RUNWAY	RW 5-23	6310	AAC	3,375	2008	64	Microsurfacing	100	\$10,456
MLB	RUNWAY	RW 9L-27R	6235	AAC	172,500	2008	56	Microsurfacing	100	\$1,027,754
MLB	TAXIWAY	TW A	105	AAC	23,644	2008	53	Mill & Overlay	100	\$171,514
MLB	TAXIWAY	TW A	110	AAC	12,940	2008	50	Mill & Overlay	100	\$110,637
MLB	TAXIWAY	TW A	115	AAC	50,350	2008	55	Mill & Overlay	100	\$321,736
MLB	TAXIWAY	TW A	123	AAC	98,000	2008	64	Microsurfacing	100	\$303,604
MLB	TAXIWAY	TW A	125	AAC	195,000	2008	54	Mill & Overlay	100	\$1,330,289
MLB	TAXIWAY	TW A	129	AAC	9,884	2008	64	Microsurfacing	100	\$30,621
MLB	TAXIWAY	TW A	130	AC	55,350	2008	70	Microsurfacing	100	\$77,490
MLB	TAXIWAY	TW C	327	AAC	7,500	2008	63	Microsurfacing	100	\$25,357
MLB	TAXIWAY	TW D	412	AC	4,360	2008	50	Mill & Overlay	100	\$37,278
MLB	TAXIWAY	TW D	450	AC	22,000	2008	51	Mill & Overlay	100	\$178,596
MLB	TAXIWAY	TW D	455	AC	18,900	2008	21	Reconstruction	100	\$394,632
MLB	TAXIWAY	TW D	460	AC	16,550	2008	33	Mill & Overlay	100	\$284,345
MLB	TAXIWAY	TW L	1210	AC	14,600	2008	51	Mill & Overlay	100	\$118,523
MLB	TAXIWAY	TW L	1215	AAC	4,770	2008	50	Mill & Overlay	100	\$40,783
MLB	TAXIWAY	TW P	1602	AAC	17,700	2008	55	Mill & Overlay	100	\$113,103
MLB	TAXIWAY	TW P	1605	AC	37,300	2008	51	Mill & Overlay	100	\$302,801



**Table B-7: MLB 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
MLB	TAXIWAY	TW P	1610	AAC	13,400	2008	63	Microsurfacing	100	\$45,305
MLB	TAXIWAY	TW Q	1717	AAC	5,350	2008	60	Microsurfacing	100	\$22,630
MLB	TAXIWAY	TW Q	1720	AAC	12,000	2008	54	Mill & Overlay	100	\$81,864
MLB	TAXIWAY	TW R	1802	AAC	7,500	2008	63	Microsurfacing	100	\$25,357
MLB	TAXIWAY	TW R	1807	AAC	7,200	2008	48	Mill & Overlay	100	\$61,560
MLB	TAXIWAY	TW R	1810	AAC	42,000	2008	73	Microsurfacing	100	\$51,240
MLB	TAXIWAY	TW T	2005	AAC	15,500	2008	49	Mill & Overlay	100	\$132,525
MLB	TAXIWAY	TW T	2010	AC	19,000	2008	53	Mill & Overlay	100	\$137,826
MLB	TAXIWAY	TW V	2205	AC	14,500	2008	47	Mill & Overlay	100	\$123,975
MLB	TAXIWAY	TW C	325	AAC	9,600	2009	64	Microsurfacing	100	\$30,633
MLB	TAXIWAY	TW L	1204	AAC	16,700	2009	64	Microsurfacing	100	\$53,289
MLB	TAXIWAY	TW N	1405	AC	27,000	2009	64	Microsurfacing	100	\$86,155
MLB	TAXIWAY	TW V	2210	AC	15,000	2009	64	Microsurfacing	100	\$47,864
MLB	RUNWAY	RW 5-23	6315	AAC	6,675	2010	63	Microsurfacing	100	\$23,943
MLB	RUNWAY	RW 9L-27R	6215	AAC	92,500	2010	64	Microsurfacing	100	\$304,017
MLB	TAXIWAY	TW A	120	AAC	292,500	2010	64	Microsurfacing	100	\$961,350
MLB	TAXIWAY	TW D	413	AAC	2,646	2010	63	Microsurfacing	100	\$9,491
MLB	RUNWAY	RW 9L-27R	6210	AAC	185,000	2011	64	Microsurfacing	100	\$626,274
MLB	TAXIWAY	TW C	326	AAC	11,000	2011	64	Microsurfacing	100	\$37,238
MLB	TAXIWAY	TW K	1120	AAC	7,040	2011	64	Microsurfacing	100	\$23,832
MLB	RUNWAY	RW 9L-27R	6230	AAC	57,500	2012	64	Microsurfacing	100	\$200,492
MLB	TAXIWAY	TW A	140	AC	5,400	2012	64	Microsurfacing	100	\$18,829
MLB	TAXIWAY	TW D	410	AC	115,000	2012	64	Microsurfacing	100	\$400,985
MLB	APRON	AP CENTER	4995	APC	12,000	2013	64	Microsurfacing	100	\$43,097
MLB	APRON	AP N GA	4110	AC	109,125	2013	64	Microsurfacing	100	\$391,915
MLB	RUNWAY	RW 5-23	6312	AAC	3,375	2013	64	Microsurfacing	100	\$12,121
MLB	TAXIWAY	TW C	320	AC	8,500	2013	64	Microsurfacing	100	\$30,527
MLB	TAXIWAY	TW Q	1715	AAC	10,750	2013	63	Microsurfacing	100	\$42,135
MLB	APRON	AP CENTER	4997	APC	5,700	2014	63	Microsurfacing	100	\$23,011

**Table B-7: MLB 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
MLB	APRON	AP CENTER	4998	PCC	25,000	2014	63	PCC Restoration	100	\$100,927
MLB	RUNWAY	RW 9L-27R	6206	AAC	6,250	2014	64	Microsurfacing	100	\$23,120
MLB	RUNWAY	RW 9R-27L	6105	AAC	929,600	2014	64	Microsurfacing	100	\$3,438,751
MLB	TAXIWAY	TW N	1410	AAC	6,180	2014	64	Microsurfacing	100	\$22,861
MLB	RUNWAY	RW 9R-27L	6107	AAC	20,000	2015	64	Microsurfacing	100	\$76,203
MLB	TAXIWAY	TW C	323	AAC	7,000	2015	64	Microsurfacing	100	\$26,671
MLB	APRON	AP TERM	4210	AC	244,000	2016	64	Microsurfacing	100	\$957,566
MLB	TAXIWAY	TW A	132	AC	26,100	2016	64	Microsurfacing	100	\$102,428
MLB	TAXIWAY	TW A	135	AAC	16,200	2016	63	Microsurfacing	100	\$69,384
MLB	RUNWAY	RW 27L THR	3307	AAC	8,600	2017	63	Microsurfacing	100	\$37,938
MLB	RUNWAY	RW 9L-27R	6205	AAC	86,250	2017	63	Microsurfacing	100	\$380,486
MLB	TAXIWAY	TW R	1825	AAC	18,000	2017	64	Microsurfacing	100	\$72,759

**Table B-8: OCF 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
OCF	APRON	AP CENTER	4110	AAC	82,200	2008	53	Mill & Overlay	100	\$446,264
OCF	APRON	AP CENTER	4115	AAC	120,000	2008	64	Microsurfacing	100	\$279,360
OCF	APRON	AP CENTER	4125	AC	35,750	2008	60	Microsurfacing	100	\$122,265
OCF	APRON	AP CENTER	4130	AAC	19,125	2008	62	Microsurfacing	100	\$54,965
OCF	APRON	AP S	4305	AC	13,600	2008	63	Microsurfacing	100	\$35,374
OCF	APRON	AP S	4310	AC	21,200	2008	23	Reconstruction	100	\$288,744
OCF	APRON	AP S	4315	AC	16,400	2008	41	Mill & Overlay	100	\$103,156
OCF	RUNWAY	RW 18-36	6105	AC	67,500	2008	66	Microsurfacing	100	\$120,285
OCF	RUNWAY	RW 18-36	6110	AAC	37,500	2008	55	Mill & Overlay	100	\$182,063
OCF	RUNWAY	RW 18-36	6115	AC	186,750	2008	68	Microsurfacing	100	\$230,823
OCF	RUNWAY	RW 18-36	6120	AAC	82,500	2008	54	Mill & Overlay	100	\$424,215
OCF	RUNWAY	RW 18-36	6125	AC	132,500	2008	53	Mill & Overlay	100	\$719,343
OCF	RUNWAY	RW 18-36	6155	AAC	103,875	2008	61	Microsurfacing	100	\$326,895
OCF	RUNWAY	RW 18-36	6165	AAC	15,000	2008	60	Microsurfacing	100	\$51,300
OCF	TAXIWAY	TW E	540	AC	124,700	2008	55	Mill & Overlay	100	\$605,419
OCF	TAXIWAY	TW E	590	AC	20,000	2008	47	Mill & Overlay	100	\$125,800
OCF	TAXIWAY	TW E2	510	AC	10,900	2008	28	Reconstruction	100	\$148,458
OCF	TAXIWAY	TW E3	515	AAC	11,500	2008	61	Microsurfacing	100	\$36,191
OCF	TAXIWAY	TW E3	516	AAC	14,000	2008	59	Microsurfacing	100	\$51,898
OCF	TAXIWAY	TW E4	520	AAC	14,000	2008	63	Microsurfacing	100	\$36,414
OCF	TAXIWAY	TW E6	575	AC	11,600	2008	0	Reconstruction	100	\$157,992
OCF	TAXIWAY	TW E8	535	AC	18,800	2008	62	Microsurfacing	100	\$54,031
OCF	TAXIWAY	TW E9	545	AC	16,000	2008	60	Microsurfacing	100	\$54,720
OCF	TAXIWAY	TW PR 8-26	105	AC	85,225	2008	57	Microsurfacing	100	\$364,848
OCF	RUNWAY	RW 18-36	6175	AAC	82,500	2009	64	Microsurfacing	100	\$197,822
OCF	TAXIWAY	TW E5	525	AAC	14,000	2009	64	Microsurfacing	100	\$33,570
OCF	APRON	AP CENTER	4120	AAC	96,187	2010	63	Microsurfacing	100	\$265,419
OCF	RUNWAY	RW 18-36	6130	AC	77,500	2010	64	Microsurfacing	100	\$191,408
OCF	RUNWAY	RW 18-36	6185	AAC	37,500	2010	62	Microsurfacing	100	\$114,339

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

<b>Network</b>	<b>Branch Use</b>	<b>Branch ID</b>	<b>Section ID</b>	<b>Surface</b>	<b>Area, SqFt</b>	<b>Year</b>	<b>PCI Before Maint.</b>	<b>Activities</b>	<b>PCI After Maint.</b>	<b>Cost</b>
OCF	TAXIWAY	TW E	505	AAC	243,500	2010	64	Microsurfacing	100	\$601,391
OCF	TAXIWAY	TW E6	530	AAC	11,500	2010	63	Microsurfacing	100	\$31,733
OCF	RUNWAY	RW 18-36	6135	AC	75,000	2011	63	Microsurfacing	100	\$213,164
OCF	RUNWAY	RW 18-36	6145	AAC	15,000	2011	63	Microsurfacing	100	\$42,633
OCF	RUNWAY	RW 8-26	6205	AC	150,500	2013	64	Microsurfacing	100	\$406,168
OCF	TAXIWAY	TW CONN	305	AC	18,400	2014	64	Microsurfacing	100	\$51,148
OCF	TAXIWAY	TW E8	536	AAC	3,600	2014	63	Microsurfacing	100	\$11,181
OCF	TAXIWAY	TW PR 8-26	106	AC	7,200	2017	64	Microsurfacing	100	\$21,870

**Table B-9: OMN 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
OMN	APRON	AP CENTER	4205	AAC	90,934	2008	22	Reconstruction	100	\$1,688,644
OMN	APRON	AP CENTER	4210	AAC	44,923	2008	26	Reconstruction	100	\$834,220
OMN	APRON	AP E	4305	AC	81,820	2008	56	Microsurfacing	100	\$429,719
OMN	APRON	AP W	4102	AC	22,508	2008	53	Mill & Overlay	100	\$144,749
OMN	TAXIWAY	INT TWD/C	805	AAC	4,200	2008	39	Mill & Overlay	100	\$36,565
OMN	TAXIWAY	TW B	204	PCC	15,360	2008	30	Reconstruction	100	\$285,235
OMN	TAXIWAY	TW B	205	AAC	29,200	2008	55	Mill & Overlay	100	\$164,834
OMN	TAXIWAY	TW B	210	AAC	16,200	2008	64	Microsurfacing	100	\$41,602
OMN	TAXIWAY	TW C	305	AAC	56,665	2008	40	Mill & Overlay	100	\$431,221
OMN	TAXIWAY	TW D	405	AAC	87,667	2008	48	Mill & Overlay	100	\$667,146
OMN	TAXIWAY	TW E	505	AAC	76,870	2008	44	Mill & Overlay	100	\$584,981
OMN	TAXIWAY	TW A	110	AC	5,803	2011	64	Microsurfacing	100	\$16,284
OMN	TAXIWAY	TW F	650	AC	5,370	2012	63	Microsurfacing	100	\$17,201
OMN	TAXIWAY	TW F	605	AC	36,531	2013	64	Microsurfacing	100	\$108,754

**Table B-10: ORL 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
ORL	APRON	AP GA	4205	AC	88,400	2008	64	Microsurfacing	100	\$227,011
ORL	APRON	AP N	4105	AC	170,153	2008	54	Mill & Overlay	100	\$1,027,384
ORL	APRON	AP N	4110	AC	14,250	2008	44	Mill & Overlay	100	\$108,443
ORL	APRON	AP N	4125	AC	142,000	2008	60	Microsurfacing	100	\$522,560
ORL	APRON	AP N	4140	AC	221,000	2008	59	Microsurfacing	100	\$900,133
ORL	APRON	AP N	4145	AC	139,000	2008	63	Microsurfacing	100	\$395,594
ORL	APRON	AP N	4165	AC	33,800	2008	26	Reconstruction	100	\$627,666
ORL	APRON	AP N	4167	AC	31,298	2008	21	Reconstruction	100	\$581,204
ORL	APRON	AP N	4175	AC	28,900	2008	0	Reconstruction	100	\$536,673
ORL	APRON	AP NE	4305	AC	63,556	2008	48	Mill & Overlay	100	\$483,661
ORL	APRON	AP RU	5105	AAC	28,500	2008	27	Reconstruction	100	\$529,245
ORL	APRON	AP W	4605	AC	72,900	2008	0	Reconstruction	100	\$1,353,753
ORL	APRON	AP W	4630	AC	89,300	2008	63	Microsurfacing	100	\$254,148
ORL	APRON	AP W	4655	APC	78,966	2008	0	Reconstruction	100	\$1,466,399
ORL	APRON	AP W	4660	AC	36,615	2008	13	Reconstruction	100	\$679,941
ORL	APRON	AP W SEGM	4810	AAC	79,000	2008	8	Reconstruction	100	\$1,467,030
ORL	RUNWAY	RW 13-31	6202	AAC	38,000	2008	40	Mill & Overlay	100	\$289,180
ORL	TAXIWAY	TW A	115	AC	44,500	2008	62	Microsurfacing	100	\$139,018
ORL	TAXIWAY	TW A	116	AC	10,000	2008	37	Mill & Overlay	100	\$108,980
ORL	TAXIWAY	TW A	150	AC	29,000	2008	8	Reconstruction	100	\$538,530
ORL	TAXIWAY	TW A	155	AAC	22,050	2008	3	Reconstruction	100	\$409,468
ORL	TAXIWAY	TW E	505	AC	23,600	2008	42	Mill & Overlay	100	\$179,596
ORL	TAXIWAY	TW E	506	AC	50,400	2008	38	Mill & Overlay	100	\$494,021
ORL	TAXIWAY	TW E	528	AAC	1,500	2008	37	Mill & Overlay	100	\$16,347
ORL	TAXIWAY	TW E	530	AC	45,000	2008	25	Reconstruction	100	\$835,650
ORL	TAXIWAY	TW E	545	AC	3,675	2008	41	Mill & Overlay	100	\$27,967
ORL	TAXIWAY	TW E	550	AAC	34,000	2008	34	Mill & Overlay	100	\$482,324
ORL	TAXIWAY	TW E	555	AC	18,800	2008	41	Mill & Overlay	100	\$143,068
ORL	TAXIWAY	TW E1	501	AC	6,269	2008	33	Mill & Overlay	100	\$95,803

**Table B-10: ORL 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
ORL	TAXIWAY	TW E2	510	AC	9,700	2008	37	Mill & Overlay	100	\$105,711
ORL	TAXIWAY	TW E3	415	AAC	2,210	2008	42	Mill & Overlay	100	\$16,818
ORL	TAXIWAY	TW E3	417	AC	6,000	2008	22	Reconstruction	100	\$111,420
ORL	TAXIWAY	TW E3	522	AC	1,700	2008	57	Microsurfacing	100	\$8,260
ORL	TAXIWAY	TW E4	1050	AAC	43,828	2008	51	Mill & Overlay	100	\$316,307
ORL	TAXIWAY	TW E4	1070	AAC	85,704	2008	60	Microsurfacing	100	\$315,391
ORL	TAXIWAY	TW E4	1080	AAC	4,952	2008	45	Mill & Overlay	100	\$37,685
ORL	TAXIWAY	TW E4	1085	AAC	4,214	2008	33	Mill & Overlay	100	\$64,398
ORL	TAXIWAY	TW E6	805	AC	13,000	2008	32	Mill & Overlay	100	\$212,914
ORL	TAXIWAY	TW F	605	AC	48,000	2008	36	Mill & Overlay	100	\$575,712
ORL	TAXIWAY	TW F	608	AC	3,200	2008	35	Mill & Overlay	100	\$41,888
ORL	TAXIWAY	TW G	705	AC	34,000	2008	38	Mill & Overlay	100	\$333,268
ORL	TAXIWAY	TW G	710	AC	4,000	2008	37	Mill & Overlay	100	\$43,592
ORL	TAXIWAY	TW H	806	AC	72,000	2008	33	Mill & Overlay	100	\$1,100,304
ORL	APRON	AP N	4155	AC	514,000	2010	64	Microsurfacing	100	\$1,400,337
ORL	APRON	AP N	4162	AC	3,000	2010	64	Microsurfacing	100	\$8,173
ORL	TAXIWAY	TW E3	520	AC	8,500	2010	64	Microsurfacing	100	\$23,157
ORL	TAXIWAY	TW A	117	AC	15,000	2011	64	Microsurfacing	100	\$42,092
ORL	TAXIWAY	TW E3	420	AC	35,000	2011	64	Microsurfacing	100	\$98,214
ORL	TAXIWAY	TW E4	1105	AC	10,000	2011	64	Microsurfacing	100	\$28,061
ORL	APRON	AP GA	4225	AC	194,000	2012	64	Microsurfacing	100	\$560,719
ORL	APRON	AP N	4158	AAC	128,583	2012	63	Microsurfacing	100	\$411,877
ORL	APRON	AP GA	4220	AC	99,000	2013	64	Microsurfacing	100	\$294,725
ORL	APRON	AP W	4650	APC	134,180	2013	64	Microsurfacing	100	\$399,456
ORL	TAXIWAY	TW E	535	AC	2,790	2013	64	Microsurfacing	100	\$8,306
ORL	APRON	AP GA	4210	AC	60,500	2015	64	Microsurfacing	100	\$191,078
ORL	APRON	AP W	4610	AC	211,943	2015	63	Microsurfacing	100	\$741,847
ORL	APRON	AP W	4620	AAC	110,320	2015	64	Microsurfacing	100	\$348,425
ORL	APRON	AP W	4640	AC	85,000	2015	63	Microsurfacing	100	\$297,519

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

<b>Network</b>	<b>Branch Use</b>	<b>Branch ID</b>	<b>Section ID</b>	<b>Surface</b>	<b>Area, SqFt</b>	<b>Year</b>	<b>PCI Before Maint.</b>	<b>Activities</b>	<b>PCI After Maint.</b>	<b>Cost</b>
ORL	APRON	AP W SEGM	4805	AAC	57,600	2015	64	Microsurfacing	100	\$181,919
ORL	TAXIWAY	TW B	102	AC	8,240	2015	64	Microsurfacing	100	\$26,025
ORL	APRON	AP GA	4215	AC	164,000	2016	64	Microsurfacing	100	\$533,503
ORL	RUNWAY	RW 7-25	6110	AAC	281,250	2017	64	Microsurfacing	100	\$942,372



**Table B-11: SFB 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
SFB	APRON	AP E	4505	PCC	22,500	2008	48	PCC Restoration	100	\$192,375
SFB	APRON	AP SW	4205	APC	400,000	2008	36	Mill & Overlay	100	\$5,392,798
SFB	APRON	AP SW	4210	AC	62,400	2008	36	Mill & Overlay	100	\$841,277
SFB	APRON	AP SW	4215	AC	6,000	2008	28	Reconstruction	100	\$125,280
SFB	APRON	AP SW	4220	AAC	57,600	2008	48	Mill & Overlay	100	\$492,480
SFB	APRON	AP SW	4230	APC	182,500	2008	34	Mill & Overlay	100	\$2,910,509
SFB	APRON	AP SW	4235	AAC	32,450	2008	25	Reconstruction	100	\$677,556
SFB	APRON	AP SW	4245	PCC	53,500	2008	63	PCC Restoration	100	\$180,883
SFB	APRON	AP SW	4250	AAC	21,000	2008	37	Mill & Overlay	100	\$257,229
SFB	APRON	AP SW	4255	PCC	50,000	2008	63	PCC Restoration	100	\$169,050
SFB	APRON	AP SW	4260	PCC	2,800	2008	30	Reconstruction	100	\$58,464
SFB	APRON	AP SW	4265	PCC	68,000	2008	34	PCC Restoration	100	\$1,084,464
SFB	APRON	AP SW	4270	AC	181,000	2008	61	Microsurfacing	100	\$714,406
SFB	APRON	AP SW	4275	AC	20,000	2008	0	Reconstruction	100	\$417,600
SFB	APRON	AP SW	4285	APC	39,375	2008	63	Microsurfacing	100	\$133,127
SFB	APRON	AP W	4405	AC	26,000	2008	35	Mill & Overlay	100	\$382,590
SFB	APRON	FBO AP	4305	AC	260,000	2008	53	Mill & Overlay	100	\$1,886,039
SFB	APRON	FBO APCONN	105	AC	56,000	2008	43	Mill & Overlay	100	\$478,800
SFB	RUNWAY	RW 18-36	6205	AAC	325,000	2008	41	Mill & Overlay	100	\$2,778,749
SFB	RUNWAY	RW 18-36	6210	AAC	162,500	2008	54	Mill & Overlay	100	\$1,108,575
SFB	RUNWAY	RW 18-36	6211	AAC	9,500	2008	54	Mill & Overlay	100	\$64,809
SFB	RUNWAY	RW 18-36	6213	AAC	12,500	2008	53	Mill & Overlay	100	\$90,675
SFB	RUNWAY	RW 18-36	6232	APC	7,200	2008	47	Mill & Overlay	100	\$61,560
SFB	RUNWAY	RW 18-36	6240	APC	9,000	2008	59	Microsurfacing	100	\$41,958
SFB	RUNWAY	RW 18-36	6245	APC	9,000	2008	47	Mill & Overlay	100	\$76,950
SFB	RUNWAY	RW 18-36	6248	AAC	6,250	2008	47	Mill & Overlay	100	\$53,437
SFB	RUNWAY	RW 18-36	6250	AAC	40,000	2008	50	Mill & Overlay	100	\$342,000
SFB	RUNWAY	RW 18-36	6255	AAC	15,375	2008	50	Mill & Overlay	100	\$131,456
SFB	RUNWAY	RW 9L-27R	6101	AAC	100,000	2008	51	Mill & Overlay	100	\$811,800

**Table B-11: SFB 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
SFB	RUNWAY	RW 9L-27R	6102	AAC	50,000	2008	54	Mill & Overlay	100	\$341,100
SFB	RUNWAY	RW 9L-27R	6105	APC	50,000	2008	54	Mill & Overlay	100	\$341,100
SFB	RUNWAY	RW 9L-27R	6110	APC	25,000	2008	51	Mill & Overlay	100	\$202,950
SFB	RUNWAY	RW 9L-27R	6115	AAC	478,000	2008	50	Mill & Overlay	100	\$4,086,899
SFB	RUNWAY	RW 9L-27R	6120	AAC	239,000	2008	53	Mill & Overlay	100	\$1,733,705
SFB	RUNWAY	RW 9L-27R	6125	APC	145,000	2008	40	Mill & Overlay	100	\$1,239,749
SFB	RUNWAY	RW 9L-27R	6130	APC	52,500	2008	49	Mill & Overlay	100	\$448,875
SFB	RUNWAY	RW 9L-27R	6135	AAC	90,000	2008	45	Mill & Overlay	100	\$769,500
SFB	RUNWAY	RW 9L-27R	6140	AAC	45,000	2008	44	Mill & Overlay	100	\$384,750
SFB	RUNWAY	RW 9L-27R	6145	APC	50,000	2008	55	Mill & Overlay	100	\$319,500
SFB	RUNWAY	RW 9L-27R	6150	APC	25,000	2008	46	Mill & Overlay	100	\$213,750
SFB	RUNWAY	RW 9L-27R	6155	AAC	60,000	2008	46	Mill & Overlay	100	\$513,000
SFB	RUNWAY	RW 9L-27R	6160	AAC	40,000	2008	58	Microsurfacing	100	\$203,760
SFB	TAXIWAY	TW B1	250	APC	67,500	2008	50	Mill & Overlay	100	\$577,125
SFB	TAXIWAY	TW B1	251	APC	9,000	2008	61	Microsurfacing	100	\$35,523
SFB	TAXIWAY	TW C	305	AC	68,500	2008	55	Mill & Overlay	100	\$437,715
SFB	TAXIWAY	TW L	1207	AAC	6,000	2008	40	Mill & Overlay	100	\$51,300
SFB	TAXIWAY	TW P	1505	AC	16,500	2008	30	Reconstruction	100	\$344,520
SFB	TAXIWAY	TW P	1510	PCC	2,280	2008	0	Reconstruction	100	\$47,606
SFB	TAXIWAY	TW R	1816	AC	5,000	2008	46	Mill & Overlay	100	\$42,750
SFB	TAXIWAY	TW R	1817	AAC	10,500	2008	38	Mill & Overlay	100	\$115,668
SFB	TAXIWAY	TW R	1818	AAC	3,500	2008	56	Microsurfacing	100	\$20,853
SFB	TAXIWAY	TW R	1820	AC	20,000	2008	64	Microsurfacing	100	\$61,960
SFB	TAXIWAY	TW R	1825	AC	34,000	2009	64	Microsurfacing	100	\$108,492
SFB	APRON	AP SW	4280	APC	16,875	2010	62	Microsurfacing	100	\$65,595
SFB	APRON	AP E	4510	PCC	50,500	2011	63	PCC Restoration	100	\$186,573
SFB	APRON	AP RU	5102	AC	10,000	2012	64	Microsurfacing	100	\$34,868
SFB	RUNWAY	RW 18-36	6231	PCC	13,600	2012	64	PCC Restoration	100	\$47,421
SFB	TAXIWAY	TW K	1105	APC	72,775	2012	64	Microsurfacing	100	\$253,754

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

<b>Network</b>	<b>Branch Use</b>	<b>Branch ID</b>	<b>Section ID</b>	<b>Surface</b>	<b>Area, SqFt</b>	<b>Year</b>	<b>PCI Before Maint.</b>	<b>Activities</b>	<b>PCI After Maint.</b>	<b>Cost</b>
SFB	APRON	AP SW	4240	PCC	420,000	2013	63	PCC Restoration	100	\$1,646,191
SFB	TAXIWAY	TW R	1805	AC	228,800	2013	64	Microsurfacing	100	\$821,719
SFB	TAXIWAY	TW B2	215	AC	54,000	2014	64	Microsurfacing	100	\$199,755
SFB	TAXIWAY	TW B3	220	AC	54,000	2014	64	Microsurfacing	100	\$199,755
SFB	TAXIWAY	TW K	1115	APC	11,000	2014	64	Microsurfacing	100	\$40,691
SFB	APRON	AP RU	5105	APC	27,000	2015	63	Microsurfacing	100	\$112,271
SFB	TAXIWAY	TW B4	225	APC	76,875	2016	64	Microsurfacing	100	\$301,692
SFB	RUNWAY	RW 18-36	6270	AAC	18,000	2017	63	Microsurfacing	100	\$79,406
SFB	TAXIWAY	TW C	355	APC	35,850	2017	64	Microsurfacing	100	\$144,912

**Table B-12: TIX 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
TIX	APRON	AP S	4205	AC	56,820	2008	50	Mill & Overlay	100	\$357,398
TIX	APRON	AP S	4215	AC	376,400	2008	45	Mill & Overlay	100	\$2,367,556
TIX	APRON	AP S	4220	AC	14,985	2008	56	Microsurfacing	100	\$68,452
TIX	APRON	AP S	4225	PCC	9,325	2008	61	PCC Restoration	100	\$29,346
TIX	APRON	AP S	4226	AC	13,040	2008	43	Mill & Overlay	100	\$82,022
TIX	APRON	AP S	4227	AC	13,200	2008	63	Microsurfacing	100	\$34,333
TIX	APRON	AP S	4228	AC	12,000	2008	63	Microsurfacing	100	\$31,212
TIX	APRON	AP S	4230	PCC	8,680	2008	63	PCC Restoration	100	\$22,577
TIX	TAXIWAY	TW B	210	AAC	236,550	2008	55	Mill & Overlay	100	\$1,148,451
TIX	TAXIWAY	TW B	220	AAC	5,000	2008	57	Microsurfacing	100	\$21,405
TIX	TAXIWAY	TW C	315	AAC	30,850	2008	53	Mill & Overlay	100	\$167,485
TIX	TAXIWAY	TW F	605	AAC	28,493	2008	44	Mill & Overlay	100	\$179,221
TIX	TAXIWAY	TW F	610	AC	58,200	2008	35	Mill & Overlay	100	\$579,381
TIX	TAXIWAY	TW F	615	AC	16,800	2008	40	Mill & Overlay	100	\$105,672
TIX	TAXIWAY	TW F	620	AC	88,791	2008	34	Mill & Overlay	100	\$948,998
TIX	APRON	AP S	4210	AC	23,300	2010	64	Microsurfacing	100	\$57,546
TIX	RUNWAY	RW 9-27	6202	AAC	5,000	2011	64	Microsurfacing	100	\$12,719
TIX	RUNWAY	RW 9-27	6210	AAC	85,000	2011	63	Microsurfacing	100	\$241,586
TIX	RUNWAY	RW 9-27	6217	AAC	4,200	2012	63	Microsurfacing	100	\$12,295
TIX	TAXIWAY	TW A	110	AAC	66,000	2014	63	Microsurfacing	100	\$204,978
TIX	APRON	AP S	4240	AC	9,600	2015	64	Microsurfacing	100	\$27,486
TIX	RUNWAY	RW 9-27	6215	AAC	220,000	2015	63	Microsurfacing	100	\$703,759
TIX	TAXIWAY	TW C	310	AAC	108,400	2015	64	Microsurfacing	100	\$310,365
TIX	TAXIWAY	TW E	510	AAC	1,896	2015	63	Microsurfacing	100	\$6,065
TIX	RUNWAY	RW 18-36	6125	AAC	50,000	2016	63	Microsurfacing	100	\$164,744
TIX	APRON	AP S	4241	AC	11,250	2017	64	Microsurfacing	100	\$34,172
TIX	RUNWAY	RW 18-36	6115	AAC	400,000	2017	62	Microsurfacing	100	\$1,499,968
TIX	RUNWAY	RW 18-36	6135	AAC	51,000	2017	63	Microsurfacing	100	\$173,080
TIX	RUNWAY	RW 9-27	6205	AAC	41,000	2017	64	Microsurfacing	100	\$124,538
TIX	TAXIWAY	TW A	105	AAC	103,250	2017	64	Microsurfacing	100	\$313,623
TIX	TAXIWAY	TW D	404	AAC	20,000	2017	64	Microsurfacing	100	\$60,750

**Table B-13: X21 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
X21	APRON	AP	4105	AAC	15,013	2008	63	Microsurfacing	100	\$39,049
X21	APRON	AP	4107	AAC	25,181	2008	62	Microsurfacing	100	\$72,370
X21	TAXIWAY	TW AP	115	AC	3,022	2008	56	Microsurfacing	100	\$13,805
X21	TAXIWAY	TW B	210	AC	3,000	2008	56	Microsurfacing	100	\$13,704
X21	APRON	AP T-HANG	4205	AC	39,100	2009	63	Microsurfacing	100	\$104,750
X21	TAXIWAY	TW A	105	AC	76,500	2009	64	Microsurfacing	100	\$183,435
X21	TAXIWAY	TW C	305	AC	4,362	2011	63	Microsurfacing	100	\$12,398
X21	TAXIWAY	TW A	110	AC	3,500	2012	64	Microsurfacing	100	\$9,171
X21	APRON	AP	4110	AC	33,190	2015	63	Microsurfacing	100	\$106,172
X21	RUNWAY	RW 15-33	6105	AC	152,250	2015	63	Microsurfacing	100	\$487,033
X21	APRON	AP T-HANG	4210	AC	30,400	2017	64	Microsurfacing	100	\$92,340

**Table B-14: X23 Major M&R Plan by Year**

<b>Network</b>	<b>Branch Use</b>	<b>Branch ID</b>	<b>Section ID</b>	<b>Surface</b>	<b>Area, SqFt</b>	<b>Year</b>	<b>PCI Before Maint.</b>	<b>Activities</b>	<b>PCI After Maint.</b>	<b>Cost</b>
X23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Table B-15: X35 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
X35	RUNWAY	RW 5-23	6205	AAC	37,500	2008	62	Microsurfacing	100	\$107,775
X35	RUNWAY	RW 5-23	6210	AAC	430,000	2008	64	Microsurfacing	100	\$1,001,041
X35	RUNWAY	RW 5-23	6215	PCC	30,000	2008	63	PCC Restoration	100	\$78,030
X35	TAXIWAY	TW E	110	AAC	167,500	2008	57	Microsurfacing	100	\$717,068
X35	TAXIWAY	TW E	115	PCC	3,750	2008	29	Reconstruction	100	\$51,075
X35	TAXIWAY	TW N	205	AC	195,000	2008	28	Reconstruction	100	\$2,655,901
X35	TAXIWAY	TW N	210	PCC	3,750	2008	48	PCC Restoration	100	\$23,588
X35	APRON	AP	4105	AC	122,500	2013	64	Microsurfacing	100	\$330,602

**Table B-16: X47 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
X47	Apron	AP	4105	PCC	18,504	2008	0	Reconstruction	100	\$252,025
X47	Apron	AP	4110	PCC	49,797	2008	19	Reconstruction	100	\$678,235
X47	Apron	AP	4115	AC	30,500	2008	48	Mill & Overlay	100	\$191,845
X47	Apron	AP	4120	PCC	8,400	2008	39	PCC Restoration	100	\$58,993
X47	Apron	AP	4130	PCC	10,000	2008	29	Reconstruction	100	\$136,200
X47	Apron	AP	4135	AC	99,750	2008	57	Microsurfacing	100	\$427,030
X47	Apron	AP T-HANG	4315	AC	26,600	2008	64	Microsurfacing	100	\$61,925
X47	Runway	RW 11-29	6105	AAC	500,000	2008	54	Mill & Overlay	100	\$2,571,001
X47	Taxiway	TW A	104	AAC	7,500	2008	40	Mill & Overlay	100	\$47,175
X47	Taxiway	TW A	105	AC	205,340	2008	58	Microsurfacing	100	\$820,128
X47	Taxiway	TW A	110	AAC	17,610	2008	50	Mill & Overlay	100	\$110,767
X47	Taxiway	TW C	307	AC	10,135	2008	53	Mill & Overlay	100	\$55,023
X47	Taxiway	TW C	310	AC	22,500	2008	51	Mill & Overlay	100	\$135,068
X47	Taxiway	TW D	405	AC	21,300	2008	45	Mill & Overlay	100	\$133,977
X47	Taxiway	TW D	407	AC	10,000	2008	59	Microsurfacing	100	\$37,070
X47	Taxiway	TW D	410	AC	100,300	2008	62	Microsurfacing	100	\$288,262
X47	Taxiway	TW D	414	AC	4,000	2008	15	Reconstruction	100	\$54,480
X47	Taxiway	TW E	510	AC	52,950	2008	61	Microsurfacing	100	\$166,634
X47	Taxiway	TW E	512	AAC	19,350	2008	37	Mill & Overlay	100	\$164,262
X47	Taxiway	TW E	515	AC	124,700	2008	52	Mill & Overlay	100	\$712,785
X47	Taxiway	TW F	605	AC	22,500	2008	56	Microsurfacing	100	\$102,780
X47	Taxiway	TW A	102	AAC	25,000	2010	63	Microsurfacing	100	\$68,985
X47	Taxiway	TW C	305	AAC	20,500	2010	64	Microsurfacing	100	\$50,630
X47	Taxiway	TW D	415	AAC	15,500	2010	64	Microsurfacing	100	\$38,282
X47	Apron	AP RU 11	5105	AAC	25,200	2012	64	Microsurfacing	100	\$66,029
X47	Runway	RW 6-24	6205	AAC	485,000	2012	62	Microsurfacing	100	\$1,568,837
X47	Apron	AP T-HANG	4310	AC	6,800	2013	64	Microsurfacing	100	\$18,352
X47	Taxiway	TW E	505	AC	19,250	2013	64	Microsurfacing	100	\$51,952
X47	Taxiway	TW B	205	AC	85,750	2014	64	Microsurfacing	100	\$238,364



**Table B-17: X59 Major M&R Plan by Year**

<b>Network</b>	<b>Branch Use</b>	<b>Branch ID</b>	<b>Section ID</b>	<b>Surface</b>	<b>Area, SqFt</b>	<b>Year</b>	<b>PCI Before Maint.</b>	<b>Activities</b>	<b>PCI After Maint.</b>	<b>Cost</b>
X59	APRON	AP	4105	AC	267,700	2008	30	Reconstruction	100	\$3,646,075
X59	APRON	AP	4110	AAC	14,500	2008	71	Microsurfacing	100	\$9,353
X59	TAXIWAY	TW BETW RW	105	AC	69,000	2008	33	Mill & Overlay	100	\$788,049
X59	TAXIWAY	TW CONN	205	AC	21,800	2008	18	Reconstruction	100	\$296,916
X59	TAXIWAY	TW CONN	206	AC	15,500	2008	21	Reconstruction	100	\$211,110
X59	RUNWAY	RW 14-32	6105	AAC	63,750	2015	63	Microsurfacing	100	\$203,930
X59	RUNWAY	RW 14-32	6110	AAC	153,750	2015	63	Microsurfacing	100	\$491,831
X59	RUNWAY	RW 14-32	6115	AAC	74,625	2015	63	Microsurfacing	100	\$238,718
X59	RUNWAY	RW 9-27	6205	AC	253,125	2016	64	Microsurfacing	100	\$746,476
X59	RUNWAY	RW 9-27	6210	AAC	46,875	2017	62	Microsurfacing	100	\$175,778

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