

Winnipeg Airports Authority Inc. Airport Site Redevelopment

APEGM

**(Association of Professional Engineers and
Geoscientists of Manitoba)**

March 30, 2006

Corporate Cornerstones

- Vision
To Lead Transportation Innovation and Growth
- Mission
With our community, we provide excellent airport services and facilities in a fiscally prudent manner
- Values
Respect, Integrity, Service Excellence [RISE]

The Market

- 24 hour international airport
- Direct access to trucking and railways
- Service
 - 3.2 million passengers
 - 1 million meeter/greeters
- Strong origin & destination market
- Strong cargo market

Site Plan



Program Planning Process

- The following tasks were identified in Airport Redevelopment Program Definition phase:
 - Traffic Forecasts
 - Facility Condition & Capacity Analysis
 - Opinion of Probable Cost
 - Financial Modeling

Planning Process

- Concession Plan
- Baggage System Plan
- Security Plan
- IT&T Plan
- Program Structure & Schedule
- Communications Package

Planning Process

- Learning from PD Phase
 - Macro vs. micro
 - Establish in-depth understanding of:
 - Business objectives
 - Areas of future opportunity
 - Change management

Consultant Selection Process

- The Program Management and Design Team chosen through competition
- Transparency of selection process
- Selection on basis of value
 - Evaluation review committees
 - Interviews
 - Reference checks

Selected Delivery Teams

- Program Manager - Parsons
- Architect for NATB, Parkade & CUB – Pelli Clarke Pelli & Stantec
- Groundside - Earthtech
- Airside - Marshall Macklin Monaghan
- Owner's Advocate - Wardrop

Terminal & Parkade



Parkade



Design Team

- Stantec in association with Pelli Clarke Pelli
 - Crosier Kilgour & Partners Ltd
 - SMS Engineering
 - Auerbach Glasow
 - Cheriton Mgmt
 - Gulay Elevator Services
 - Design for All
 - LMDG
 - RWDI
 - Daniel Lyzun & Associates

ATB Signature Building

- Design Definition:

Winnipeg Airports Authority will establish a signature airport site redevelopment design that is consistent with our vision of leading transportation innovation and growth. Unique, striking and outstanding, our terminal structure will reflect our prairie roots and heritage of an important Canadian transportation centre that will continue to play a leading role in the future of this country.

Project Objectives

- Project has been planned in order to achieve:
 - Flexibility & responsiveness
 - Phasing
 - Affordability
 - Design excellence

Design Criteria

- Forecast 2015 passenger volumes with expandability to meet forecast 2020 passenger volumes

2004: 3.0 million passengers

2015: 4.1 million passengers

2020: 4.6 million passengers

Terminal Design

- Complex Design
- Variety of occupancies from very sophisticated to very simple
- Overriding security requirements
- Way-finding and signage
- Common use facilities

Terminal Design

- Large open spaces – difficult to heat, cool and light
- Changing requirements from air carriers
- Very complicated IT&T systems
- Equivalency arguments for means of egress
- Coordination with Groundside & Airside

Terminal Approach View



Winnipeg Airports Authority Inc.

Bag Claim Area



Winnipeg Airports Authority Inc.

Baggage Claim View



Winnipeg Airports Authority Inc.

Departures Hall/Ticketing



Town Square Hall



Concourse View



Construction Timing

- Roadways/Site Works 2005-06
- Parkade 2005-06
- Airport Terminal Building Phase I 2006-09
- Airside 2006-07-08
- Airport Terminal Building Phase II Future

Terminal Construction

- Construction Packaging complex issue
- Risk mitigation for construction
 - **Cultivated relationships with local construction community**
 - **Met all large local general contractors and subcontractors**
 - **Sought opinions on construction packaging and construction management**

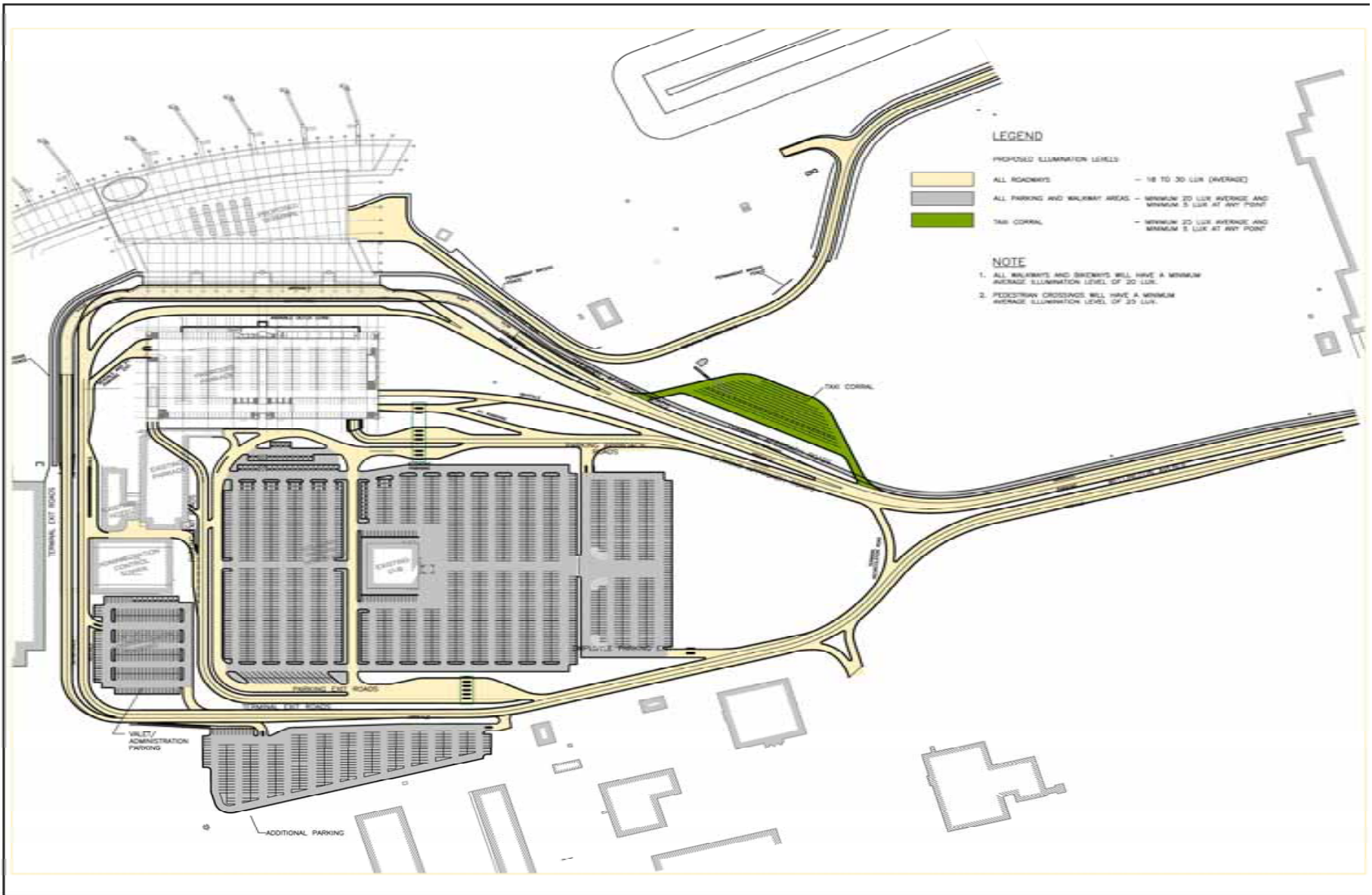
Terminal Construction

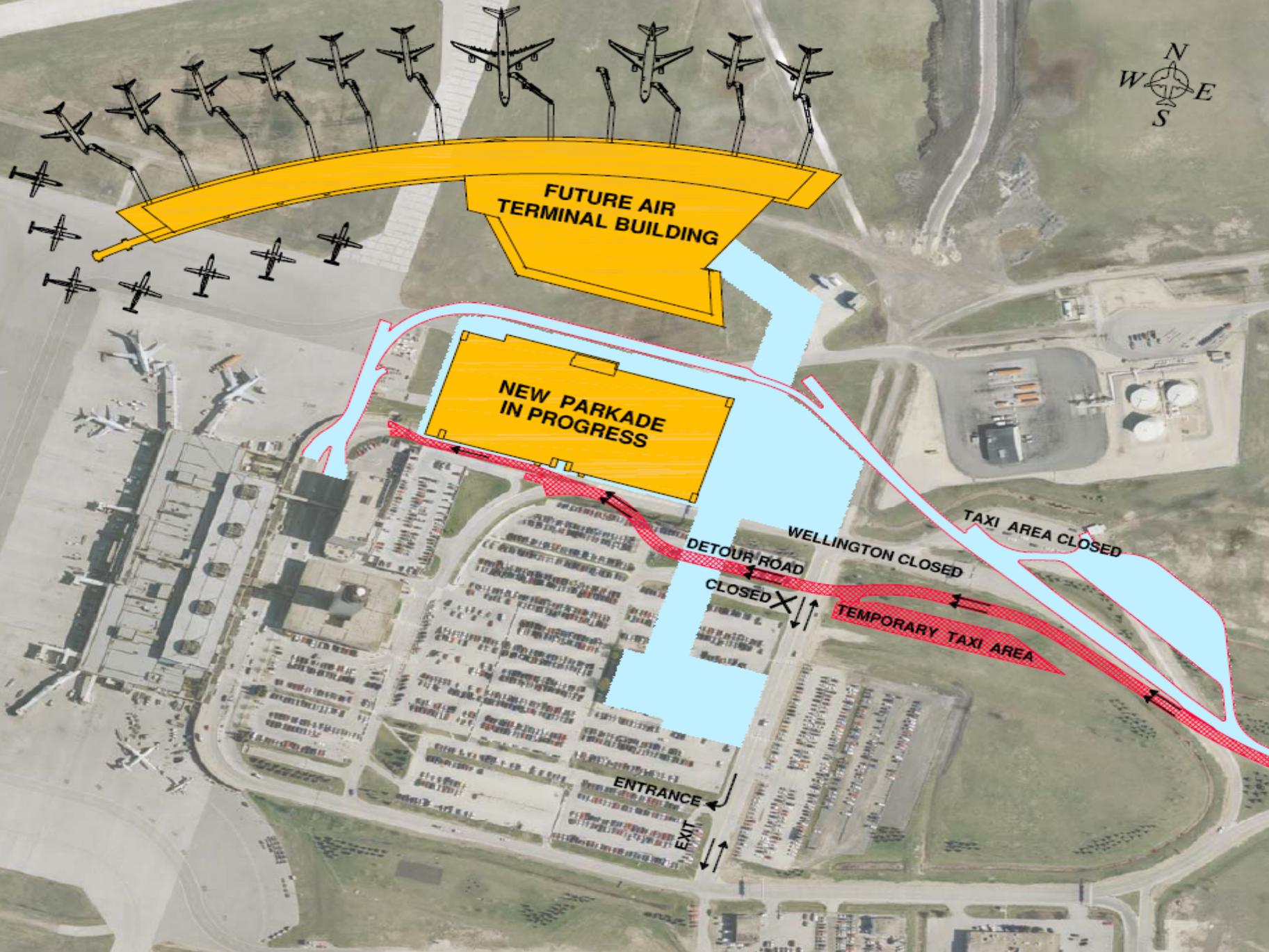
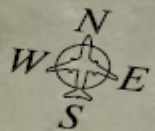
- Commissioning
- Activation

Implications for Engineers

- Simply performing tasks is not enough
- Key questions you must ask the client
 - What business functions do you want the facility to achieve?
 - What are critical facilities you require to support your business model?
 - Where is your business going? Where will you be positioned in the future?

Groundside





**FUTURE AIR
TERMINAL BUILDING**

**NEW PARKADE
IN PROGRESS**

DETOUR ROAD

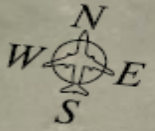
WELLINGTON CLOSED

TAXI AREA CLOSED

TEMPORARY TAXI AREA

ENTRANCE

EXIT



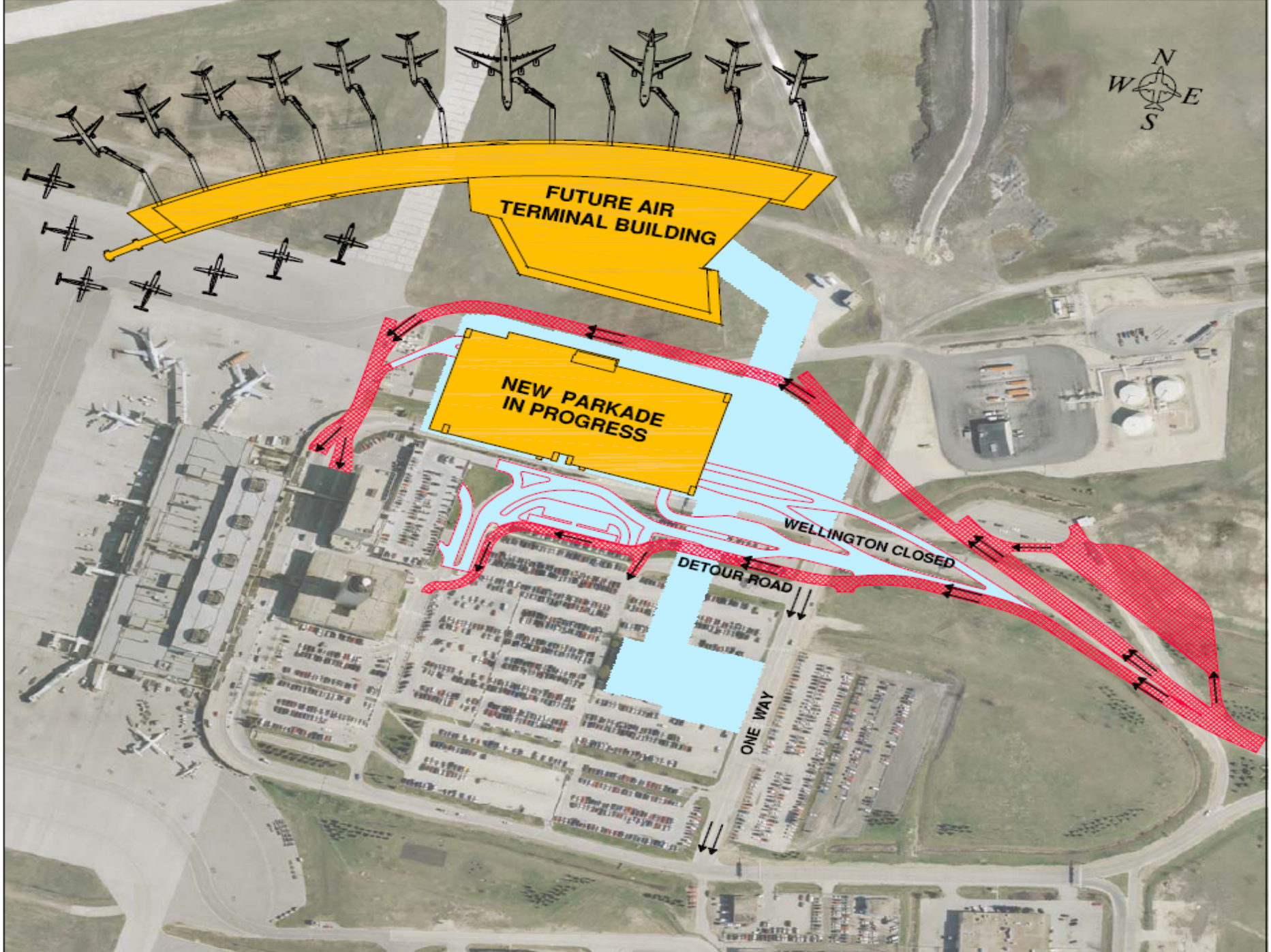
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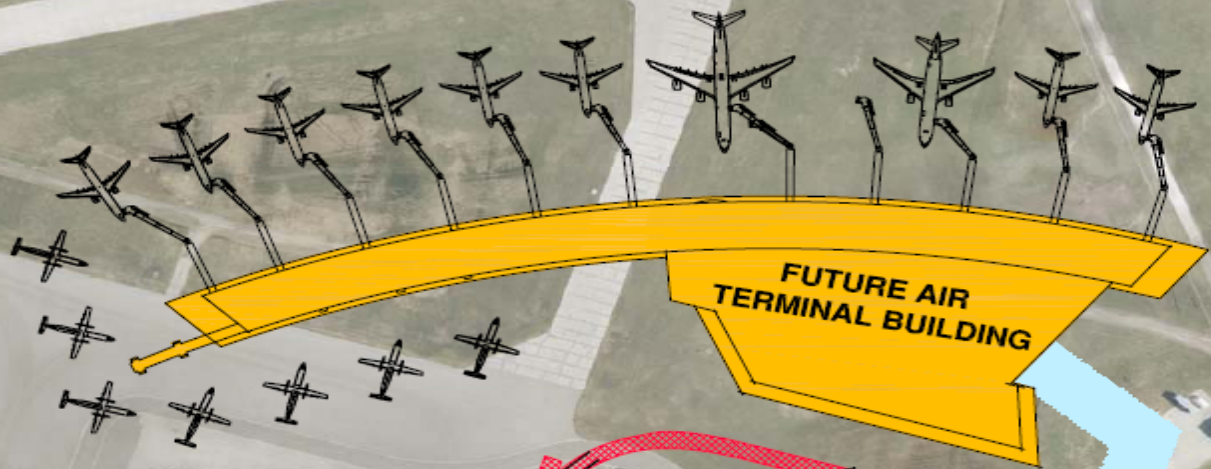
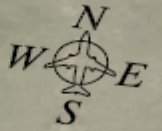
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WELLINGTON CLOSED

DETOUR ROAD

ONE WAY

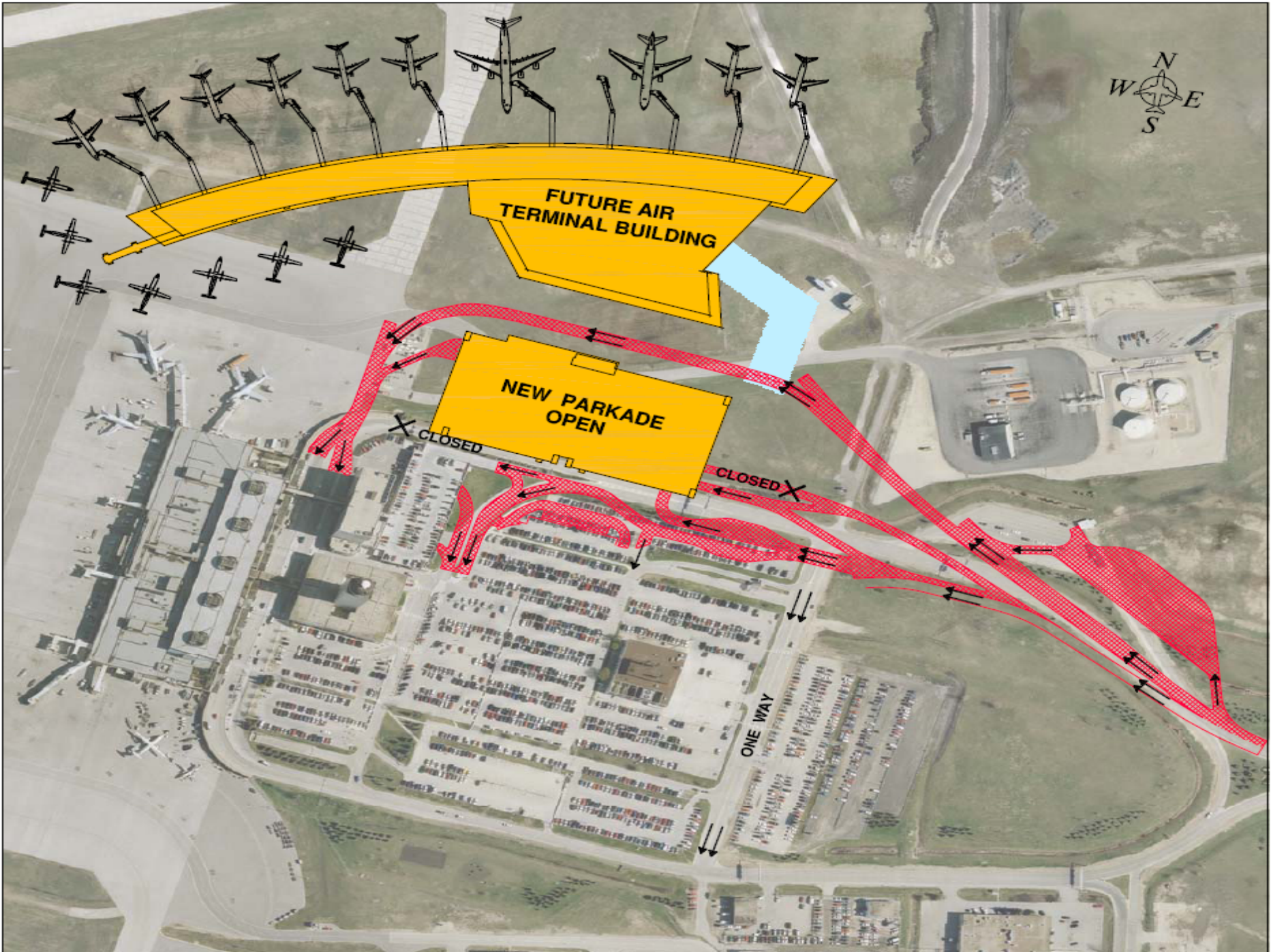




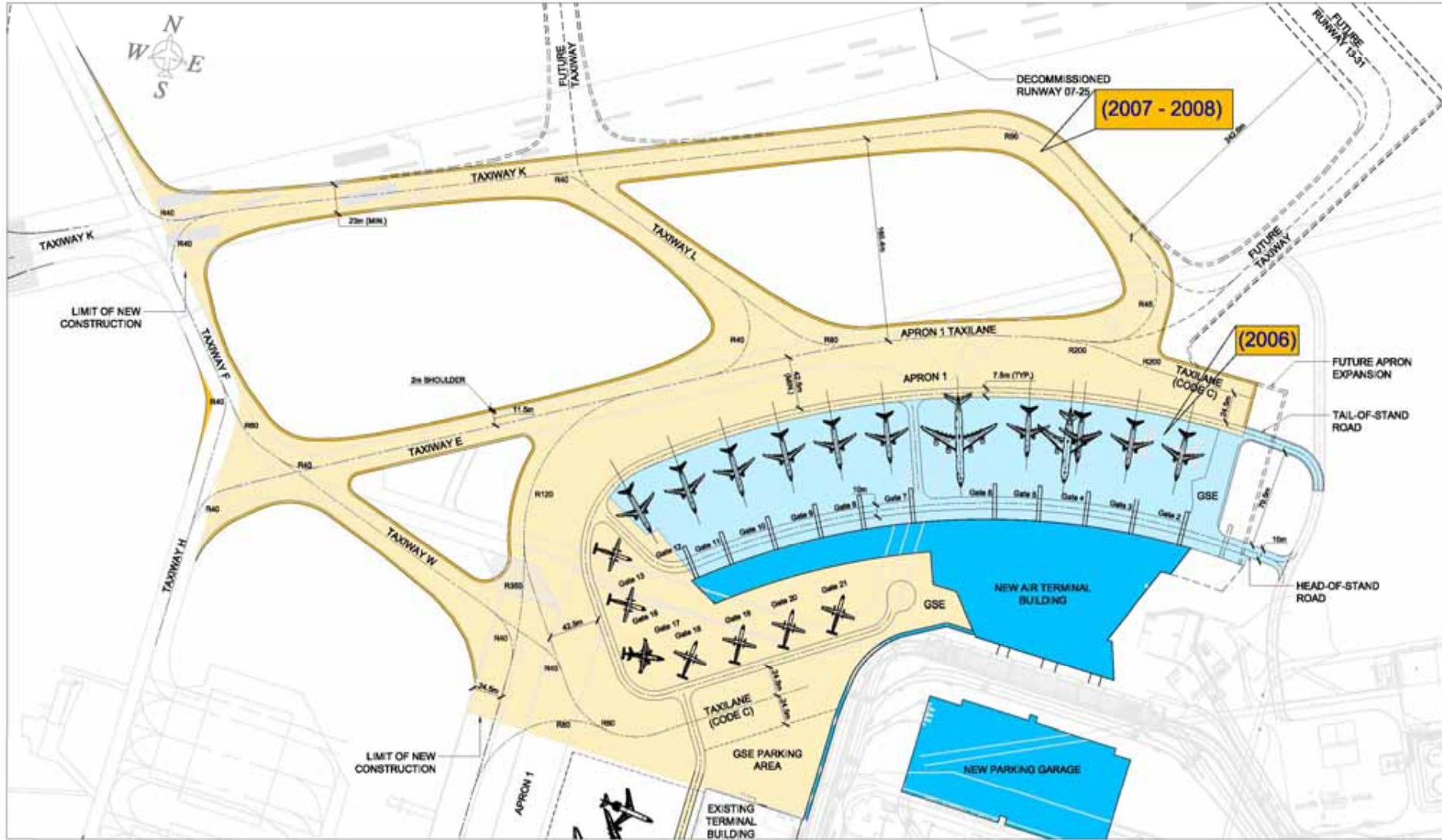
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CLOSED

ONE WAY



Airside



Financial

- \$560 million range
- Projected funded through Airport Improvement Fee
- Bond Rating – S&P, Moody's
- Bond Issue Closed – Sept. 29, 05

Economic Impact

- WAA capital projects will generate:
 - Employment 7,301 person years
 - Wages \$ 311 million
 - GDP \$ 391 million
 - Economic output \$1.009 billion

Thank you!



Winnipeg Airports Authority Inc.