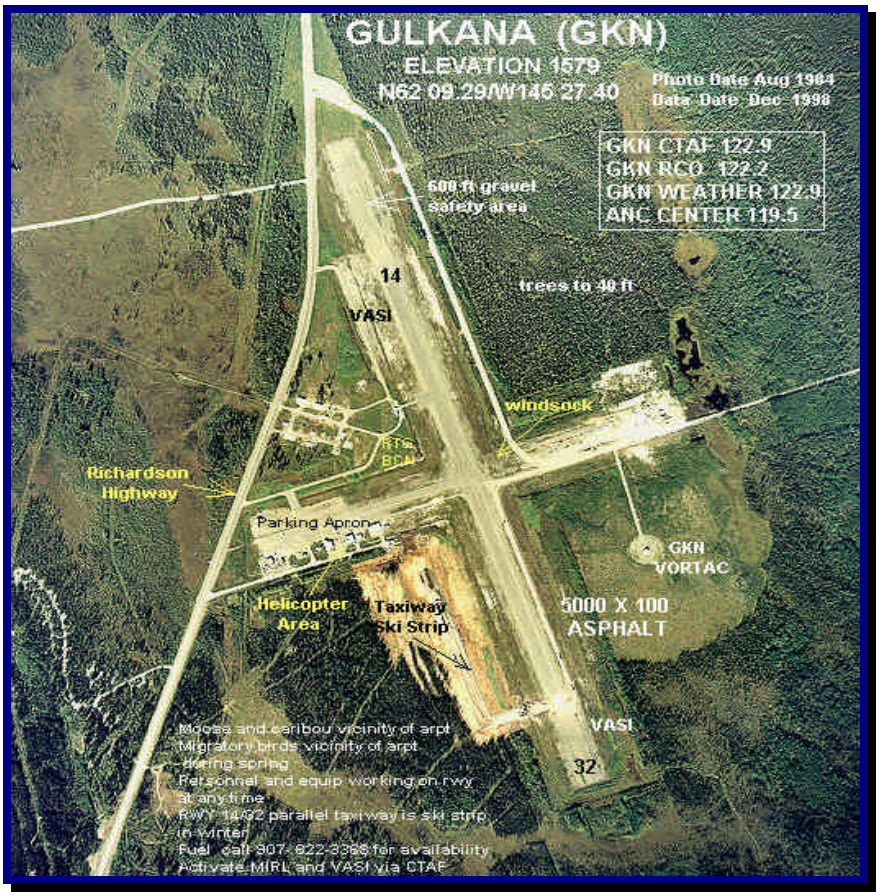
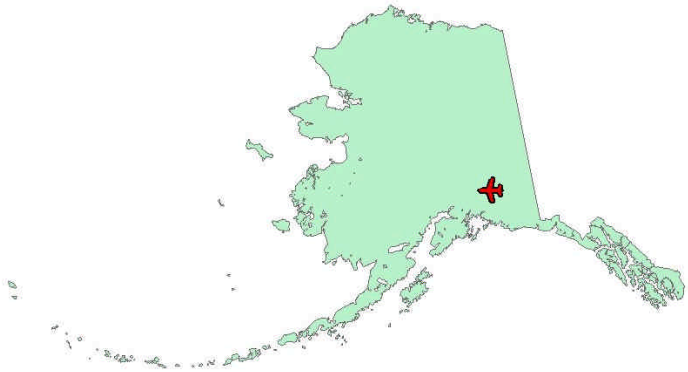


GULKANA AIRPORT



2004 Alaska Airport Pavement Condition Report

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

GULKANA 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 2004
- A Branch PCI Condition Report
- A Section PCI Condition Report

Airport Information:

- Location:
  The Gulkana Airport is located approximately 3 miles north of the Hub in Glennallen on the east side of the Richardson Highway. There is an FAA Flight Service Station on the airport. It primarily serves private General Aviation aircraft with occasional scheduled flights. It is a without fencing and controlled access.
- District: South Central District of the Northern Region
- Airport Manager: Joseph Junker
- District Maintenance Manager: Joseph Junker, Acting
- Pavement Surface: Asphalt Pavement
- Last Pavement Construction: 1975
- Pavement layout:
  The airport consists of Runway 14L-32R, Runway 14R-32L/Taxiway A (gravel so not considered herein), Taxiway B, and two apron sections. A third apron section on the south side of Taxiway B is a lease area, so not considered in this report.
- Design Aircraft: Twin Otter
- 2003 Enplanements: 290 – a 76% decrease from 2002
- Airport Class: Non-Primary
- Last pavement condition survey: 2004
  conducted by Angela Parsons and June Finkbiner of Central Region Materials
- Next planned pavement condition survey: 2007
- 2004 reported pavement maintenance and/or changed conditions: A fog seal was applied to Apron Section 4100-05 in 2004. Taxiway A was graded. A pavement rehabilitation project may be getting started.
- Recommendations: Reconstruct T/W B and the Apron. Maintain pavement by crack sealing cracks wider than ¼" and patching as needed.

Date: 12 /15/2004

Branch Condition Report

Pavement Database: NetworkID: Gulkana

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
200 (TAXIWAY B)	2	1959.00	75.00	156817.00	TAXIWAY	51.50	8.50	45.17
300 (TAXIWAY C)	1	210.00	35.00	12715.00	TAXIWAY	69.00	0.00	69.00
4100 (APRONS ADJOINING T/W B)	5	1955.00	139.40	287206.00	APRON	35.40	8.31	37.11
4200 (MedEvac Apron)	1	118.00	135.00	15930.00	APRON	51.00	0.00	51.00
6100 (RUNWAY 32R - 14L)	1	5000.00	100.00	500000.01	RUNWAY	51.00	0.00	51.00
6200 (Runway 14R - 32L)	1	50.00	60.00	4050.00	RUNWAY	64.00	0.00	64.00

Branch Condition Report

Pavement Database:

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Average PCI STD.	Weighted Average PCI
APRON	6	303136.01	38.00	9.56	37.84
RUNWAY	2	504050.01	57.50	6.50	51.10
TAXIWAY	3	169532.00	57.33	10.78	46.96
All	11	976718.02	46.82	13.51	46.27

Date: 1 /13/2005

Section Condition Report

Pavement Database: *NetworkID: Gulkana*

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection	Age At Inspectio	PCI
200 (TAXIWAY B)	200-01	08/15/1980	AC	TAXIWAY	P	1	136,775.00	09/21/2004	24	43.00
200 (TAXIWAY B)	200-02	08/15/1993	AC	TAXIWAY	T	1	20,042.00	09/21/2004	11	60.00
300 (TAXIWAY C)	300-01	08/15/1992	AC	TAXIWAY	S	1	12,715.00	09/21/2004	12	69.00
4100 (APRONS ADJOINING T/W B)	4100-01	08/15/1975	AC	APRON	P	0	183,750.00	09/21/2004	29	40.00
4100 (APRONS ADJOINING T/W B)	4100-02	08/15/1975	AAC	APRON	T	0	35,000.00	09/21/2004	29	20.00
4100 (APRONS ADJOINING T/W B)	4100-03	08/01/1975	AC	APRON	S	0	20,000.00	09/21/2004	29	32.00
4100 (APRONS ADJOINING T/W B)	4100-04	08/15/1975	AC	APRON	T	0	26,600.00	09/21/2004	29	39.00
4100 (APRONS ADJOINING T/W B)	4100-05	08/15/1975	AC	APRON	T	0	21,856.00	09/21/2004	29	45.00
4200 (MedEvac Apron)	4200-01	08/01/1975	AC	APRON	P	0	15,930.00	09/21/2004	29	51.00
6100 (RUNWAY 32R - 14L)	6100-01	08/15/1992	AC	RUNWAY	P	0	500,000.01	09/21/2004	12	51.00
6200 (Runway 14R - 32L)	6200-01	09/15/1995	AC	RUNWAY	S	0	4,050.00	09/21/2004	9	64.00

Section Condition Report

Pavement Database:

Age Category	Average Age At Inspection	Total Area (SqFt)	Number of Section	Arithmetic Average PCI	PCI Standard Deviation	Weighted Average PCI
06-10	9.00	4,050.00	1	64.00	0.00	64.00
11-15	11.67	532,757.01	3	60.00	7.35	51.77
21-25	24.00	136,775.00	1	43.00	0.00	43.00
26-30	29.00	303,136.01	6	38.00	9.56	37.84
All	22.00	976,718.02	11	46.82	13.51	46.27

PAVEMENT STRENGTH SURVEY

STATE Alaska | **CITY** Gulkana | **AIRPORT** Gulkana | This is a variation of FAA Form 5320-1-1

IDENT.	NAME	CONSTRUCTION DATES ORIG.	OVERLAY	CONSTRUCTION AGENCY	SOURCE OF INFORMATION	Existing Pavement Conditions (PCI) at last inspection	Soil Class	Subbase Course	Base Course	Surface Course	Overlay	Pavement Strength
						RUNWAYS						
6100-01	Runway 32R-14L	1992		AK DOT & PF		51				AC		no data
6100-02	Runway 32L-14R	1980		AK DOT & PF		64				AC (N. end)		
						TAXIWAYS						
200-01	Taxiway B, west end	1980		AK DOT & PF		43				AC		
200-02	Taxiway B, east end	1993		AK DOT & PF		60				AC		
300-01	Taxiway C	1992		AK DOT & PF		69				AC		
						APRONS						
4100-01	Apron	1975		AK DOT & PF		40				AC		
4100-02	Apron	1975		AK DOT & PF		20				AC		
4100-03	Apron	1975		AK DOT & PF		32				AC		
4100-04	Apron	1975		AK DOT & PF		37				AC		
4100-05	Apron	1975		AK DOT & PF		45				AC	Fog Sealed 2000	
4200-01	Medivac	1975		AK DOT & PF		51				AC		

REMARKS:

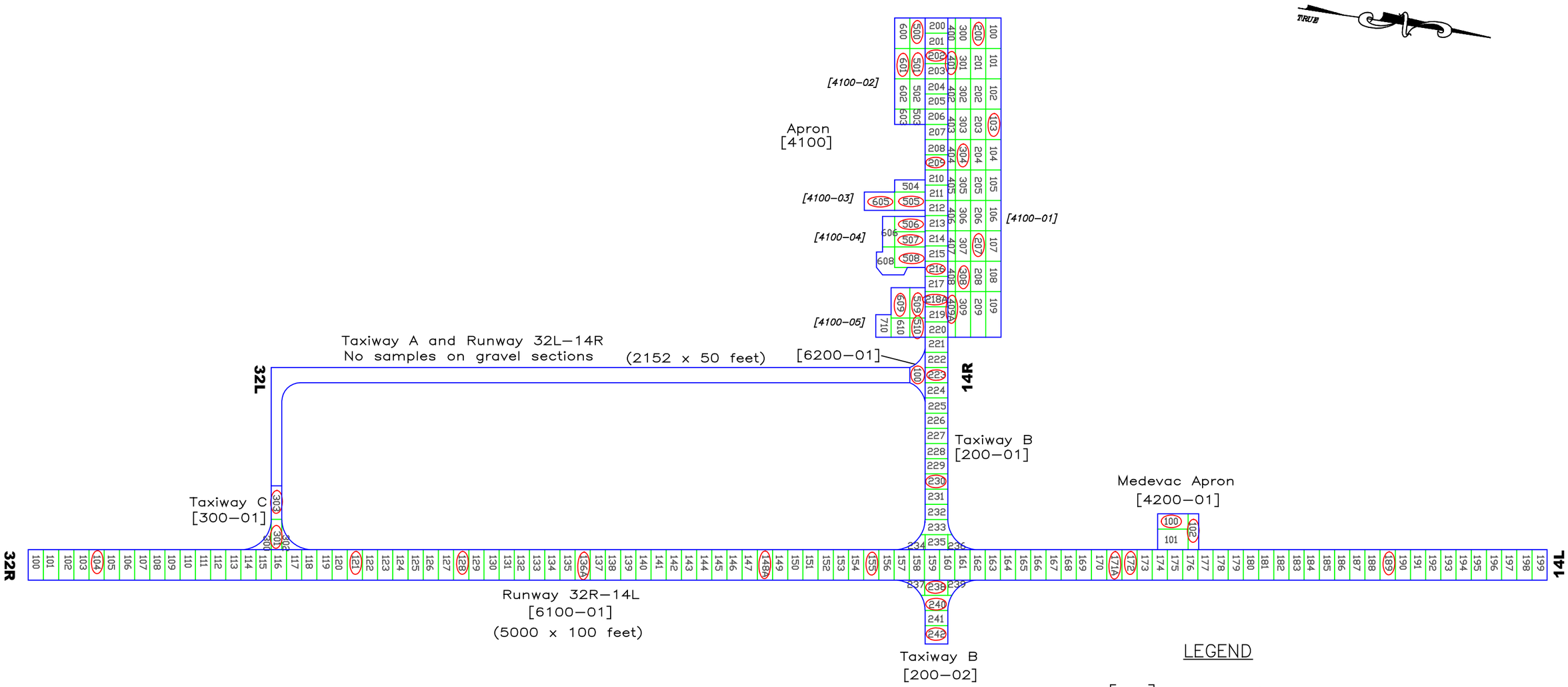
Age of aprons are estimated

Runway 32L-14R is gravel surfaced with a short paved approach from Taxiway B (Section 200-01).

Date of Site Inspection: 9/21/2004 | Evaluated By: S. Gartin | 11/30/2004

Pavement Condition Survey - PCI Sample Unit Layout Plan

State	City	Airport	Airport Code:	Site No.
Alaska	Gulkana	Gulkana	GKN	50281.*A



LEGEND

[ ] Branch/Section Identifier

Sample Units

Unit of Pavement Sampled 2004

SCALE

0' 300' 600' 900'

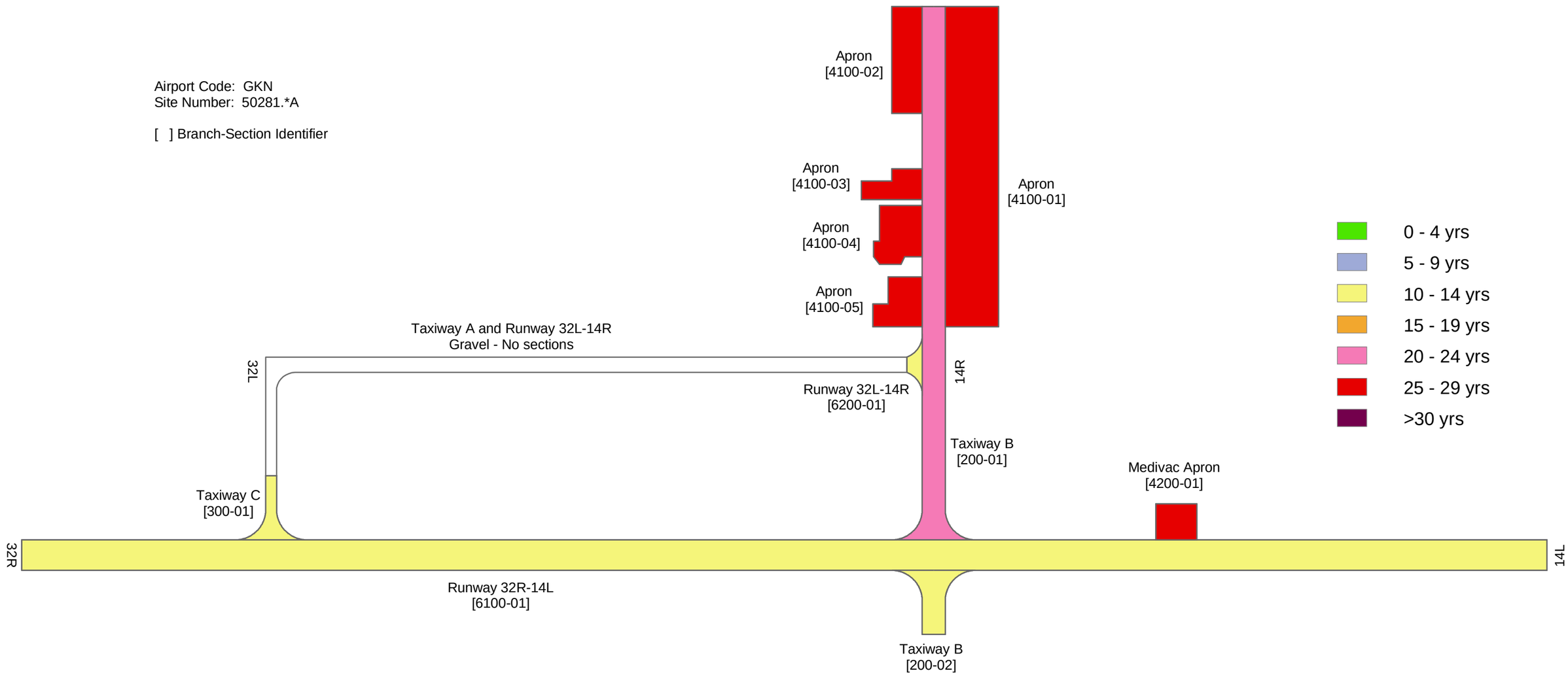
Map compiled December 10, 2004

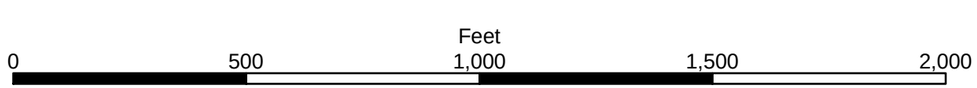
Gulkana Airport

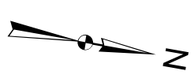
Pavement Surface Age
2004

Airport Code: GKN
Site Number: 50281.*A

[ ] Branch-Section Identifier







Map Compiled December 2004
by Central Region Materials, AK DOT&PF

Gulkana Airport

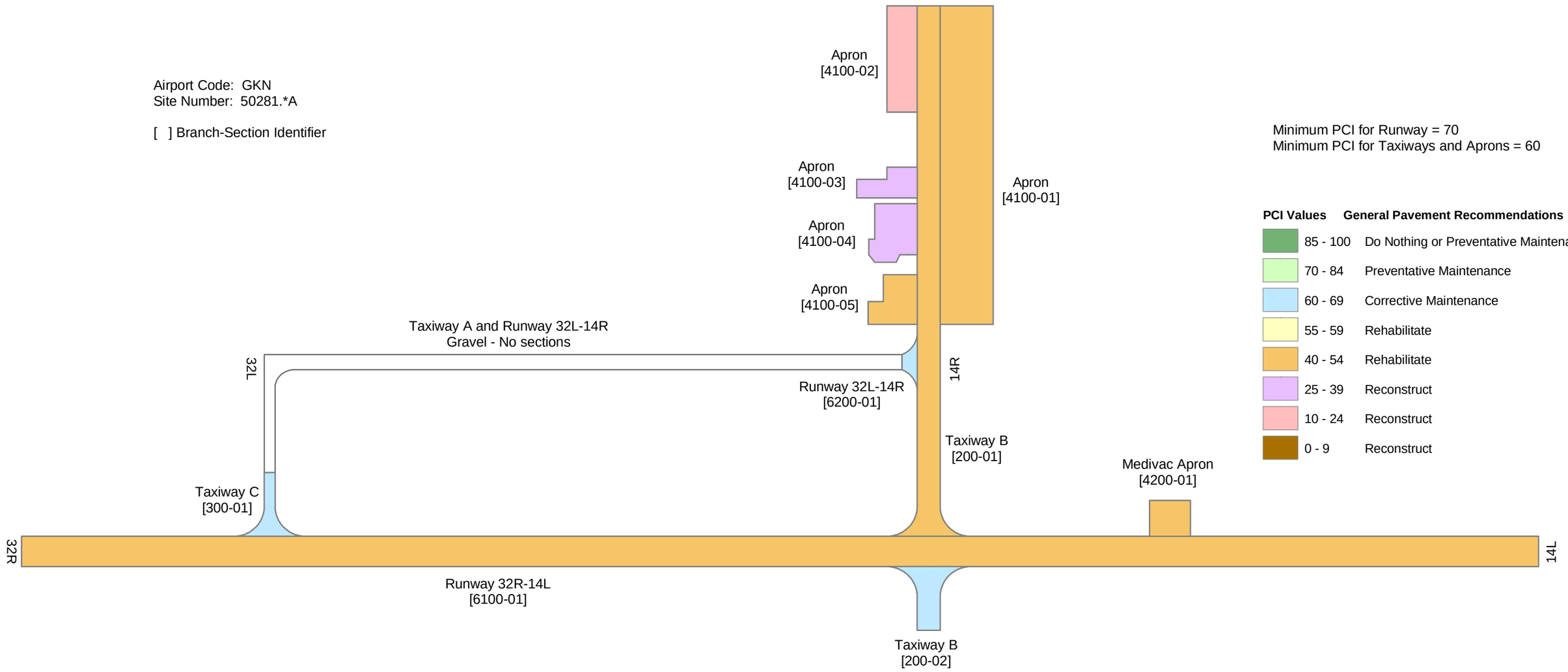
Pavement Condition Index (PCI)
Measured Values for the Year 2004

Airport Code: GKN
Site Number: 50281.*A

[ ] Branch-Section Identifier

Minimum PCI for Runway = 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



Feet
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Map Compiled December 2004
by Central Region Materials, AK DOT&PF

Gulkana Airport

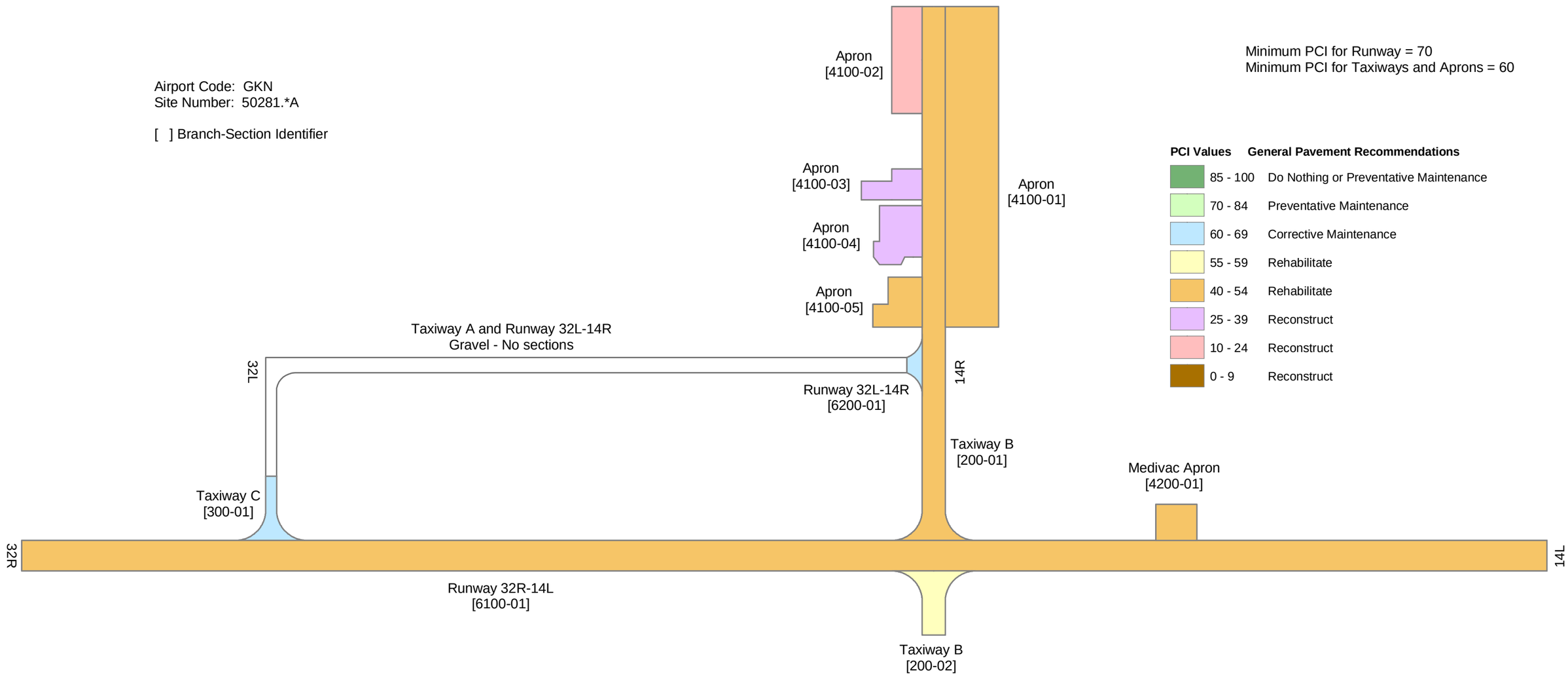
Pavement Condition Index (PCI)
Predicted Values for the Year 2005

Airport Code: GKN
Site Number: 50281.*A

[ ] Branch-Section Identifier

Minimum PCI for Runway = 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 Compiled December 2004
by Central Region Materials, AK DOT&PF

Gulkana Airport

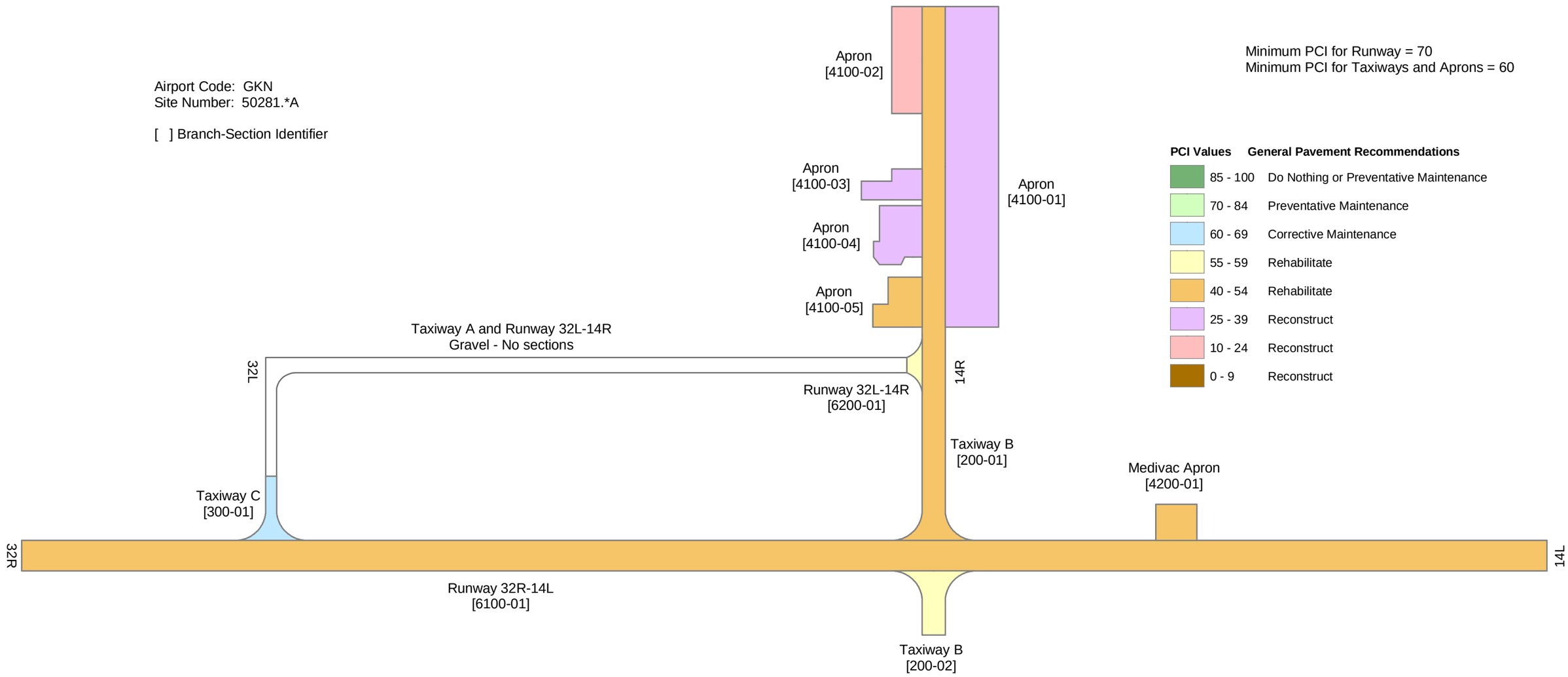
Pavement Condition Index (PCI)
Predicted Values for the Year 2006

Airport Code: GKN
Site Number: 50281.*A

[ ] Branch-Section Identifier

Minimum PCI for Runway = 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 Compiled December 2004
by Central Region Materials, AK DOT&PF

Gulkana Airport

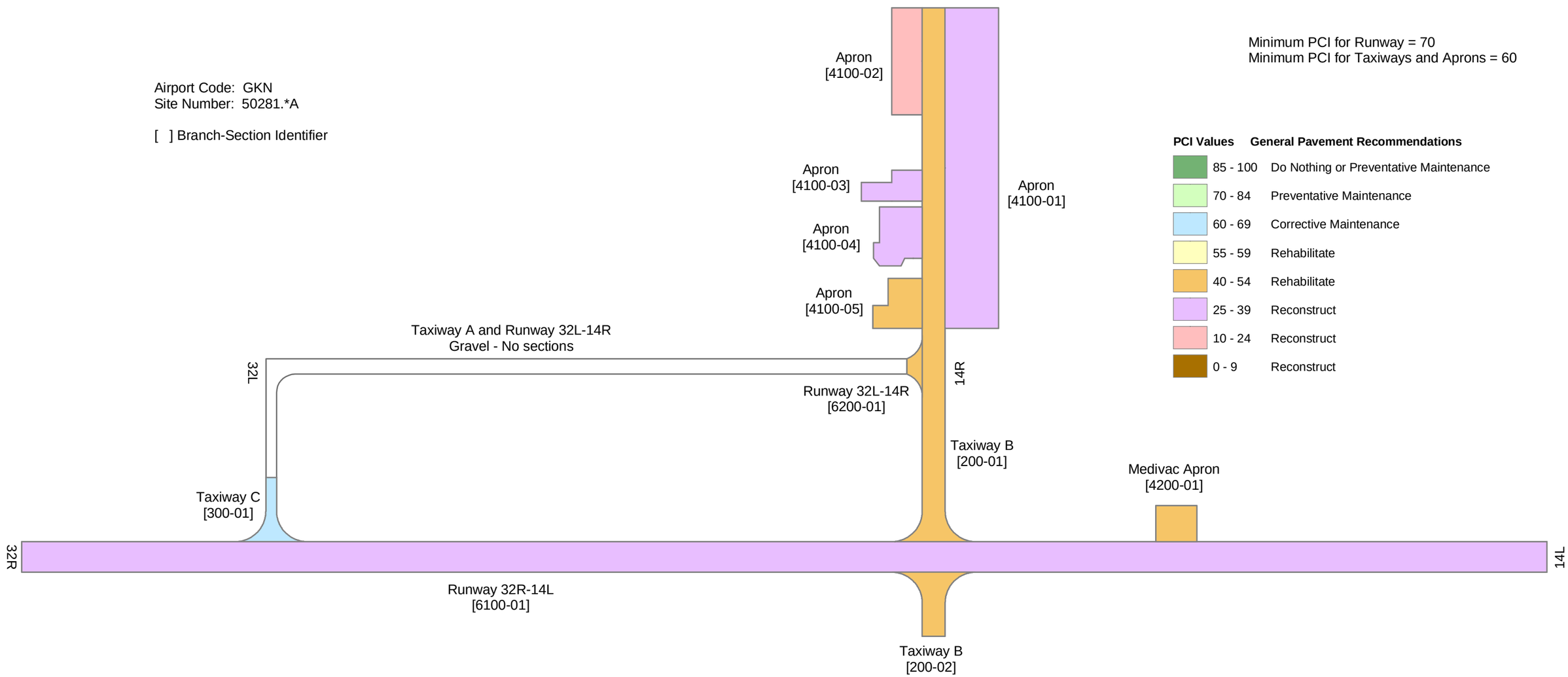
Pavement Condition Index (PCI)
Predicted Values for the Year 2007

Airport Code: GKN
Site Number: 50281.*A

[ ] Branch-Section Identifier

Minimum PCI for Runway = 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 Compiled December 2004
by Central Region Materials, AK DOT&PF

Gulkana Airport

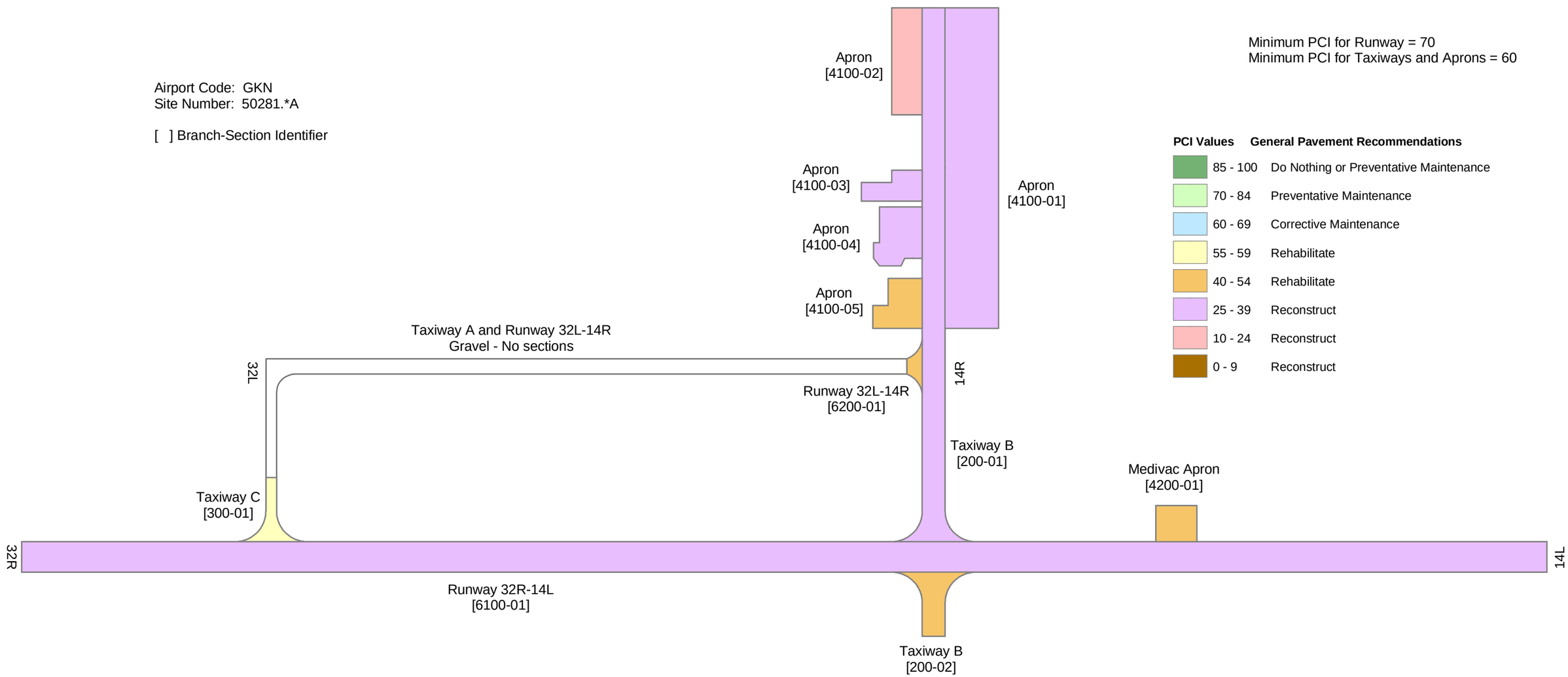
Pavement Condition Index (PCI)
Predicted Values for the Year 2008

Airport Code: GKN
Site Number: 50281.*A

[ ] Branch-Section Identifier

Minimum PCI for Runway = 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 Compiled December 2004
by Central Region Materials, AK DOT&PF

Gulkana Airport

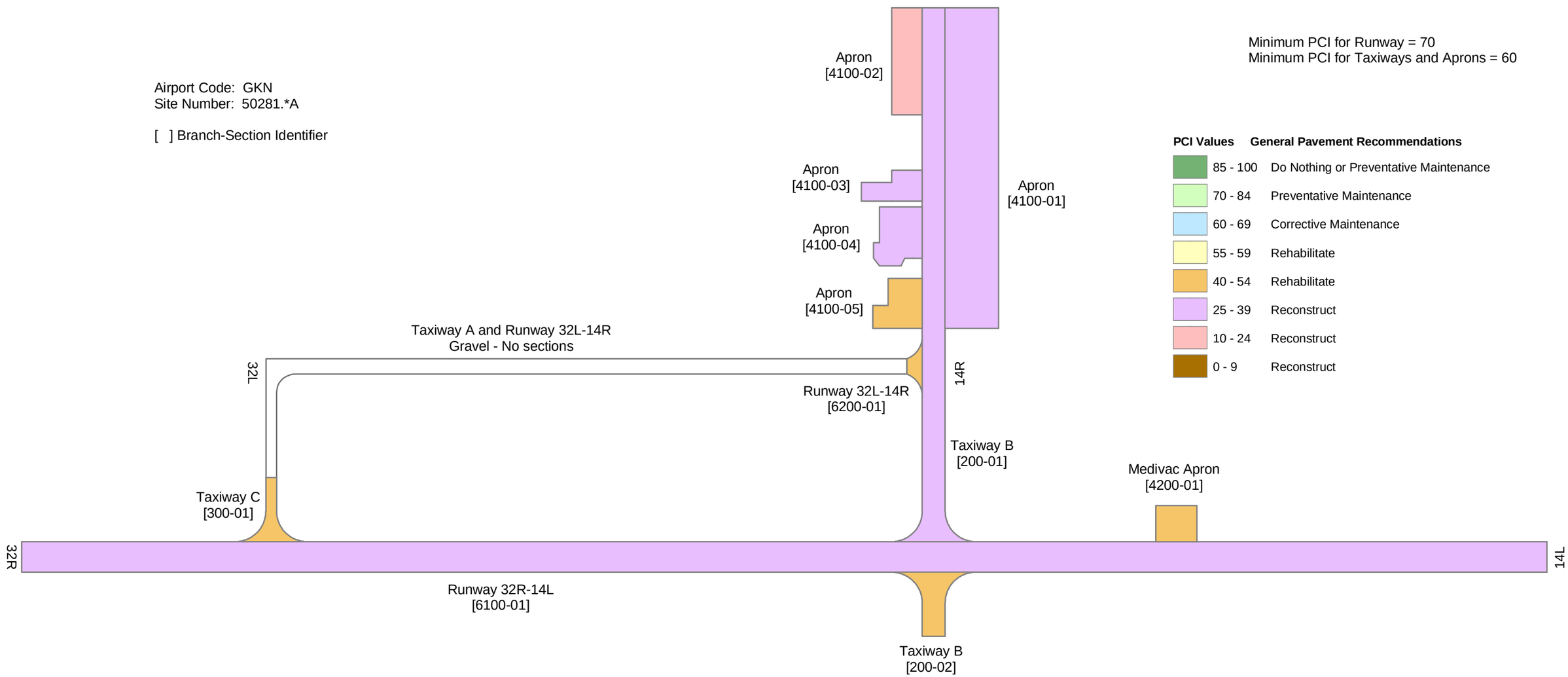
Pavement Condition Index (PCI)
Predicted Values for the Year 2009

Airport Code: GKN
Site Number: 50281.*A

[ ] Branch-Section Identifier

Minimum PCI for Runway = 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



Feet
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N

Map Compiled December 2004
by Central Region Materials, AK DOT&PF