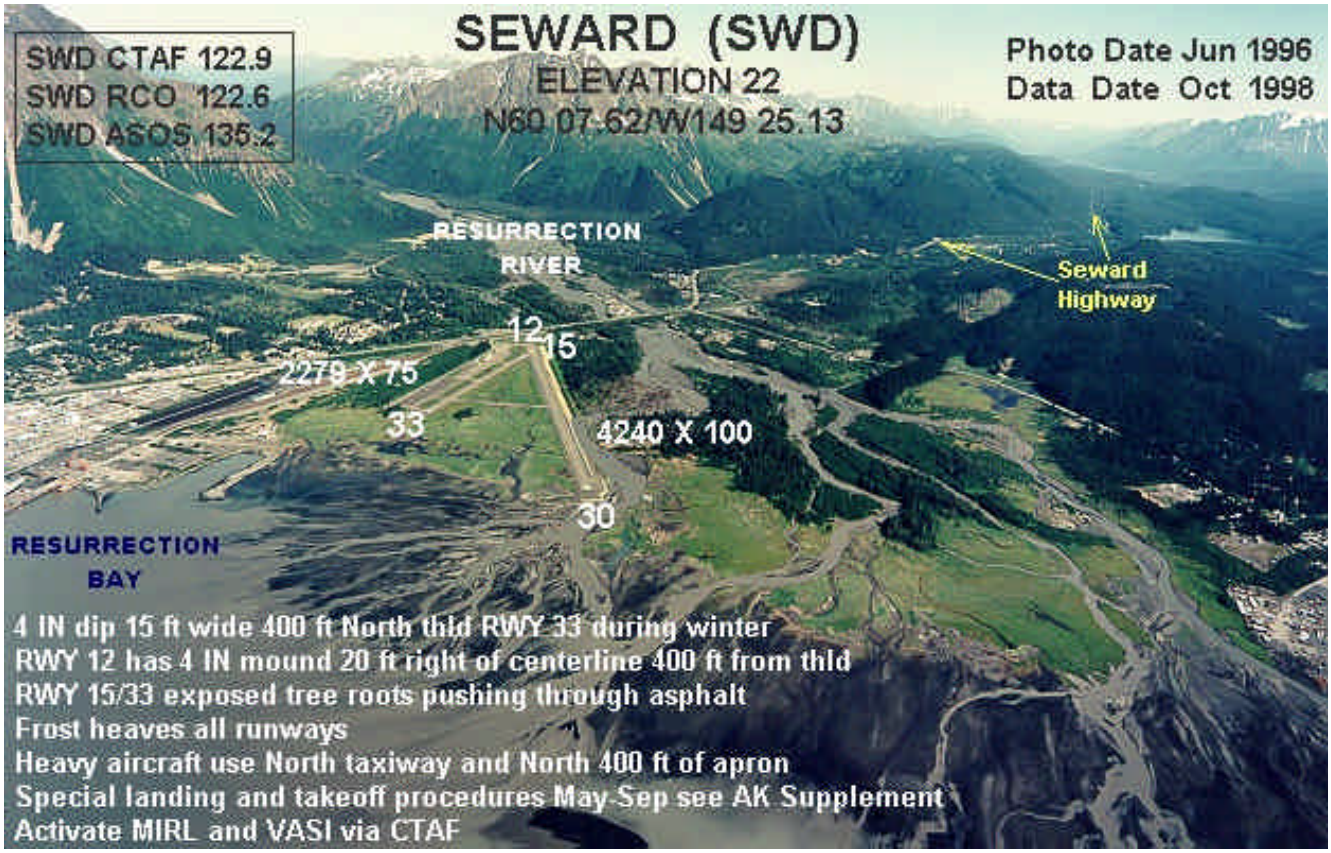
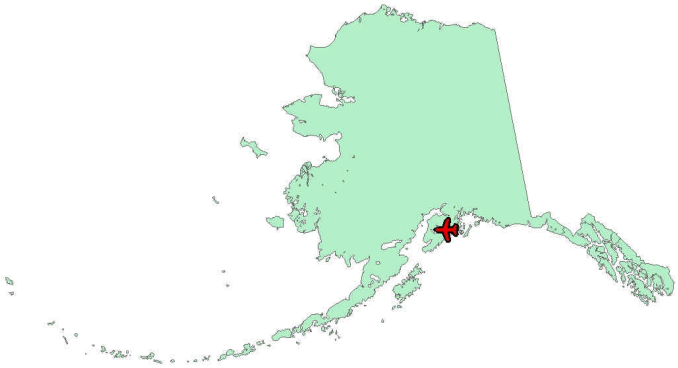


SEWARD AIRPORT



2004 Alaska Airport Pavement Condition Report

Scott Gartin, P.E.
State Pavement Engineer
Statewide Materials Section, Alaska DOT&PF
5800 E. Tudor Road
Phone: (907) 269-6244 Fax: (907) 269-6231
Email: scott_gartin@dot.state.ak.us

Maps and report compiled by
H. June Finkbiner
Central Region Materials, Alaska DOT&PF

SEWARD AIRPORT - 2004

Contents:

- A Pavement Strength Form showing project history, latest Pavement Condition Index (PCI) data, pavement strength ratings (if available) and other useful information
- A Pavement Condition Survey – PCI Sample Unit Layout Plan
- PCI maps showing as-measured and predicted pavement conditions
- Age map showing pavement age as of January 2003
- A Branch PCI Condition Report
- A Section PCI Condition Report

Airport Information:

- Location:
  The Seward Airport is located in the south coast of the Kenai Peninsula, just north of the town of Seward, in south central Alaska. This airport serves private, passenger and cargo aircraft. Some military aircraft use the airport. It generally serves C-130 and smaller aircraft. However, the pavement strength to withstand C-130 sized aircraft is questionable.
- District: Peninsula, Central Region
- Airport Manager: Benton L. Groom
- District Maintenance Manager: Carl High
- Pavement Surface: Asphalt Concrete
- Last Pavement Construction: 1983
- Pavement layout:
  The main runway (3-21) is approximately 4,524' long and is 100' wide with gravel shoulders. The crosswind runway (15-33) measures 2,425' long and 75' wide with gravel shoulders. The Operations Apron serves local charter companies and the Parking Apron provides tie downs.
- Design Aircraft: C-130
- 2002 Enplanements: 360
- Airport Class: Non-Primary
- Last pavement condition survey: 2002
- Next planned pavement condition survey: 2005
- 2004 reported pavement maintenance and/or changed conditions: Crack sealing and patching work was done. Stumps protruding through pavement along edge and adjoining taxiways to Runway 15-33 are still problematic. Some light cans are popping out of their bases along the runways.
- Recommendations: See PCI maps, remove stumps and patch, continue sealing that are greater than ¼" wide.

Date: 4 /14/2003

Branch Condition Report

Pavement Database: NetworkID: Seward

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	PCI Standard Deviation	Weighted Average PCI
100 (Taxiway A)	2	2,695.00	35.00	94,325.00	TAXIWAY	60.00	13.00	57.85
200 (Taxiway B)	1	230.00	50.00	16,223.00	TAXIWAY	57.00	0.00	57.00
300 (Taxiway C)	1	130.00	35.00	8,176.00	TAXIWAY	46.00	0.00	46.00
400 (Taxiway D)	1	130.00	37.00	7,534.00	TAXIWAY	27.00	0.00	27.00
4100 (Operations Apron)	1	1,582.00	96.00	167,604.00	APRON	57.00	0.00	57.00
4200 (Parking Apron)	1	1,125.00	181.00	196,825.01	APRON	87.00	0.00	87.00
500 (Taxiway E)	1	130.00	35.00	6,696.00	TAXIWAY	69.00	0.00	69.00
600 (Taxiway F)	1	132.00	35.00	5,693.00	TAXIWAY	63.00	0.00	63.00
6100 (Runway 12-30)	3	4,799.00	93.33	471,200.01	RUNWAY	61.00	12.75	52.24
6200 (Runway 15-33)	1	2,425.00	75.00	189,375.00	RUNWAY	51.00	0.00	51.00

Branch Condition Report

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	2	364,429.01	72.00	15.00	73.20
RUNWAY	4	660,575.02	58.50	11.86	51.88
TAXIWAY	7	138,647.00	54.57	14.71	56.13
All	13	1,163,651.03	58.46	15.19	59.07

Date: 4 /14/2003

Section Condition Report

Pavement Database: *NetworkID: Seward*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection Date	Age At Inspection	PCI
100 (Taxiway A)	100-01	09/01/1983	AAC	TAXIWAY	S	0	54,950.00	06/07/2002	19	47.00
100 (Taxiway A)	100-02	09/01/1992	AC	TAXIWAY	S	0	39,375.00	06/07/2002	10	73.00
200 (Taxiway B)	200-01	09/01/1983	AAC	TAXIWAY	P	0	16,223.00	06/07/2002	19	57.00
300 (Taxiway C)	300-01	09/01/1983	AAC	TAXIWAY	S	0	8,176.00	06/07/2002	19	46.00
400 (Taxiway D)	400-01	09/01/1983	AAC	TAXIWAY	S	0	7,534.00	06/07/2002	19	27.00
4100 (Operations Apron)	4100-01	09/01/1983	AAC	APRON	P	0	167,604.00	06/07/2002	19	57.00
4200 (Parking Apron)	4200-01	09/01/1992	AC	APRON	P	0	196,825.01	06/07/2002	10	87.00
500 (Taxiway E)	500-01	09/01/1992	AC	TAXIWAY	S	0	6,696.00	06/07/2002	10	69.00
600 (Taxiway F)	600-01	09/01/1992	AC	TAXIWAY	S	0	5,693.00	06/07/2002	10	63.00
6100 (Runway 12-30)	6100-01	09/01/1983	AAC	RUNWAY	P		424,000.01	06/07/2002	19	51.00
6100 (Runway 12-30)	6100-02	09/01/1983	AC	RUNWAY	P	0	28,400.00	06/07/2002	19	53.00
6100 (Runway 12-30)	6100-03	09/01/1983	AC	RUNWAY	S	0	18,800.00	06/07/2002	19	79.00
6200 (Runway 15-33)	6200-01	09/01/1983	AC	RUNWAY	P	0	189,375.00	06/07/2002	19	51.00

Section Condition Report

Pavement Database:

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
06-10	10.00	248,589.01	4	73.00	8.83	83.75
16-20	19.00	915,062.02	9	52.00	12.77	52.36
All	16.23	1,163,651.03	13	58.46	15.19	59.07

PAVEMENT STRENGTH SURVEY

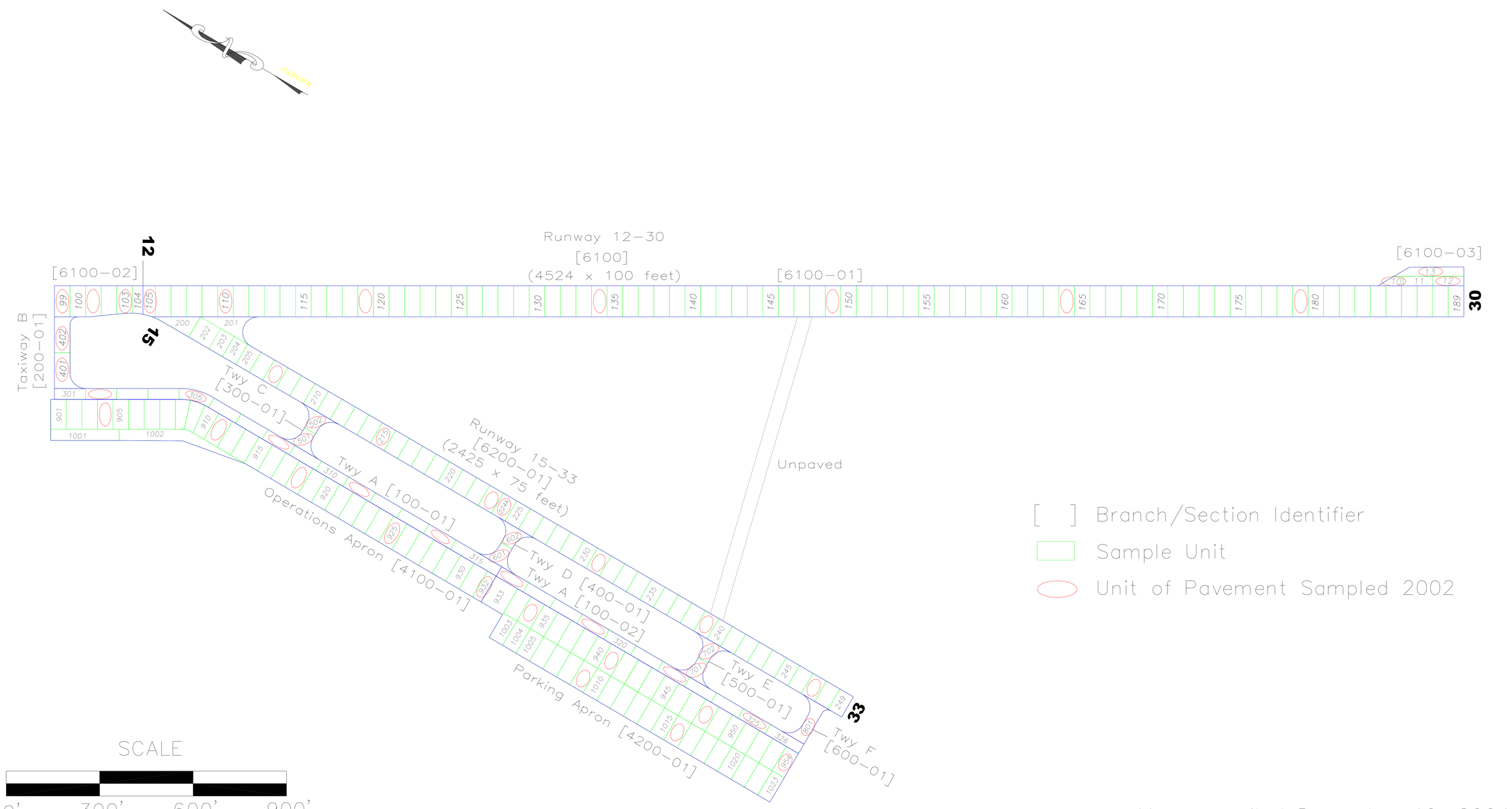
STATE Alaska		CITY	Seward	AIRPORT	Seward			This is a variation of FAA Form 5320-1-1				
		CONSTRUCTION DATES				Existing	SOIL	Subbase	Base	Surface		Pavement
IDENT.	NAME	ORIG.	OVERLAY	CONSTRUCTION AGENCY	SOURCE OF INFORMATION	Pavement Conditions (PCI)	CLASS	Course	Course	Course	Overlay	Strength
						RUNWAYS						
6100-01	Runway 12-30 Section 1	1983		AK DOT&PF		51			Unknown Thickness BST	3" AC		H42
6100-02	Runway 12-30 Section 2	1983		AK DOT&PF		53			4" BST	3" AC		H42
6100-03	Runway 12-30 Section 3	1983		AK DOT&PF		79			Unknown Thickness BST	3" AC		H42
6200-01	Runway 15-33 Section	1983		AK DOT&PF		51				2" AC		H42
						TAXIWAYS						
100-01	Taxiway A Section 1	1983		AK DOT&PF		47						
100-02	Taxiway A Section 2	1992		AK DOT&PF		73						
200-01	Taxiway B	1983		AK DOT&PF		57			Unknown Thickness CABC	3" AC		
300-01	Taxiway C	1983		AK DOT&PF		46					2" AC	
400-01	Taxiway D	1983		AK DOT&PF		27					2" AC	
500-01	Taxiway E	1992		AK DOT&PF		69		30" Borrow	6" CABC	2" AC		
600-01	Taxiway F	1992		AK DOT&PF		63		30" Borrow	6" CABC	2" AC		
						APRONS						
4100-01	Operations Apron	1983		AK DOT&PF		57						
4200-02	Parking Apron	1992		AK DOT&PF		87		30" Barrow	6" CABC	2"AC		

REMARKS:

This airport serves single and twin general aviation aircraft with occasional C130 traffic on R/W 12-30

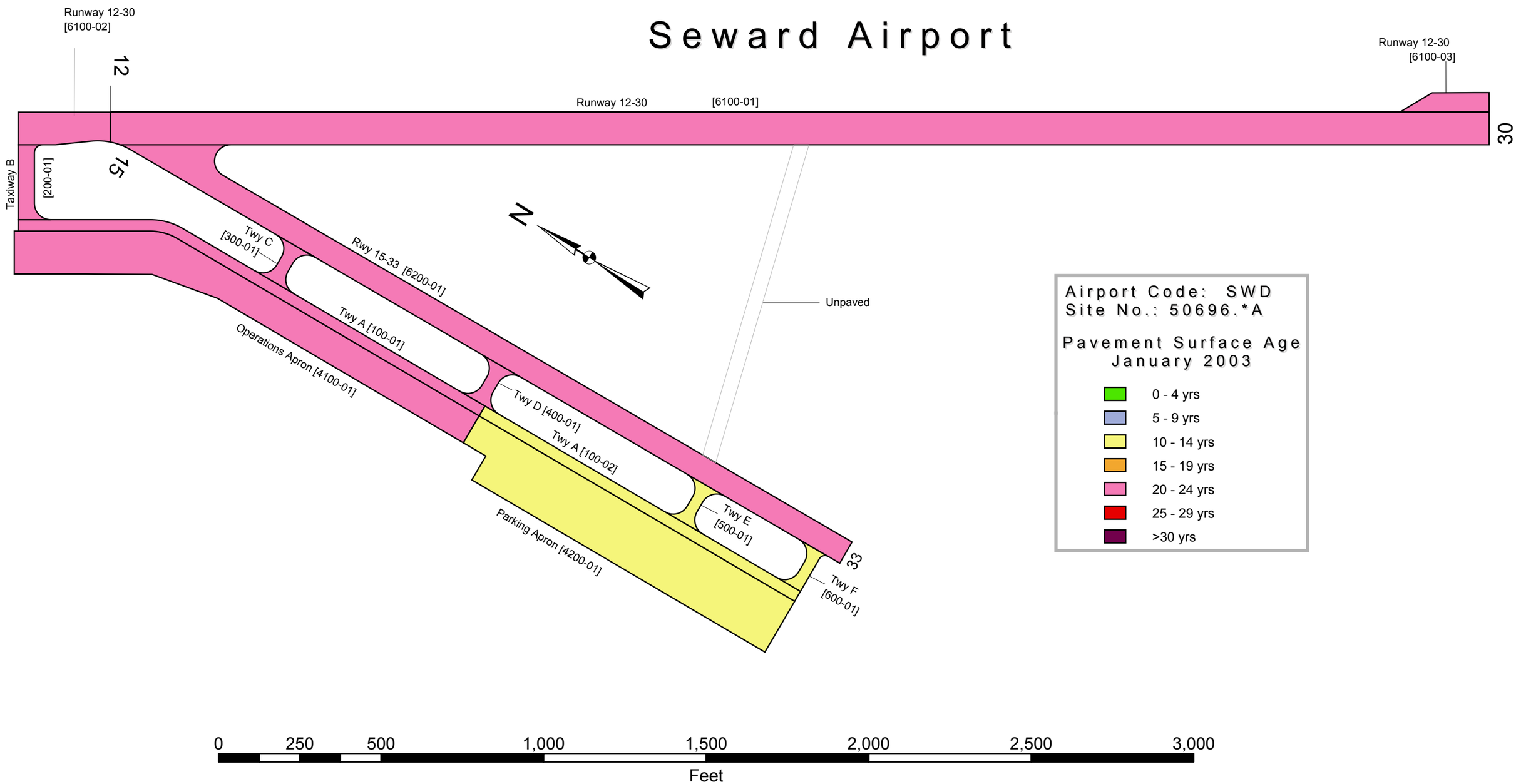
Date of Site Inspection:	6/7/2002	Evaluated By:	S. Gartin	1/14/2003	PAGE 1 of 1

Pavement Condition Survey - PCI Sample Unit Layout Plan	State Alaska	City Seward	Airport Seward	Airport Code: SWD	Site No. 50696.*A



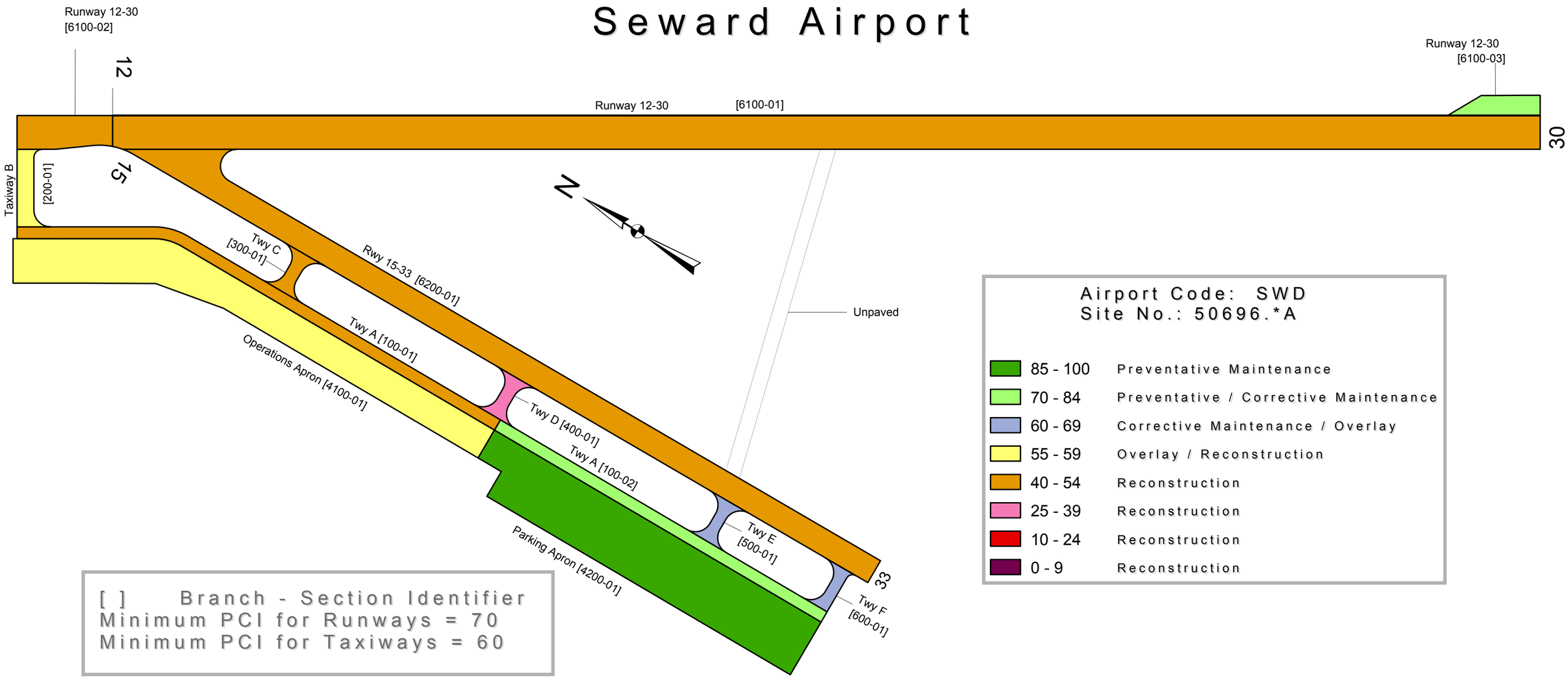
Map compiled December 10, 2004

Pavement Surface Age
January 2003
Seward Airport



Pavement Condition Index - PCI
Measured Values for the Year 2002

Seward Airport



Airport Code: SWD
Site No.: 50696.*A

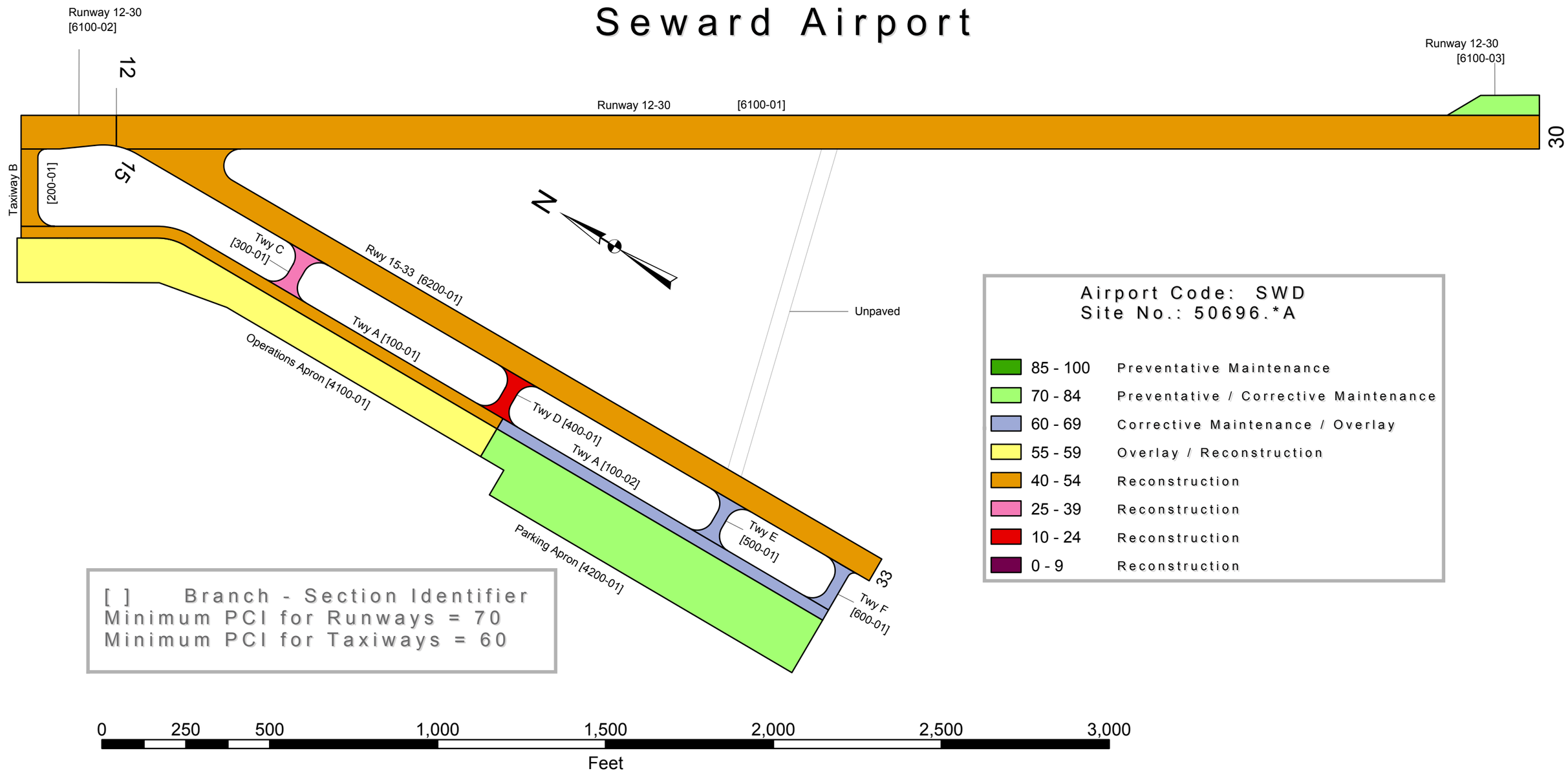
85 - 100	Preventative Maintenance
70 - 84	Preventative / Corrective Maintenance
60 - 69	Corrective Maintenance / Overlay
55 - 59	Overlay / Reconstruction
40 - 54	Reconstruction
25 - 39	Reconstruction
10 - 24	Reconstruction
0 - 9	Reconstruction

[ ] Branch - Section Identifier
Minimum PCI for Runways = 70
Minimum PCI for Taxiways = 60

0 250 500 1,000 1,500 2,000 2,500 3,000
Feet

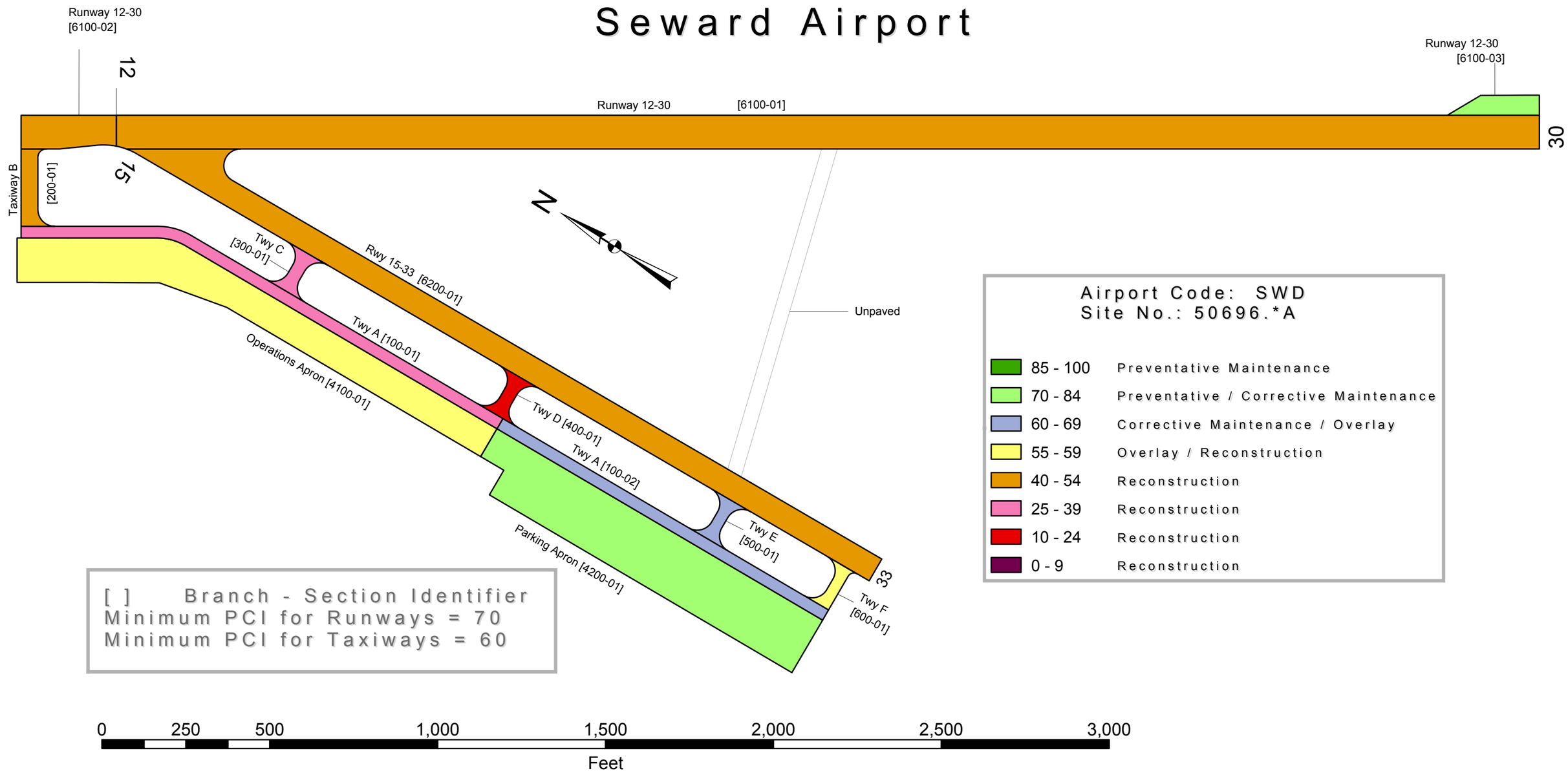
Pavement Condition Index - PCI
Predicted Values for the Year 2003

Seward Airport



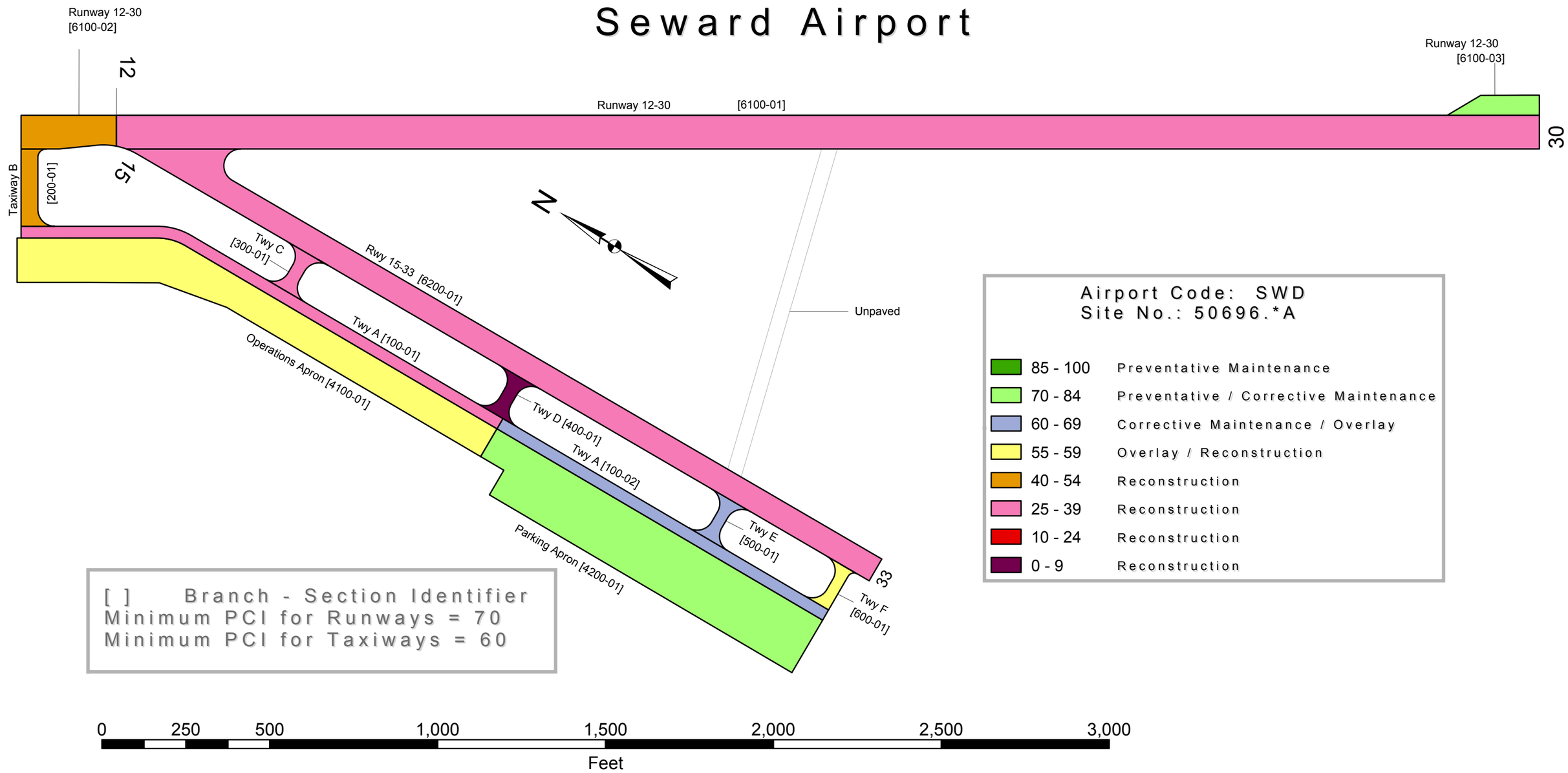
Pavement Condition Index - PCI
Predicted Values for the Year 2004

Seward Airport



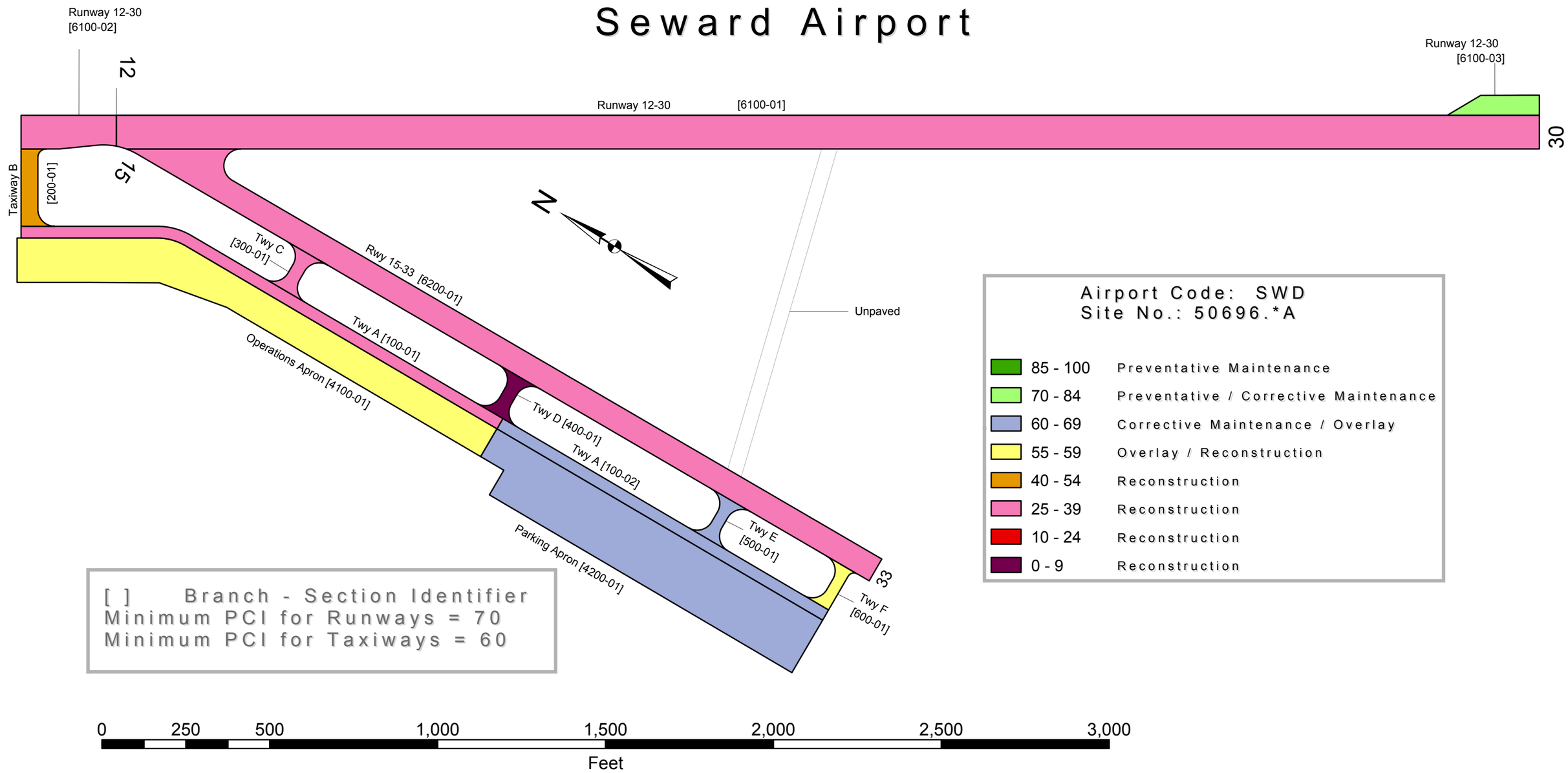
Pavement Condition Index - PCI
Predicted Values for the Year 2005

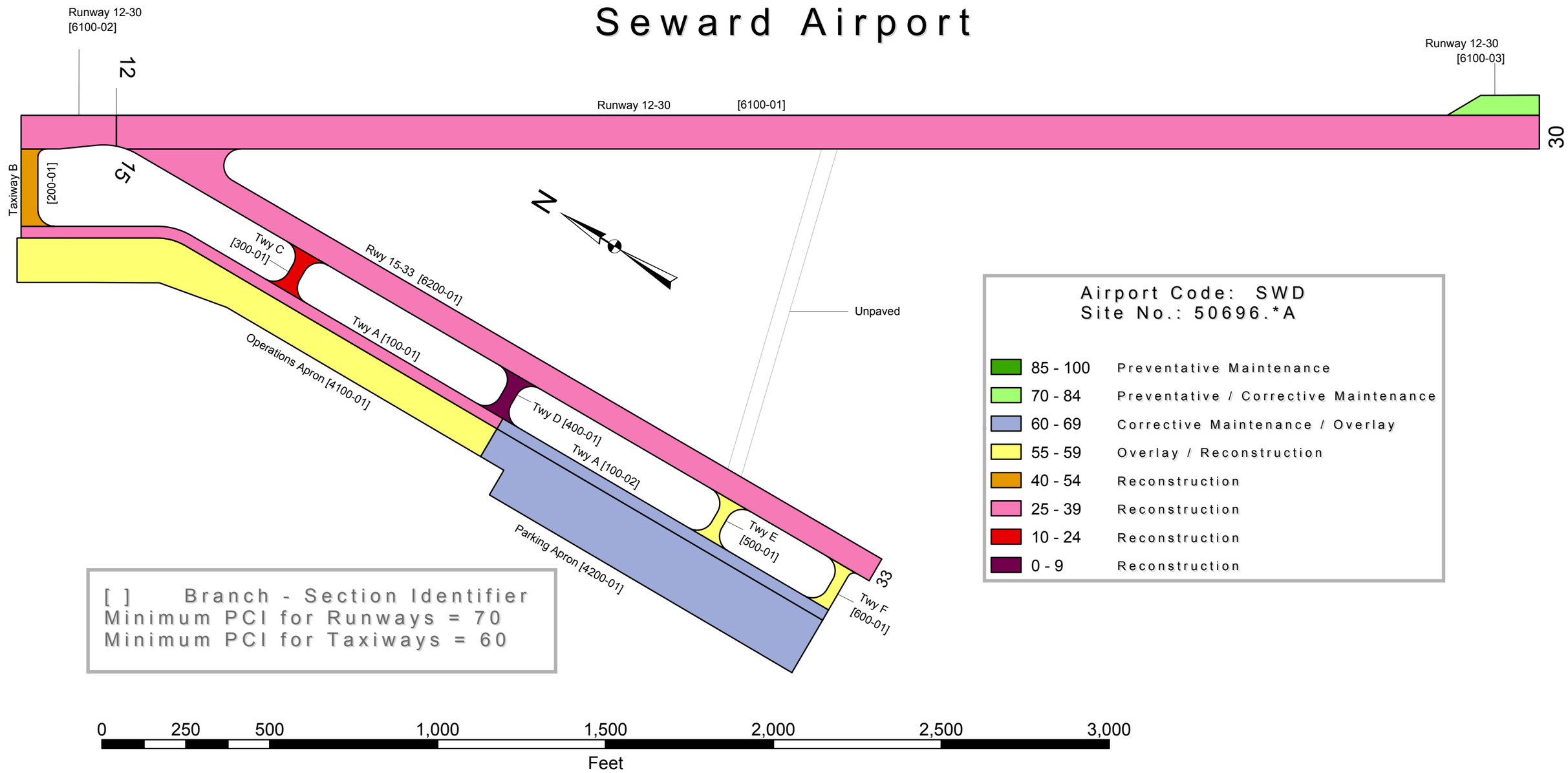
Seward Airport



Pavement Condition Index - PCI
Predicted Values for the Year 2006

Seward Airport



Pavement Condition Index - PCI
Predicted Values for the Year 2007

Seward Airport