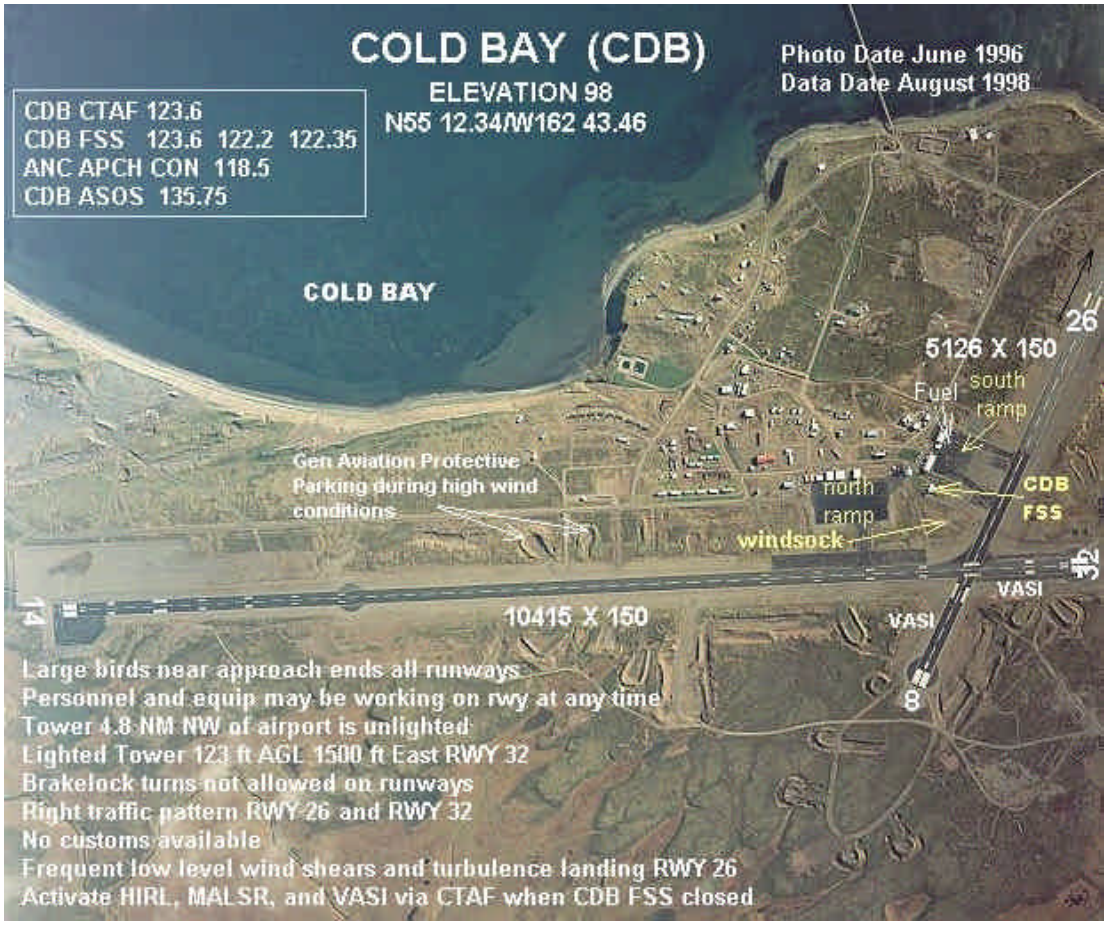
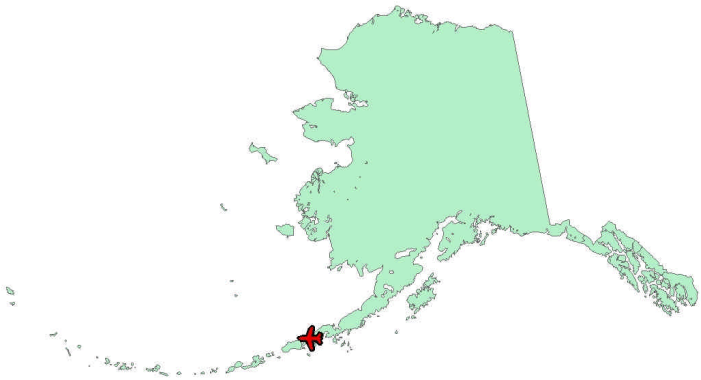


COLD BAY AIRPORT



2004 Alaska Airport Pavement Condition Report

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

COLD BAY 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: Near the south end of the Alaska Peninsula
- District: Southwest
- Airport Manager: Harold L. Kremer III (Happy)
- District Maintenance Manager: Troy Larue
- Pavement Surface: Hot recycled Asphalt Concrete, Asphalt Concrete, some with slurry seal or tar seal
- Last Pavement Construction: 1989
- Pavement layout: Runways 14-32, 8-26, three taxiways and two aprons
- Design Aircraft: B-747-400
- 2003 Enplanements: 9,035 – a 17% increase from 2002
- Airport Class: Non-Primary
- Last pavement condition survey: Sept. 2002
- Next planned pavement condition survey: 2006
- 2004 reported pavement maintenance and/or changed conditions: A project for reconstruction of R/W 8-26, T/Ws A & B and overlaying the South Apron was let in June of 2004. That project will also include some extension of R/W 8-26. Paving is planned for 2005.
- Recommendations: The North Apron and Taxiway C are also showing needs for reconstruction. Crack seal and patch as necessary.

Date: 5 /6/2003

Branch Condition Report

Pavement Database: NetworkID: ColdBay

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	626.00	62.50	26,960.00	TAXIWAY	64.00	5.00	64.34
200 (Taxiway B)	2	666.00	62.50	25,953.00	TAXIWAY	68.00	8.00	66.51
300 (Taxiway C)	2	440.00	90.00	74,236.00	TAXIWAY	52.50	14.50	49.69
4100 (South Apron)	1	325.00	459.00	149,175.00	APRON	39.00	0.00	39.00
4200 (North Ramp)	2	595.00	407.50	330,025.01	APRON	28.50	7.50	34.68
6100 (Runway 14-32)	6	32,248.00	84.67	1,669,224.04	RUNWAY	48.33	25.14	69.60
6200 (Runway 8-26)	9	8,096.00	83.33	830,277.02	RUNWAY	52.67	18.97	43.28

Branch Condition Report

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	3	479,200.01	32.00	7.87	36.03
RUNWAY	15	2,499,501.06	50.93	21.75	60.85
TAXIWAY	6	127,149.00	61.50	11.95	56.23
All	24	3,105,850.08	51.21	20.30	56.83

Date: 5 /6/2003

Section Condition Report

Pavement Database: *NetworkID: ColdBay*

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	09/01/1989	AC	TAXIWAY	P	0	14,400.00	09/20/2002	13	69.00
100 (Taxiway A)	100-05	09/01/1989	AAC	TAXIWAY	P	0	12,560.00	09/20/2002	13	59.00
200 (Taxiway B)	200-01	09/01/1989	AAC	TAXIWAY	P	0	15,400.00	09/20/2002	13	60.00
200 (Taxiway B)	200-05	09/01/1989	AC	TAXIWAY	P	0	10,553.00	09/20/2002	13	76.00
300 (Taxiway C)	300-01	09/01/1972	AC	TAXIWAY	S	0	44,318.00	09/20/2002	30	38.00
300 (Taxiway C)	300-02	09/01/1974	AC	TAXIWAY	S	0	29,918.00	09/20/2002	28	67.00
4100 (South Apron)	4100-01	09/01/1974	AAC	APRON	P	0	149,175.00	09/20/2002	28	39.00
4200 (North Ramp)	4200-01	09/01/1972	AC	APRON	S	0	301,000.01	09/20/2002	30	36.00
4200 (North Ramp)	4200-05	09/01/1970	AC	APRON	S	0	29,025.00	09/20/2002	32	21.00
6100 (Runway 14-32)	6100-01	09/01/1989	AAC	RUNWAY	P	0	520,000.01	09/19/2002	13	72.00
6100 (Runway 14-32)	6100-03	09/01/1989	AC	RUNWAY	P	0	542,250.01	09/19/2002	13	77.00
6100 (Runway 14-32)	6100-05	09/01/1989	AAC	RUNWAY	P	0	497,750.01	09/19/2002	13	70.00
6100 (Runway 14-32)	6100-07	08/01/1974	AAC	RUNWAY	P	0	14,000.00	09/19/2002	28	22.00
6100 (Runway 14-32)	6100-08	08/01/1974	AAC	RUNWAY	P	0	14,000.00	09/19/2002	28	32.00
6100 (Runway 14-32)	6100-09	09/01/1974	AC	RUNWAY	P	0	81,224.00	09/19/2002	28	17.00
6200 (Runway 8-26)	6200-01	08/01/1974	AAC	RUNWAY	P	0	398,550.01	09/20/2002	28	18.00
6200 (Runway 8-26)	6200-02	09/01/1974	AAC	RUNWAY	S	0	14,000.00	09/20/2002	28	55.00
6200 (Runway 8-26)	6200-03	09/01/1974	AAC	RUNWAY	S	0	14,000.00	09/20/2002	28	54.00
6200 (Runway 8-26)	6200-05	08/01/1989	AAC	RUNWAY	P	0	51,542.00	09/20/2002	13	69.00
6200 (Runway 8-26)	6200-10	09/01/1989	AC	RUNWAY	P	0	92,249.00	09/20/2002	13	70.00
6200 (Runway 8-26)	6200-15	09/01/1989	AAC	RUNWAY	P	0	55,536.00	09/20/2002	13	59.00
6200 (Runway 8-26)	6200-25	09/01/1989	AAC	RUNWAY	P	0	176,400.00	09/20/2002	13	73.00
6200 (Runway 8-26)	6200-26	08/01/1974	AAC	RUNWAY	S	0	14,000.00	09/20/2002	28	21.00
6200 (Runway 8-26)	6200-27	08/01/1974	AAC	RUNWAY	S	0	14,000.00	09/20/2002	28	55.00

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
11-15	13.00	1,988,640.05	11	68.55	6.17	72.24
26-30	28.33	1,088,185.03	12	37.83	16.08	29.63
31-35	32.00	29,025.00	1	21.00	0.00	21.00
All	21.46	3,105,850.08	24	51.21	20.30	56.83

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
0-02	2.00	675800.01	5	81.60	3.72	82.08
03-05	4.63	670627.02	8	76.00	6.02	76.67
06-10	7.25	168410.00	4	58.75	9.78	61.39
11-15	14.25	1235421.03	12	49.42	10.48	52.46
16-20	18.00	710083.02	6	44.67	3.94	44.27
All	10.14	3460341.07	35	60.34	16.29	61.69

PAVEMENT STRENGTH SURVEY

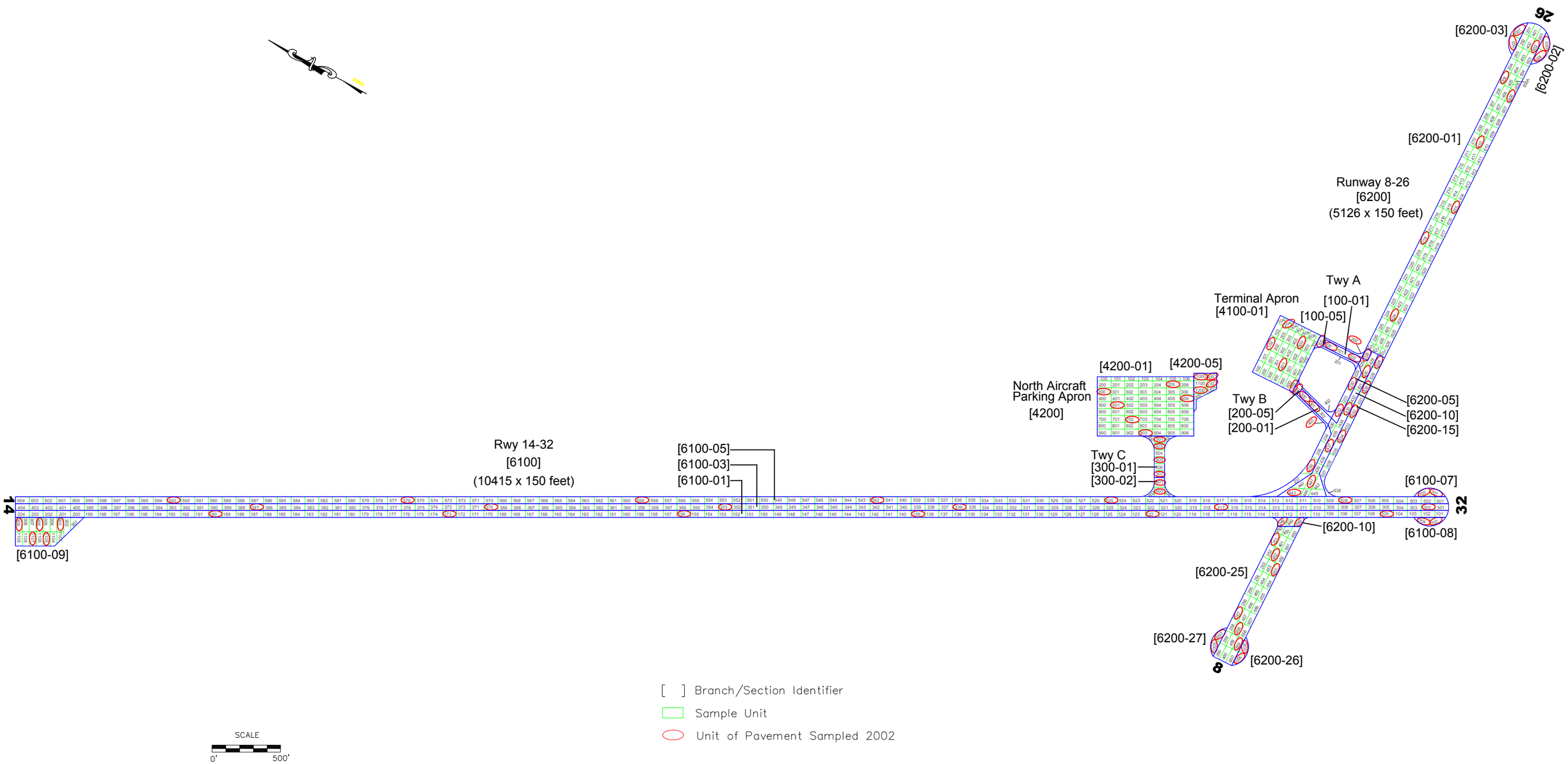
STATE Alaska		CITY	Cold Bay	AIRPORT	Cold Bay				This is a variation of FAA Form 5320-1-1			
		CONSTRUCTION DATES				Existing	SOIL	Subbase	Base	Surface		Pavement
IDENT.	NAME	ORIG.	OVERLAY	CONSTRUCTION AGENCY	SOURCE OF INFORMATION	Pavement Conditions (PCI)	CLASS	Course	Course	Course	Overlay	Strength
						RUNWAYS						
6100-01	Runway 14-32 (left 50') section 1	1989		AK DOT & PF	Project # 5591, AK Supp.	72		existing varies 24" - 37"	6" existing	2.5"-4" AC varies	2" Recycled Hot AC	S75, T131, ST175, TT175, DTT 850
6100-03	Runway 14-32 (50'keel) section 3	1989		AK DOT & PF	Project # 5591, AK Supp.	77		existing varies 24" - 37"	4" average existing	6" Recycled Hot AC		S75, T131, ST175, TT175, DTT 850
6100-05	Runway 14-32 (right 50') section 5	1989		AK DOT & PF	Project # 5591, AK Supp.	70		existing varies 24" - 37"	6" existing	2.5"-4" AC varies	2" Recycled Hot AC	S75, T131, ST175, TT175, DTT 850
6100-07	R/W 14-32, Section 7	1974				22					Slurry Seal	
6100-08	R/W 14-32, Section 8	1974				32					Slurry Seal	
6100-09	R/W 14-32, Section 9	1974				17				AC		
6200-01	Runway 8-26 (westend) section 1	1974		AK DOT & PF	Project # 5591, AK Supp.	18					Slurry Seal	S75, T131, ST175, TT175
6200-02	Runway 26, Lt. T.O.	1974				55					Slurry Seal	
6200-03	Runway 26, Rt. T.O.	1974				54					Slurry Seal	
6200-05	Runway 8-26 (mideast) Right 50' section 5	1989		AK DOT & PF	Project # 5591, AK Supp.	68		existing varies 24" - 37"	6" existing	2.5"-4" AC varies	2" Recycled Hot AC	S75, T131, ST175, TT175
6200-10	Runway 8-26 (mideast) keel section 10	1989		AK DOT & PF	Project # 5591, AK Supp.	70		existing varies 24" - 37"	4" average existing	6" Recycled Hot AC		S75, T131, ST175, TT175
6200-15	Runway 8-26 (mideast) left 50' section 15	1989		AK DOT & PF	Project # 5591, AK Supp.	59		existing varies 24" - 37"	6" existing	2.5"-4" AC varies	2" Recycled Hot AC	S75, T131, ST175, TT175
6200-25	Section 25	1989				73					Slurry Seal	S75, T131, ST175, TT175
6200-26	Section 26	1974				21					Slurry Seal	
6200-27	Runway 8-26, Section 27	1974		AK DOT & PF	As-Built 11/74	55					Slurry Seal	
						TAXIWAYS						
100-01	Taxiway A Section 1	1989		AK DOT & PF	Project # 55911	69				6" Recycled Hot AC		
100-05	Taxiway A Section 5	1974				59						
200-01	Taxiway B Section 1	1989		AK DOT & PF	Project # 55911	60				6" Recycled Hot AC		
200-05	Taxiway B Section 5	1974				76						
300-01	Taxiway C Section 1	1989		AK DOT & PF	As-Built's 1974, Project # 55911	38			12" (1974)	4" AC (1974)	2" Recycled Hot AC	
300-02	Taxiway C Section 2	1989		AK DOT & PF	As-Built's 1974, Project # 55911	67		20" (1972)	12" (1972)	4" AC (1972)	2" Recycled Hot AC	
						APRONS						
4100-01	South Apron	9/1/1973		AK DOT & PF		39					Slurry Seal	
4200-01	North Ramp, Section 1	9/1/1989		AK DOT & PF	As-Built 1973	30		20" (1972)	12" CABC (1972)	4"AC (1972)	2" Recycled Hot AC	
4200-05	North Ramp, Section 5	9/1/1972		AK DOT & PF	As-Built 1973	32		20" (1972)	12" CABC (1972)	4"AC (1972)		
side Apron	Side R/W 14-32 Apron	9/1/1965		AK DOT & PF		no survey				AC		

REMARKS:

Runway 14-32 is used for emergency landings of up to B-747 size aircraft, but the Ramps are not strong enough to support them.
There is a 25' edge on the east side of the North Apron with 2" AC/14" CABC/20" Subbase
Outboard 12.5' on both sides of taxiways A & B were just overlaid with 2" Recycled Hot AC
Side R/W 14-32 Apron not in use

Date of Site Inspection:	9/21/2002	Evaluated By:	S. Gartin	1/13/2003	PAGE 1 of 1

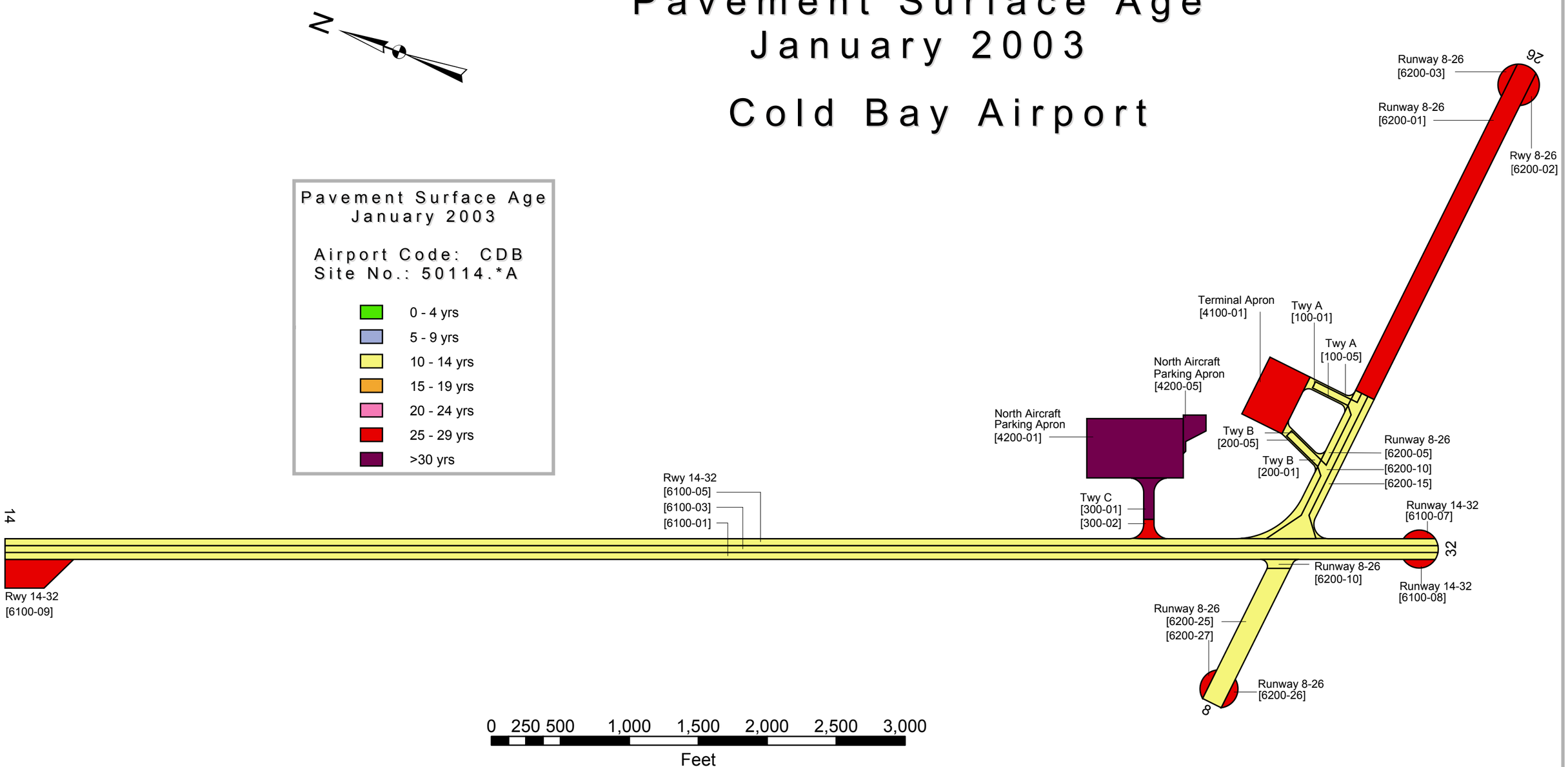
Pavement Condition Survey - PCI Sample Unit Layout Plan	State Alaska	City Cold Bay	Airport Cold Bay	Airport Code: CDB	Site No. 50870.3.*A



Map compiled December 10, 2004

Pavement Surface Age
January 2003

Cold Bay Airport



Cold Bay Airport

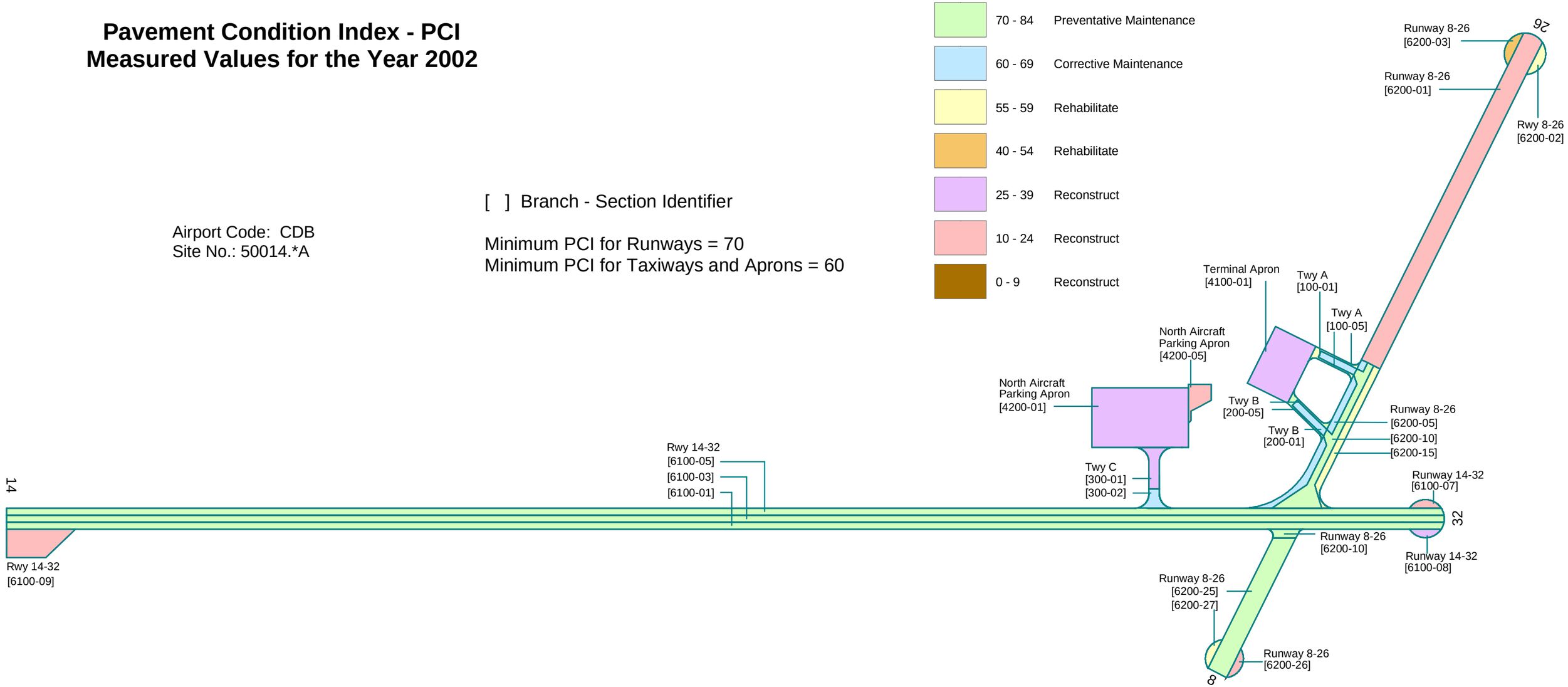
Pavement Condition Index - PCI
Measured Values for the Year 2002

Airport Code: CDB
Site No.: 50014.*A

[ ] Branch - Section Identifier

Minimum PCI for Runways = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



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Feet

Map complied 2002 (revised July 2003)
by Statewide Pavement Management, AK DOT&PF

Cold Bay Airport

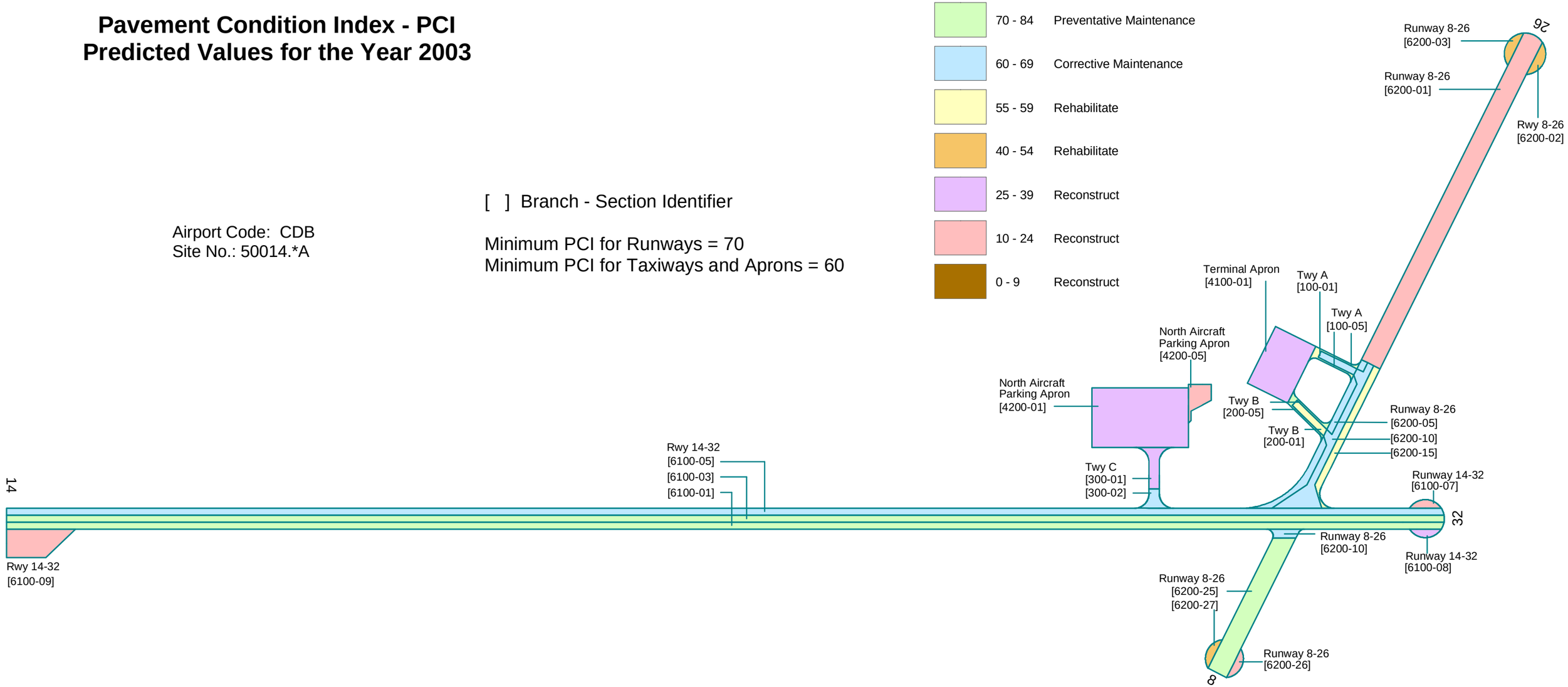
Pavement Condition Index - PCI
Predicted Values for the Year 2003

Airport Code: CDB
Site No.: 50014.*A

[ ] Branch - Section Identifier

Minimum PCI for Runways = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



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Map complied 2002 (revised July 2003)
by Statewide Pavement Management, AK DOT&PF

Cold Bay Airport

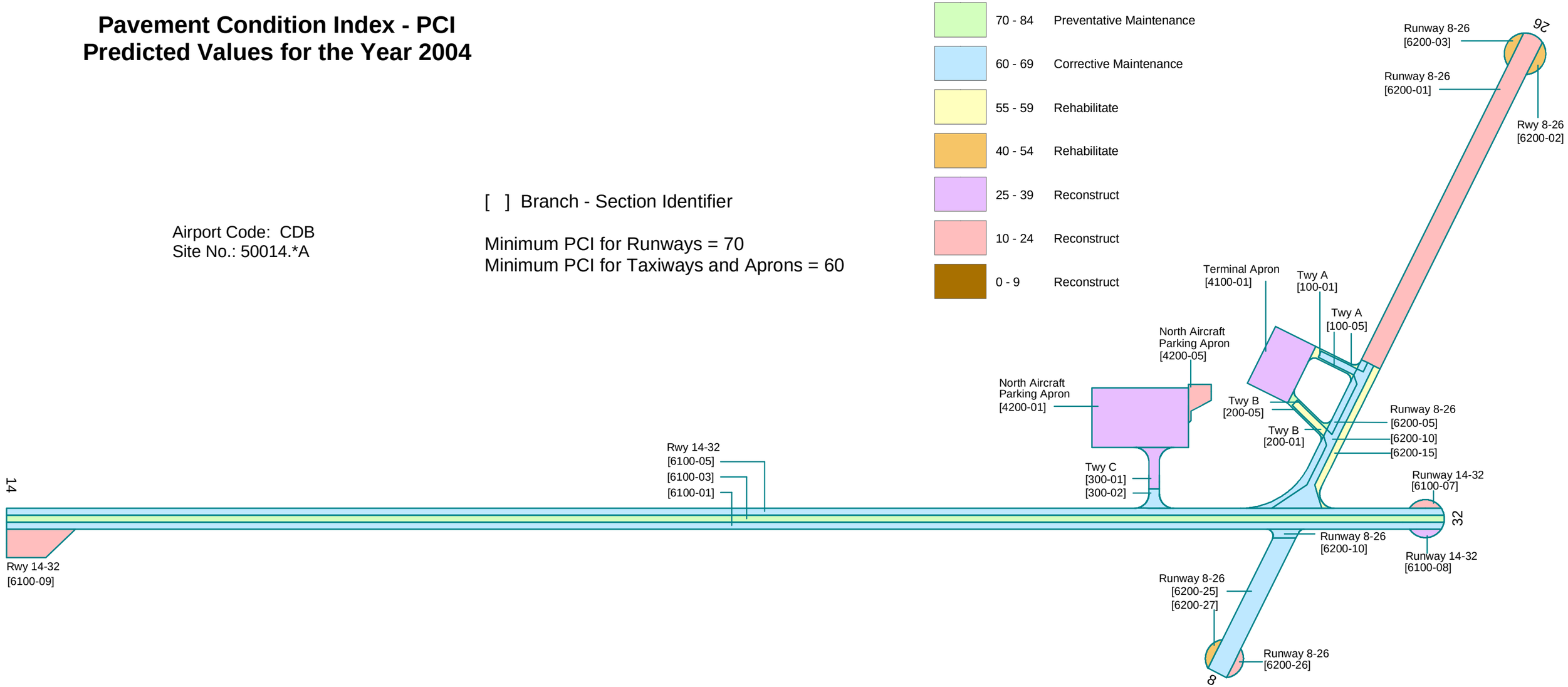
Pavement Condition Index - PCI
Predicted Values for the Year 2004

Airport Code: CDB
Site No.: 50014.*A

[ ] Branch - Section Identifier

Minimum PCI for Runways = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



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Feet

Map complied 2002 (revised July 2003)
by Statewide Pavement Management, AK DOT&PF

Cold Bay Airport

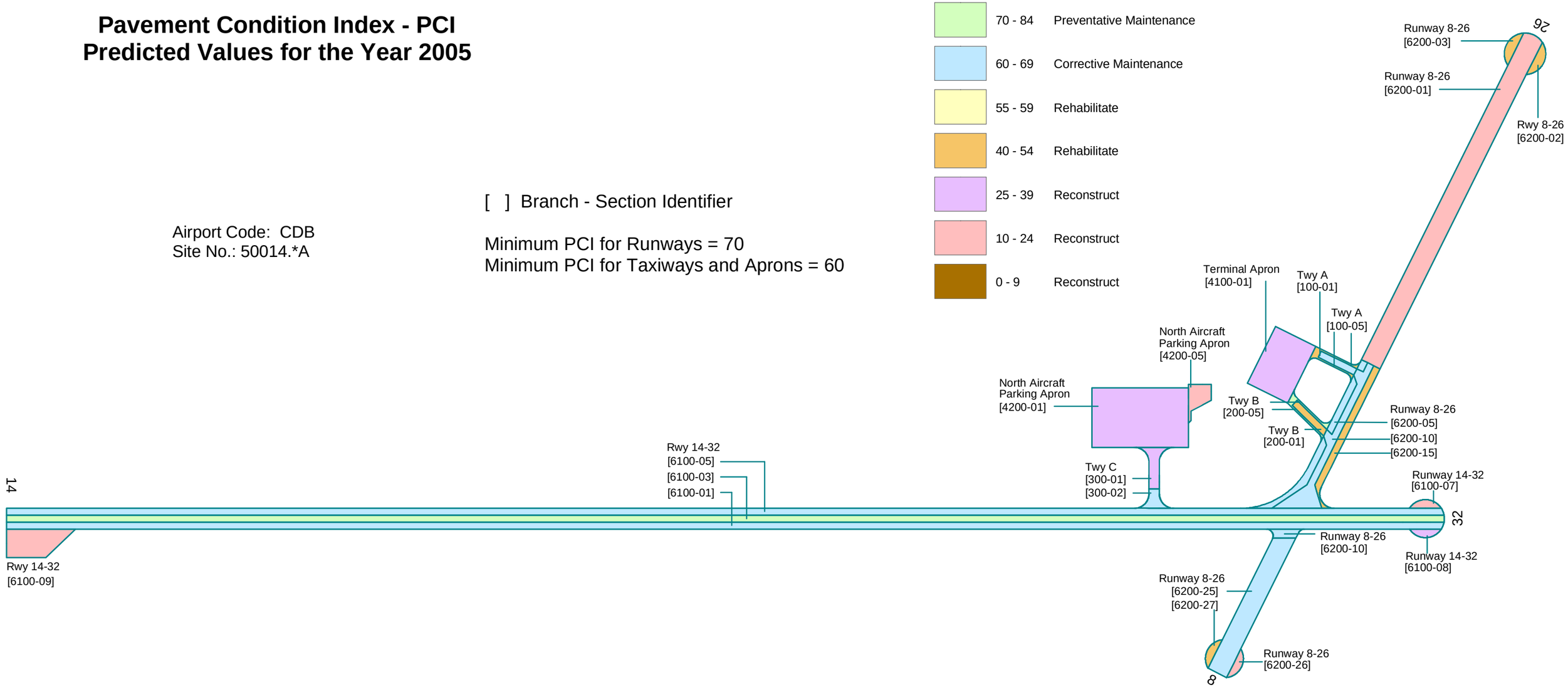
Pavement Condition Index - PCI
Predicted Values for the Year 2005

Airport Code: CDB
Site No.: 50014.*A

[ ] Branch - Section Identifier

Minimum PCI for Runways = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



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Feet

Map complied 2002 (revised July 2003)
by Statewide Pavement Management, AK DOT&PF

Cold Bay Airport

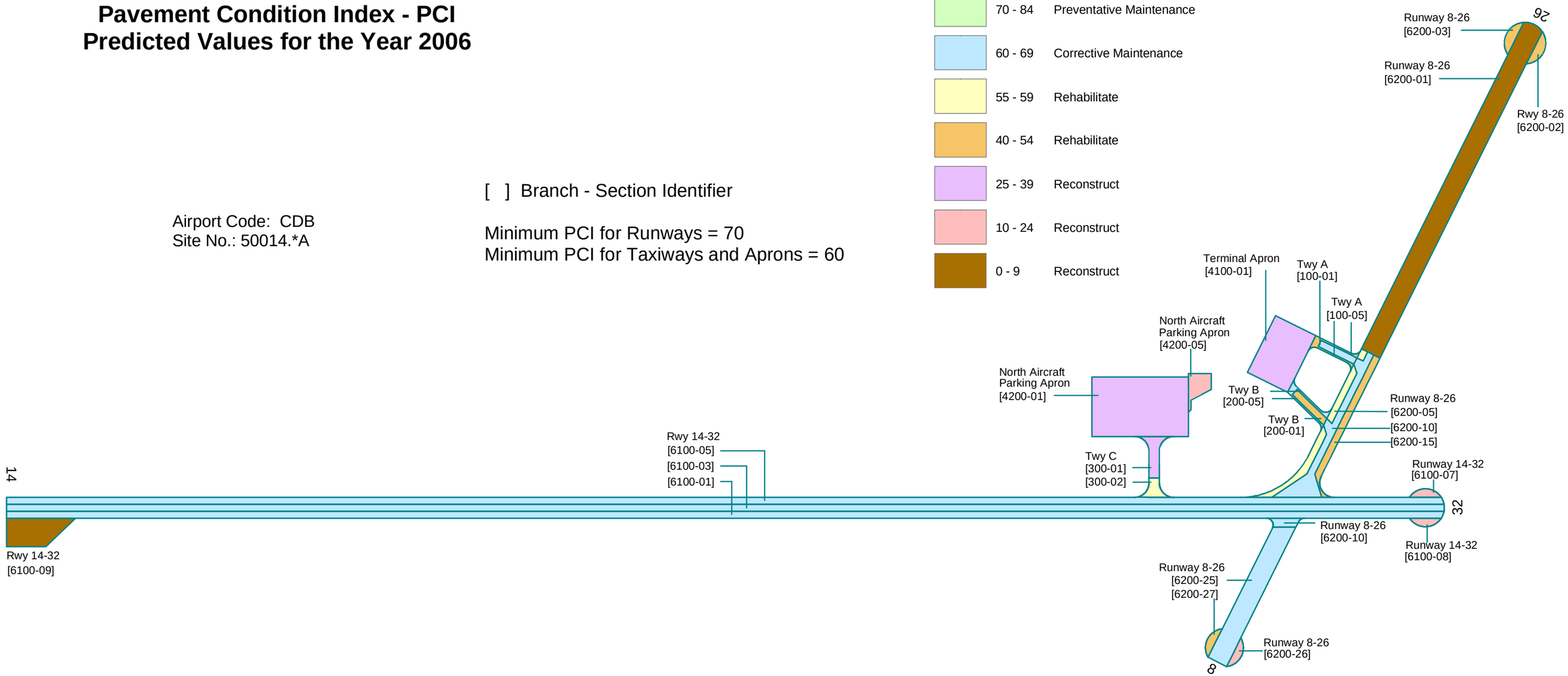
Pavement Condition Index - PCI
Predicted Values for the Year 2006

Airport Code: CDB
Site No.: 50014.*A

[ ] Branch - Section Identifier

Minimum PCI for Runways = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



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Map complied 2002 (revised July 2003)
by Statewide Pavement Management, AK DOT&PF

Cold Bay Airport

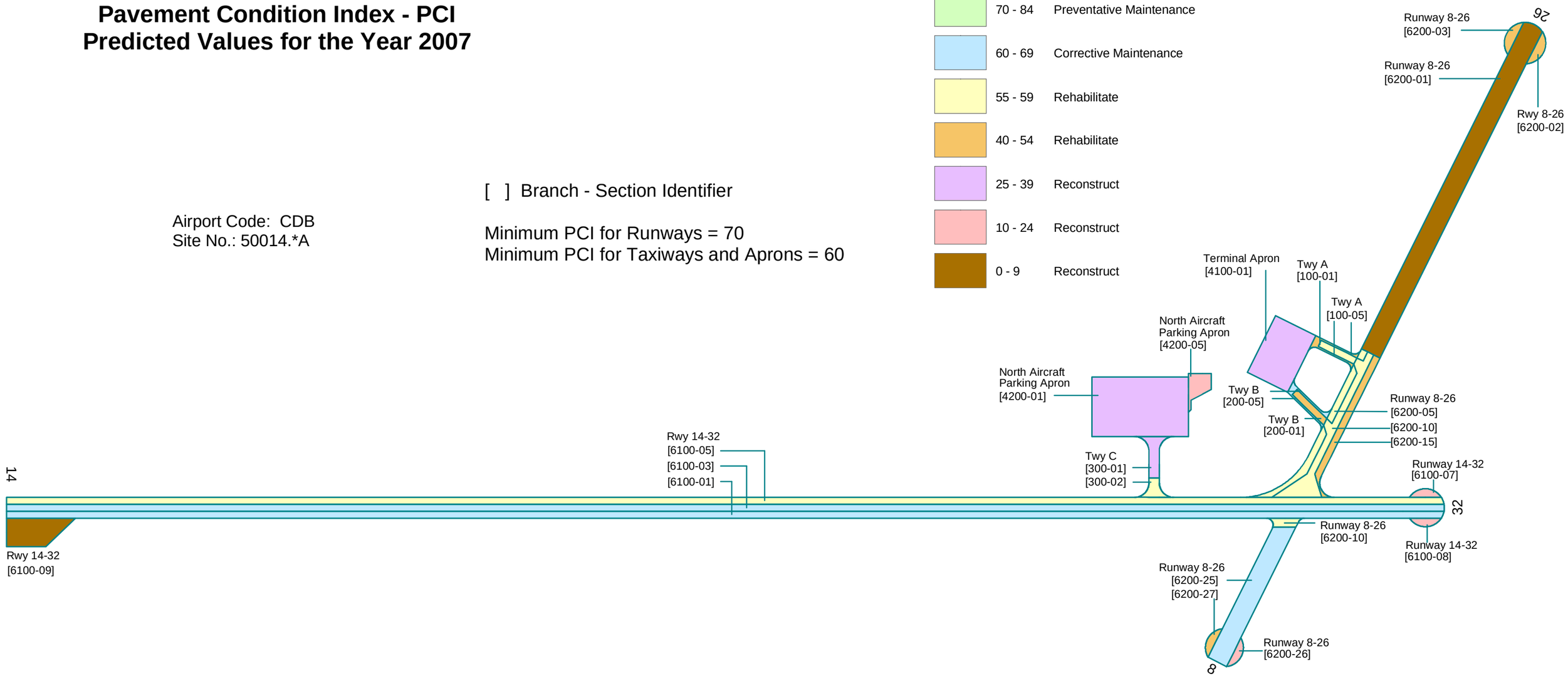
Pavement Condition Index - PCI
Predicted Values for the Year 2007

Airport Code: CDB
Site No.: 50014.*A

[ ] Branch - Section Identifier

Minimum PCI for Runways = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



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Feet

Map complied 2002 (revised July 2003)
by Statewide Pavement Management, AK DOT&PF

Cold Bay Airport

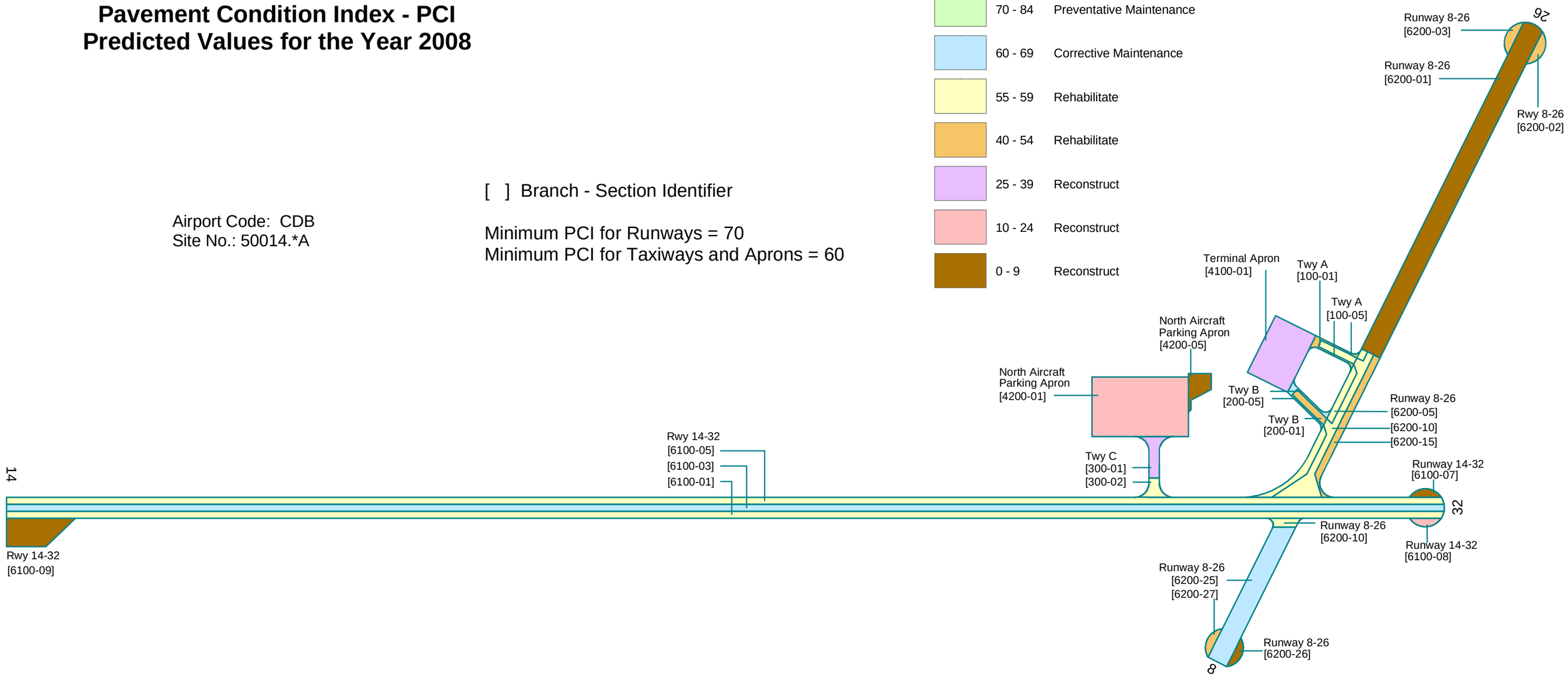
Pavement Condition Index - PCI
Predicted Values for the Year 2008

Airport Code: CDB
Site No.: 50014.*A

[ ] Branch - Section Identifier

Minimum PCI for Runways = 70
Minimum PCI for Taxiways and Aprons = 60

PCI Values	General Pavement Recommendations
85 - 100	Do Nothing or Preventative Maintenance
70 - 84	Preventative Maintenance
60 - 69	Corrective Maintenance
55 - 59	Rehabilitate
40 - 54	Rehabilitate
25 - 39	Reconstruct
10 - 24	Reconstruct
0 - 9	Reconstruct



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Feet

Map complied 2002 (revised July 2003)
by Statewide Pavement Management, AK DOT&PF