

SANTA MARIA PUBLIC AIRPORT DISTRICT BOARD OF DIRECTORS

Thursday October 8, 2020 Virtual Meeting
Zoom Meeting: Zoom.us
Meeting ID: 820 6332 8775
Meeting Password: 3217
7:00 P.M.

REGULAR MEETING A G E N D A

This agenda is prepared and posted pursuant to the requirements of the California Government Code Section 54954.2. By listing a topic on this agenda, the Santa Maria Public Airport District has expressed its intent to discuss and act on each item. The Santa Maria Public Airport District welcomes orderly participation at its meetings from all members of the public. This includes assistance under the Americans with Disabilities Act to provide an equally effective opportunity for individuals with a disability to participate in and benefit from District activities. To request assistance with disability accommodation, please call (805) 922-1726. Notification at least 48 hours prior to the meeting would enable the Santa Maria Public Airport District to make reasonable arrangements to ensure accessibility to this meeting.

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL: Adams, Brown, Rafferty, Engel, Baskett

- 1. MINUTES OF THE REGULAR MEETING HELD SEPTEMBER 24, 2020.
- 2. COMMITTEE REPORT(S):
 - a) AVIATION SUPPORT & PLANNING (Standing or Ad Hoc)
 - b) ADMINISTRATION & FINANCIAL (Standing or Ad Hoc)
 - c) MARKETING & PROMOTIONS (Standing or Ad Hoc)
 - d) CITY & COUNTY LIAISON
 - e) STATE & FEDERAL LIAISON
 - f) VANDENBERG LIAISON
 - g) BUSINESS PARK COMMITTEE (Ad Hoc)
- 3. GENERAL MANAGER'S REPORT
- 4. MANAGER OF FINANCE & ADMINISTRATION REPORT
 - a) Demand Register
- 5. DISTRICT COUNSEL'S REPORT. (Joshua George and Natalie Frye Laacke)

6. PUBLIC SESSION: Statements from the public will be heard during public session. Requests requiring board action will be referred to staff and brought on the next appropriate agenda. Members of the public may use the "raise hand" feature to be put in a speaking queue. Public comment will be limited to three (3) minutes. If a speaker continues speaking after being notified of the end of their public comment period, the meeting Host will mute the speaker and move on to the next person in the queue.

Please raise your hand in the following ways:

Telephone: Press "*9" to raise your hand and notify the meeting Host. You will be placed in the queue and unmuted, in order, so that you may provide public comment.

Computer and Mobile: Click the "raise hand" button to notify the Host. You will be placed in the queue and unmuted, in order, so that you may provide public comment.

- 7. DISCUSSION AND DIRECTION TO STAFF REGARDING PAVEMENT MAINTENANCE.
- 8. DISCUSSION AND DIRECTION TO STAFF REGARDING THE HANGAR LOCATED AT 3029-B AIRPARK DRIVE.
- 9. CLOSED SESSION. The Board will hold a Closed Session to discuss the following item(s):
 - a) Conference with Real Property Negotiators (Chris Hastert, Tom Ross and District Counsel) Re: APN 111-231-11 (Gov. Code Section 54956.8)
 - b) Conference with Real Property Negotiators (Chris Hastert and District Counsel) Re: 3455 Airpark Drive (Gov. Code Section 54956.8)
 - c) Conference with Real Property Negotiators (Chris Hastert, Kerry Fenton and District Counsel) Re: 3249 Terminal Drive Suite 103 (Gov. Code Section 54956.8)
 - d) Conference with Legal Counsel-Initiation of litigation pursuant to Government Code 54956.9(c): One case.
- 10. DIRECTORS' COMMENTS.
- 11. ADJOURNMENT.

MINUTES OF THE REGULAR BOARD MEETING OF THE BOARD OF DIRECTORS OF THE SANTA MARIA PUBLIC AIRPORT DISTRICT HELD SEPTEMBER 24, 2020

The Board of Directors of the Santa Maria Public Airport District held a Regular Meeting via a virtual meeting at 7:00 p.m. Present were Directors Adams, Brown, Rafferty, Engel and Baskett. General Manager Hastert and District Counsel Frye Laacke. Manager of Finance & Administration Reade was absent.

- 1. MINUTES OF THE REGULAR MEETING HELD August 27, 2020. Director Brown made a Motion to approve the minutes of the regular meeting held August 27, 2020. Director Rafferty Seconded and it was carried by the following roll call vote. Directors Adams, Brown, Rafferty, Engel and Baskett voted "Yes".
- 2. MINUTES OF THE SPECIAL MEETING HELD September 16, 2020. Director Brown made a Motion to approve. Director Rafferty Seconded and it was carried by the following roll call vote. Directors Adams, Brown, Rafferty, Engel and Baskett voted "Yes".
- 3. COMMITTEE REPORT(S):
 - a) AVIATION SUPPORT & PLANNING (Standing or Ad Hoc) No meeting scheduled.
 - b) ADMINISTRATION & FINANCIAL (Standing or Ad Hoc) No meeting scheduled.
 - c) MARKETING & PROMOTIONS (Standing or Ad Hoc) No meeting scheduled.
 - d) CITY & COUNTY LIAISON This meeting was canceled.
 - e) STATE & FEDERAL LIAISON No meeting scheduled.
 - f) VANDENBERG LIAISON No meeting scheduled.
 - g) BUSINESS PARK COMMITTEE (Ad Hoc) The committee met to discuss updates on future projects.
- 4. GENERAL MANAGER'S REPORT. Mr. Hastert notified the Board of a tabletop exercise he attended regarding Unmanned Aerial Systems.
- 5. MANAGER OF FINANCE & ADMINISTRATION REPORT.

The General Manager presented the Demand Register to the Board for review and approval.

- a) Demand Register. The Demand Register, covering warrants 068167 through 068241 in the amount of \$276,578.44 was recommended for approval as presented. Director Rafferty made a Motion to accept the Demand Register as presented. Director Baskett Seconded and it was carried by the following roll call vote. Directors Adams, Brown, Rafferty, Engel and Baskett voted "Yes".
- b) Budget to Actual. Not presented.

- c) Financial Statements. Not presented.
- 6. DISTRICT COUNSEL'S REPORT. Nothing to report.
- 7. PUBLIC SESSION: Statements from the public will be heard during public session. Requests requiring board action will be referred to staff and brought on the next appropriate agenda. Members of the public may use the "raise hand" feature to be put in a speaking queue. Public comment will be limited to three (3) minutes. If a speaker continues speaking after being notified of the end of their public comment period, the meeting Host will mute the speaker and move on to the next person in the queue.

Please raise your hand in the following ways:

Telephone: Press "*9" to raise your hand and notify the meeting Host. You will be placed in the queue and unmuted, in order, so that you may provide public comment. Computer and Mobile: Click the "raise hand" button to notify the Host. You will be placed in the queue and unmuted, in order, so that you may provide public comment.

No one requested to speak.

- 8. Authorization for the General Manager to execute the extension of listing agreement between the District and Ross Realty. Director Baskett made a Motion to approve. Director Rafferty Seconded and it was carried by the following roll call vote. Directors Adams, Brown, Rafferty, Engel and Baskett voted "Yes".
- 9. Authorization for the President and Secretary to execute a Building Space Lease between the District and Art-Craft Paint, Inc. for the hangar located at 3115-B Airpark Drive. Director Rafferty made a Motion to approve. Director Engel Seconded and it was carried by the following roll call vote. Directors Adams, Brown, Rafferty, Engel and Baskett voted "Yes".
- 10. Authorization for the President and Secretary to execute the fifth amendment of Ground Lease between the District and Central Coast Jet Center. Director Rafferty made a Motion to approve. Director Baskett Seconded and it was carried by the following roll call vote. Directors Adams, Brown, Rafferty, Engel and Baskett voted "Yes".
- 11. Authorization for the President and Secretary to execute a Land Lease between the District and Testa Catering. Director Baskett made a Motion to approve. Director Rafferty Seconded and it was carried by the following roll call vote. Directors Adams, Brown, Rafferty, Engel and Baskett voted "Yes".
- 12. CLOSED SESSION. At 7:14 p.m. the Board went into Closed Session to discuss the following item(s):
 - a) Conference with Real Property Negotiators (Chris Hastert and District Counsel) Re: 3455 Airpark Drive (Gov. Code Section 54956.8)

At 7:18 p.m., the Board and staff reconvened to Open Public Session.

There were no reportable actions.

- 13. DIRECTORS' COMMENTS: Directors Adams, Rafferty and Engel had no comment.
 - Directors Brown and Baskett congratulated Director Rafferty on being selected as Citizen of the Year by the Santa Maria Valley Chamber of Commerce.
- 14. ADJOURNMENT. President Adams asked for a Motion to adjourn to a Regular Meeting to be held on October 8, 2020 at 7:00 p.m. via a virtual meeting. Director Rafferty made that Motion, Director Engel Seconded and it was carried by the following roll call vote. Directors Adams, Brown, Rafferty, Engel and Baskett voted "Yes".

ORDER OF ADJOURNMENT

This Regular Meeting of the Board of Directors of the Santa Maria Public Airport District is hereby adjourned at 7:19 p.m. on September 24, 2020.

Chuck Adams, President	-
Hugh Rafferty, Secretary	_

DEMAND REGISTER SANTA MARIA PUBLIC AIRPORT DISTRICT

Full consideration has been received by the San each demand, numbers 068242 to 068279 ar Premier Bank and in the total amount of \$127,64	nd electronic payments on Pacific
CHRIS HASTERT GENERAL MANAGER	DATE
The undersigned certifies that the attached r Santa Maria Public Airport District for ea 068279, and electronic payments on Pacific Pre \$127,641.38 has been approved as being in corby the Santa Maria Public Airport District apayment.	ch demand, numbers 068242 to mier Bank in the total amount of formity with the budget approved
VERONEKA READE MANAGER OF FINANCE AND ADMINISTR	DATE ATION
THE BOARD OF DIRECTORS OF THE SAIDISTRICT APPROVED PAYMENT OF THE THE MEETING OF OCTOBER 8, 2020.	
HUGH RAFFERTY SECRETARY	

Santa Maria Public Airport District

Demand Register

Check Number	Check Date \	Vendor Name	Check Amount	Description
* 068242	9/24/2020 AAAE		450.00	Education
* 068243	9/24/2020 AT&T		42.84	Phone Service
* 068244	9/24/2020 CED		333.85	Lighting Maintenance
* 068245	9/24/2020 City of Gu	ıadalupe	37,404.65	Security Service
* 068246	9/24/2020 Frontier C	Communications	589.10	Telephone Service
* 068247	9/24/2020 Home De	pot	412.97	Building Maintenance
* 068248	9/24/2020 Letters, In	ıc.	78.88	Auto Maintenance
* 068249	9/24/2020 Quadient		403.63	Postage Meter Lease
* 068250	9/24/2020 Principal I	Financial Group	2,660.49	Dental, Life, Disability, Vision
* 068251	9/24/2020 Tolman &	ર Walker Ins.	12,950.00	Insurance - Annual
* 068252	9/29/2020 Bagby Plu	ımbing Service	1,301.99	Building Maint Terminal
* 068253	9/29/2020 City of Sa	nta Maria-Util Div	6,430.60	Water Invoices
* 068254	9/29/2020 Clark Pest	t Control	660.00	Weed/Wildlife Abatement
* 068255	9/29/2020 Frontier C	Communications	94.38	Telephone Service
* 068256	9/29/2020 Letters, In	IC.	6.00	Auto Maintenance
* 068257	9/29/2020 Napa Aut	o Parts	27.60	Auto parts
* 068258	9/29/2020 Next Day	Signs	674.25	Signs
* 068259	9/29/2020 Safety-Kle	een	175.00	Waste Oil Removal
* 068260	10/2/2020 Chuck Ad	ams	400.00	Directors Fees
* 068261	10/2/2020 Apex Auto	o Glass	278.55	Auto Maintenance
* 068262	10/2/2020 AT&T		382.04	Phone Service
* 068263	10/2/2020 B&B Stee	I & Supply of SM	31.43	Building Maintenance
* 068264	10/2/2020 Bomar Se	curity	5,176.27	Security Service
* 068265	10/2/2020 Central Ci	ity Tool Supply	42.39	Small Tools
* 068266	10/2/2020 CED		551.57	Lighting Maintenance
* 068267	10/2/2020 Coastal A	g	18.03	Weed/Wildlife Abatement
* 068268	10/2/2020 Electronic	Parts Store	78.18	Radio Maint.
* 068269	10/2/2020 Carl Enge	l, Jr.	300.00	Directors Fees
* 068270	10/2/2020 Frontier C	Communications	120.11	Telephone Service

Santa Maria Public Airport District

Demand Register

Check Number	Check Date	Vendor Name	Che	eck Amount	Description
* 068271	10/2/2020	The Gas Company		193.74	Utilities
* 068272	10/2/2020	Ray Heath		3,575.20	Consulting Service
* 068273	10/2/2020	Interstate Batteries		115.22	Auto Maint Mechanical
* 068274	10/2/2020	MarTeeny Designs		275.00	Web Page Maint.
* 068275	10/2/2020	McMasters and Carr		396.81	Building Maint Terminal
* 068276	10/2/2020	Mission Uniform Service		290.14	Uniform Service
* 068277	10/2/2020	Hugh Rafferty		300.00	Directors Fees
* 068278	10/2/2020	Shred 2 You, Inc.		141.50	Document Shredding
* 068279	10/2/2020	Verizon Wireless		925.90	Mobile Devices
		Subtotal	\$	78,288.31	_
		Electronic Payments			
ACH	9/24/2020	MasterCard ServiceCenter		1,927.20	Computer Supplies & Support/Misc Office Supplies
ACH	9/24/2020	MasterCard ServiceCenter		1,494.33	Business Travel/Security Service/Computer Support
ACH	9/28/2020	Umpqua Bank		2,078.24	Sundries/Computer Supplies/Lighting/SWAAE Dues
ACH	9/29/2020	CalPERS		5,617.14	Employee Retirement
ACH	10/1/2020	Paychex		26,222.15	Payroll
ACH	10/2/2020	Paychex		187.46	Paychex Invoice
ACH	10/2/2020	Bankcard		1,576.79	Credit Card Fee
ACH	10/2/2020	Paychex		5,507.16	Payroll Taxes
ACH	10/2/2020	CalPERS		700.00	Fees for GASB-68 Reports
ACH	10/5/2020	Mass Mutual		4,042.60	Employee Paid Retirement
		Subtotal	\$	49,353.07	_
					_
		Total	\$	127,641.38	<u>.</u>



ADA Compliant Pedestrian Ramps and Loading zone



- PCC Flatwork:
 - Pedestrian Ramps and Pathways
 - Spandrels and Cross Gutters



ADA Compliant Pedestrian Ramps and Loading zone





Terminal Drive Pavement Improvements



- Asphalt concrete pavement:
 - Intersection Reconstruct of failed pavement section
 - Isolated failure areas reconstruct failed pavement section
 - Surface Treatment All of Terminal Drive (including new pavement areas)
 - Pavement Markings

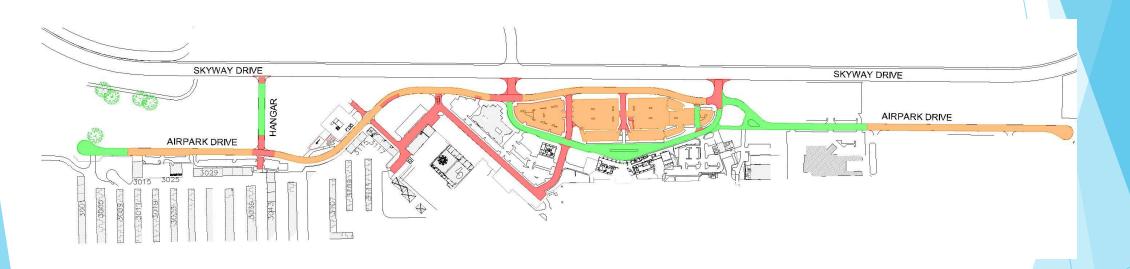


Terminal Drive Pavement Improvements





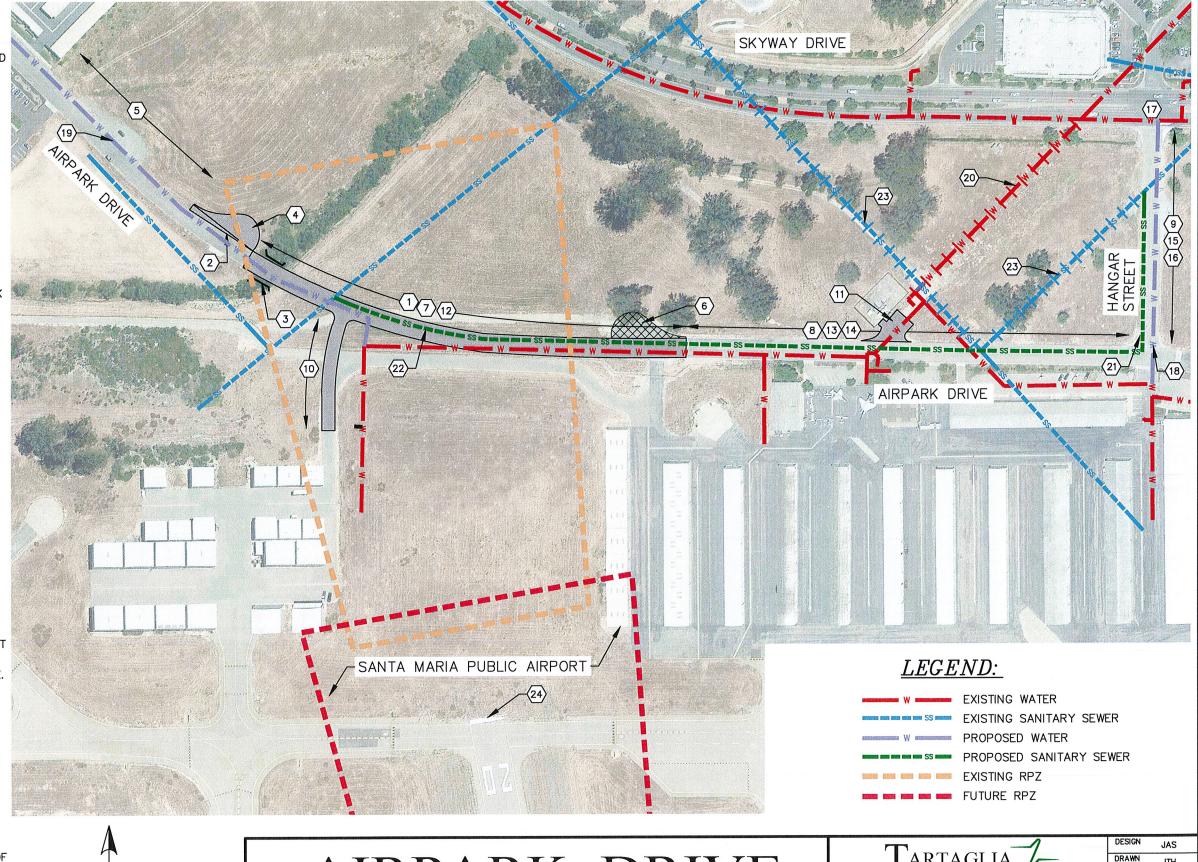
Santa Maria Public Airport Landside Pavement Conditions





① IMPROVEMENT NOTES:

- 1. CONSTRUCT EXTENSION 44' WIDE WITH CURB, GUTTER, AND 6' SIDEWALK BOTH SIDES.
- 2. TRANSITION FROM 44' TO 50' NORTH OF CHANNEL.
- 3.CHANNEL SPAN TO BE BOTTOMLESS CULVERT OR CON—SPAN TYPE BRIDGE. BUILD TO 60 FEET WIDE TO ALLOW FOR SIDEWALK AND RAILING BEHIND SIDEWALK THAT DOES NOT ENCROACH INTO WALKWAY.
- 4.CONSTRUCT TEMPORARY 105 FEET RADIUS CUL—DE—SAC AT THE SOUTH END OF NORTH AIRPARK DR., OFFSET TO EAST ON DISTRICT PROPERTY. DISTRICT TO PROVIDE TEMPORARY ACCESS EASEMENT. CUL—DE—SAC TO BE REMOVED WHEN EXTENSION IS COMPLETE.
- 5.NORTH OF CHANNEL ALONG DISTRICT PROPERTY FRONTAGE, EXTEND CURB, GUTTER, SIDEWALK AND FULL—WIDTH PAVEMENT ON THE EAST SIDE OF AIRPARK DRIVE NORTH TO THE MINI STORAGE.
- 6.REMOVE CUL-DE-SAC AT NORTH END OF SOUTH AIRPARK DR. SEVERAL MAY INCLUDE OBSTRUCTION LIGHTS AND/OR BE SHORTER THAN NORMAL.
- 7.INSTALL STREET LIGHTS ON CONSTRUCTED PORTION OF AIRPARK DR.
- 8.INSTALL STREET LIGHTS ON AIRPARK DRIVE FROM NEW SEGMENT TO HANGAR STREET.
- 9.INSTALL STREET LIGHTS ON HANGAR STREET.
- 10. INCLUDE DRIVEWAY ACCESS TO DISTRICT HANGAR COMPLEX, SOUTH OF CHANNEL AND WEST OF RUNWAY 20 RPZ. INCLUDES NEW CONTROLLED AUTOMATIC VEHICLE GATE.
- 11. INCLUDE DRIVEWAY AND PAVED APRON ACCESS TO CITY WATER WELL.
- 12. INSTALL DRAINAGE IN AIRPARK DRIVE NORTH TO CHANNEL IF ENGINEERING DESIGN DICTATES.
- 13. INSTALL CURB AND GUTTER ON NORTH SIDE OF SOUTH AIRPARK DRIVE (MISSING PORTION).
- 14. INSTALL SIDEWALK ALONG NORTH SIDE OF SOUTH AIRPARK DRIVE FROM EXTENSION SOUTH TO HANGAR STREET.
- 15. INSTALL CURB, GUTTER ALONG BOTH SIDES OF HANGAR STREET FROM AIRPARK TO SKYWAY.
- 16. INSTALL SIDEWALK ALONG WEST SIDE OF HANGAR STREET FROM AIRPARK DRIVE TO SKYWAY.
- 17. INSTALL SIGNAL AT HANGAR STREET AND SKYWAY DRIVE.
- 18. INSTALL CITY WATER MAIN IN HANGAR STREET FORM AIRPORT DRIVE TO SKYWAY DRIVE.
- 19. EXTEND CITY WATER MAIN IN AIRPARK DRIVE EXTENSION ACROSS (UNDER) CHANNEL, CONNECT TO WATER MAIN IN NORTH AIRPARK DRIVE.
- 20. ABANDON IN-PLACE WATER MAIN CUTTING DIAGONALLY ACROSS UNDEVELOPED PROPERTY FROM WELL 6S TO SKYWAY DRIVE.
- 21. INSTALL CITY SEWER MAIN IN HANGAR STREET FROM AIRPARK DRIVE TO SKYWAY DRIVE.
- 22.INSTALL CITY SEWER MAIN IN AIRPARK DRIVE FROM HANGAR STREET CONNECTING TO EXISTING JUST SOUTH OF CHANNEL.
- 23. ABANDON IN—PLACE SEWER MAIN CUTTING DIAGONALLY ACROSS UNDEVELOPED PROPERTY BETWEEN AIRPARK DRIVE AND SKYWAY DRIVE.
- 24.RUNWAY 20 THRESHOLD AND ASSOCIATED RUNWAY PROTECTION ZONE (RPZ) TO BE RELOCATED BY AIRPORT DISTRICT.



AIRPARK DRIVE EXTENSION



DESIGN JAS

DRAWN JTH

CHECKED JAS

SCALE 1"=200'

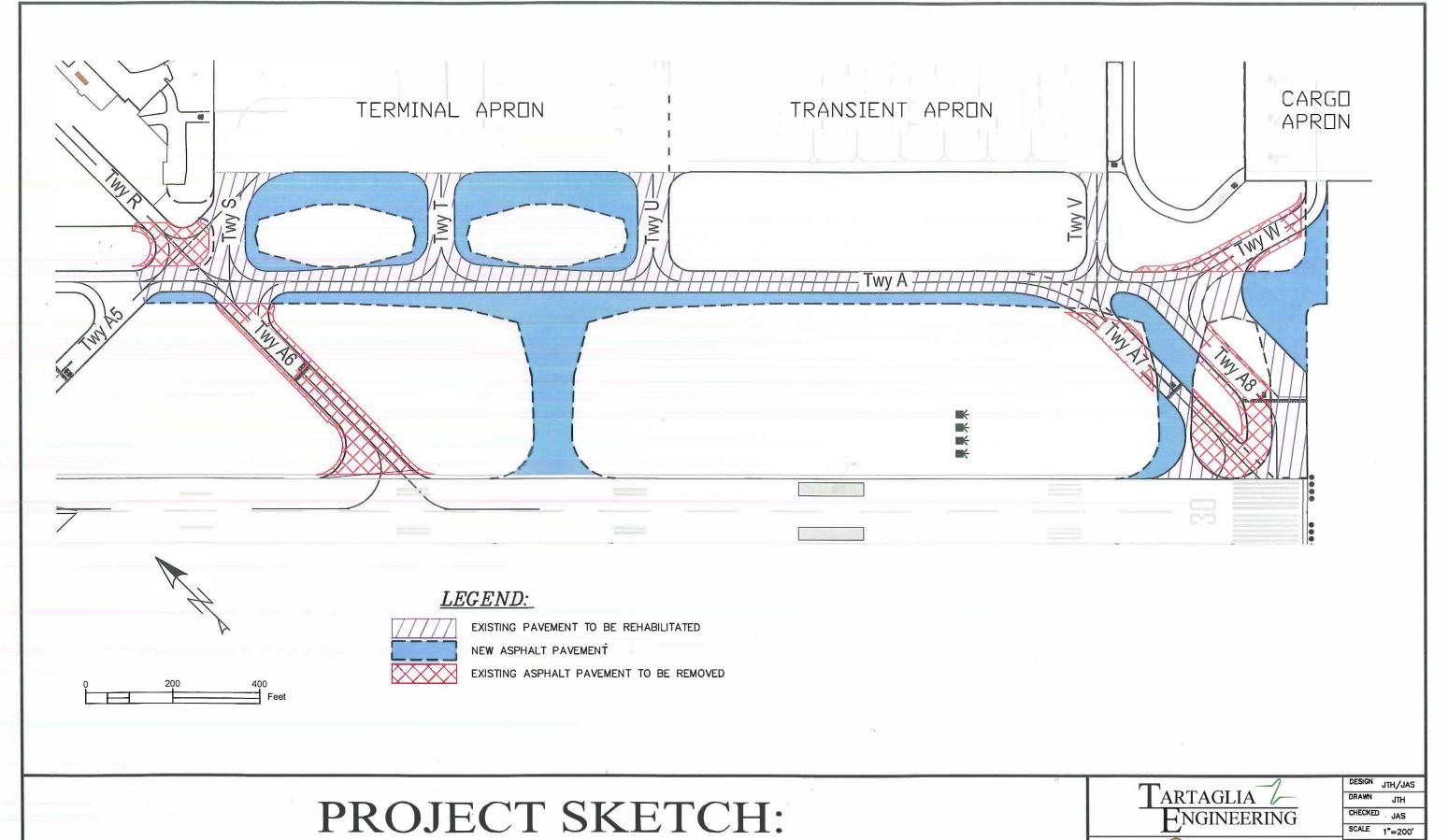
DWG.NO. 13-36

DATE 3/14/18

SHEET



LEGEND: △23 CONTROL POINT ///// AREA OF WORK PATH OF TRAVEL TAXILANE CLOSED DELINEATION PER DETAIL A, THIS SHEET BUILDING RESTRICTION LINE (BRL) -- MOVEMENT AREA BOUNDARY LINE ---- RUNWAY SAFETY AREA (RSA) - RUNWAY OBJECT FREE AREA (ROFA) GRAPHIC SCALE (IN FEET) 1 inch = 200 ft.



REHABILITATE PARALLEL & CONNECTING TAXIWAYS, PHASE 1



ALL SANTA MARIA
PUBLIC AIRPORT DISTRICT

DESIGN	JTH/JAS
DRAWN	JTH
CHECKED	JAS
SCALE	1"=200'

DATE 10/29/19

Airport Na	me	Santa Maria Public Airport	NPIAS: 06-0237	Fiscal Year:		Date: 2-12-2
Shown On ALP	Project Type*	Project Desc	ription	Federal Share	Local Share	Total
Yes	D	Rehab. Twy A from A5 to A8. Rehab. Twy's S, T, U, V, and W. Remove connecting Taxiways A6 - A8, and construct new connecting, conforming Taxiways A6 - A8. (Construct & reimburse design)		\$6,572,850	\$677,150	\$7,250,000
* D- Deve	lopment;	P - Planning; E - Environmental				
PROV	DE THE I	FOLLOWING DETAILED INFOR	RMATION FOR PROJECTS	S ANTICIPATEI	WITHIN 1-	2 YEARS
Detail Proj	ect Descrip	tion (Square/Lineal Footage or Leng	th/Width)			
addresses : (RSAT). To over 8,500	several non he effort ac lineal feet	ation project focuses on addressing e-conforming taxiway geometry issu ldresses surface raveling, weatherin of taxiway in both 50 and 70 foot w structural section, shoulder backing	es and Hot Spots documentea g, and complete subgrade fai idths. The rehabilitation effor	l by the Runway S lure. The extent o t includes comple	Safety Advisor of rehabilitatio ete removal an	y Team n will cover nd

Project Schedule (Anticipated date for bids or negotiated prices, consultant selection for planning or environmental projects, length of construction or design, planning, or environmental process.

new pavement markings. In addition, the taxiway effort will include complete removal of Taxiway's A6 - A8, and construction of

The District will submit a pre-application in December, 2020. A final application will be submitted in May, 2021, based on bids received for construction of the improvements and a negotiated fee proposal for design of the rehabilitation effort (reimbursement) and professional support services during construction. Construction will begin upon receipt of the grant. It is anticipated the rehabilitation effort will be complete and the grant closed within 24 months.

NEPA Environmental Status (Date of FONSI) or submit CATEX Form for Approval

new, conforming Taxiways A6, A7 and A8. Composite PCI: 68

A Cat-Ex will be prepared and submitted to the FAA during the summer, 2020 for the taxiway rehabilitation and geometry upgrades project.

Land Title Status & Date of Exhibit "A" Status

Date

The Exhibit A Property Map was updated in 2018 as part of the Master Plan Update.

Open AIP Funded Projects

Expected Close-Out Date

AIP 3-06-0237-036-2018: Terminal Apron Rehabilitation, Phase 2 (construct & reimburse design)

March, 2020

Certification: To the best of my knowledge and belief, all information shown in the ACIP Data Sheet is true and correct and has been duly authorized by the Sponsor.

Chris Hastert, District General Manager

Chris Hastert, District General Manager

Name and Title of Authorized Representative (Print or Type)

Contact Name and Title (Print or Type)

805-922-1726

Signature Date Contact Phone (Print or Type)

PAVEMENT MAINTENANCE MANAGEMENT PLAN

SANTA MARIA
PUBLIC AIRPORT

PREPARED FOR:

SANTA MARIA PUBLIC AIRPORT DISTRICT 3217 TERMINAL DRIVE SANTA MARIA, CA 93455 (805) 922-1726



PREPARED BY:

TARTAGLIA ENGINEERING 7360 EL CAMINO REAL, SUITE E ATASCADERO, CA 93423 (805) 466-5660



Contents

EXECUTIVE SUMMARY	2
INTRODUCTION	3
DESCRIPTION OF WORK	4
SANTA MARIA PUBLIC AIRPORT	5
METHOD OF ANALYSIS	5
FIELD INSPECTION	7
PAVEMENT DISTRESS – FLEXIBLE PAVEMENTS	9
PAVEMENT DISTRESS – RIGID PAVEMENTS	11
PAVEMENT CONDITION – PCI CALCULATIONS	14
MAINTENANCE & REHABILITATION STRATEGIES	21
MAINTENANCE & REHABILITATION PLAN	22
SUMMARY	25
REFERENCES	26
APPENDIX A – PAVEMENT INSPECTION LAYOUTS	27
APPENDIX B - REHAB STRATEGIES FOR AC PAVING	44
APPENDIX C - REHAB STRATEGIES FOR PCC PAVING	45
APPENDIX D -10-YEAR SECTION PCI AND M & R PLAN	46
APPENDIX E - SAMPLE PCI SURVEY DATA SHEETS	74
APPENDIX F – SAMPLE INSPECTION PHOTOS	76

EXECUTIVE SUMMARY

SANTA MARIA PUBLIC AIRPORT

In the 1940's, during the second world war, the United States constructed the Santa Maria Army Air Base. After a few ownership changes, in 1964 the airport was transferred to the newly formed Santa Maria Public Airport District. The airport consists of approximately 2,598 acres located on the central coast of California inside the Santa Maria city limits, at the northwest corner of Santa Barbara County. The airport serves both general aviation and commercial service and is classified as a nonhub primary commercial service airport. For pavement evaluation and design, the DC-10 (458,000 Maximum Takeoff Weight) is the largest aircraft that currently operates at the airport and is considered the most harmful to a pavement life.

GENERATION OF THE PAVEMENT MAINTENANCE MANAGEMENT PLAN (PMMP)

The Pavement Maintenance Management Plan (PMMP) for the airport began with an extensive review of all available records, including as-built plans, studies, reports, and pavement condition reports. Each pavement feature (Runway 12-30, Taxiway A, etc.) was given a branch ID. Each branch, if necessary, was subdivided into sections if there were variations in construction activities, structural section, or traffic patterns. From there, each branch or section of a branch was divided into sample units. A base map, or pavement inspection layout, was generated, which identified how many sample units should be inspected (approximately 10% of sample units). Refer to APPENDIX A, Pavement Inspection Layouts, for sample locations.

Multiple site visits were performed to evaluate the existing pavement condition at the sample unit locations identified on the base maps. Statistical sampling was employed for inspection of the airfield pavements. When inspecting a sample unit, the team recorded the type, extent, and severity of each observed pavement distress.

The field data was analyzed, and each pavement section was assigned a numerical rating based on observed conditions. The software program, PAVER 7, was used to help expedite the process. The rating system (ranges from 0 to 100) for pavement is called the Pavement Condition Index, or PCI. Based on the pavement section PCI, a 10-year maintenance and rehabilitation plan was developed along with associated construction cost estimates.

This Pavement Maintenance Management Plan was prepared in conformance with the requirements of the Federal Aviation Administration (FAA).

CONCLUSION

The Airport District recognizes the value of the investment it has in pavement at the Santa Maria Public Airport. This PMMP will help the Airport District better understand the current pavement condition at each segment of the airport. The plan will also be used to prioritize the pavement rehabilitation projects and determine the associated cost for each rehabilitation technique. By following the PMMP, the District will manage and maintain the airfield pavement in the most cost-effective way. Details and procedures will be put in place to assure that proper preventative and reparative pavement maintenance will be performed.

INTRODUCTION

The purpose of this investigation and report is to establish a Pavement Maintenance Management Plan (PMMP) for Santa Maria Public Airport District. A PMMP is a tool for evaluating existing pavement surfaces, rating these surfaces in an unbiased manner by applying the same review and rating methods to all pavements, prioritizing and programming the maintenance effort, and estimating future maintenance costs. One goal of a PMMP is to save money in pavement maintenance and rehabilitation over the life of the pavement. Finally, a good PMMP should allow for updating at periodic intervals in the future.

FIGURE 1, Typical Pavement Condition Life Cycle, clearly shows that the quality of new pavement surfaces remains high for a significant length of time. The quality drops rapidly as the pavement passes through the "75% Of Life" point, also called critical PCI value, and if left unaddressed, will continue dropping at an increasing rate all the way to zero. According to the chart, a \$1.00 investment in pavement maintenance at the exact right time in the pavements life cycle can result in the savings of \$3.00 to \$4.00 at a later date. It is the goal of a PMMP to monitor the quality and integrity of pavements within the study area and to determine what maintenance practices can extend the high-quality level farthest into the future at the most practical cost thereby minimizing overall life cycle costs.

The PMMP will be the genesis of a comprehensive maintenance and repair (M&R) program for the investment in pavement surfaces. Based on a review of available construction records and a detailed visual inspection, a PMMP should become the basis for maintaining and repairing pavement surfaces before they deteriorate beyond the point of saving. By planning and scheduling the work in advance, the owner gains the financial advantage of scheduling similar repair strategies together, thereby experiencing the economies of scale. By scheduling the work as opposed to performing unplanned repairs, the owner gains the advantage of processing planned repairs through the normal construction contract bidding process. Finally, by planning maintenance activities before pavements completely deteriorate, the owner will avoid the often overlooked but very real "cost" associated with unscheduled interruptions, multiple closures that conflict with peak traffic periods, or longer shutdown times for complete pavement reconstruction.

The District has a large investment in airfield pavements. These facilities were designed and constructed to provide adequate load-carrying capacity and an environment for safe operation under all weather conditions. Pavement maintenance will play a large role in overall asset management in the future as the infrastructure continues to age, the overall mix of aircraft using the facility continues to get heavier, and the frequency of aircraft operations continues to increase.

Being the primary investor in airfield and airport pavements, the FAA fully recognizes the value in planned and programmed pavement maintenance established through a PMMP.

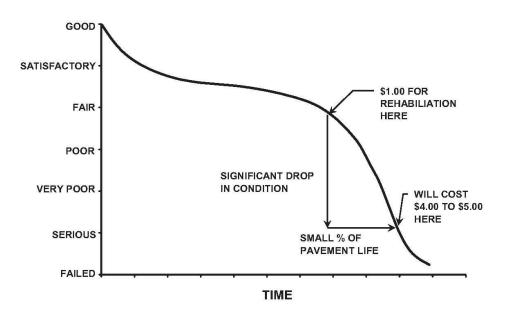


FIGURE 1. Typical Pavement Condition Life Cycle

DESCRIPTION OF WORK

The process of establishing or up-dating a Pavement Maintenance Management Plan includes a sequence of numerous steps described as follows:

A. Preliminary Research

Review all available construction reports and as-built plans to determine the life, maintenance history, and structural sections of all pavements within the limits of the study.

B. Subdivide Pavements

Pavement features are given branch ID's and further divided into sections. Each section is broken down into sample units. Asphalt pavement features are divided into sample units of approximately 5,000 square feet. Portland cement concrete pavements are subdivided into a maximum of 20 concrete panels.

C. Perform Field Investigation

Pavement sections within the study area are visually inspected and the type, level, and extent of pavement distresses are recorded on field data sheets. Approximately 10% of sample units are inspected.

D. Analyze Field Data

Field documentation is analyzed and numerically adjusted based on the overall condition of each segment and the interaction of multiple distresses within each segment.

E. Establish Numerical Rating

Each pavement branch/section is given a numerical rating that reflects its overall level of distress.

F. Establish a Maintenance and Rehabilitation Plan

Maintenance strategies based on individual pavement section PCI ratings and pavement distress types. Rehabilitation cost estimates are prepared to address the type and extent of distress identified. A global maintenance plan was established to keep every section above the critical PCI.

G. Up-Date the Pavement Maintenance Management Plan

The Pavement Maintenance Management Plan is updated at periodic intervals to reflect changes in field conditions including further deterioration of pavements and/or pavement rehabilitation efforts.

SANTA MARIA PUBLIC AIRPORT

The Santa Maria valley is positioned in the northwest corner of Santa Barbara County in an area called the Central Coast of California. Within the City limits, the airport consumes approximately 2,598 acres consisting of 2 Runways; Runway 12-30 (main runway) with a length of 8,004 feet and 150 feet wide, and Runway 2-20, which serves as the crosswind runway with a length of 5,199 feet long by 75 feet wide. The Runways are accompanied by multiple parallel, connecting, access, and entrance/exit taxiways. All taxiway at the airport are 50-60 feet wide. The surface of both runways and all taxiways are asphalt pavement, with only one small taxiway section constructed with PCC. There are three general aviation aprons, one terminal/commercial service apron, and one cargo apron at the Airport. The terminal apron surface is PCC and all other aprons on the airport are asphalt pavement.

METHOD OF ANALYSIS

Pavement analysis is a methodical activity consistently and uniformly repeated over an entire area. It is critical that the analysis be uniform to achieve unbiased results. Additionally, as pavement conditions can be subjective, a team approach will more likely result in an objective analysis.

The pavement analysis focuses on a review of individual pavement sections that, together, create the airport. The first step in the analysis is to perform an extensive investigation into all available construction and maintenance plans, specifications, and records pertaining to initial construction, maintenance, and rehabilitation of all airfield pavements. This information becomes the basis for subdividing airport pavement branches into pavement sections.

BRANCH: A Branch is a clearly recognizable feature of pavement such as a taxiway, ramp, apron, or runway. Runway 12-30 and Taxiway A are examples of a pavement branch.

SECTION: A section is a portion of a facility that has its own history of construction, maintenance, and/or has experienced its own unique level of activity. Sections directly reflect the history of the airport. For example, a runway that was extended would constitute two sections; the

initial runway and the extension. If the entire area of a pavement branch has consistent construction history, structural section, and traffic loading and frequency, then that branch will only have one section.

SAMPLE UNIT: Sections are subdivided into individual sample units as a matter of practicality to facilitate the field investigation. Whether the inspection is performed on foot or from a vehicle, the inspector is limited as to the extent of his vision. Asphalt pavement features are divided into sample units of approximately 5,000 square feet. Portland cement concrete pavements are subdivided into a maximum of 20 concrete panels.

To summarize, pavement features are given a branch ID, then if necessary, subdivided into sections, and finally, each section is broken down into sample units for inspection purposes.

After all pavements within the study area have been subdivided into sample units, the next step is to perform an extensive visual inspection in the field. During this inspection, the team identifies the types of distress that may exist within the inspection area, the severity level of each distress (low, medium, high), and the unit of distress (length, area, etc.).

APPENDIX A, Pavement Inspection Layouts, identifies each pavement branch and section at Santa Maria Public Airport.

FIELD INSPECTION

Over the course of multiple site visits, the PMMP inspection team completed its in-depth field inspection of all airport pavements at the airport. Sample units were located by performing measurements from known points with tape or measuring wheel. When analyzing a pavement section, the team performed the inspection on-foot and within the vehicle, stopping as necessary to examine individual distress events. Measurements were taken to help quantify the extent of specific distresses. At those locations where pavement distress was high or concentrated when compared to surrounding pavements of the same feature the crew took the time to scrutinize field conditions beyond the pavement surface to ascertain other factors that could be contributing to the trouble. To the greatest extent possible, sample unit inspections were performed on foot to assure a high level of accuracy in the statistical process. Inspection results were documented on individual Condition Survey Data Sheets for each sample unit. Copies of representative inspection work sheets are shown in Appendix E – Sample PCI Survey Data Sheets. TABLE 1, Branch Listing Overview, provides an overview of each pavement branch at the airport.

TABLE 1: Branch Listing Overview

BRANCH ID	NAME	USE	NUMBER OF SECTIONS	TRUE AREA (SQFT)
CCJC ARPON	CCJC APRON	APRON	1	4,500.00
CR	CARGO RAMP	APRON	1	105,000.00
HA1	HANGAR AREA 1	APRON	1	69,500.00
HA2	HANGAR AREA 2	APRON	1	608,000.00
HR	HOTEL RAMP	APRON	1	285,000.00
HTL	HANGAR TAXILANE	TAXIWAY	1	60,000.00
MHR	MAIN HANGAR RAMP	APRON	2	298,600.00
RW 12-30	RUNWAY 12-30	RUNWAY	2	1,201,050.00
RW 2-20	RUNWAY 2-20	RUNWAY	1	389,175.00
TA	TERMINAL APRON	APRON	2	333,000.00
TDA	TIE-DOWN AREA	APRON	1	75,500.00
TL E3	TAXILANE E3	TAXIWAY	1	55,000.00
TL H	TAXILANE H	TAXIWAY	1	100,000.00
TXY A	TAXIWAY A	TAXIWAY	2	411,250.00
TXY A HB 1	HOLDING BAY 1	TAXIWAY	1	54,000.00
TXY A HB 2	HOLDING BAY 2	TAXIWAY	1	25,000.00
TXY A1	TAXIWAY A1	TAXIWAY	1	33,750.00
TXY A2	TAXIWAY A2	TAXIWAY	1	29,050.00
TXY A3	TAXIWAY A3	TAXIWAY	1	21,500.00
TXY A4	TAXIWAY A4	TAXIWAY	1	30,500.00
TXY A5	TAXIWAY A5	TAXIWAY	1	30,500.00
TXY A6	TAXIWAY A6	TAXIWAY	1	30,250.00
TXY A7	TAXIWAY A7	TAXIWAY	1	44,500.00
TXY A8	TAXIWAY A8	TAXIWAY	1	82,500.00

BRANCH ID	NAME	USE	NUMBER OF SECTIONS	TRUE AREA (SQFT)
TXY B	TAXIWAY B	TAXIWAY	1	126,250.00
TXY B2	TAXIWAY B2	TAXIWAY	1	24,000.00
TXY B3	TAXIWAY B3	TAXIWAY	1	21,000.00
TXY B5	TAXIWAY B5	TAXIWAY	1	25,500.00
TXY B7	TAXIWAY B7	TAXIWAY	1	20,000.00
TXY C	TAXIWAY C	TAXIWAY	2	305,000.00
TXY C1	TAXIWAY C1	TAXIWAY	1	23,500.00
TXY C2	TAXIWAY C2	TAXIWAY	1	23,500.00
TXY C3	TAXIWAY C3	TAXIWAY	1	23,500.00
TXY C3 HB1	HOLDING BAY 3	TAXIWAY	1	15,150.00
TXY E	TAXIWAY E	TAXIWAY	1	135,000.00
TXY E	TAXIWAY E3	TAXIWAY	1	55,000.00
TXY H	TAXIWAY H	TAXIWAY	2	119,000.00
TXY H1	TAXIWAY H1	TAXIWAY	1	33,000.00
TXY H2	TAXIWAY H2	TAXIWAY	1	9,100.00
TXY J	TAXIWAY J	TAXIWAY	1	66,250.00
TXY K	TAXIWAY K	TAXIWAY	1	12,750.00
TXY L	TAXIWAY L	TAXIWAY	1	6,250.00
TXY M	TAXIWAY M	TAXIWAY	2	12,250.00
TXY N	TAXIWAY N	TAXIWAY	1	8,500.00
TXY P	TAXIWAY P	TAXIWAY	1	6,250.00
TXY Q	TAXIWAY Q	TAXIWAY	1	5,750.00
TXY R	TAXIWAY R	TAXIWAY	1	19,500.00
TXY S	TAXIWAY S	TAXIWAY	1	16,875.00
TXY T	TAXIWAY T	TAXIWAY	1	13,650.00
TXY U	TAXIWAY U	TAXIWAY	1	17,250.00
TXY V	TAXIWAY V	TAXIWAY	1	11,500.00
TXY W	TAXIWAY W	TAXIWAY	1	15,000.00
			TOTAL	5,492,400.00

PAVEMENT DISTRESS – FLEXIBLE PAVEMENTS

The method in which a pavement deteriorates is visible through various signs or indicators that can be associated with the probable causes of the failure or deterioration. The following is a brief discussion on forms of flexible pavement distress and the associated probable cause for each failure.

A. Longitudinal/Transverse Cracking

Longitudinal and transverse cracks are caused by shrinkage of the asphalt pavement surface course. Longitudinal cracks are also caused by poorly constructed paving lane (cold) joints.

B. Alligator or Fatigue Cracking

Alligator and fatigue cracking are a series of interconnected cracks that form a tight pattern of small blocks or chunks that resemble an alligator skin. They are typically caused by excessive defection of the surface over an unstable foundation, primarily attributed to water saturation of the base or subgrade.

C. Reflective Cracking

Reflection cracks are caused by vertical or horizontal movements in the pavement beneath the last overlay brought on by expansion or contraction with changes in moisture or temperature. Reflection cracks in asphalt occur most frequently in situations where an asphalt overlay was placed over portland cement concrete pavements and the reflected pattern coincides with the concrete joint pattern beneath. Reflection cracks in asphalt overlays over older asphalt pavement occur when the cracks in the older pavement have not been properly repaired.

D. Raveling/Weathering

Raveling and weathering of the pavement surface is caused by the dislodging of aggregate particles and loss of the asphalt binder. As the raveling and weathering progresses unchecked, larger pieces of pavement are broken free resulting in a rougher, uneven surface.

E. Rutting

Rutting is a surface depression in the wheel path caused by permanent deformation in any of the pavement layers or subgrade. Rutting is typically caused by a consolidation of materials within the structural section due to heavy traffic loads.

F. Corrugation/Waves

Corrugation and waves are the result of a form of plastic surface movement typified by ripples or waves across the pavement surface. Corrugation and waves are typically caused by a lack of stability in the asphalt mix and/or a poor bond between asphalt pavement layers.

G. Depressions

Depressions are local low areas of limited size. Depressions are caused by either heavier than expected traffic or by local settlement of the underlying pavement layers.

H. Swelling

Swelling is characterized by an upward bulge in the pavement surface. Swells are typically caused by frost action in the subgrade or by swelling of the soil.

I. Pot Holing

Pot holing describes a complete failure of the pavement structure on a local level. Pot holing can occur as an isolated condition or through a series of individual pot holes in close proximity to each other. Pot holing is quite often the result of other forms of pavement failure that has been allowed to continue unabated.

J. Bleeding

Bleeding is characterized by a film of bituminous (black) material on the pavement surface resembling a shiny, glass-like surface that becomes very sticky. It is caused by excessive amounts of liquid asphalt in the mix and/or low air-void content and occurs when asphalt fills the voids on the mix during hot weather and then expands out onto the surface of the pavement.

K. Patching

Patching is characterized by local asphalt pavement repair (skin patch or complete reconstruction) or trench or utility repair as a result of subsurface construction. The surface of patching is discolored and typically uneven as compared to the adjacent pavement surface.

L. Fuel Spillage

Fuel spillage tends to be a local condition that is the result of continuous or prolonged fuel spillage onto the pavement surface due to improper fueling practices or a poorly maintained fuel facility. The asphalt surface becomes soft and pliable.

M. Block Cracking

Block cracking generally occurs over a large pavement area and is most associated with shrinkage of the asphalt pavement and daily temperature cycling. This distress typically indicates that the pavement has hardened significantly.

N. Shoving

Shoving is a form of plastic movement resulting in localized bulging of the pavement surface. Shoving is caused by a lack of stability in the asphalt mix and/or poor bonding between layers and can also occur at the asphalt pavement/cement concrete interface where the flexibility of the asphalt encounters the more ridged cement concrete structure.

TABLE 2, Asphalt Surface Distress Cause, summarizes the cause of each distress type for asphalt concrete surfaces.

DISTRESS TYPE	DISTRESS CAUSE
Alligator Cracking	Load
Bleeding	Other
Block Cracking	Climate/Durability
Corrugation	Other
Depression	Other
Jet Blast	Other
Joint Reflection Cracking	Climate/Durability
Longitudinal/Transverse Cracking	Climate/Durability
Oil Spillage	Other
Patching	Climate/Durability
Polished Aggregate	Other
Raveling	Climate/Durability
Rutting	Load
Shoving	Other
Slippage Cracking	Other
Swell	Other
Weathering	Climate/Durability

TABLE 2, Asphalt Surface Distress Cause

PAVEMENT DISTRESS – RIGID PAVEMENTS

Similar to flexible pavement structures, the method in which rigid pavements deteriorate is visible through various signs or indicators that can be associated with the probable causes of the failure or deterioration. The following is a brief discussion on forms of rigid pavement distress and the associated probable cause for each failure.

A. Longitudinal/Transverse Cracking

Longitudinal and transverse cracks are usually caused by a combination of repeated loads and shrinkage stresses and are characterized by cracks which divide the slab into two or more pieces.

B. Corner Cracks/Breaks

This type of distress is characterized by a crack that intersects the joints at a distance less than one-half of the slab length on both sides, measured from the corner of the slab. Corner cracks are caused by load repetition, combined with a loss of support and curling stresses. A corner crack typically extends vertically through the entire slab thickness.

C. Corner Spalling

Corner spalling is the raveling or breakdown of the slab within approximately two feet of the corner. Spalling is typically caused by improper curing and finishing of the concrete,

unsuitable aggregates, and/or improper mixing of the concrete. A corner spall typically angles downward to intersect the joint.

D. Joint Spalling

Joint spalling is the breakdown of the slab edges within two feet of the side of the joint as a result of excessive stresses at the joint or crack caused by infiltration of incompressible materials. Joint spalls typically intersect the joint at an angle.

E. "D" Cracking

"D" cracking is a pattern of cracks running in the vicinity of and parallel to a joint of linear crack. It is typically caused by the concrete's inability to withstand environmental factors such as freeze-thaw cycles in the presence of variable expansive aggregates. If left unchecked, this type of cracking often leads to the complete disintegration of the concrete within two feet of the joint or linear crack.

F. Joint Seal Damage

Joint seal damage is any condition which enables soil or rocks to accumulate in the joints or allows infiltration of water. Joint seal damage is caused by improper joint width, use of the wrong type of sealant, incorrect application, and/or not cleaning the joint properly before sealing. Joint seal damage includes stripping of the joint sealant, extrusion of the joint sealant, hardening of the filler through oxidation, loss of bond to the slab edges material and absence of sealant in the joint.

G. Scaling/Raveling

Scaling is the disintegration and loss of the wearing surface. Scaling may also be the result of a weakened surface caused by improper curing or finishing, freeze-thaw cycles, and unsuitable aggregate.

H. Shattered Slab

A shattered slab is defined as a slab where intersecting cracks break up the slab into four or more pieces. This is caused by overloading and/or inadequate foundation support.

I. Pumping

Pumping is characterized by the ejection of material by water through joints or cracks, caused by deflection of the slab under passing loads. As the water is ejected, it carries particles of gravel, sand, clay, or silt resulting in progressive loss of pavement support that can lead to cracking. Pumping near joints indicates a poor joint seal and the presence of ground water. Pumping is evidenced by surface staining and base or subgrade material on the pavement close to joints or cracks.

J. Settlement/Faulting

Settlement or faulting is a difference in elevation at a joint or crack caused by upheaval or differential consolidation. This condition is a result of loss of fines, from frost heave, or from swelling soils.

K. Patch

A patch is an area where the original pavement has been removed and replaced by a filler, either portland cement concrete, asphalt pavement, or other material. Patches tend to be discolored and uneven when compared to the adjacent rigid pavement.

L. Utility Cut

A utility cut is similar in nature to a patch except that utility cuts were specifically made to facilitate the installation of some underground improvement and utility cuts tend to be much larger in size than standard patches.

TABLE 3, Concrete Surface Distress Cause, summarizes the cause of each distress type for asphalt concrete surfaces.

TABLE 3, Concrete Surface Distress Cause

DISTRESS TYPE	DISTRESS CAUSE
Blow Up	Climate/Durability
Corner Break	Load
Linear Cracking	Load
Durability Cracking	Climate/Durability
Joint Seal Damage	Climate/Durability
Small Patch	Other
Large Patch/Utility Cut	Other
Popouts	Other
Pumping	Other
Scaling	Other
Faulting	Other
Shattered Slab	Load
Shrinkage Cracking	Other
Joint Spalling	Other
Corner Spalling	Other

PAVEMENT CONDITION – PCI CALCULATIONS

Having completed the visual inspection portion of the analysis, the team then focused its efforts on determining a numerical value for the condition of the sample unit inspected. Using PAVER 7 software, the Pavement Condition Index (PCI) was calculated for each individual section based on the results of the field inspection. The summary of each distress type and severity for each section is listed in TABLE 4, Pavement Section Distress Summary. The PCI results for each section are shown in TABLE 5, Section Condition Report, and graphically depicted on FIGURE 2, Santa Maria Public Airport PCI Rating Map. The following displays the pavement condition based on calculated PCI:

PCI	PAVEMENT CONDITION	
86-100	Good	
71-85	Satisfactory	
56-70	Fair	
41-55	Poor	
26-40	Very Poor	
11-25	Serious	
0-10	Failed	

TABLE 4: Pavement Section Distress Summary

BRANCH ID	SECTION ID	DISTRESS TYPE	DISTRESS SEVERITY
CCJC		SHRINKAGE CRACKING	N/A
APRON	1	JOINT SEAL DAMAGE	LOW
CR	1	WEATHERING	LOW
HA1	1	RAVELING	LOW, MEDIUM
HA1	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING RAVELING PATCHING	LOW, MEDIUM LOW, MEDIUM LOW, MEDIUM MEDIUM
		SHOVING DEPRESSION	LOW LOW
HR	1	BLOCK CRACKING WEATHERING LONGITUDINAL & TRANSVERS CRACKING ALLIGATOR CRACKING	LOW, MEDIUM LOW MEDIUM LOW, MEDIUM
HTL	1	BLOCK CRACKING WEATHERING	HIGH LOW
MHR	1	WEATHERING LONGITUDINAL & TRANSVERS CRACKING JOINT REFLECTIVE CRACKING RAVELING	LOW LOW, MEDIUM HIGH HIGH
MHR	2	WEATHERING JOINT REFLECTIVE CRACKING	LOW MEDIUM
RW 12-30	1	WEATHERING LONGITUDINAL & TRANSVERS CRACKING RAVELING	LOW LOW HIGH
RW 12-30	2	WEATHERING LONGITUDINAL & TRANSVERS CRACKING	MEDIUM LOW, MEDIUM
RW 2-20	1	WEATHERING LONGITUDINAL & TRANSVERS CRACKING	LOW, MEDIUM LOW, MEDIUM
TA	1	NONE	
TA	2	WEATHERING LONGITUDINAL & TRANSVERS CRACKING ALLIGATOR CRACKING BLOCK CRACKING RAVELING RUTTING	MEDIUM, HIGH LOW, MEDIUM LOW, MEDIUM MEDIUM MEDIUM, HIGH MEDIUM
TDA	1	NONE (NEW CONSTRUCTION)	
TL H	1	ALLIGATOR CRACKING LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	MEDIUM LOW, MEDIUM LOW
TXY A	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	LOW LOW
TXY A	2	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING SLIPPAGE CRACKING BLOCK CRACKING PATCHING RUTTING	LOW, MEDIUM LOW, MEDIUM LOW LOW LOW LOW, MEDIUM

TXY A HB 1	BRANCH ID	SECTION ID	DISTRESS TYPE	DISTRESS SEVERITY
TXY A HB 1		Ш	LONGITUDINAL & TRANSVERSE CRACKING	
PATCHING		1		
TXY AI			PATCHING	
TXY A1	TOWN A TIP O	1	LONGITUDINAL & TRANSVERSE CRACKING	MEDIUM
TXY A2 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING MEDIUM MEDIUM, HIGH TXY A3 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM MEDIUM, HIGH TXY A3 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM MEDIUM MEDIUM, HIGH TXY A4 1 LONGITUDINAL & TRANSVERSE CRACKING LOW SLIPPAGE CRACKING LOW MEDIUM SLIPPAGE CRACKING LOW MEDIUM SLIPPAGE CRACKING LOW MEDIUM SLIPPAGE CRACKING LOW MEDIUM MEDIUM MEDIUM MEDIUM SLIPPAGE CRACKING LOW MEDIUM LOW MEATHERING LOW MEDIUM M	TXY A HB 2	1	WEATHERING	MEDIUM
TXY A2	TXX A1	1	LONGITUDINAL & TRANSVERSE CRACKING	LOW
TXY A2	IXI AI	1	WEATHERING	LOW, HIGH
RUTTING			LONGITUDINAL & TRANSVERSE CRACKING	LOW
TXY A3	TXY A2	1		MEDIUM
TXY A3				MEDIUM, HIGH
TXY A3				
TXY A4 1 BLOCK CRACKING LOW MEDIUM LOW MEDIUM LOW MEDIUM LOW MEDIUM LOW MEATHERING LOW MEDIUM MEDIUM MEDIUM MEDIUM MEDIUM LOW MEDIUM				
TXY A4 1 BLOCK CRACKING RAVELING WEATHERING SLIPPAGE CRACKING LOW MEDIUM MEDIUM LOW MEDIUM MEDIUM LOW MEDIUM LOW TXY A5 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING BLOCK CRACKING WEATHERING LOW MEDIUM TXY A7 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM MEDIUM TXY B1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM MEATHERING LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW MEDIUM	TXY A3			
TXY A4 1 BLOCK CRACKING RAVELING LOW LOW WEATHERING SLIPPAGE CRACKING LOW MEDIUM LOW TXY A5 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM BLOCK CRACKING LOW MEDIUM MEDIUM BLOCK CRACKING LOW MEDIUM MEDIU				
TXY A4 1 RAVELING WEATHERING SLIPPAGE CRACKING TXY A5 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING BLOCK CRACKING WEATHERING MEDIUM LOW TXY A6 1 WEATHERING MEDIUM MEDIUM MEDIUM MEDIUM LOW TXY A7 1 ALIGATOR CRACKING MEDIUM LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW, MEDIUM M				
TXY A4 SLIPPAGE CRACKING LOW				
TXY A5 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY A6 1 WEATHERING MEDIUM TXY A7 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY A7 1 WEATHERING MEDIUM TXY A8 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY A8 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY B 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY B 1 WEATHERING LOW TXY B 1 WEATHERING LOW TXY B 1 WEATHERING LOW TXY B 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY B 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY B 1 LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH TXY B 1 WEATHERING LOW, MED., HIGH TXY B 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY B 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY B 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C 2 LINEAR CRACKING MEDIUM TXY C 1 WEATHERING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C 1 WEATHERING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 4 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LOW LOW LOW LOW LOW LOW	TXV A4	1		
TXY A5	1211	1		
TXY A5 1 WEATHERING BLOCK CRACKING TXY A6 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM WEATHERING MEDIUM TXY A7 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM MEATHERING LOW MEATHERING LOW TXY B2 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEATHERING LOW, MED., HIGH TXY B3 1 WEATHERING LOW, MEDIUM TXY B7 1 SLIPPAGE CRACKING LOW WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW WEATHERING LOW MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C 1 WEATHERING LOW TXY C TXY C3 1 WEATHERING LOW MEDIUM TXY C4 I WEATHERING LOW TXY C5 I WEATHERING LOW MEDIUM TXY C6 I WEATHERING LOW MEDIUM TXY C7 I WEATHERING LOW MEDIUM TXY C8 I LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C9 I WEATHERING LOW MEDIUM MEDIUM TXY C1 I WEATHERING LOW MEDIUM TXY C2 I WEATHERING LOW MEDIUM MEDIUM TXY C3 I LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM M				
TXY A6 1 LONGITUDINAL & TRANSVERSE CRACKING LOW				
TXY A6 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING BLOCK CRACKING WEATHERING ALLIGATOR CRACKING LOW LOW LOW LOW LOW LOW MEDIUM MEDIUM MEDIUM MEDIUM MEDIUM LOW LOW LOW LOW LOW LOW LOW MEATHERING LOW LOW LOW LOW LOW LOW LOW LOW LOW MEDIUM LOW LOW MEDIUM LOW LOW MEDIUM LOW LOW MEDIUM LOW LOW MEATHERING LOW LOW, MED, HIGH LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW MEATHERING MEDIUM LOW LOW MEATHERING MEDIUM, HIGH MEDIUM MEDI	TXY A5	1		_
TXY A6 1 WEATHERING MEDIUM BLOCK CRACKING TXY A7 1 WEATHERING LOW ALLIGATOR CRACKING TXY A8 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY B 1 WEATHERING LOW TXY B2 1 LONGITUDINAL & TRANSVERSE CRACKING TXY B3 1 WEATHERING LOW TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING LOW, MED., HIGH WEATHERING LOW, MED., HIGH LOW, MED., HIGH LOW, MED., HIGH LOW, MED., HIGH LOW, MED. HIGH LOW WEATHERING LOW WEATHERING MEDIUM TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C 2 LINEAR CRACKING LOW TXY C1 1 WEATHERING LOW TXY C2 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C4 TXY C5 1 WEATHERING LOW TXY C6 TXY C7 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C7 TXY C8 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C8 TXY C9 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C9 TXY C1 1 WEATHERING LOW LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM, HIGH MEDIUM MEDI				
BLOCK CRACKING MEDIUM				
TXY A7	TXY A6	1		
TXY A8 1 LONGITUDINAL & TRANSVERSE CRACKING LOW, MEDIUM LOW TXY B 1 WEATHERING LOW TXY B 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY B2 1 LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH TXY B3 1 WEATHERING LOW, MED., HIGH TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING LOW, MEDIUM TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY B7 1 SLIPPAGE CRACKING LOW WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING MEDIUM TXY C 2 LINEAR CRACKING LOW TXY C 2 LINEAR CRACKING LOW TXY C 1 WEATHERING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM, HIGH MEDIUM, HIGH MEDIUM, HIGH MEDIUM, HIGH LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM, HIGH LOW LOW LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM, HIGH LOW LOW LOW LOW LOW LOW LOW LO				
TXY A8 1 LONGITUDINAL & TRANSVERSE CRACKING LOW, MEDIUM LOW TXY B 1 WEATHERING LOW TXY B2 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW, MED., HIGH LOW, MEDIUM LOW, MEDIUM ELOW, MEDIUM ELOW MEATHERING LOW MEDIUM TXY B7 1 SLIPPAGE CRACKING WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C 2 LINEAR CRACKING TXY C 2 LINEAR CRACKING TXY C 1 WEATHERING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM, HIGH LOW LOW LOW MEDIUM, HIGH LOW LOW, MED., HIGH WEATHERING LOW LOW, MED., HIGH MEDIUM, HIGH LOW LOW, MED., HIGH MEDIUM, HIGH LOW LOW LOW, MED., HIGH MEDIUM, HIGH LOW LOW LOW LOW, MED., HIGH MEDIUM, HIGH LOW LOW LOW LOW LOW LOW, MED., HIGH MEDIUM, HIGH LOW LOW LOW LOW LOW LOW LOW LO	TXY A7	1		
TXY 8	121 117	1		
TXY B 1 WEATHERING LOW TXY B2 1 LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH TXY B3 1 WEATHERING LOW, MED., HIGH TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY B7 1 SLIPPAGE CRACKING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 2 LINEAR CRACKING LOW TXY C 2 LINEAR CRACKING LOW TXY C 1 WEATHERING LOW TXY C 1 WEATHERING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 1 WEATHERING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C 1 WEATHERING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 1 WEATHERING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH WEATHERING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH WEATHERING LOW LOW, MED., HIGH MEDIUM, HIGH MEDIUM, HIGH LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH MEDIUM, HIGH LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW	TXY A8	1		
TXY B2 1 LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH TXY B3 1 WEATHERING LOW, HIGH TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY B7 1 SLIPPAGE CRACKING LOW WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW WEATHERING LOW TXY C 2 LINEAR CRACKING LOW TXY C1 1 WEATHERING LOW TXY C2 1 WEATHERING LOW TXY C3 1 WEATHERING LOW TXY C3 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW WEATHERING LOW TXY E 1 WEATHERING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH WEATHERING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH WEATHERING LOW LOW MED., HIGH MEDIUM, HIGH MEDIUM, HIGH LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM, HIGH MEDIUM, HIGH LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW	1111 110	1		
TXY B3 1 WEATHERING LOW, MED., HIGH TXY B3 1 WEATHERING LOW, HIGH TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY B7 1 SLIPPAGE CRACKING LOW WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING MEDIUM TXY C 2 LINEAR CRACKING LOW TXY C 1 WEATHERING LOW TXY C 2 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 1 WEATHERING LOW TXY C 1 WEATHERING LOW TXY C 2 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C 3 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 1 WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH WEATHERING MEDIUM, HIGH LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW MEDIUM, HIGH MEDIUM, HIGH LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	TXY B	1	WEATHERING	LOW
TXY B3 1 WEATHERING LOW, MED., HIGH TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY B7 1 SLIPPAGE CRACKING LOW TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 2 LINEAR CRACKING LOW TXY C 2 LINEAR CRACKING LOW TXY C 1 WEATHERING LOW TXY C 1 WEATHERING LOW TXY C 2 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 1 WEATHERING LOW TXY C 2 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 1 WEATHERING LOW TXY C 2 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C 3 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 1 WEATHERING LOW TXY E 1 WEATHERING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH MEDIUM, HIGH LOW LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH MEDIUM, HIGH LOW LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW	TXV B2	1		
TXY B5 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING MEDIUM BLOCK CRACKING LOW SLIPPAGE CRACKING LOW WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING LOW TXY C 2 LINEAR CRACKING TXY C 1 WEATHERING LOW TXY C 1 WEATHERING LOW TXY C 1 WEATHERING LOW TXY C 2 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM TXY C 1 COW MEDIUM LOW TXY C 2 LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW MEATHERING LOW LOW MEATHERING LOW MEDIUM, HIGH MEDIUM, HIGH MEDIUM, HIGH MEDIUM, HIGH LOW LOW MEDIUM, LOW MEDIUM, HIGH MEDIUM, HIGH MEDIUM, HIGH LOW LOW MEDIUM, LOW MEDIUM, HIGH MEDIUM, HIGH LOW LOW TXY F 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW MEDIUM, HIGH MEDIUM, HIGH MEDIUM, HIGH LOW LOW TXY F 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LOW LOW LOW LOW MEDIUM, HIGH MEDIUM, HIGH MEDIUM, HIGH LOW LOW LOW TXY F 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW TXY F 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LOW LOW LOW LOW LOW LOW	111 22	1		
TXY BS 1 WEATHERING MEDIUM BLOCK CRACKING LOW SLIPPAGE CRACKING LOW WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C 2 LINEAR CRACKING LOW TXY C 1 WEATHERING LOW TXY C 1 WEATHERING LOW TXY C 1 WEATHERING LOW TXY C 2 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C 3 LONGITUDINAL & TRANSVERSE CRACKING LOW TXY C 3 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 1 WEATHERING LOW TXY E 1 WEATHERING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH MEDIUM, HIGH LOW LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LOW LOW LOW LOW LOW LOW	TXY B3	1		LOW, HIGH
TXY E3 WEATHERING MEDIUM	TVV P5	1	LONGITUDINAL & TRANSVERSE CRACKING	LOW
TXY B7 1 SLIPPAGE CRACKING WEATHERING MEDIUM TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C 2 LINEAR CRACKING MEDIUM TXY C1 1 WEATHERING LOW TXY C2 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C3 1 WEATHERING LOW TXY C4 1 WEATHERING LOW TXY C5 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY E 1 WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW	TAT D3	1		
TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C 2 LINEAR CRACKING LOW TXY C1 1 WEATHERING MEDIUM TXY C2 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY C3 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW TXY E 1 WEATHERING LOW, MED., HIGH MEDIUM, HIGH LOW LONGITUDINAL & TRANSVERSE CRACKING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW TXY E 3 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LOW LOW LOW LOW LOW LOW			BLOCK CRACKING	LOW
TXY C 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING TXY C 2 LINEAR CRACKING LOW MEDIUM TXY C1 1 WEATHERING LOW TXY C2 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 1 WEATHERING LOW TXY E 1 WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	TXY B7	1	SLIPPAGE CRACKING	
TXY C 1 WEATHERING LOW LINEAR CRACKING LOW JOINT SEAL DAMAGE MEDIUM TXY C1				
TXY C 2 LINEAR CRACKING JOINT SEAL DAMAGE TXY C1 1 WEATHERING LOW MEDIUM TXY C2 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING LOW HB 3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LOW LOW LOW LOW LOW LOW	TXY C	1		
TXY C 2 JOINT SEAL DAMAGE MEDIUM TXY C1 1 WEATHERING LOW TXY C2 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW HB 3 1 WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH WEATHERING MEDIUM, HIGH BLOCK CRACKING LOW TXY E3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	1111 0	1		
TXY C1 1 WEATHERING LOW TXY C2 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 1 WEATHERING LOW TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	TXY C	2		
TXY C2 1 WEATHERING LOW TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW HB 3 1 WEATHERING LOW LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LOW LONGITUDINAL & TRANSVERSE CRACKING MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW				
TXY C3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW LOW WEATHERING LOW WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH MEDIUM, HIGH BLOCK CRACKING LOW TXY E3 LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	TXY C1	1		
HB 3 1 WEATHERING LOW HB 3 1 WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH WEATHERING MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	TXY C2	1	WEATHERING	LOW
HB 3 1 WEATHERING LOW HB 3 1 WEATHERING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW, MED., HIGH WEATHERING MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	TWY CO	1	LONGITUDINAL & TRANSVERSE CRACKING	LOW
TXY E 1 LONGITUDINAL & TRANSVERSE CRACKING WEATHERING BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	171 (2)	1	WEATHERING	
TXY E 1 WEATHERING MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	нв з	1	WEATHERING	LOW
TXY E 1 WEATHERING MEDIUM, HIGH BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW			LONGITUDINAL & TRANSVERSE CRACKING	LOW, MED., HIGH
BLOCK CRACKING LOW LONGITUDINAL & TRANSVERSE CRACKING LOW	TXY E	1	WEATHERING	
TXV E3 1 LONGITUDINAL & TRANSVERSE CRACKING LOW				· · · · · · · · · · · · · · · · · · ·
TXYB3 I I I	TVV E2	1	LONGITUDINAL & TRANSVERSE CRACKING	LOW
WEATHERING LOW	IAY E3	1	WEATHERING	LOW

BRANCH ID	SECTION ID	DISTRESS TYPE	DISTRESS SEVERITY
тхү н	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING PATCHING	LOW MEDIUM, HIGH LOW
TXY H	2	WEATHERING	MEDIUM, HIGH
TXY H1	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	LOW LOW
TXY H2	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	LOW LOW
TXY J	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	MEDIUM LOW
TXY K	1	RAVELING	LOW
TXY L	1	LONGITUDINAL & TRANSVERSE CRACKING PATCHING RAVELING	LOW LOW LOW
TXY M	1	RAVELING	MEDIUM
TXY M	2	NONE	
TXY N	1	PATCHING WEATHERING	LOW LOW
TXY P	1	NONE (NEW CONSTRUCTION)	
TXY Q	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	LOW LOW
TXY R	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	LOW LOW
TXY S	1	ALLIGATOR CRACKING WEATHERING	LOW LOW
TXY T	1	ALLIGATOR CRACKING DEPRESSION WEATHERING	MEDIUM LOW MEDIUM
TXY U	1	BLOCK CRACKING LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	LOW LOW MEDIUM
TXY V	1	LONGITUDINAL & TRANSVERSE CRACKING WEATHERING	LOW, MEDIUM LOW
TXY W	1	WEATHERING	LOW

TABLE 5: Section Condition Report

Branch ID	Section ID	True Area	PCI
		(SqFt)	
CCJC APRON	1	4,500	84
CR	1	105,000.00	94
HA1	1	69,500.00	67
HA2	1	608,000.00	76
HR	1	285,000.00	50
HTL	1	60,000.00	100
MHR	1	144,600.00	72
MHR	2	154,000.00	53
RW 12-30	1	256,500.00	74
RW 12-30	2	944,550.00	69
RW 2-20	1	389,175.00	76
TA	1	133,000.00	100
TA	2	200,000.00	29
TDA	1	75,500.00	17
TL H	1	100,000.00	63
TXY A	1	100,000.00	75
TXY A	2	311,250.00	54
TXY A HB 1	1	54,000.00	55
TXY A HB 2	1	25,000.00	75
TXY A1	1	33,750.00	73
TXY A2	1	29,050.00	41
TXY A3	1	21,500.00	47
TXY A4	1	30,500.00	63
TXY A5	1	30,500.00	65
TXY A6	1	30,250.00	56
TXY A7	1	44,500.00	58
TXY A8	1	82,500.00	85
TXY B	1	126,250.00	94
TXY B2	1	24,000.00	82
TXY B3	1	21,000.00	73
TXY B5	1	25,500.00	75
TXY B7	1	20,000.00	56
TXY C	1	257,500.00	93
TXY C	2	47,500.00	87
TXY C1	1	23,500.00	94
TXY C2	1	23,500.00	94
TXY C3	1	23,500.00	90
TXY C3 HB1	1	15,150.00	94
TXYE	1	135,000.00	61
TXY E3	1	55,000.00	75
TXY H	1	98,000.00	73
TXY H	2	21,000.00	77
TXY H1	1	33,000.00	85
TXY H2	1	9,100.00	81
TXY J	1	66,250.00	67
	1		74
TXYK	1	12,750.00	64
TXY L		6,250.00	
TXY M	2	1,000.00	43
TXY M		11,250.00	100
TXY N	1	8,500.00	89

SANTA MARIA PUBLIC AIRPORT

Branch ID	Section ID	True Area (SqFt)	PCI
TXY P	1	6,250.00	100
TXY Q	1	5,750.00	85
TXY R	1	19,500.00	90
TXY S	1	16,875.00	34
TXY T	1	13,650.00	33
TXY U	1	17,250.00	70
TXY V	1	11,500.00	80
TXY W	1	15,000.00	94

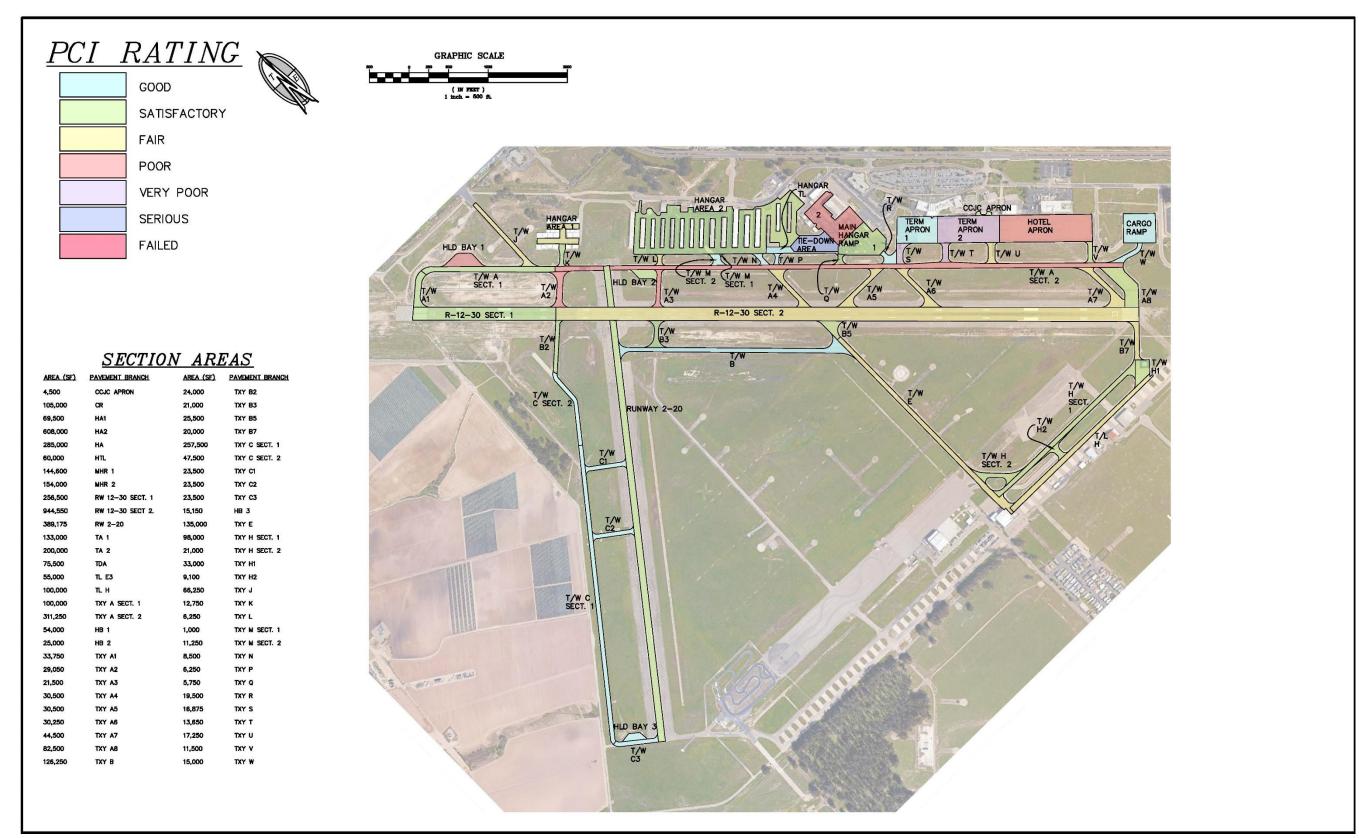


FIGURE 2: Santa Maria Public Airport PCI Rating Map

NOVEMBER, 2018

MAINTENANCE & REHABILITATION STRATEGIES

Once the PCI is calculated for each pavement section, the next step is to establish a corresponding maintenance and repair (M & R) strategy. M & R strategies will vary depending on the current level of pavement PCI and future pavement PCI, based on estimated PCI deterioration rates. To help in this effort, the Critical PCI will be used to determine the best pavement M & R strategy. The Critical PCI is defined as the PCI value at which cost of applying localized preventive maintenance increases significantly. The critical PCI at Santa Maria Public Airport is 75. TABLE 6, M & R Types, reviews the various M & R strategies identified in the PAVER software that will be implemented at the airport. APPENDIX B – Rehab Strategies for AC Paving and APPENDIX C – Rehab Strategies for PCC Paving list the desired M & R strategy for each pavement distress type/severity, a brief description of the M & R strategy, as well as associated cost for the M & R approach. The repair strategies are to be a starting point in determining a course of action for rehabilitation of pavements. A global maintenance plan was established to keep every section above the critical PCI.

TABLE 6: M & R Types

M&R TYPE	PAVER USER MANUAL DEFINITION	ABOVE/BELOW CRITICAL PCI	EXAMPLES
Global Preventive (M&R)	Activities applied to entire pavement sections with the primary objective of slowing the rate of deterioration. This policy is applied to pavements above the critical PCI.	Above	Crack fill Slurry Seal Application Pavement Rejuvenation Joint seal/rod Replacement
Localized Preventive M&R	Distress maintenance activities performed with the primary objective of slowing the rate of deterioration. This policy is applied to pavements above the critical PCI.	Above	Crack Fill Patching Joint seal/rod replacement
Localized Stopgap (Safety) M&R	The localized M&R needed to keep the pavement operational in a safe condition. This policy is applied to pavements below the critical PCI.	Below	Localized Reconstruction Slab/Partial Slab Reconstruction Slab Corner Break Reconstruction
Major M&R	Activities applied to the entire pavement section to correct or improve existing structural or functional requirements. It is also used to upgrade pavements below the critical PCI.	Below	Complete Reconstruction Pavement Overlay

MAINTENANCE & REHABILITATION PLAN

For budgeting and planning purposes, the M & R plan discussed in this section is only the construction effort, and doesn't incorporate any administration, design, materials testing, or planning efforts. The cost identified in this M & R manual reflect current construction cost, and assumes the project is on a large scale. Additionally, they do not reflect any "costs" associated with facility down-time and overall management of the airfield around the rehabilitation project. Actual unit costs may vary.

The 10-year M & R plan for each pavement section can be reviewed in APPENDIX D – 10-Year Section PCI and M & R plan. A summary of the overall pavements can be viewed in TABLE 7 – 10-Year Airport Pavements M & R Plan.

This M & R plan was established using an unlimited budget during the analysis, and can be adjusted to fit the District's overall budget. It is possible to receive federal funding through the Airport Improvement Program to assist with complying with the M & R plan.

TABLE 7, 10-Year Airport Pavements M & R Plan

Year	Maintenance	Type of	Unit Cost	Area	Total Cost
	Recommended	Maintenance			
	Runway 12-30 Sec 1	Crack Fill	\$2.50/LF	20,000 LF	\$50,000
	Runway 12-30 Sec 1	Patching	\$10.00/SF	200 SF	\$2,000
	Runway 2-20	Crack Fill	\$2.50/LF	15,000LF	\$37,500
	Runway 2-20	Slurry Seal	\$3.50/SY	43,240 SY	\$151,340
	HA1	Overlay	\$3.00	69,500 SF	\$208,500
	HA2	Crack Fill	\$2.50/LF	20,000 LF	\$50,000
	HA2	Slurry Seal	\$3.50/SY	67,550 SY	\$236,425
	HR	Overlay	\$3.00/SF	285,000 SF	\$855,000
	MHR Sec 1	Crack Fill	\$3.00/LF	10,000 LF	\$30,000
	MHR Sec 1	Slurry Seal	\$3.50/SY	16,065 SY	\$56,228
	MHR Sec 2	Overlay	\$3.00/SF	154,000 SF	\$462,000
	TA Sec 2	Reconstruct - PCC	\$20.00/SF	200,000 SF	\$4,000,000
	TDA	Reconstruct	\$12.00/SF	75,500 SF	\$906,000
	TL H	Crack Fill	\$2.50/LF	5,000 LF	\$12,500
	TL H	Slurry Seal	\$3.50/SY	33,333 SY	\$116,665
	TL H	Patching	\$10.00/SF	1,500 SF	\$15,000
	TXY A Sec 1	Crack Fill	\$2.50/LF	10,000 LF	\$25,000
	TXY A Sec 1	Slurry Seal	\$3.50/SY	33,333 SY	\$116,665
	TXY A HB 1	Overlay	\$3.00/SF	54,000 SF	\$162,000
2019	TXY A HB 2	Crack Fill	\$2.50/LF	5,000 LF	\$7,500
	TXY A HB 2	Slurry Seal	\$3.50/SY	2,750 SY	\$9,625
	TXY A1	Crack Fill	\$2.50/LF	5,000 LF	\$7,500
	TXY A1	Slurry Seal	\$3.50/SY	3,750 SY	\$13,125
	TXY A2	Reconstruct	\$18.00/SF	29,050 SF	\$522,900
	TXY A3	Reconstruct	\$18.00/SF	21,500 SF	\$387,000
	TXY A4	Overlay	\$3.00/SF	30,500 Sf	\$91,500
	TXY A5	Overlay	\$3.00/SF	30,500 Sf	\$91,500
	TXY A6	Overlay	\$3.00/SF	30,250 SF	\$90,750
	TXY A7	Overlay	\$3.00/SF	44,500 SF	\$133,500
	TXY B3	Crack Fill	\$2.50/LF	2,000 LF	\$5,000
	TXY B3	Slurry Seal	\$3.50/SY	2,400 SY	\$8,400
	TXY B5	Crack Fill	\$2.50/LF	2,500 LF	\$6,250
	TXY B5	Slurry Seal	\$3.50/SY	2,900 SY	\$10,150
	TXY B7	Overlay	3.00/SF	20,000 SF	\$60,000
	TXY E	Overlay	\$3.00/SF	135,000	\$405,000
	TXY E3	Crack Fill	\$2.50/LF	5,500 LF	\$13,750
	TXY E3	Slurry Seal	\$3.50/SY	6,100 SY	\$21,350

Estimated Total				721,42	1,423.30
Ten Year	101712			\$21.42	1,425.50
2029	TOTAL	Juliy Jeal	10,00/31	1,000 31	\$6,000
2020	TXY Q	Slurry Seal	\$3.50/SY	1,000 SY	\$3,500
	TXY Q	Crack Fill	\$2.50/LF	1,000 SF	\$2,500
2028	TXY A8 TOTAL	Siurry Sear	\$5.5U/SY	9,165 SY	\$32,077.50 \$52,077.50
2020	TXY A8	Crack Fill Slurry Seal	\$2.50/LF \$3.50/SY	8,000 LF	\$20,000
2027	TOTAL	Cup al. Ettl	¢2.50/15	0.00015	\$0
2026	TOTAL				\$0 \$0
2026	TOTAL				\$14,450
2025	TXY B2	Slurry Seal	\$3.50/SY	2,700 SY	\$9,450
6.55	TXY B2	Crack Fill	\$2.50/LF	2,000 LF	\$5,000
2024	TOTAL	Con al Eill	62.50/15	2.000 5	\$0
2000	TOTAL				\$7,050
2023	TXY V	Slurry Seal	\$3.50/SY	1,300 SY	\$4,550
	TXY V	Crack Fill	\$2.50/LF	1,000 LF	\$2,500
	TOTAL	0 1 5:11	42.52/15	4.000 : 7	\$5,602,500
2022	Taxiway A Sec 2	Reconstruct	\$18.00/SF	311,250 SF	\$5,602,500
2021	TOTAL		d40.00 (5=	244 272 27	\$0
	TOTAL				\$5,667,300
2020	Runway 12-30 Sec 2	Overlay	\$6.00/SF	944,550 SF	\$5,667,300
	TOTAL				\$10,072,048
	TXY U	Slurry Seal	\$3.50/SY	2,000 SY	\$7,000
	TXY U	Crack Fill	\$2.50/LF	2,000 SF	\$5,000
	TXY T	Reconstruct	\$18.00/SF	13,650 SF	\$245,700
	TXY S	Reconstruct	\$18.00/SF	16,875 SF	\$303,750
	TXY M Sec 1	Reconstruct - AC	\$12.00/SF	1,000 SF	\$12,000
	TXY L	Slurry Seal	\$3.50/SY	1,000 SY	\$3,500
	TXY L	Crack Fill	\$2.50/LF	1,000 LF	\$2,500
	TXY K	Slurry Seal	\$3.50/SY	1,400 SY	\$4,900
	TXY K	Crack Fill	\$2.50/LF	1,000 LF	\$2,500
	TXY J	Slurry Seal	\$3.50/SY	7,400 SY	\$25,900
	TXY J	Crack Fill	\$2.50/LF	6,500 LF	\$5,000
	TXY H Sec 2	Slurry Seal	\$3.50/SY	2,350 SY	\$8,225
	TXY H Sec 2	Crack Fill	\$2.50/LF	2,000 LF	\$5,000
	TXY H Sec 1	Slurry Seal	\$3.50/SY	10,900 SY	\$38,450
	TXY H Sec 1	Crack Fill	\$2.50/LF	10,000 LF	\$25,000

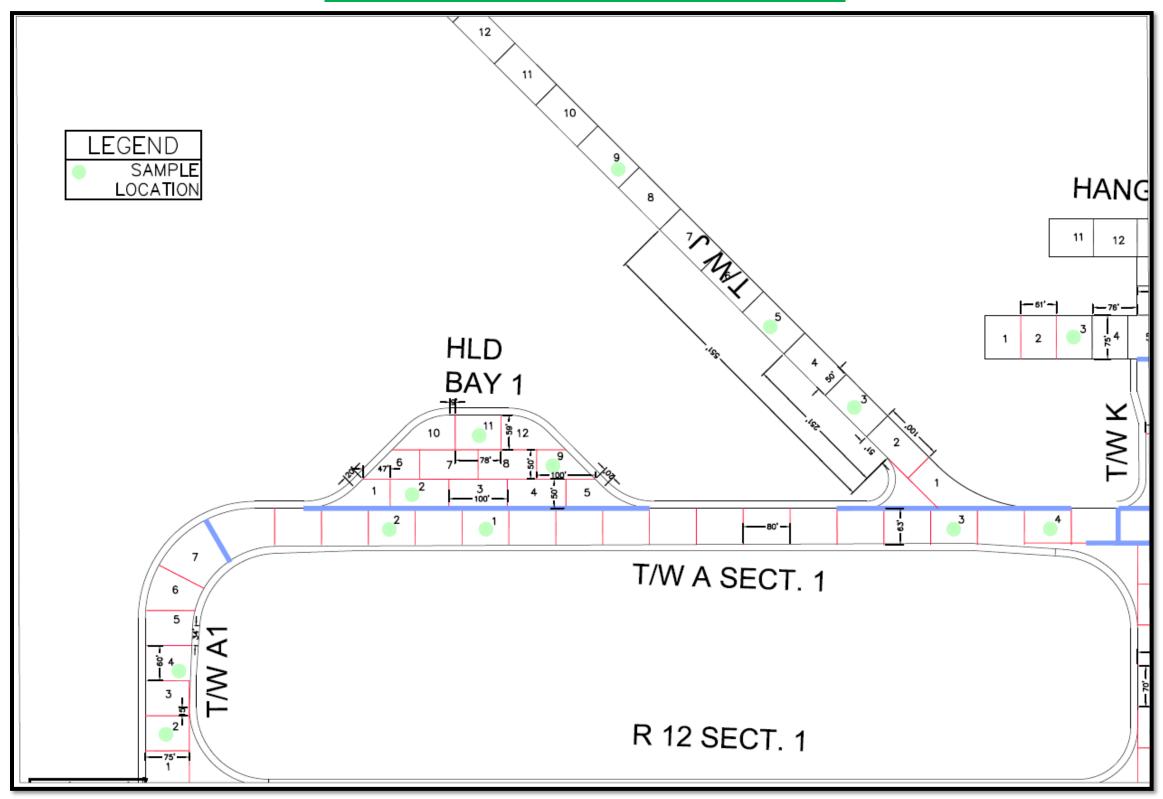
SUMMARY

Overall, the existing pavement condition varied, with PCI's ranging from 17 to 100. A pavement M & R plan was established to assist the airport with planning and budgeting, and keep the airfield pavement in good condition at the least expense. The total cost generated from the 10-Year M & R plan was \$21,421,425.50. These costs show how much the airport needs to spend to maintain and/or improve the airfield pavement condition. The M & R plan should be updated annually, assisted by visual inspections and report updating.

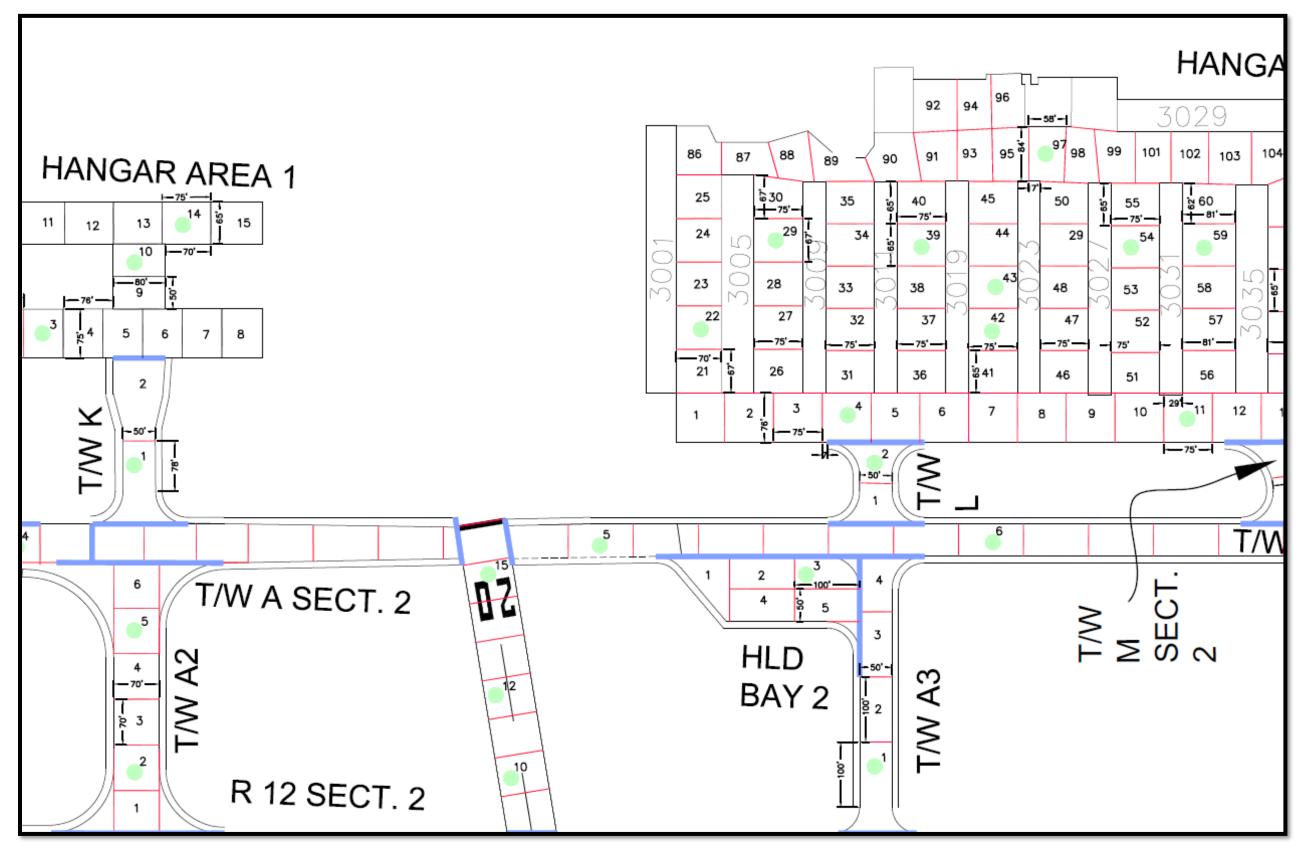
REFERENCES

1.	Pavement Maintenance Management Plan,
	FAA Advisory Circular 150/5380-7B, 10/10/2014
2.	Guidelines and Procedures for Maintenance of Airport Pavements,
	FAA Advisory Circular 150/5380-6C, 10/10/14
3.	Airfield Pavement Surface Evaluation and Ratings Manuals
	FAA Advisory Circular 150/5320-17A, 9/10/14
4.	ASTM D5440-10
	Standard Test Method for Airport Pavement Condition Index Survey
5.	Paver Manual for Asphalt Distress,
	U.S. Army Corps of Engineers
6.	Paver Manual for Concrete Distress,
	U.S. Army Corps of Engineers
7.	Santa Maria Public Airport Master Plan
	Coffman Associates

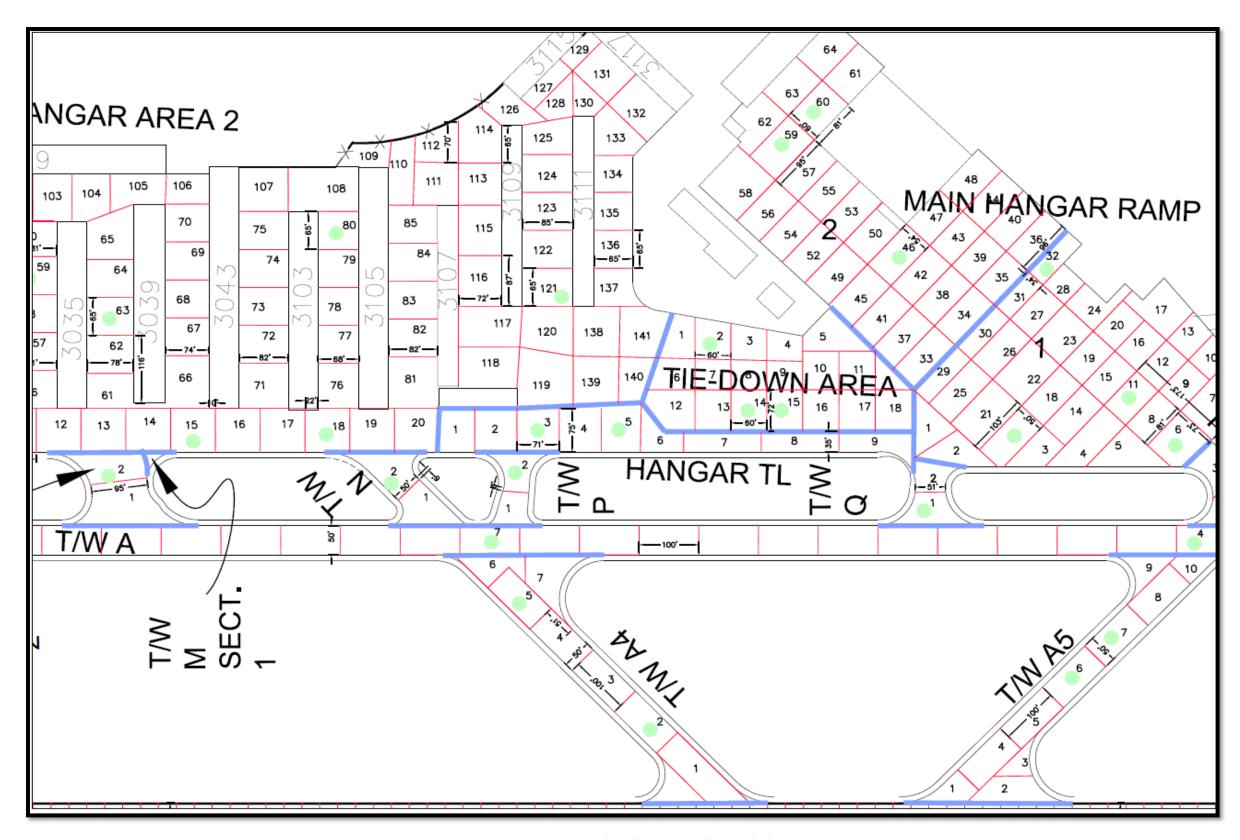
<u>APPENDIX A – PAVEMENT INSPECTION LAYOUTS</u>



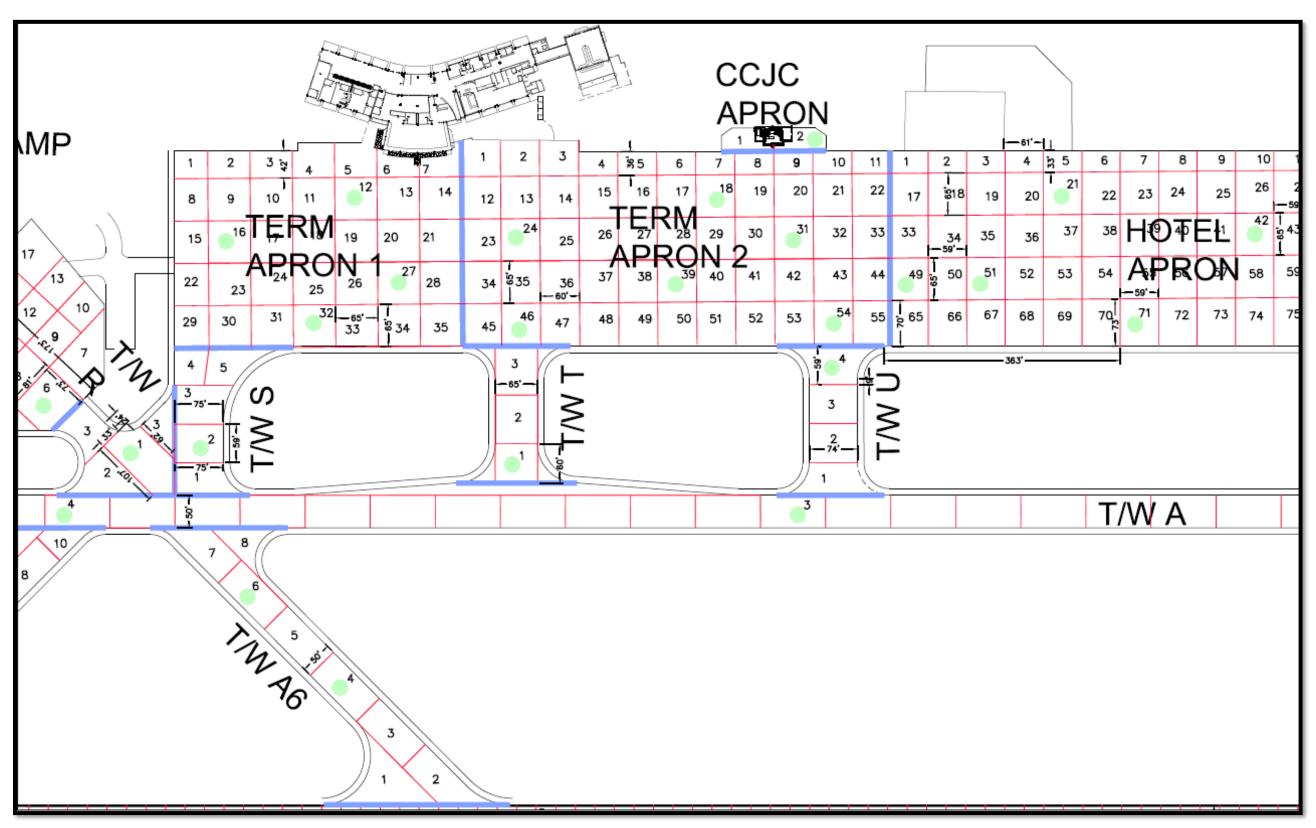
PAVEMENT INSPECTION LAYOUT: 1 OF 17



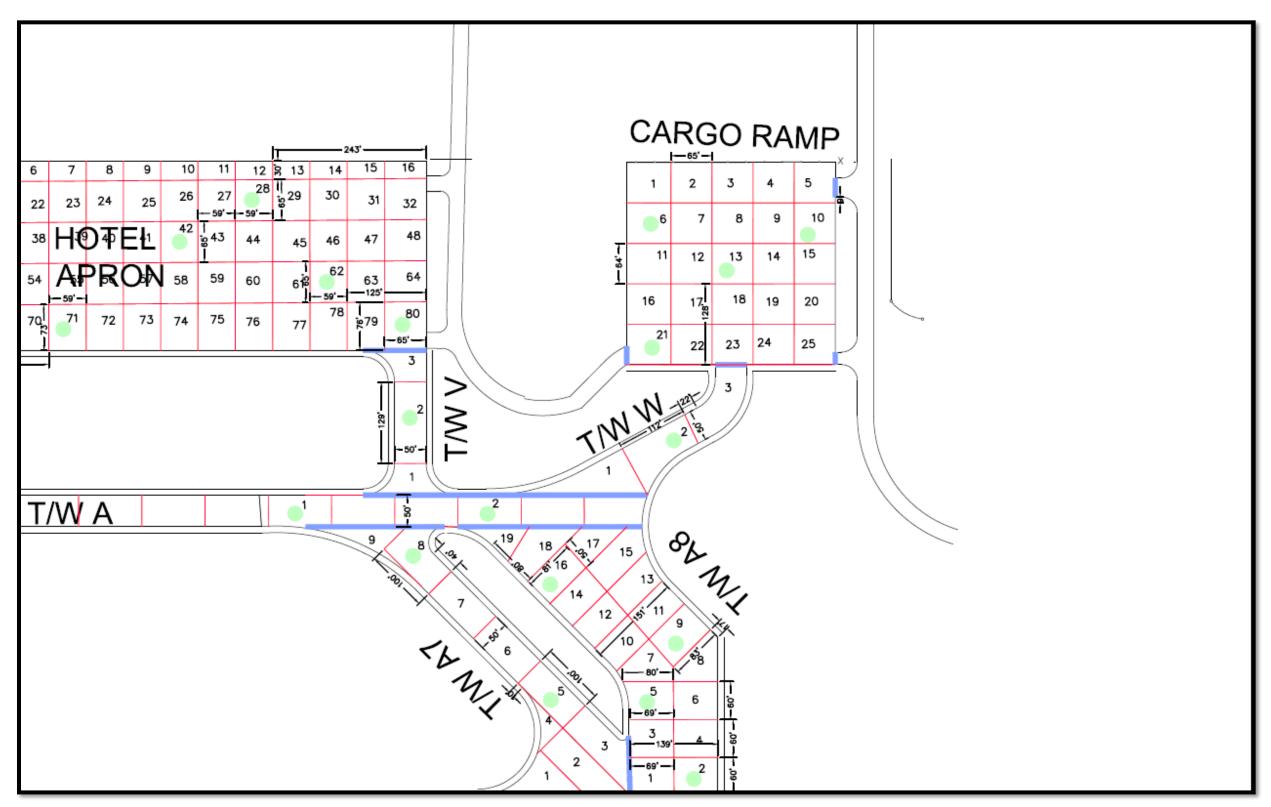
PAVEMENT INSPECTION LAYOUT: 2 OF 17



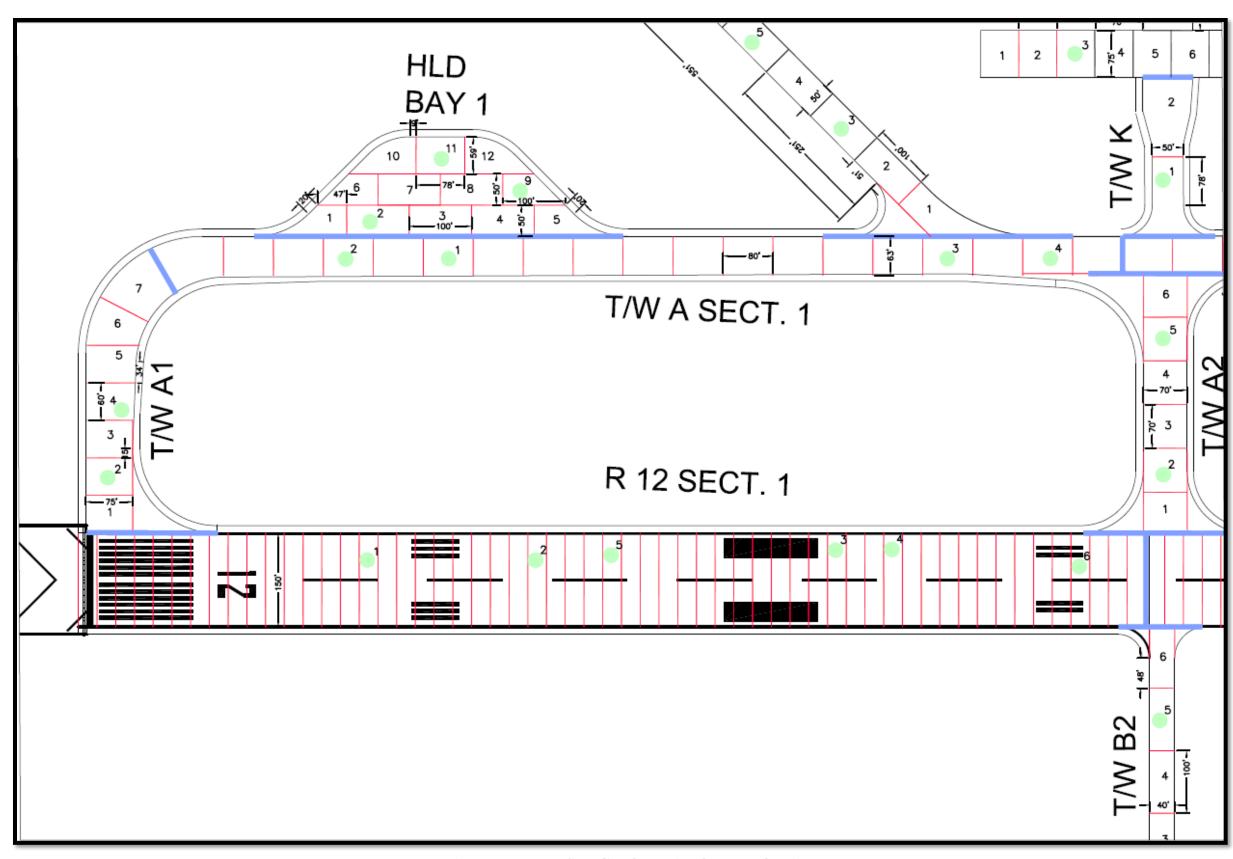
PAVEMENT INSPECTION LAYOUT: 3 OF 17



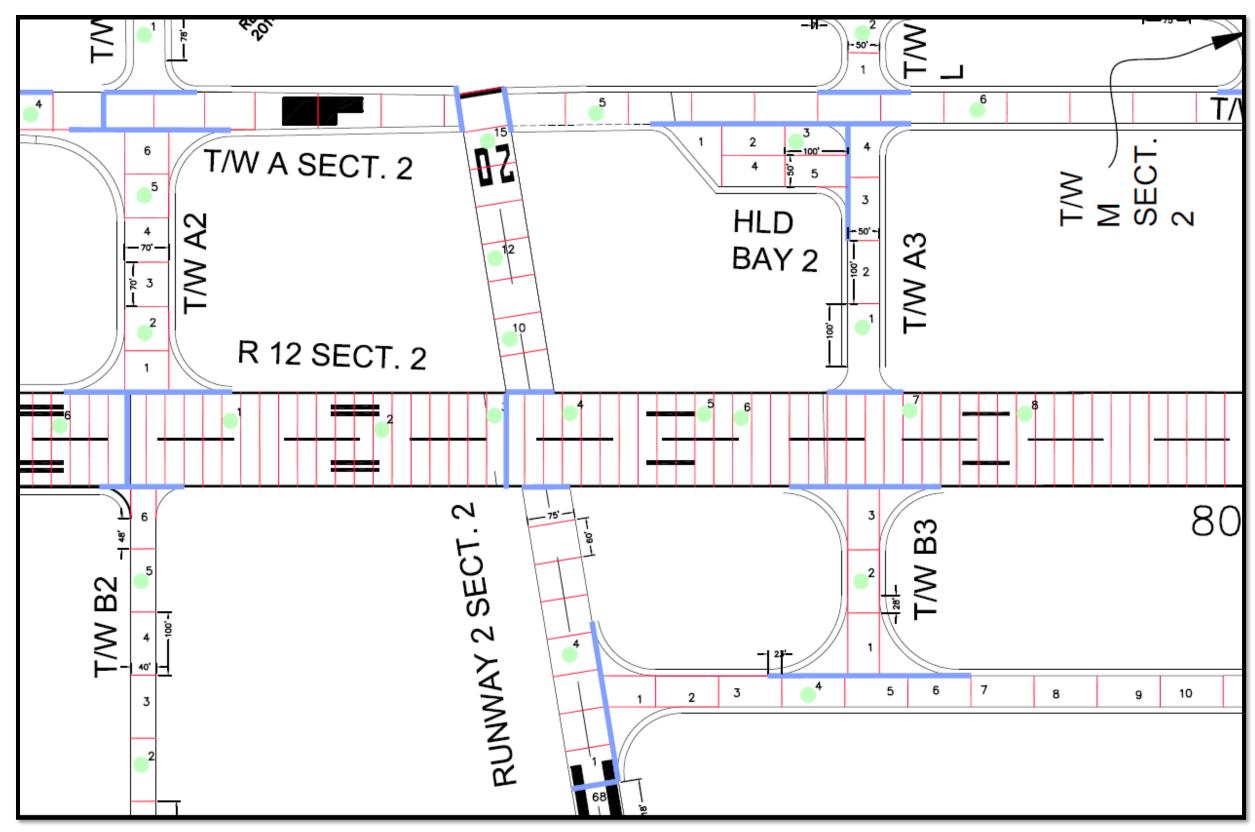
PAVEMENT INSPECTION LAYOUT: 4 OF 17



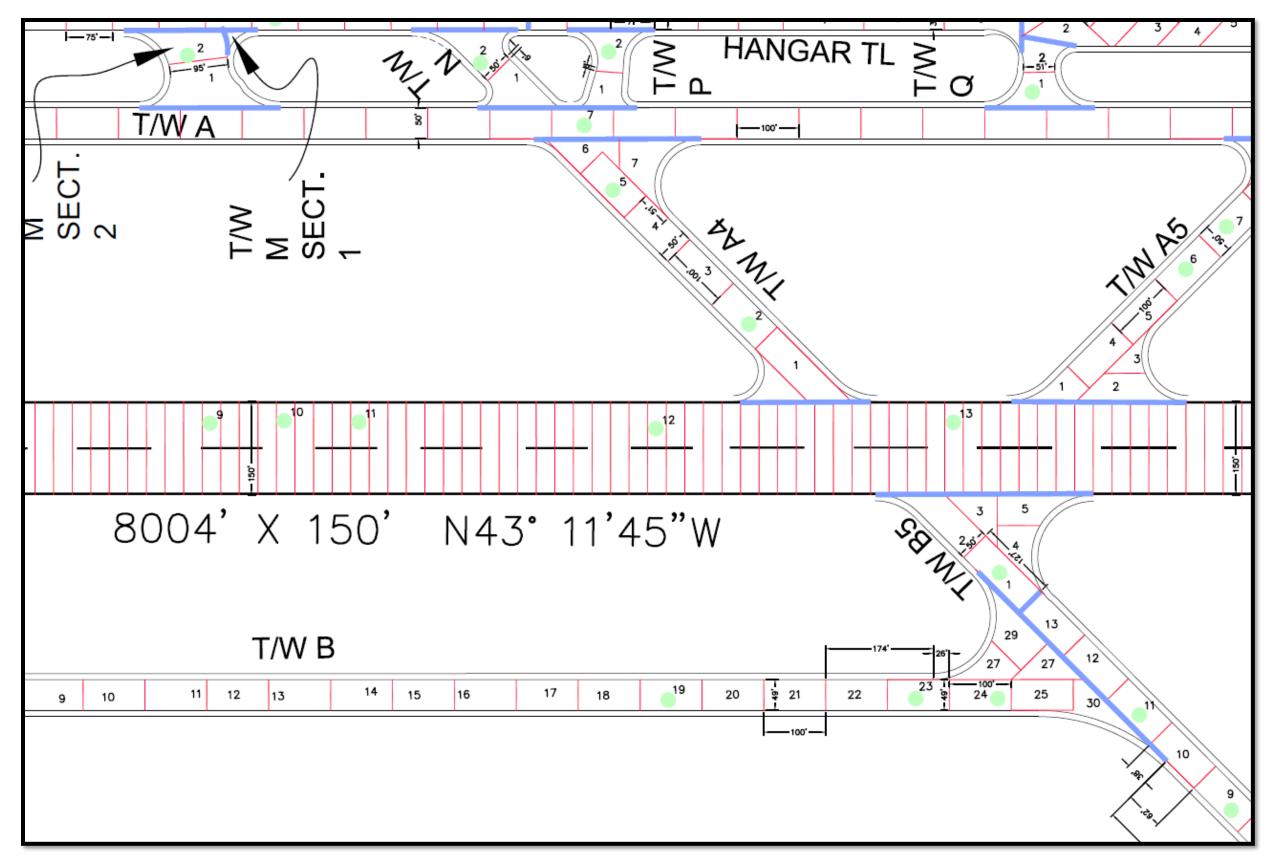
PAVEMENT INSPECTION LAYOUT: 5 OF 17



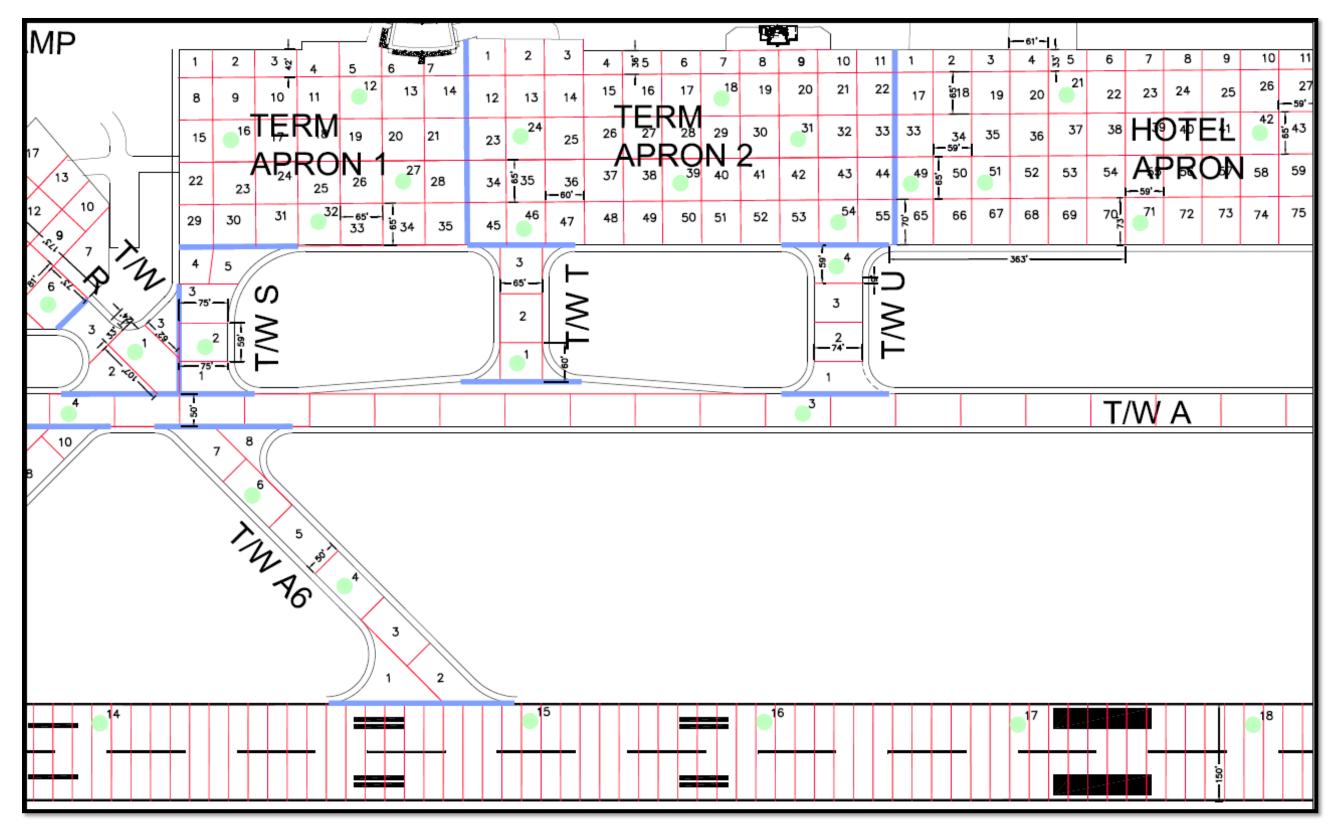
PAVEMENT INSPECTION LAYOUT: 6 OF 17



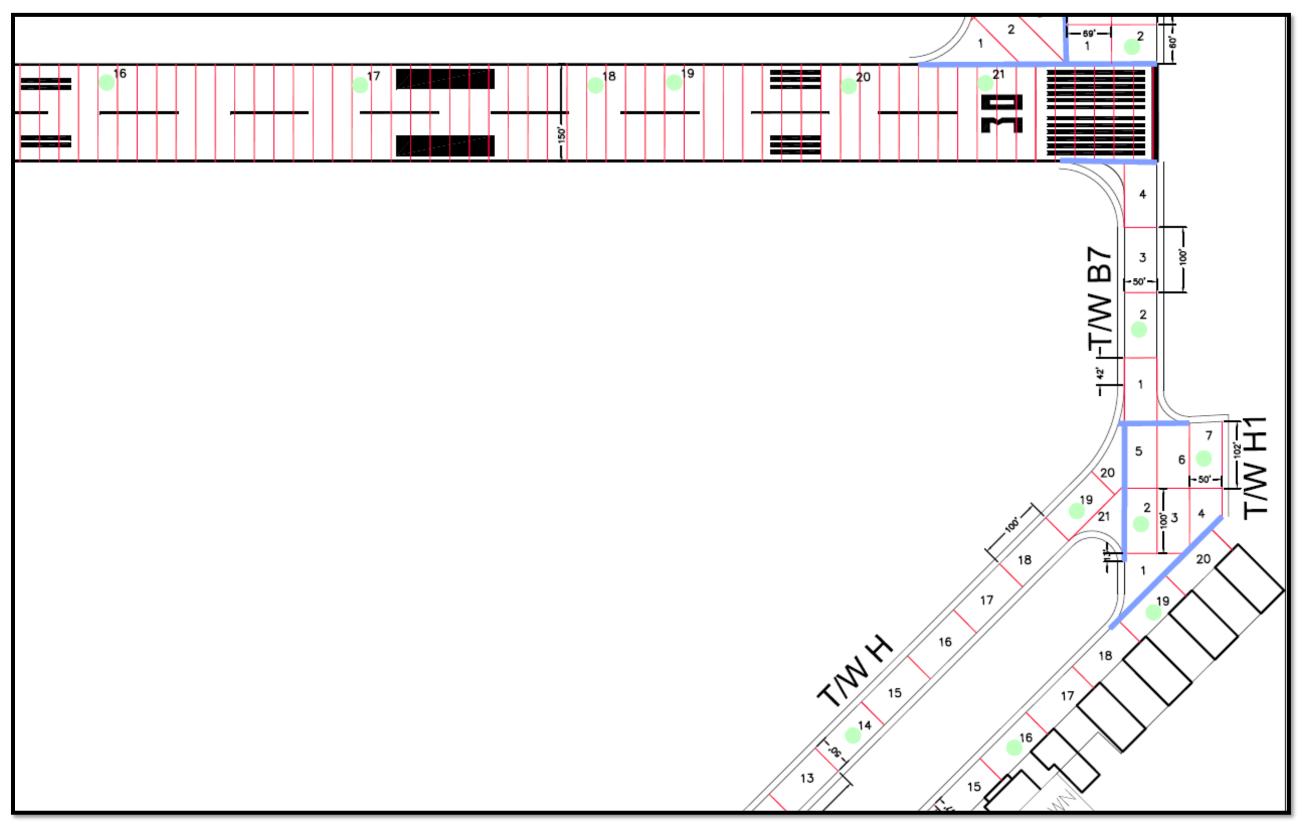
PAVEMENT INSPECTION LAYOUT: 7 OF 17



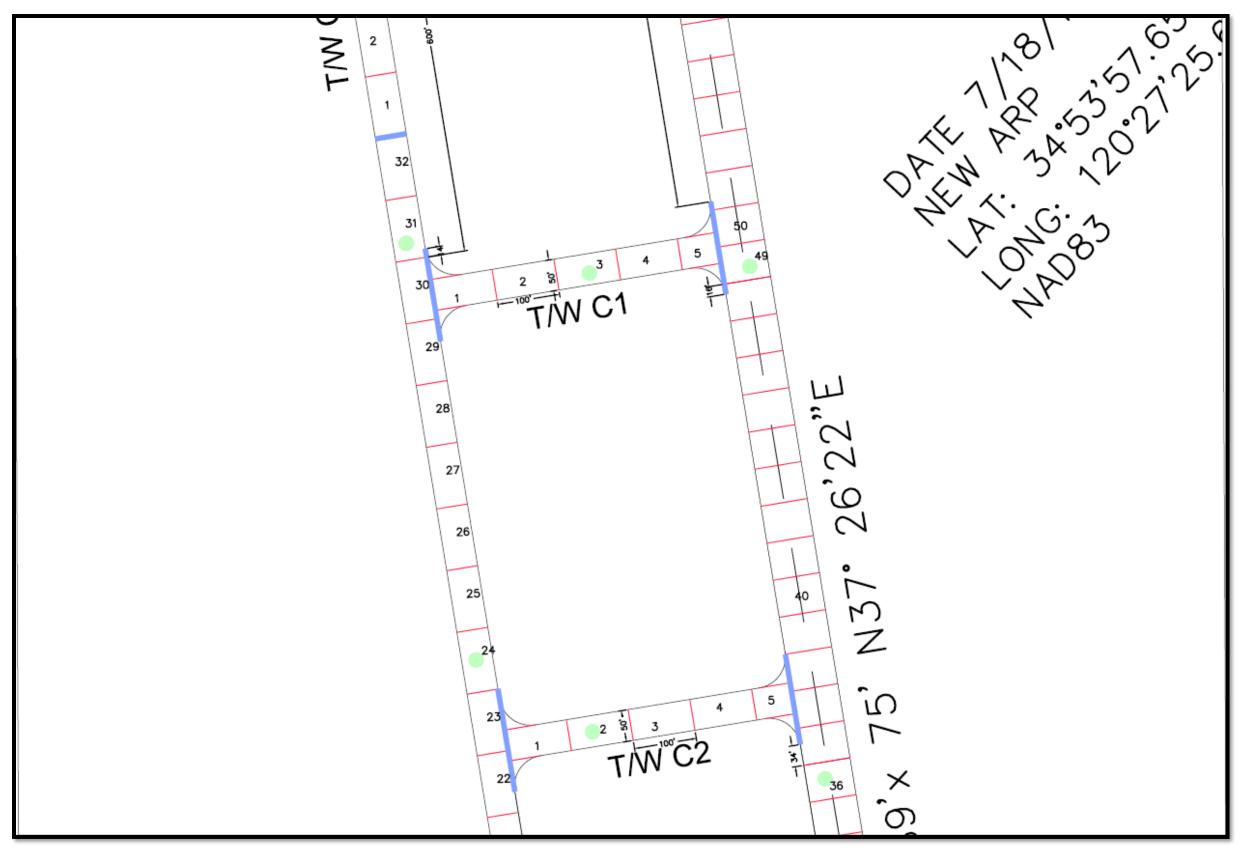
PAVEMENT INSPECTION LAYOUT: 8 OF 17



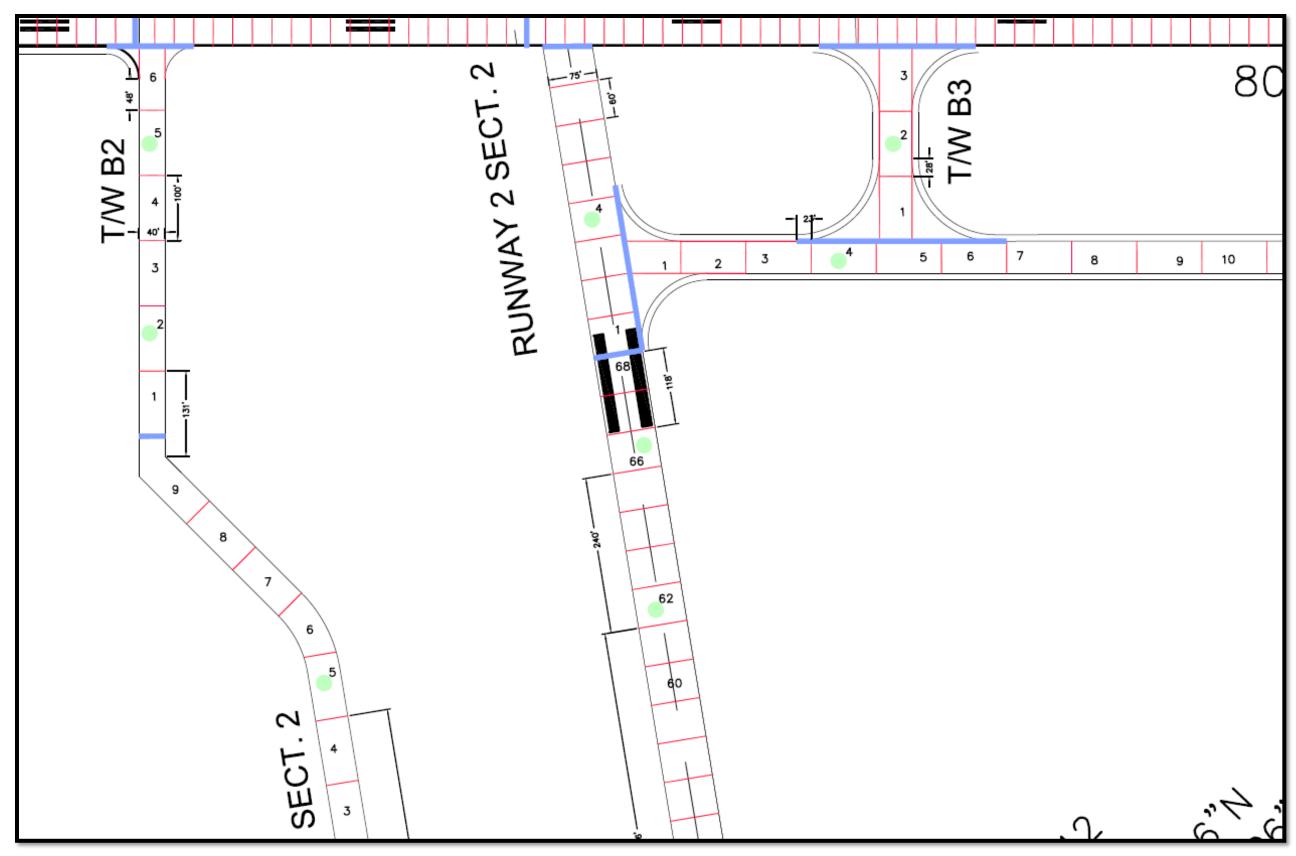
PAVEMENT INSPECTION LAYOUT: 9 OF 17



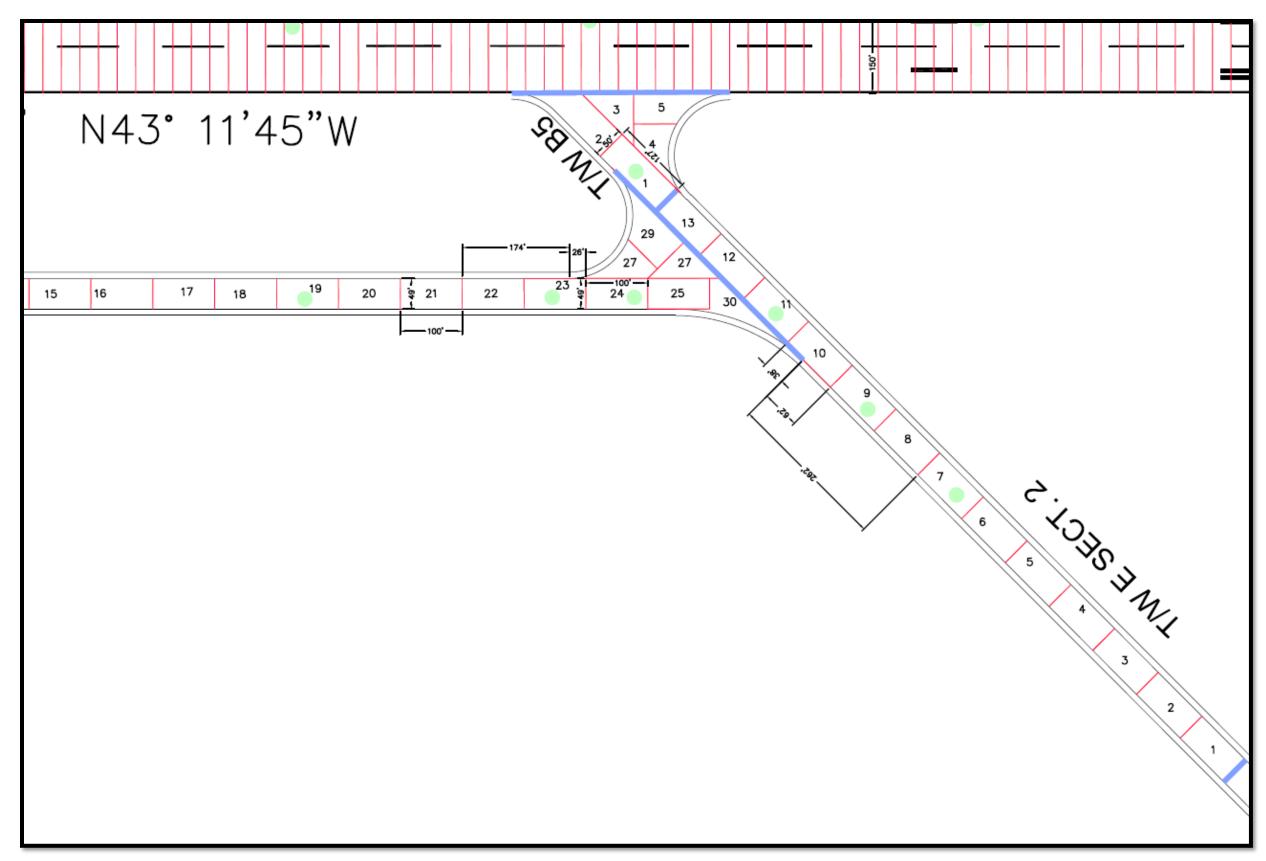
PAVEMENT INSPECTION LAYOUT: 10 OF 17



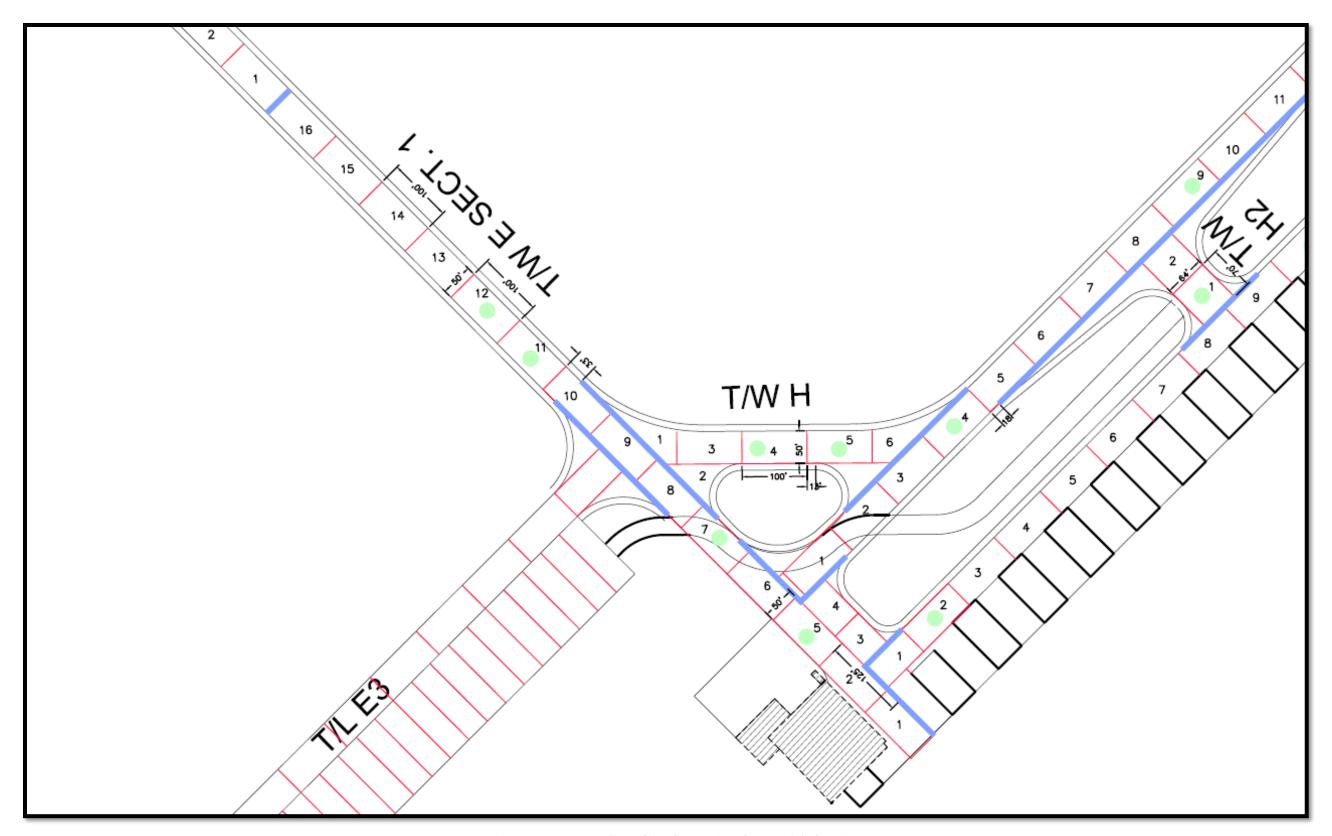
PAVEMENT INSPECTION LAYOUT: 11 OF 17



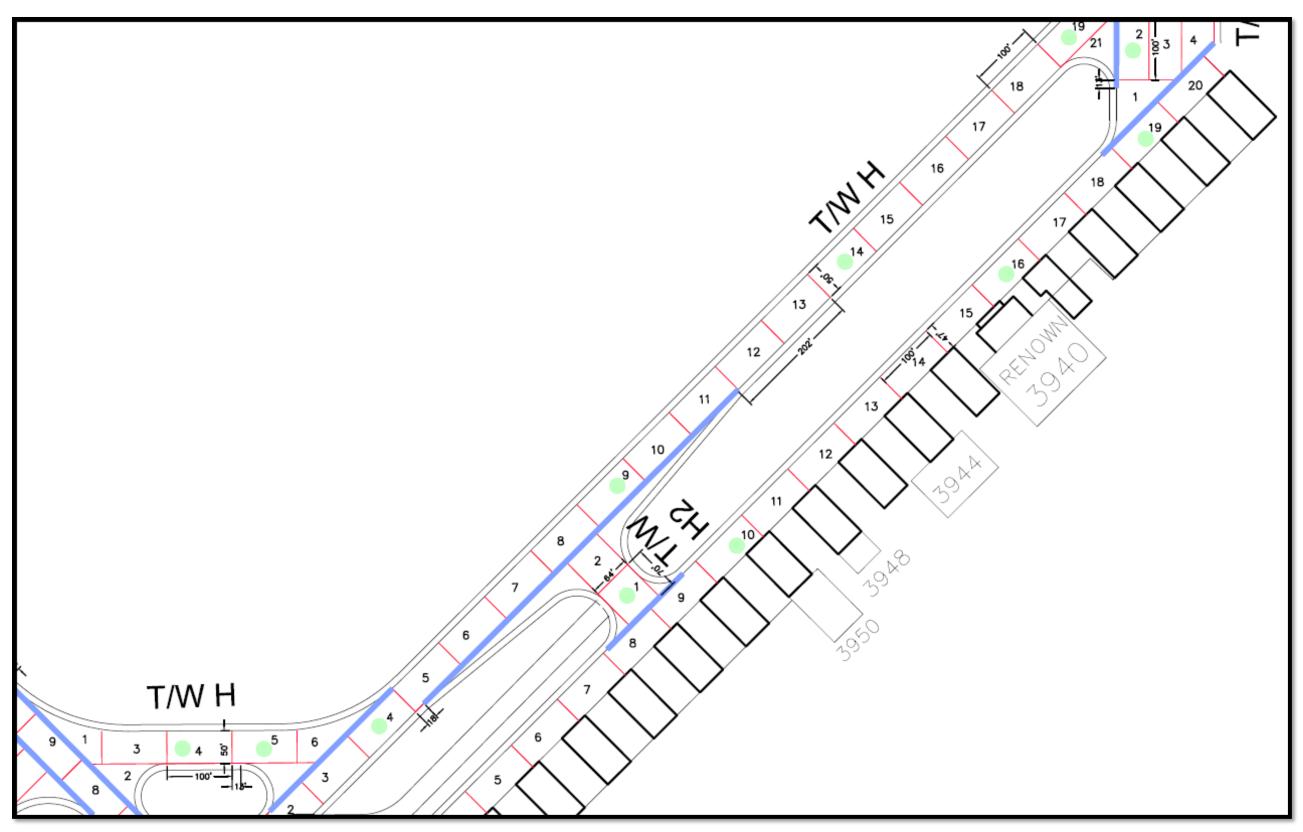
PAVEMENT INSPECTION LAYOUT: 12 OF 17



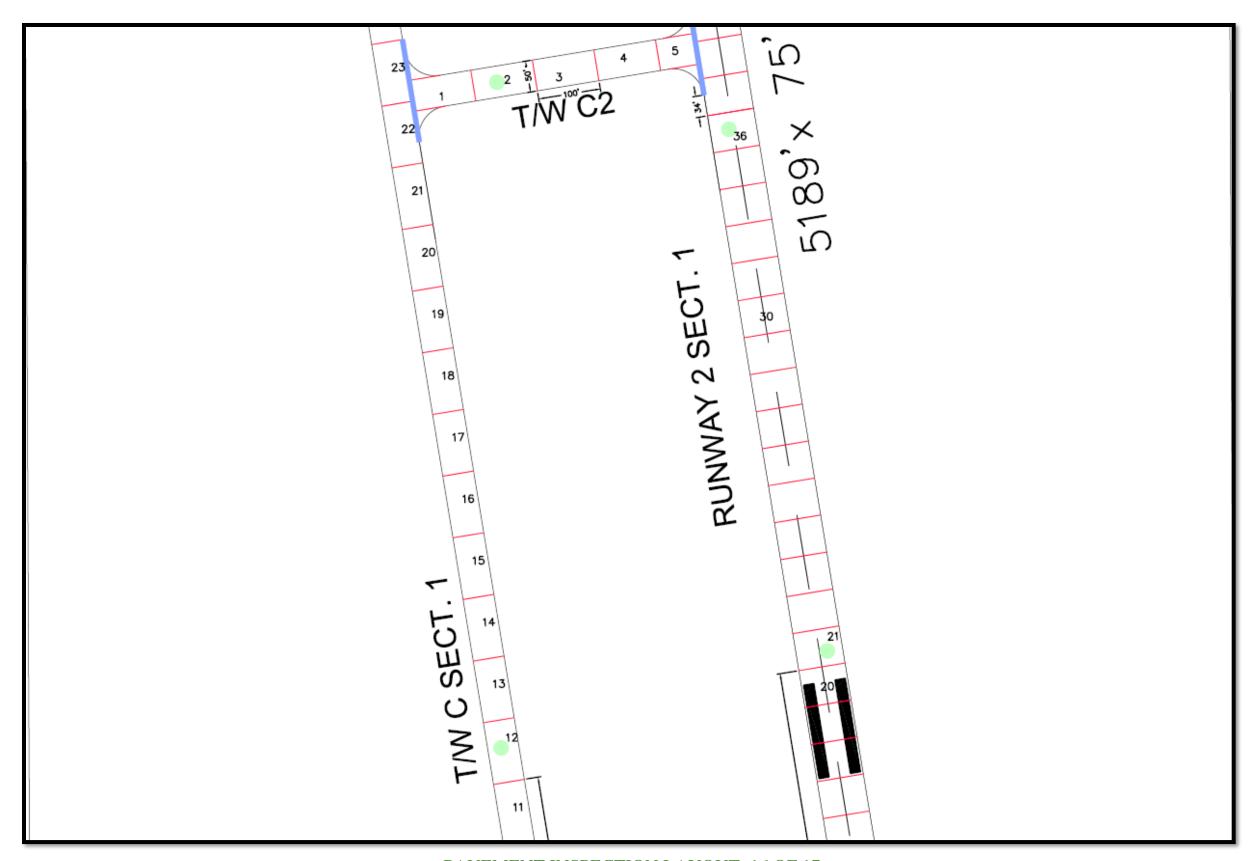
PAVEMENT INSPECTION LAYOUT: 13 OF 17



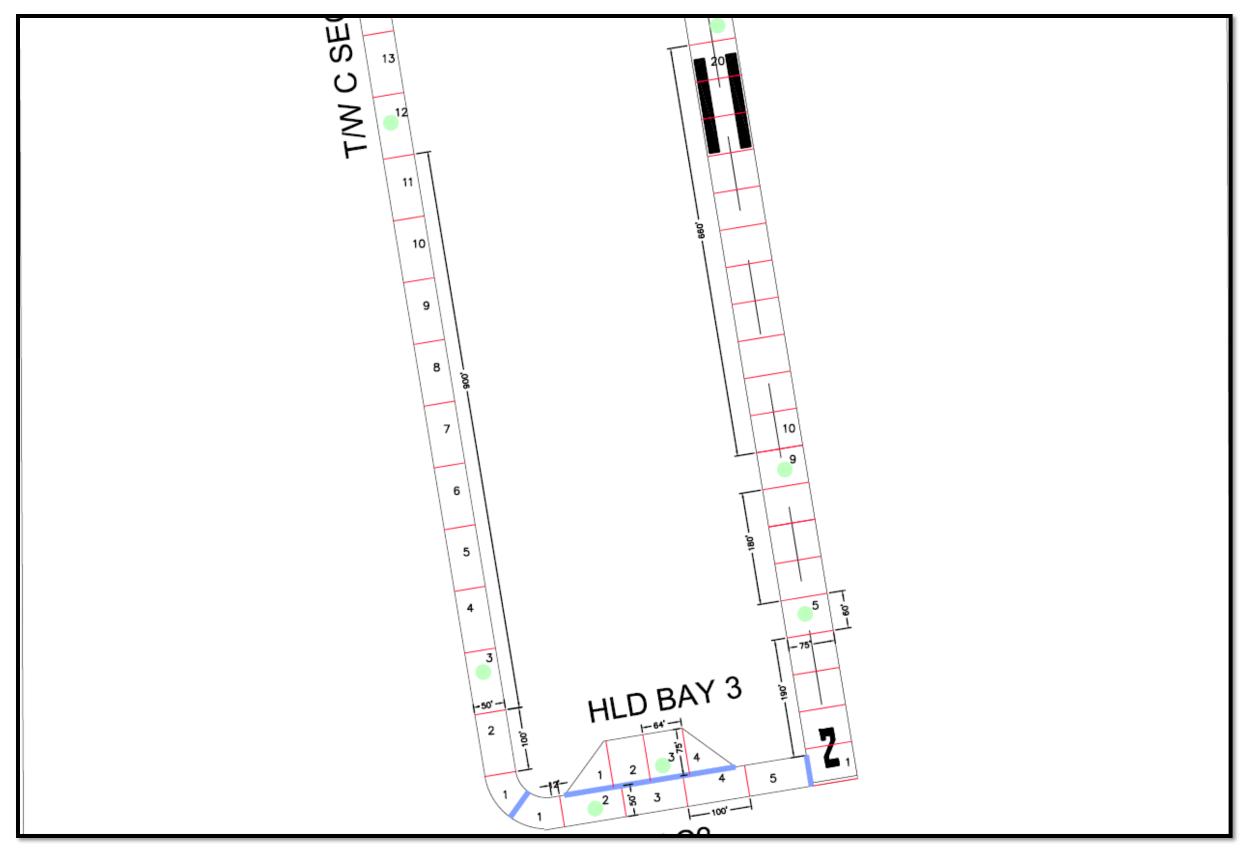
PAVEMENT INSPECTION LAYOUT: 14 OF 17



PAVEMENT INSPECTION LAYOUT: 15 OF 17



PAVEMENT INSPECTION LAYOUT: 16 OF 17



PAVEMENT INSPECTION LAYOUT: 17 OF 17

APPENDIX B - REHAB STRATEGIES FOR AC PAVING

DISTRESS	SEVERITY	REPAIR STRATEGY	
	L	Fill Cracks	
Longitudinal/Transverse	M	Fill Cracks	
Cracking	Н	Pave-Prep and Overlay	
	L	Fill Cracks	
Alligator or Fatigue	M	Glass Grid and Overlay / Reconstruct Section	
Cracking	Н	Reconstruct Section	
	L	Fill Cracks	
Reflective Cracking	M	Glass Grid and Overlay	
8	Н	Reconstruct Section	
	L	Fog Seal	
Raveling/Weathering	M	Slurry Seal	
	Н	AC Thin Overlay	
	L	Field Study	
Rutting	M	Asphalt Patch Pave / Reconstruct Section	
	Н	Asphalt Patch Pave / Reconstruct Section	
	L	Field Study	
Corrugation/Waves	M	Asphalt Patch Pave	
	Н	Asphalt Patch Pave	
	L	Field Study	
Depressions	M	AC Thin Overlay	
Depressions	Н	Asphalt Patch Pave	
	L	Field Study	
Swelling	M	Asphalt Patch Pave	
	Н	Asphalt Patch Pave	
	L	Field Study	
Pot Holing	M	Asphalt Patch Pave	
	Н	Reconstruct Section	
	L	Do Nothing	
Bleeding	M	Do Nothing	
	Н	Field Study	
	L	Do Nothing	
Patching	M	Do Nothing	
	Н	Fill Cracks and Seal Coat	
	L	Field Study	
Fuel Spillage	M	Surface Seal - Fuel Damage	
	Н	Asphalt Patch Pave	
	L	Field Study	
Joint Reflection (PCC)	M	Fill Cracks	
	Н	Glass Grid and Overlay	

APPENDIX C - REHAB STRATEGIES FOR PCC PAVING

DISTRESS	SEVERITY	REPAIR STRATEGY
	L	Do Nothing
Longitudinal/Transverse Cracking	M	Crack/Joint Repair & Sealing
Cracking	Н	Crack/Joint Repair & Sealing
	L	Do Nothing
Corner Cracks/Breaks	M	Field Study
	Н	Partial Slab Reconstruct - Full Depth
	L	Do Nothing
Corner Spalling	M	Field Study
	Н	Partial Slab Reconstruct - Partial Depth
	L	Do Nothing
Joint Spalling	M	Crack/Joint Repair & Sealing
	Н	Partial Slab Reconstruct - Partial Depth
	L	Field Study
"D" Cracking	M	Partial Slab Reconstruct - Partial Depth
	Н	Partial Slab Reconstruct - Full Depth
	L	Do Nothing
Joint Seal Damage	M	Crack/Joint Repair & Sealing
	Н	Crack/Joint Repair & Sealing
	L	Do Nothing
Scaling/Raveling	M	Field Study
	Н	Partial Slab Reconstruct - Partial Depth
	L	Field Study
Shattered Slab	M	Crack/Joint Repair & Sealing
	Н	Full Slab Reconstruct
	L	Crack/Joint Repair & Sealing
Pumping	M	Partial Slab Reconstruct - Full Depth
	Н	Full Slab Reconstruct
	L	Do Nothing
Settlement	M	Restore Level: AC Patch
	Н	Full Slab Reconstruct
	L	Do Nothing
Faulting	M	Restore Level: PCC Grind
	Н	Restore Level: PCC Grind

APPENDIX D -10-YEAR SECTION PCI AND M & R PLAN

RUNWAY 12-30 SECTION 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2010	7.4	V	Crack Fill	\$2.50/LF	20,000 LF	\$50,000
2019	74	Υ	Patching	\$10.00/SF	200 SF	\$2,000
2020	90	N				
2021	89	N				
2022	88	N				
2023	87	N				
2024	86	N				
2025	85	N				
2026	84	N				
2027	83	N				
2028	82	N				_
2029	81	N				
			•	Ten Year Esti	mated Total	\$52,000.00

RUNWAY 12-30 SECTION 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	69	N				
2020	67	Υ	Overlay	\$6.00/SF	944,550 SF	\$5,667,300
2021	100	N				
2022	99	N				
2023	98	N				
2024	97	N				
2025	96	N				
2026	95	N				
2027	94	N				
2028	93	N				
2029	92	N				
			To	en Year Est	imated Total	\$5,667,300.00

RUNWAY 2-20 SECTION 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2010	76	Υ	Crack Fill	\$2.50/LF	15,000 LF	\$37,500
2019	76	Y	Slurry Seal	\$3.50/SY	43,240 SY	\$151,340
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
	Ten Year Estimated Total					

CARGO RAMP

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	94	N				
2020	93	N				
2021	92	N				
2022	91	N				
2023	90	N				
2024	89	N				
2025	88	N				
2026	87	N				
2027	86	N				
2028	85	N				
2029	84	N				
Ten Year Estimated Total						\$0.00

HANGAR AREA 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	67	Y	Overlay	\$3.00	69,500 SF	\$208,500
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N		_		
Ten Year Estimated Total						

HANGAR AREA 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost	
2019	76	Υ	Crack Fill	\$2.50/LF	20,000 LF	\$50,000	
2019	70	70	Slurry Seal	\$3.50/SY	67,550 SY	\$236,425	
2020	100	N					
2021	99	N					
2022	98	N					
2023	97	N					
2024	96	N					
2025	95	N					
2026	94	N					
2027	93	N					
2028	92	N					
2029	91	N					
	Ten Year Estimated Total						

HOTEL RAMP

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	50	Y	Overlay	\$3.00	285,000 SF	\$855,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N		_		
Ten Year Estimated Total						

HANGAR TAXILANE

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost	
2019	100	N					
2020	99	N					
2021	98	N					
2022	97	N					
2023	96	N					
2024	95	N					
2025	94	N					
2026	93	N					
2027	92	N					
2028	91	N					
2029	90	N					
Ten Year Estimated Total							

MAIN HANGAR RAMP – SECTION 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost	
2010	72	V	Crack Fill	\$3.00/LF	10,000 LF	\$30,000	
2019	72	Υ	Slurry Seal	\$3.50/SY	16,065 SY	\$56,228	
2020	100	N					
2021	99	N					
2022	98	N					
2023	97	N					
2024	96	N					
2025	95	N					
2026	94	N					
2027	93	N					
2028	92	N					
2029	91	N					
	Ten Year Estimated Total						

MAIN HANGAR RAMP – SECTION 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	53	Y	Overlay	\$3.00/SF	154,000 SF	\$462,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						\$462,000.00

TERMINAL APRON – SECTION 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	100	N				
2020	99	N				
2021	98	N				
2022	97	N				
2023	96	N				
2024	95	N				
2025	94	N				
2026	93	N				
2027	92	N				
2028	91	N				
2029	90	N				
Ten Year Estimated Total						

TERMINAL APRON – SECTION 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost	
2019	29	Y	Reconstruct - PCC	\$20.00/SF	200,000 SF	\$4,000,000	
2020	100	N					
2021	99	N					
2022	98	N					
2023	97	N					
2024	96	N					
2025	95	N					
2026	94	N					
2027	93	N					
2028	92	N					
2029	91	N					
	Ten Year Estimated Total						

TIE-DOWN AREA

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	17	Υ	Reconstruct	\$12.00/SF	75,500 SF	\$906,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXILANE H

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2010	60	,	Crack Fill	\$2.50/LF	5,000 LF	\$12,500
2019	63	Y	Slurry Seal	\$3.50/SY	33,333 SY	\$116,665
			Patching	\$10.00/SF	1,500 SF	\$15,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N	·			
2029	91	N				
Ten Year Estimated Total						

TAXIWAY A – SECTION 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	75	Y	Crack Fill	\$2.50/LF	10,000 LF	\$25,000
2013	7.5	r	Slurry Seal	\$3.50/SY	33,333 SY	\$116,665
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY A – SECTION 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	54	N				
2020	53	N				
2021	52	N				
2022	51	Υ	Reconstruct	\$18.00/SF	311,250 SF	\$5,602,500
2023	100	N				
2024	99	N				
2025	98	N				
2026	97	N				
2027	96	N				
2028	95	N				
2029	94	N				
	\$5,602,500.00					

TAXIWAY A HOLDING BAY 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	55	Y	Overlay	\$3.00/SF	54,000 SF	\$162,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY A HOLDING BAY 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost		
2010	75	Υ	Crack Fill	\$2.50/LF	5,000 LF	\$7,500		
2019	75	Y	Slurry Seal	\$3.50/SY	2,750 SY	\$9,625		
2020	100	N						
2021	99	N						
2022	98	N						
2023	97	N						
2024	96	N						
2025	95	N						
2026	94	N						
2027	93	N						
2028	92	N						
2029	91	N						
	Ten Year Estimated Total \$17,125.00							

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2010	72	Υ	Crack Fill	\$2.50/LF	5,000 LF	\$7,500
2019	73	Y	Slurry Seal	\$3.50/SY	3,750 SY	\$13,125
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY A2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	41	Y	Reconstruct	\$18.00/SF	29,050 SF	\$522,900
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	47	Y	Reconstruct	\$18.00/SF	21,500 SF	\$387,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY A4

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	63	Y	Overlay	\$3.00/SF	30,500 Sf	\$91,500
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	65	Y	Overlay	\$3.00/SF	30,500 Sf	\$91,500
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY A6

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	56	Y	Overlay	\$3.00/SF	30,250 SF	\$90,750
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	58	Y	Overlay	\$3.00/SF	44,500 SF	\$133,500
2020	100	Ν				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY A8

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	85	N				
2020	84	N				
2021	83	N				
2022	82	N				
2023	81	N				
2024	80	N				
2025	79	N				
2026	78	N				
2027	77	N				
2029	76	V	Crack Fill	\$2.50/LF	8,000 LF	\$20,000
2028	/6	76 Y	Slurry Seal	\$3.50/SY	9,165 SY	\$32,077.50
2029	100	N		_		
Ten Year Estimated Total						

TAXIWAY B

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	94	N				
2020	93	N				
2021	92	N				
2022	91	N				
2023	90	N				
2024	89	N				
2025	88	N				
2026	87	N				
2027	86	N				
2028	85	N				
2029	84	N	_	_		
Ten Year Estimated Total						

TAXIWAY B2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost		
2019	82	N						
2020	81	N						
2021	80	N						
2022	79	N						
2023	78	N						
2024	77	N						
2025	76	76 7	Crack Fill	\$2.50/LF	2,000 LF	\$5,000		
2025	76	Y	Slurry Seal	\$3.50/SY	2,700 SY	\$9,450		
2026	100	N						
2027	99	N						
2028	98	N						
2029	97	N						
	Ten Year Estimated Total \$14,450.00							

TAXIWAY B3

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	73	Υ	Crack Fill	\$2.50/LF	2,000 LF	\$5,000
2019	/5	ľ	Slurry Seal	\$3.50/SY	2,400 SY	\$8,400
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY B5

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2010	75	V	Crack Fill	\$2.50/LF	2,500 LF	\$6,250
2019	75	Y	Slurry Seal	\$3.50/SY	2,900 SY	\$10,150
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						\$16,400.00

TAXIWAY B7

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	56	Y	Overlay	3.00/SF	20,000 SF	\$60,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	Ν				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N		_		
Ten Year Estimated Total						

TAXIWAY C – SECTION 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	93	N				
2020	92	N				
2021	91	N				
2022	90	N				
2023	89	N				
2024	88	N				
2025	87	N				
2026	86	N				
2027	85	N				
2028	84	N		_		
2029	83	N				
Ten Year Estimated Total						

TAXIWAY C – SECTION 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	87	N				
2020	86	N				
2021	85	N				
2022	84	N				
2023	83	N				
2024	82	N				
2025	81	N				
2026	80	N				
2027	79	N				
2028	78	N				
2029	77	N	_	_		
			Ten	Year Estir	nated Total	\$0.00

TAXIWAY C1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	94	N				
2020	93	N				
2021	92	N				
2022	91	N				
2023	90	N				
2024	89	N				
2025	88	N				
2026	87	N				
2027	86	N				
2028	85	N				
2029	84	N				
Ten Year Estimated Total						

TAXIWAY C2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	94	N				
2020	93	N				
2021	92	N				
2022	91	N				
2023	90	N				
2024	89	N				
2025	88	N				
2026	87	N				
2027	86	N				
2028	85	N				
2029	84	N	_	_		
			Ten	Year Estir	nated Total	\$0.00

TAXIWAY C3

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	90	N				
2020	89	N				
2021	88	N				
2022	87	N				
2023	86	N				
2024	85	N				
2025	84	N				
2026	83	N				
2027	82	N				
2028	81	N				
2029	80	N				
Ten Year Estimated Total						

TAXIWAY C3 HOLDING BAY1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	94	N				
2020	93	N				
2021	92	N				
2022	91	N				
2023	90	N				
2024	89	N				
2025	88	N				
2026	87	N				
2027	86	N				
2028	85	N				
2029	84	N				
Ten Year Estimated Total						

TAXIWAY E

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	61	Y	Overlay	\$3.00/SF	135,000	\$405,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY E3

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2010	75	Υ	Crack Fill	\$2.50/LF	5,500 LF	\$13,750
2019	75	/5 f	Slurry Seal	\$3.50/SY	6,100 SY	\$21,350
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY H – SECTION 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost	
2019	73	Υ	Crack Fill Slurry Seal	\$2.50/LF \$3.50/SY	10,000 LF 10,900 SY	\$25,000 \$38,450	
2020	100	N	Sidily Scal	φυισυγοι	10,300 31	φσσ, 1σσ	
2021	99	N					
2022	98	N					
2023	97	N					
2024	96	N					
2025	95	N					
2026	94	N					
2027	93	N					
2028	92	N					
2029	91	N					
Ten Year Estimated Total \$63,450							

TAXIWAY H – SECTION 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2010	77	V	Crack Fill	\$2.50/LF	2,000 LF	\$5,000
2019	//	77 Y	Slurry Seal	\$3.50/SY	2,350 SY	\$8,225
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						\$13,225.00

TAXIWAY J

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
		.,	Crack Fill	\$2.50/LF	6,500 LF	\$5,000
2019	67	Υ	Slurry Seal	\$3.50/SY	7,400 SY	\$25,900
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						\$30,900.00

TAXIWAY K

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost	
2010	74	7.0	Υ	Crack Fill	\$2.50/LF	1,000 LF	\$2,500
2019	/4	Ť	Slurry Seal	\$3.50/SY	1,400 SY	\$4,900	
2020	100	N					
2021	99	N					
2022	98	N					
2023	97	N					
2024	96	N					
2025	95	N					
2026	94	N					
2027	93	N					
2028	92	N					
2029	91	N					
Ten Year Estimated Total						\$7,400.00	

TAXIWAY L

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
			Crack Fill	\$2.50/LF	1,000 LF	\$2,500
2019	64	Y	Slurry Seal	\$3.50/SY	1,000 SY	\$3,500
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY M – SECTION 1

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	43	Y	Reconstruct - AC	\$12.00/SF	1,000 SF	\$12,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY M – SECTION 2

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	100	N				
2020	99	N				
2021	98	N				
2022	97	N				
2023	96	N				
2024	95	N				
2025	94	N				
2026	93	N				
2027	92	N				
2028	91	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY N

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	89	N				
2020	88	N				
2021	87	N				
2022	86	N				
2023	85	N				
2024	84	N				
2025	83	N				
2026	82	N				
2027	81	N				
2028	80	N				
2029	79	N				
			Te	n Year Esti	mated Total	\$0.00

TAXIWAY P

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	100	N				
2020	99	N				
2021	98	N				
2022	97	N				
2023	96	N				
2024	95	N				
2025	94	N				
2026	93	N				
2027	92	N				
2028	91	N				
2029	90	N				
Ten Year Estimated Total						

TAXIWAY Q

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	85	N				
2020	84	N				
2021	83	N				
2022	82	N				
2023	81	N				
2024	80	N				
2025	79	N				
2026	78	N				
2027	77	N				
2028	76	N				
2020	75	V	Crack Fill	\$2.50/LF	1,000 SF	\$2,500
2029	75	75 Y	Slurry Seal	\$3.50/SY	1,000 SY	\$3,500
Ten Year Estimated Total						

TAXIWAY R

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	90	N				
2020	89	N				
2021	88	N				
2022	87	N				
2023	86	N				
2024	85	N				
2025	84	N				
2026	83	N				
2027	82	N				
2028	81	N				
2029	80	N				
Ten Year Estimated Total						\$0.00

TAXIWAY S

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	34	Y	Reconstruct	\$18.00/SF	16,875 SF	\$303,750
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						\$303,750.00

TAXIWAY T

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	33	Y	Reconstruct	\$18.00/SF	13,650 SF	\$245,700
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						

TAXIWAY U

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	70	о ү	Crack Fill	\$2.50/LF	2,000 SF	\$5,000
2019	70		Slurry Seal	\$3.50/SY	2,000 SY	\$7,000
2020	100	N				
2021	99	N				
2022	98	N				
2023	97	N				
2024	96	N				
2025	95	N				
2026	94	N				
2027	93	N				
2028	92	N				
2029	91	N				
Ten Year Estimated Total						\$12,000.00

TAXIWAY V

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	80	N				
2020	79	N				
2021	78	N				
2022	76	N				
2022	75	Y	Crack Fill	\$2.50/LF	1,000 LF	\$2,500
2023	75		Slurry Seal	\$3.50/SY	1,300 SY	\$4,550
2024	100	N				
2025	99	N				
2026	98	N				
2027	97	N				
2028	96	N				
2029	95	N				
Ten Year Estimated Total						\$7,050.00

TAXIWAY W

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	94	N				
2020	93	N				
2021	92	N				
2022	91	N				
2023	90	N				
2024	89	N				
2025	88	N				
2026	87	N				
2027	86	N				
2028	85	N				
2029	84	N				
Ten Year Estimated Total						\$0.00

CCJC ARPON

Year	Projected PCI	Maintenance Recommended	Type of Maintenance	Unit Cost	Area	Total Cost
2019	94	N				
2020	93	N	N			
2021	92	N				
2022	91	N				
2023	90	N				
2024	89	N				
2025	88	N				
2026	87	N				
2027	86	N				
2028	85	N				
2029	84	N				
Ten Year Estimated Total						\$0.00

APPENDIX E - SAMPLE PCI SURVEY DATA SHEETS

Airfield Asphalt Pavement

	AC AI	RFIELD PAV	EMENT (CONDITION SUF	RVEY DAT	A SHEET	
PID 5/	MX			INSPECTOR JUS	on / Br	ett	
FROM				BRANCH USE A	,	DATE INSPECTED	5-28-18
то	то				SECTION SECTION LENGTH 590		
SERVICE SERVICE	A POST AND A STATE OF THE PARTY		AC Surfa	ced Distress Codes		MAISBERT STATE	THE REAL
41. Alligator Cracking 42. Bleeding 43. Block Cracking 44. Corrugation 45. Depression 46. Jet Blast 47. Jt. Reflection (PCC) 48. Long. & Trans. Cracking 49. Oil Spillage 50. Patching			51. Polished Aggregat 52. Raveling 53. Rutting 54. Shoving From PCt 55. Slippage Cracking	5	56, Swell 57, Weathering Comments		
SAMPLE NUMBER	1	SAMPLE	5,000 51	THE PARTY OF THE P	Sketch / C	comments	
DISTRESS	L	м	Н	MIS			
57		5,000					
43	5,000						
SAMPLE NUMBER	6	SAMPLE AREA	5000 SF	SAMPLE NUMBER	- 10 No. 10	SAMPLE AREA	
DISTRESS CODE	L	М	н	DISTRESS CODE	L	М	н
57		5,000					
48	100	,					
43		1,500					
	L					and the same of th	

Airfield Concrete Pavement

PC	C AIRFIE	LD PAVE	MENT	CONDITION SURVEY	DATA SHEET
PID C	11			INSPECTOR /	1.1-
5/	VX			NAME JUSON / BI	et1
FROM				BRANCH USE C - Section 2	INSPECTED 8-28-18
то				SECTION WIDTH	SECTION LENGTH
SLAB	_'	SLAB	_1	NUMBER	
width 2	5	LENGTH	51	OF SLABS 20	
STATE OF THE STATE OF		individues.		faced Distress Codes	
61. Blowup		65. Joint Seal Da	-	V-100 (VC-1010 E)	73. Shrinkage Cracks
62. Corner Breal	k	66. Patching, Sm			74. Spalling, Joints
63. Cracks	aaldaa	67. Patching, Lar	ge		75. Spalling, Corner
64. Durability Cra	acking	68. Popouts			76. ASR
SAMPLE NUMBER		SLABS IN	20	Sketch /	Comments
DISTRESS					
CODE	L	М	Н		
25		20 5/4/25			
60		20 0/4/25		-	
				1 2	
				7	-
				_	
				7	
				Cl. val. /	
SAMPLE NUMBER	2	SLABS IN SAMPLE	20	Sketch /	Comments
DISTRESS	L	м	Н		
65		20 5/6/25			
L 3	4 Slabs				
0)	1 /10107			-	
				_	
				7	
				-	
			9		

<u>APPENDIX F – SAMPLE INSPECTION PHOTOS</u>



TERMINAL APRON, SECTION 2, SAMPLE UNIT 18 – Distress Type: Rutting



TAXIWAY T, SAMPLE UNIT 2 – Distress Type: Alligator Cracking