VICTORIA AIRPORT AUTHORITY

Victoria International Airport
MASTER PLAN
EXECUTIVE SUMMARY

February 2008

Victoria International Airport Master Plan
EXECUTIVE SUMMARY

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I. INTRODUCTION

On November 15, 1995, following the signing of a Letter of Intent by the Victoria Airport Authority (VAA) and Transport Canada, negotiations commenced to transfer the airport to local interests. The airport was officially transferred to the Airport Authority on April 4, 1997.

The Authority was given the mandate to operate the airport under a ground lease with the Federal Government for a period of 60 years (with an option to extend this by a further 20). The VAA is a not-for-profit corporation. While the airport is expected to generate surpluses, these dollars must be re-invested directly back into improving the airport's infrastructure.

To ensure that the Airport Authority's practices are ethically, socially and fiscally responsible, and to remain accountable to the general public, the corporation's senior management reports to a well-structured Board of Directors. Exhibit I-1 outlines the structure of the Victoria Airport Authority's Board of Directors.

Exhibit I-1. Victoria Airport Authority Board of Directors

Nominated or Appointed From	Number of Nominees/Appointments
City of Victoria	1 nominated
District of Saanich	1 nominated
District of Central Saanich	1 nominated
Town of Sidney	2 nominated
District of North Saanich	2 nominated
Capital Regional District	1 nominated
Greater Victoria Chamber of Commerce	1 nominated
Federal Government	2 appointed
Provincial Government	1 nominated
VAA Board	3 - Appointed Directly by the Board Itself

Source: Victoria Airport Authority 2005 Annual Report

There are up to fifteen members on the Board of Directors with one of their primary functions is to provide "prudent direction and monitoring of management to discharge fiduciary responsibility."

VICTORIA AIRPORT AUTHORITY

AIRPORT LAYOUT PLAN

VICTORIA INTERNATIONAL AIRPORT MASTER PLAN

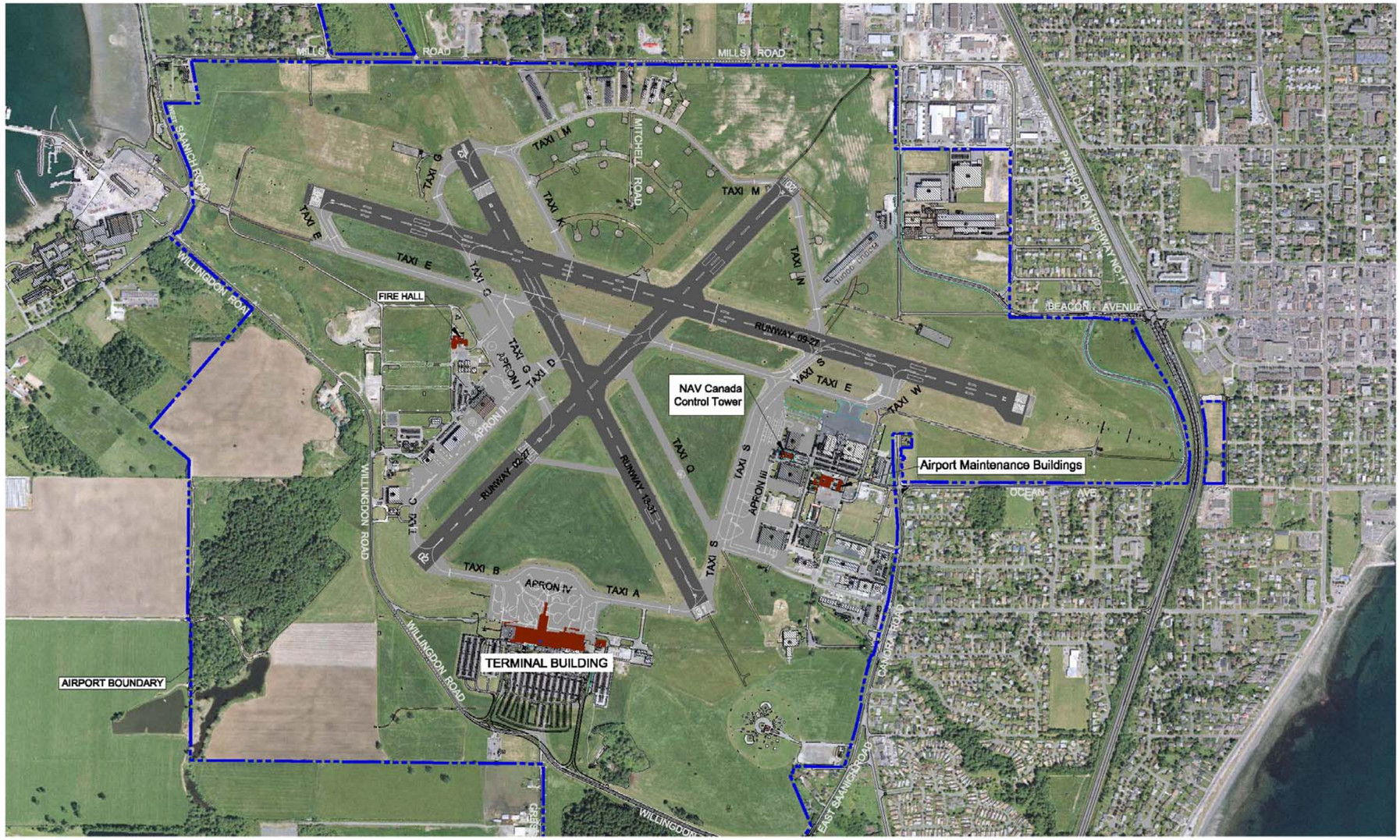

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EXHIBIT I-2

A. Airport Role

The Victoria Airport Authority's primary role is to manage and develop the airport in a safe, secure, financially viable and environmentally sustainable manner. Additionally, the VAA's role is to preserve land at the airport for the purposes of meeting current and forecast demand for aviation services of the Greater Victoria region.

The Victoria Airport is a designated airport within the National Airport System and provides access to scheduled and non-scheduled air service. In addition, Victoria International Airport serves a number of diverse users, including:

- Aircraft Charter Services
- Courier Cargo Services
- Fixed Base Operators
- Flying Training Schools
- Aircraft Manufacturing, Repair and Overhaul
- General Aviation
- Military Operations
- Industrial Land Development

Exhibit I-2 presents the existing airport layout plan.

B. Objectives of the Master Plan

The Master Plan for Victoria International Airport will guide the development of the airport over the 20 year period 2005 to 2025. In particular it must:

- Define the probable growth of aviation activity in the Victoria region through the planning period;
- Provide an airside system comprising the runway, taxiways, aprons and navigation aids that will offer sufficient capacity to support domestic, transborder and international aircraft operations over the master plan period, and enable airside operations to be conducted safely and efficiently;
- Provide a passenger terminal area and design concept matched in capacity to the forecast traffic over the master plan period;
- Protect lands for the required development of other primary and ancillary functions of the airport, such as parking lots, roads, firehall, maintenance complex and control tower;

- Include a land use plan that identifies the requirements for future airport uses within the airport boundary and on neighbouring lands, which optimizes the commercial potential of airport lands; and,
- Develop and operate the airport in an environmentally sustainable fashion.

C. Airport History and Activity Levels

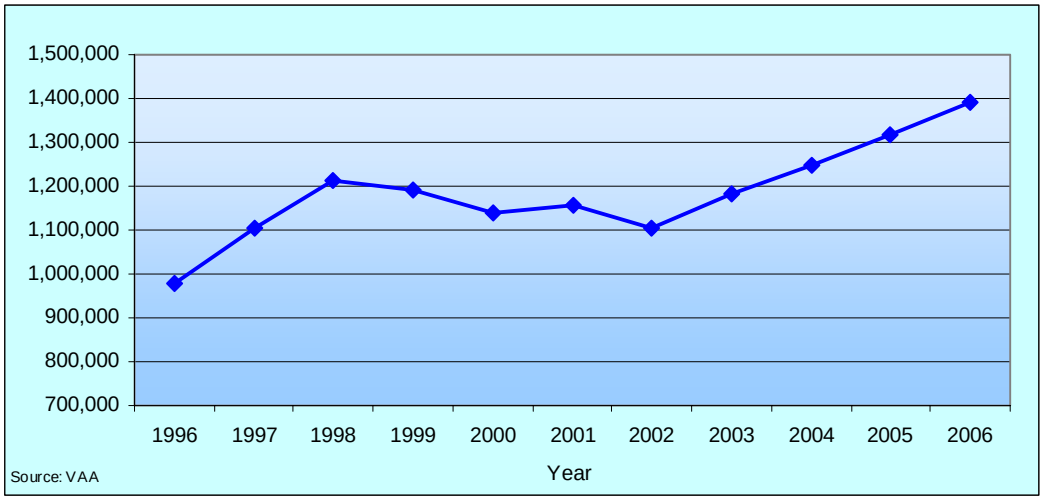
In 1937, the Federal Government constructed a land-based airport to serve the City of Victoria and surrounding regions on Southern Vancouver Island. Construction of the airfield, which was originally known as the Pat Bay Air Station, commenced in 1938 and was completed in 1940. Originally, the airport was dedicated solely to military use as a pilot training base to support the Royal Canadian and British Air Force during World War II.

In 1942, the Department of National Defence granted Trans-Canada Air Lines authorization to commence scheduled passenger services utilizing DC-3s to Vancouver and a year later an extension to Seattle was added. The Royal Canadian Air Force left the airfield in 1952 and remained absent until the late 1980s when 443 Helicopter Squadron of Canadian Forces Air Command began operating CH-124 Sea King ship-borne anti-submarine helicopters from the airport.

The airport was re-named Victoria International Airport in 1959 and is also commonly referred to by its airport designator codes YYJ/CYYJ. In 1961, the airport's primary runway 09/27 was lengthened to 1,829 metres (6,000 feet) and a decade later was further stretched to its present-day length of 2,134 metres (7,000 feet). A new terminal was constructed in 1964 and was renovated and expanded in 1987, while a new control tower was built in 1963 and updated in 1989. On April 14, 1997, the management of the airport was transferred to the Victoria Airport Authority (VAA). By 2006, the VAA completed the substantial renovation and expansion of the terminal building.

Growth in annual passenger traffic at Victoria Airport (YYJ) over the period 1985-2006 is presented in Exhibit I-3. In 2006, almost 1.4 million passengers used Victoria International Airport. Domestic traffic accounted for 89.0% of the traffic at YYJ, transborder 10.0% and international 1.0%. This distribution of traffic has changed very little over the previous 10-years.

Exhibit I-3. Growth in Enplaned and Deplaned Passenger 1985-2006



Source: Victoria Airport Authority

II. FORECAST ACTIVITY LEVELS

Actual and forecast enplaned/deplaned (E/D) passengers under low, medium and high cases over the period 1990 to 2025 are presented graphically in Exhibit II-1 and traffic by sector under the medium case for 2006, 2015, and 2025 are presented in Exhibit II-2. By 2025, passenger traffic is forecast to be 2.3 million, with a possible range of 2.0 to 2.6 million. Average annual growth rates are forecast to be 3.4% for the five years 2005-2010, and 2.8% over the 20 years, 2005 to 2025.

Exhibit II-1. Actual and Forecast Total E/D Passengers 1990-2025

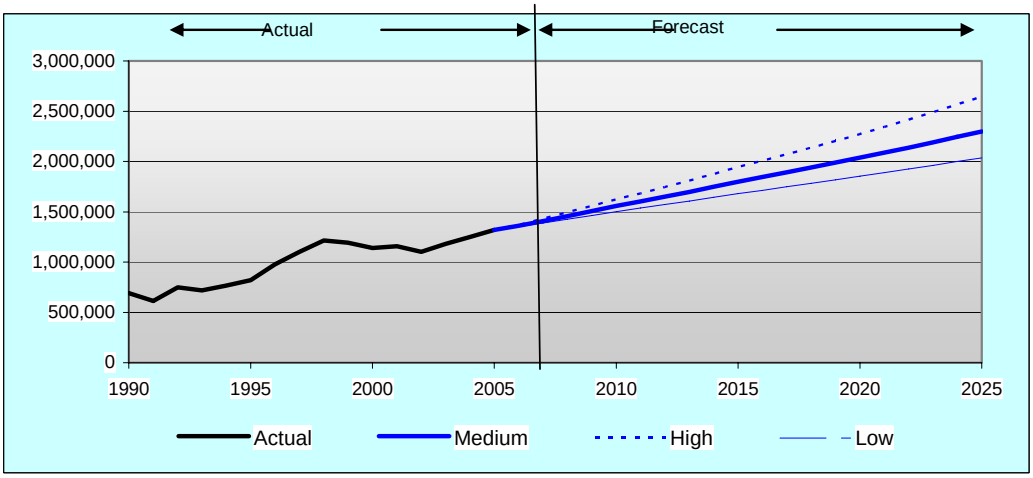


Exhibit II-2. Forecast E/D Passengers 2006-2025 – Medium Case

Year	E/D Passenger			
	Total	Domestic	Transborder	Intern'l
2006	1,361,200	1,212,500	130,800	17,900
2007	1,408,900	1,252,800	137,000	19,100
2008	1,458,100	1,294,400	143,300	20,400
2009	1,507,300	1,335,800	149,800	21,700
2010	1,558,000	1,378,400	156,600	23,000
2011	1,603,400	1,416,200	162,900	24,300
2012	1,650,200	1,455,000	169,500	25,700
2013	1,698,300	1,494,900	176,300	27,100
2014	1,747,900	1,535,900	183,400	28,600
2015	1,798,600	1,577,700	190,700	30,200
2025	2,297,700	1,981,100	268,900	47,700
Average Annual Growth Rates				
2005-2010	3.4%	3.3%	3.3%	12.0%
2005-2015	3.2%	3.0%	3.6%	8.7%
2005-2020	2.9%	2.8%	3.6%	7.4%
2005-2025	2.8%	2.7%	3.6%	6.7%

The historical and forecast movements to 2025 are shown graphically in Exhibit II-3 and are presented in tabular format in Exhibit II-4. The growth rates in the small carrier and general aviation segments have been volatile in the past and the forecasts are subject to greater uncertainty than those of the larger passenger aircraft.

Exhibit II-3. Historical and Forecast Aircraft Movements at YYJ by Operator Segment, 1985-2025

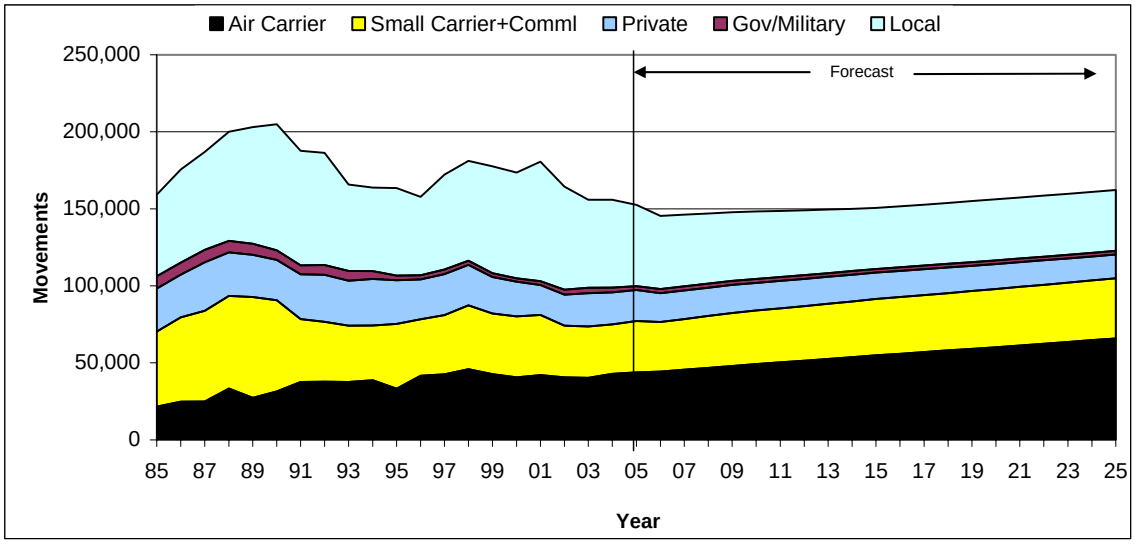


Exhibit II-4. Current and Forecast Aircraft Movements at YYJ by Operator, 2005-2025

Year	Air Carrier		Other	Private	Gov.+	Total	Local	Total
	Level I-III	Level IV+	Comm.		Military	Itinerant		
2006	37,765	25,264	7,931	19,221	2,944	93,035	42,166	145,201
2007	45,493	26,092	6,890	18,527	2,609	99,613	46,544	146,157
2008	46,731	26,614	7,097	18,342	2,583	101,368	45,613	146,981
2009	47,974	27,146	7,310	18,159	2,557	103,147	44,701	147,848
2010	49,168	27,554	7,237	17,977	2,532	104,467	43,807	148,274
2011	50,264	27,967	7,165	17,797	2,506	105,700	42,931	148,630
2012	51,387	28,386	7,093	17,619	2,481	106,967	42,072	149,039
2013	52,536	28,812	7,022	17,443	2,457	108,270	41,231	149,500
2014	53,714	29,244	6,952	17,269	2,432	109,610	40,406	150,016
2015	54,911	29,683	6,882	17,096	2,408	110,980	39,598	150,578
2025	65,861	32,788	6,224	15,461	2,321	122,656	39,598	162,253
Average annual growth rates								
2005-10	2.3%	1.3%	-0.5%	-2.3%	0.5%	1.3%	-3.7%	-0.3%
2005-15	2.3%	1.4%	-0.8%	-1.7%	-0.2%	1.3%	-2.8%	0.0%
2005-25	2.1%	1.2%	-0.9%	-1.3%	-0.3%	1.1%	-1.4%	0.4%

III. FACILITY REQUIREMENTS

A demand capacity analysis and facilities requirements were developed for the following airport systems:

- Airfield
  - Runways, Taxiway, Aprons, Airfield Lighting
- Passenger Terminal Area and Groundside Transportation
- Airport Support

The facilities requirements were developed to support and to meet the requirements of the peak hour passenger and activity level forecasts.

A. Airfield System Requirements

1. Runway Requirements

Based on the forecast airfield demand and capacity analysis, the runway system has adequate runway capacity over the 20 year planning period. Notwithstanding, an analysis was undertaken to determine the extent if Runway 09-27 could be expanded for the purposes of serving direct non-stop inter-continental air service.

Based on the current orientation of the runway, and the runway's proximity to the airport boundary, it was determined that Runway 09-27 could be expanded by 427 metres (1,400 feet) to 2,560 metres (8,400 feet). Detailed planning, engineering, financial and environmental study is required to confirm the justification for this work.

2. Taxiways Requirements

Similar to the runway system, there are no issues with the capacity of the taxiway system. However, there are operational improvements that can be made to the taxiways at the airport that reduce aircraft taxiing times and engine emissions. Listed below are the recommended improvements.

- Extension of Taxiway E to the threshold of Runway 27;
- Taxiway exit from Runway 09-27 to Taxiway S are needed;
- Decommissioning of Taxiway D;
- A new taxiway from the north end of Apron IV to Runway 02-20; and,
- A new taxiway north of Runway 09-27 connecting Taxiway K to Runway 02-20 and to Taxiway N for General Aviation.

3. Aircraft Apron IV Requirements

There is a current demand for 10 commercial aircraft gates which includes overnight parking at the airport. Apron IV (the primary commercial apron) can accommodate 10 aircraft gate positions.

Based on the forecast planning demand, 13 gates will be required in 2010, 15 gates in 2015 and 18 gates by 2025. See following Exhibit III-1.

Exhibit III-1. Number of Airfield Gates Required by Year and Aircraft Type

Aircraft Category	2006	2010	2015	2025
Turboprop	3	4	4	4
Regional Jet	2	3	5	6
Narrowbody Jet	4	5	5	6
Wide-body Jet	1	1	1	2
Total	**10**	**13**	**15**	**18**

B. Passenger Terminal Area Requirements

Passenger Terminal requirements are based on the peak hour passenger forecasts at the airport. The forecast peak hour passenger demand is as follows:

Year	Peak Hour Volume	
	Arrival	Departure
2006	380	460
2010	500	560
2015	550	610
2025	700	860

By 2025, the passenger terminal area will need to increase in size by approximately 55.0% to meet forecast demand. See Exhibit III-2. Additionally, short and long-term vehicle parking at the airport will need to increase by 70.0%, from 800 spaces to 1,400 spaces. The airport access roads, while meeting future capacity will require realignment to accommodate future growth in airport parking.

Exhibit III-2. Forecast Terminal Area Requirements

Terminal Element	Current	2006 460 pax	2010 560 pax	2015 610 pax	2025 860 pax
Processors					
Curb Length	220	230	280	305	430
Check-ins - Number (CUTE)	33	23	28	31	44
Security Points - Number	2	3	4	4	5
Hold Room Seating	494	368	448	488	688
Immigration Units	3	3	3	4	5
Spaces					
Departures Concourse Area (m2)	967	860	1,047	1,141	1,607
Check-in Counter Space (m2)	255	187	228	248	349
Security Points Space (m2)	125	96	128	128	160
Hold Room Space (m2)	1455	972	1,183	1,288	1,816
Concessions	610	520	669	743	957
Car Rentals	140	130	130	130	130
Bag Make up area (m2)	745	510	580	780	1,010
International Bag Claim (m2)	420	374	374	525	525
Customs/Imm. Area (m2)	550	434	434	620	775
Domestic Bag Claim/Arrivals Hall (m2)	1,731	1,577	1,913	2,064	2,818
Bag Claim Display Length	30	30	37	41	51
Mechanical/Elec (m2)	550	405	471	536	694
Circulation/restrooms	1,400	1,239	1,510	2,048	2,651
Other Govt Agencies	260	255	255	255	255
ATO/Support/Airline Offices (m2)	425	210	404	419	529
Miscellaneous	15	0	0	0	0
Total Nominal Area	**9,678**	**8,348**	**9,912**	**11,517**	**14,878**
Demand/Capacity Ratio		**86.3%**	**102.4%**	**119.0%**	**153.7%**

C. Airport Support Systems

The current airport maintenance complex and fire hall facilities are World War II vintage and will require replacement within the early part of the planning horizon.

D. Pat Bay Seaplane Base

The Pat Bay Seaplane Base is used for commercial and private seaplane operators and also for industrial barging operations and launching of luxury yachts. The Seaplane Base is approximately 1.7 hectares.

The Seaplane Base is a provincial government domain having been filled estuary. The Victoria Airport Authority is very interested in obtaining a land lease with the Province for the continued operation and management of this area.

Over the planning period this facility will continue to operate in a similar capacity. No significant development plans are envisioned.

IV. ENVIRONMENTAL ISSUES

The Victoria Airport Authority is committed to operate Victoria International Airport in an environmentally sound and responsible manner. To successfully implement this policy, VAA has developed and will continue to maintain management systems that will:

- Ensure full compliance with all applicable environmental laws and regulations;
- Implement pollution prevention measures and improved operating procedures that minimize airport impacts in the community;
- Integrate environmental considerations into all airport planning, operations and development;
- Establish environmental objectives and best management practices and monitor performance; and,
- Cooperate with government agencies, the community and stakeholder to enhance protection of the environment.

VAA has a comprehensive environmental program that includes:

- Air Quality Management;
- Water Quality Monitoring;
- Pollution Prevention;
- Green Building Initiatives;
- Habitat Restoration;
- Environmental Assessments;
- Construction Surveillance;
- Facility Audits; and,
- Noise Management.

As a principle, the development of the airport will respond to user demands for airport facilities over time. The primary environmental concerns affecting the future development of Victoria International Airport will be Green House Gas (GHG) emissions and Noise Management. With respect to GHG emissions, VAA is working with the aviation industry including the airlines, NAV CANADA, Transport Canada, Environment Canada and other tenants to minimize carbon emissions.

A. Noise Exposure Forecasts

The Noise Exposure Forecasts (NEF) are the officially recognized means of measurement used for airport noise assessment in Canada. NEF contours are calculated on the basis of annual aircraft movements, fleet mix, runway utilization, flight path, and time of day operations. There are two types of NEF contours. One is based on the actual data for the most recent year (2005) and the second is based on a forecast period. Exhibits IV-1 and IV-2 present the Noise Exposure Forecasts (NEF) for 2005 and 2015.

1. 2005 Existing Conditions

The 2005 Noise Planning Contours illustrate the noise environment at the Victoria International Airport based on existing aircraft utilization and airport infrastructure.

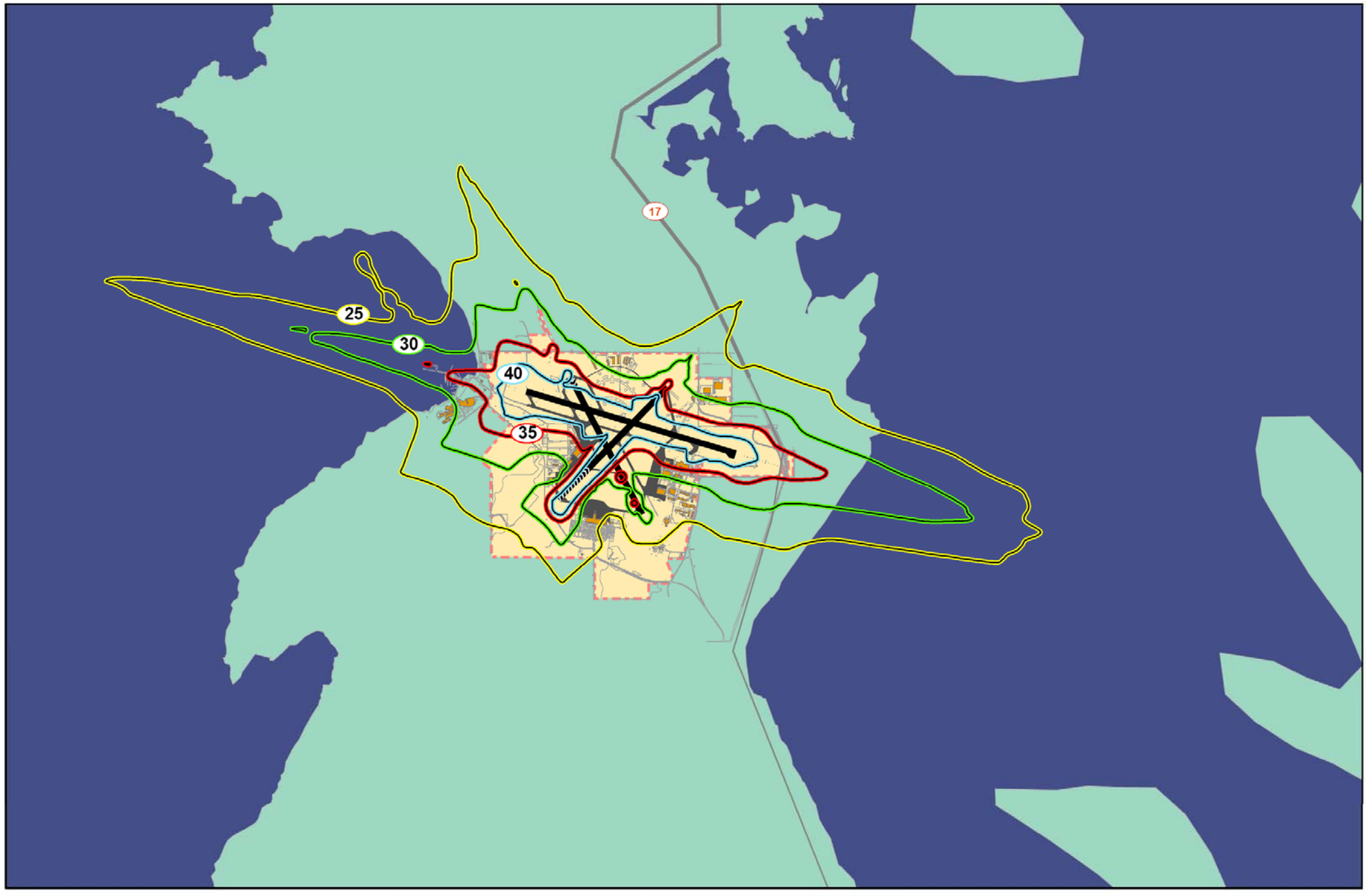
2. 2015 Noise Exposure Forecast (NEF)

The 2015 NEF contours are actually smaller at 30 NEF and 35 NEF, and are almost identical to the current 25 NEF. The reduction of the 30 and 35 NEF is due to the phasing out of older generation aircraft. Transport Canada recommends that no residential development occur within the 30 NEF Contour.

VICTORIA AIRPORT AUTHORITY

Previous Noise Exposure Forecast (2005)

Airport Master Plan Update - Victoria Airport Authority



N
W
E
S

Legend

- Airport Boundary
- Runway
- Runway Displacement
- Apron / Taxiway
- Buildings
- Expressway
- Primary Highway

NEF Noise Contours (2005)

- 25-NEF
- 30-NEF
- 35-NEF
- 40-NEF

Note:

For Planning Purposes Only.

Map Source:

Airport and City Electronic Mapping provided by Victoria Airport Authority.

Contour Source:

Contours digitized by PSMI from the Victoria International Airport 2003 Environmental Management Plan

0 2.5 5
Kilometers

EXHIBIT IV-1

PSMI # 20223 - December 2006

VICTORIA AIRPORT AUTHORITY

Noise Exposure Forecast (2015)

Airport Master Plan Update - Victoria Airport Authority

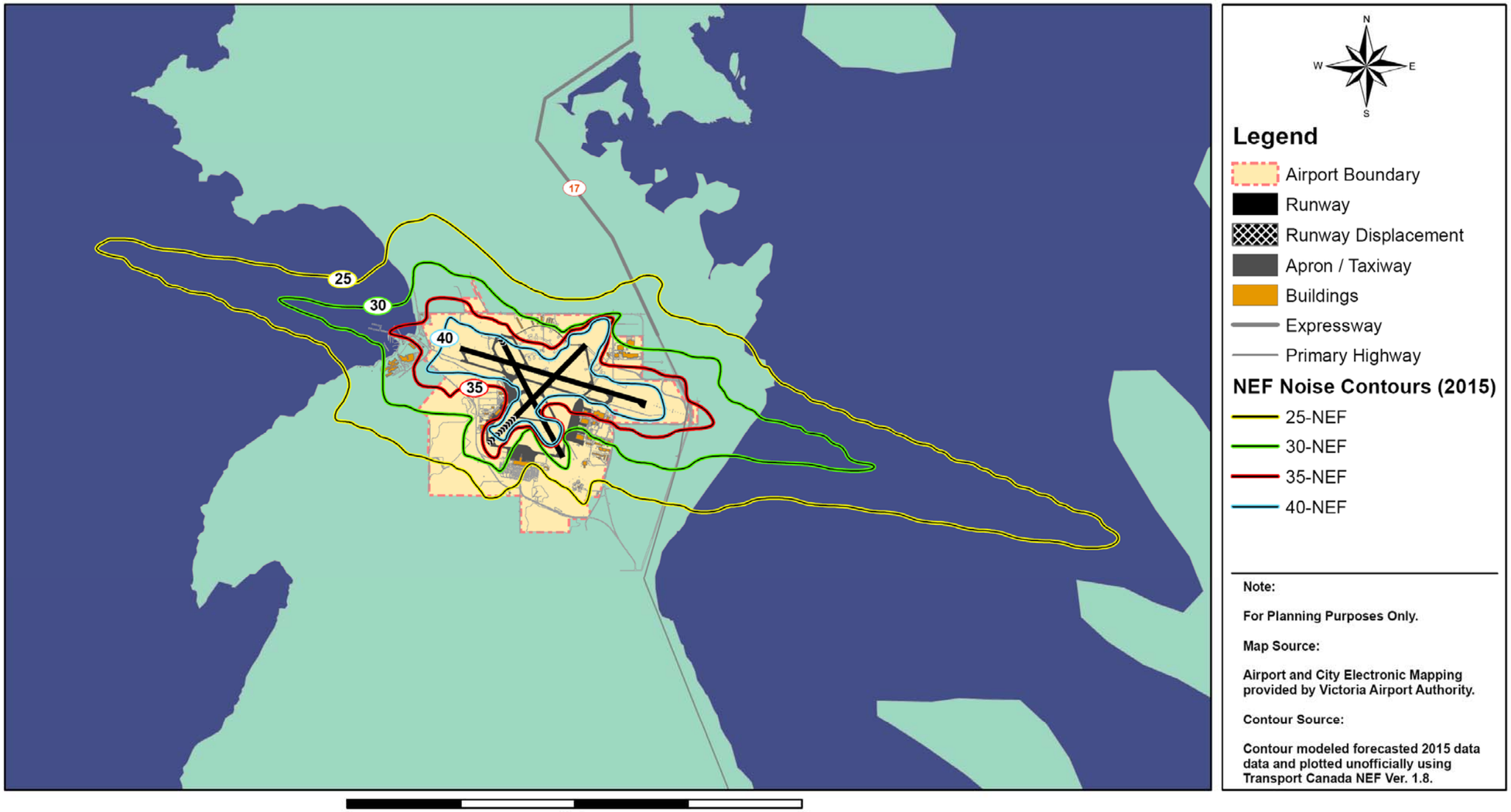


EXHIBIT IV-2

PSMI # 20223 - December 2006

V. DEVELOPMENT PLAN

A development plan was prepared for the airfield system, the passenger terminal building, and the landside areas at the airport over a 20 year period.

Exhibits V-1A and V-1B present the proposed development plan for the airfield and airport support functions at the airport.

A. Airfield Development Plan

- Phased partial decommissioning of Runway 02-20:
  - Closure of Arrivals Runway 02 (within the next 2-3 years);
- Full Parallel Taxiway E to the threshold of Runway 27;
- New taxiway exit from Runway 27 to Taxiway S;
- Apron IV expansion to accommodate long-term aircraft gate requirements;
- New taxiway from Apron IV to Runway 02-20;
- Decommissioning of Taxiway D;
- Construct a new taxiway and road access from Mills Road to accommodate the consolidation of General Aviation at the airport; and,
- Upgrading of airfield lighting to include the following:
  - Install High Intensity approach lighting on Runway 09; and,
  - Extend approach lighting on Runway 27 by 320 metres.

To determine the ultimate capacity of the airfield beyond the 20 year planning horizon, an analysis to expand Runway 09-27 was undertaken. Based on the current orientation of the runway and its proximity to the airport boundary, it was determined that Runway 09-27 could be expanded by 427 metres or 1,400 feet, for a total runway length of 8,400 feet (2,560 metres). An 8,400 foot runway will permit widebody aircraft to fly non-stop to London.

Listed in Exhibit V-2 are aircraft types and runway length requirements for aircraft that have the range to fly direct non-stop to Europe from Victoria. Examples of aircraft that are potential candidates include the A330, B-767 and the new B-787. Exhibit V-3 presents the runway length requirements for the B767-300, based on various passenger loads. A B767-300 aircraft with full passenger loads will require a runway length of approximately 8,100 feet.

Exhibit V-2. Runway Length Requirements for Direct Non-stop YYJ Service

Aircraft	MTOW-Max Takeoff Weight (KGs)	Take-off Runway @ MTOW	Runway Length Requirements		Max. Range (km)
Airbus A330-200	233,013	8,418	6,800	7,600	11,850
Airbus A330-300	233,013	8,635	7,400	7,900	8,340-10,185
Boeing 767-300ER	186,880	9,100	7,800	8,100	11,306
Boeing 787-8*	217,724	9,100	9,100 @ MTOW		> 12,000

Exhibit V-3. Runway Length Requirements for B767-300

B767-300/ER Pax Load Factors	Runway Lengths (Feet)
80%	7,800
90%	7,900
100%	8,100
MTOW	9,100

The timing of a runway extension will depend on when passenger demand to London or Europe can justify a once or twice weekly air service. Exhibit V-4 presents an 8,400 foot runway extension of Runway 09-27.

VICTORIA AIRPORT AUTHORITY

AIRPORT DEVELOPMENT PLAN

VICTORIA INTERNATIONAL AIRPORT MASTER PLAN

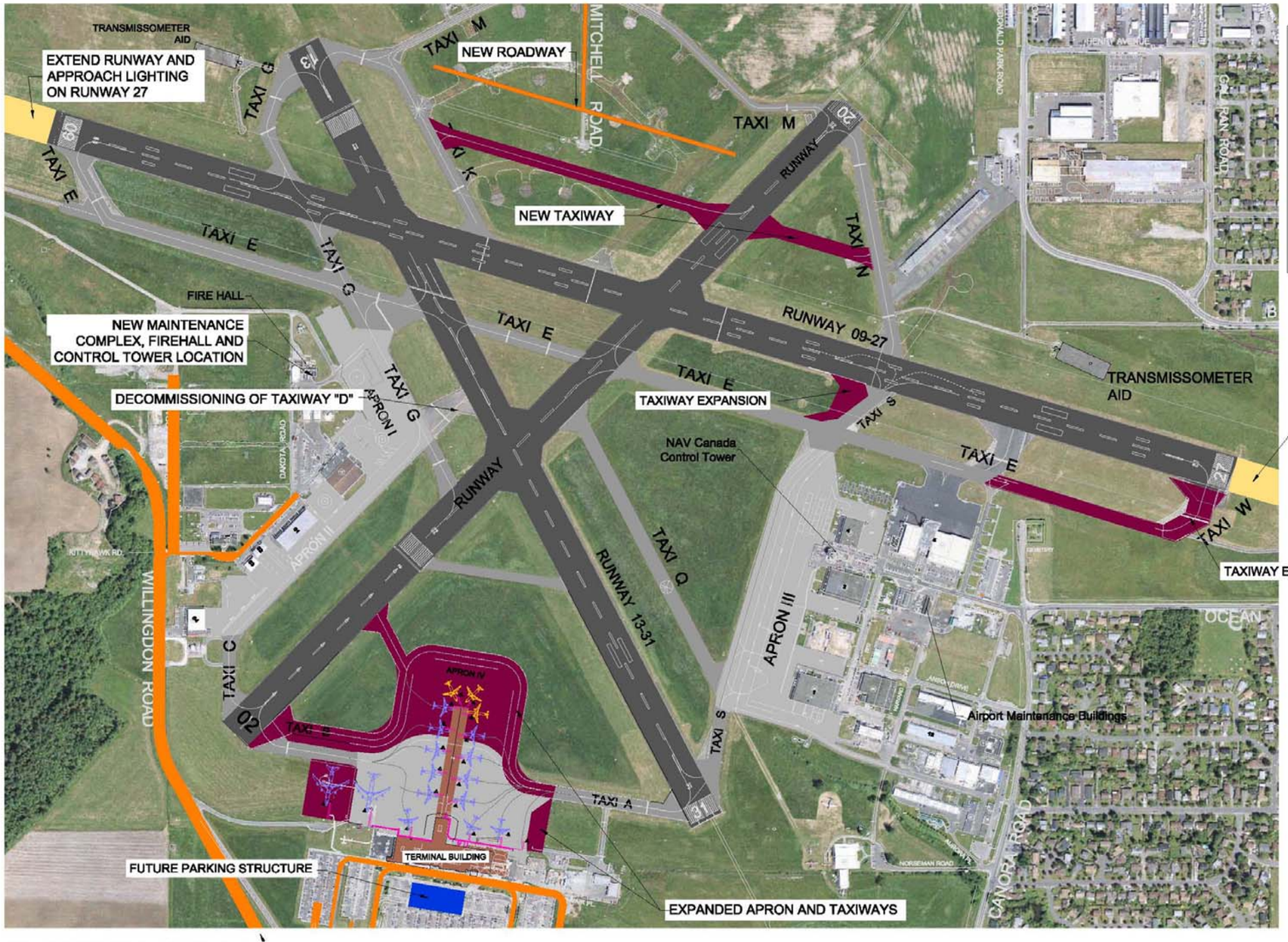


EXHIBIT V-1A

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VICTORIA AIRPORT AUTHORITY

AIRPORT DEVELOPMENT PLAN

VICTORIA INTERNATIONAL AIRPORT MASTER PLAN

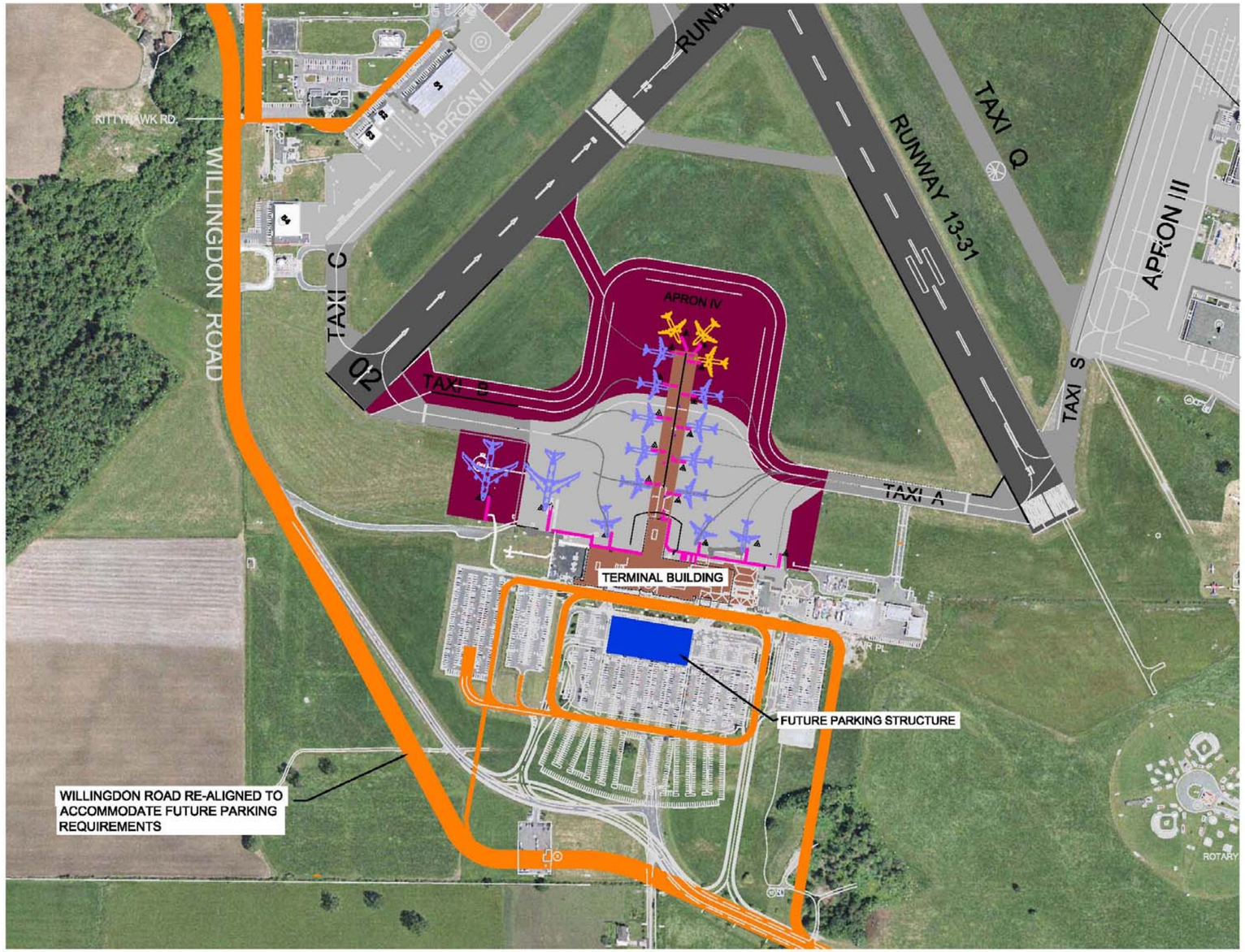

EXHIBIT V-1B

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VICTORIA AIRPORT AUTHORITY

AIRPORT LAYOUT PLAN - RUNWAY EXTENSION OPTION 1

VICTORIA INTERNATIONAL AIRPORT MASTER PLAN

ICAO REQUIREMENTS
RUNWAY EXTENSION

JACOBS CONSULTANCY
AIRPORT MANAGEMENT CONSULTING

EXHIBIT V-4

B. Landside Development

The following presents the recommended landside development.

- In the short-term continue to expand the Terminal Building public parking lots;
- Construct new bicycle/walking path around the parameter of the airport property to provide safe access and recreational viewing opportunities for the community;
- In the mid-term realign Willingdon Road to accommodate future surface parking growth;
- In partnership with the Province and the Federal Government, initiate airport access improvements at McTavish Road and Pat Bay Highway;
- In the long-term a parking structure is proposed which will create additional capacity while also improving access to the terminal. The parking structure should be flexible for expansion; and,
- To create improved access to the General Aviation area at the north side of the airport, construct an additional groundside access road from Mills Road to the General Aviation area is proposed.

Transit to the Airport

The Airport Authority continues to work with BC Transit and the community to provide additional public bus service to the Terminal Building and to our industrial/business areas at the airport. There are a number of challenges for BC Transit serving a remote site like the airport. The key issue concerns limited ridership throughout the day along the routes that service the general vicinity. Continued growth of passenger activity and the development of the airport's industrial/commercial lands will help generate demand for increased bus service.

C. Terminal Development

1. Short-Term

Minor changes to the Terminal Building can be made within the existing building to accommodate stress points that will appear in the near term. Specifically, additional security check points at pre-board screening and extensions to the existing baggage claim devices have been allowed for within the current building design. Modifications to these facilities will meet immediate term capacity shortfall.

2. Mid-Term

Expansion to the Terminal Building is represented in Exhibits V-5 to V-7. The first phase allows for 12 Gates, six of which are bridged from an expanded second story of the existing terminal, through the development of additional upper holdrooms and by an addition to the east of the existing Departures Hall.

The bridged gates and aircraft positions will accommodate Code C, D, and two Code E aircraft in keeping with the trend towards larger equipment and increased number of point to point destinations. This phase of development sees the expansion of the airside ramp to the east and west of the existing apron but does not necessitate the expansion of taxiway and apron to the north.

In order to meet the demands of the departures area of the Terminal and to accommodate new expanded holdrooms on the second floor, an addition to the east of the existing terminal is envisioned. The ground floor of the addition will expand the departures concourse, the check-in counter space, airline support offices and baggage make-up areas. These modifications will create enough capacity in these areas to meet the forecast demands to the year 2025 and beyond.

The holdroom additions on the second floor will be sized to handle bridged Code C and larger aircraft.

3. Long-Term

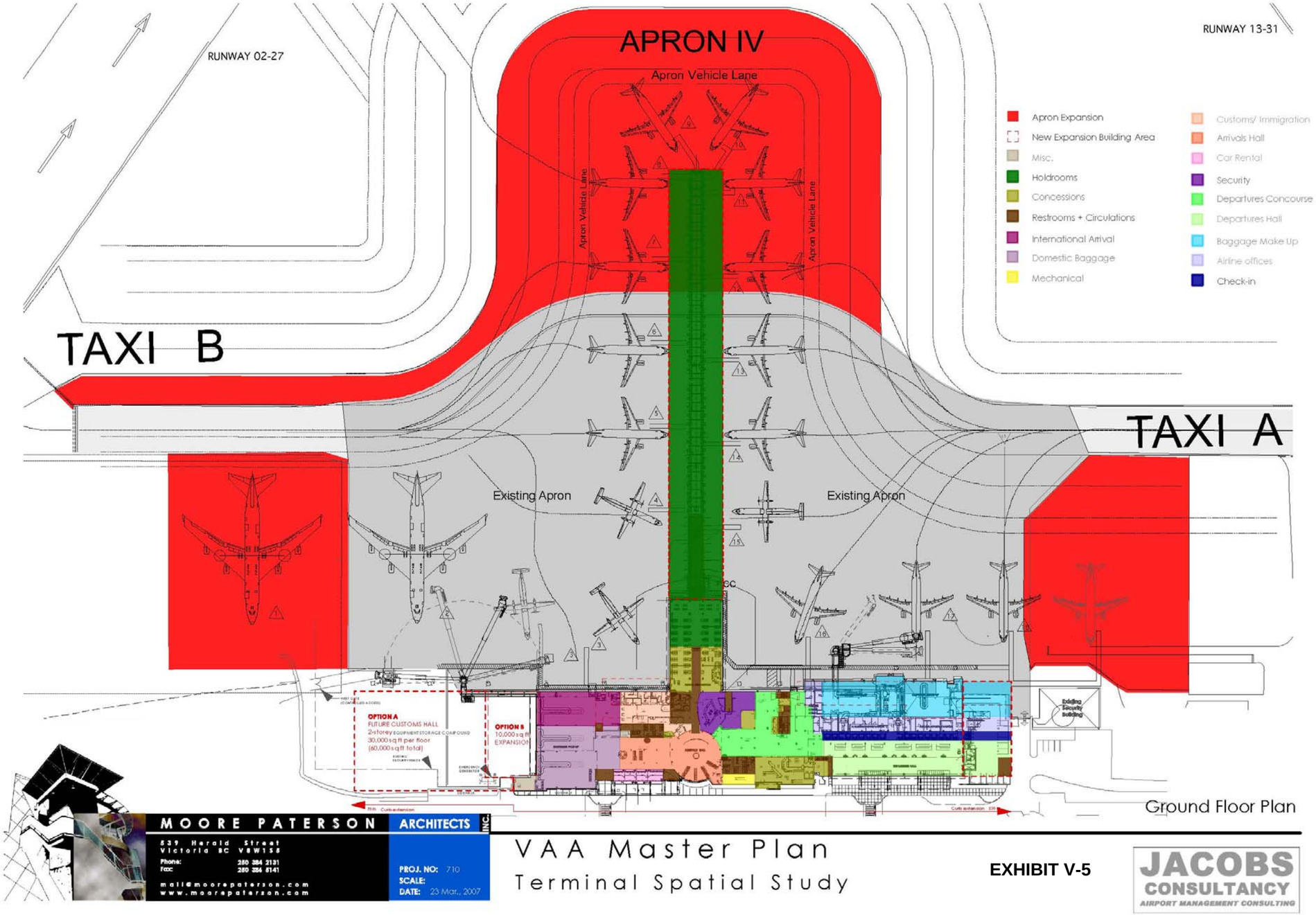
The long-term phase of expansion includes expanding the Terminal north into the airfield with additional aircraft positions and bridged gates. This extension of the existing lower holdroom to the north will require expansion of apron and taxiways to the north.

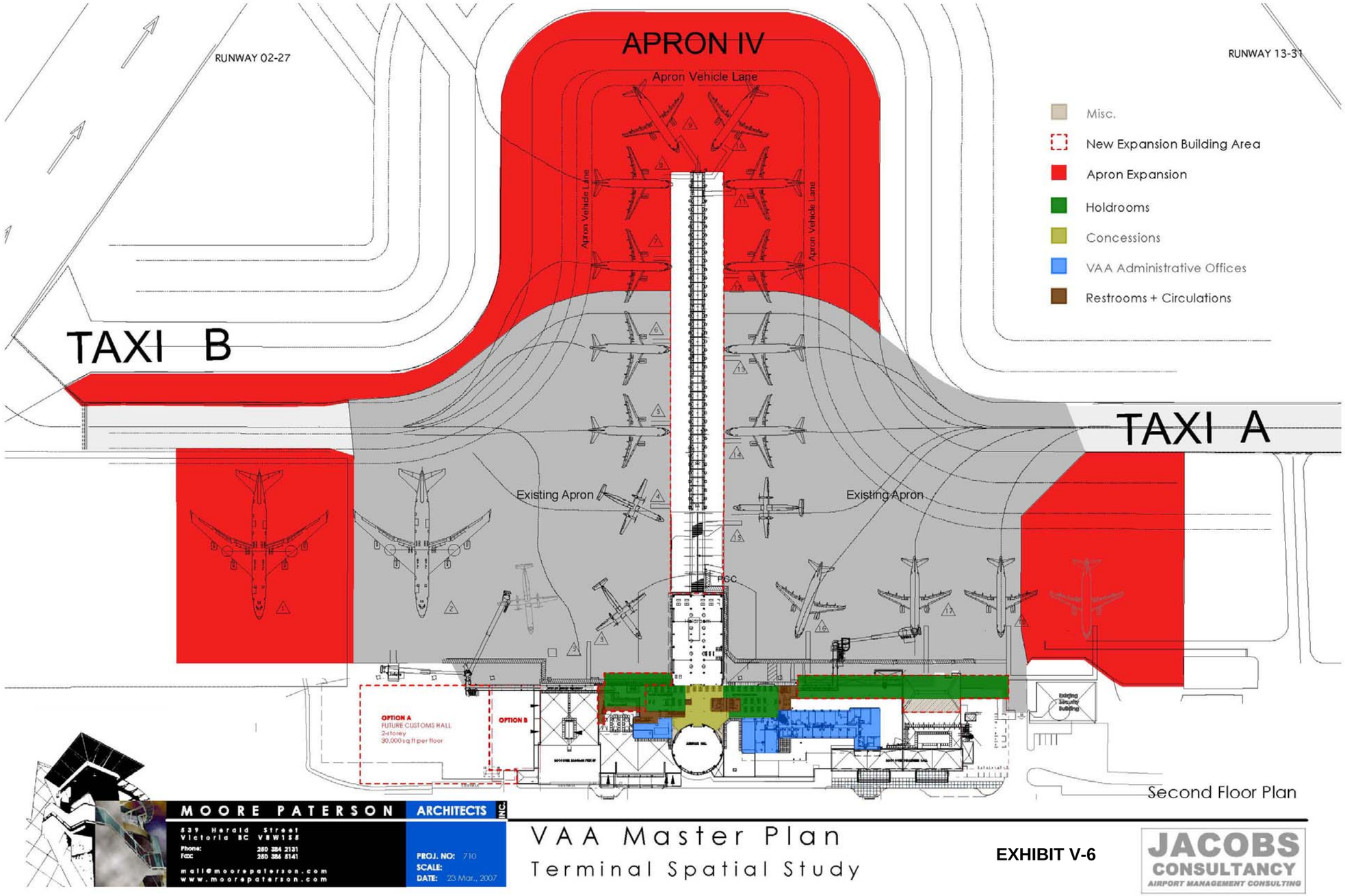
If international and U.S. travel increases through a change in travel patterns, congestion at YVR, or through policy decisions to encourage wide body service through Victoria, an expansion to create an International Customs Hall and U.S. Pre-Clearance Facility to the west of the existing baggage claim area will be undertaken. The Custom and Immigration function would be relocated to this new facility and a new International Departures and Arrivals area will be created on the ground floor with holdrooms and international bridged gates on the second floor. The existing international and Customs and Immigration area in the existing Terminal will be renovated for increased domestic baggage claim capacity.

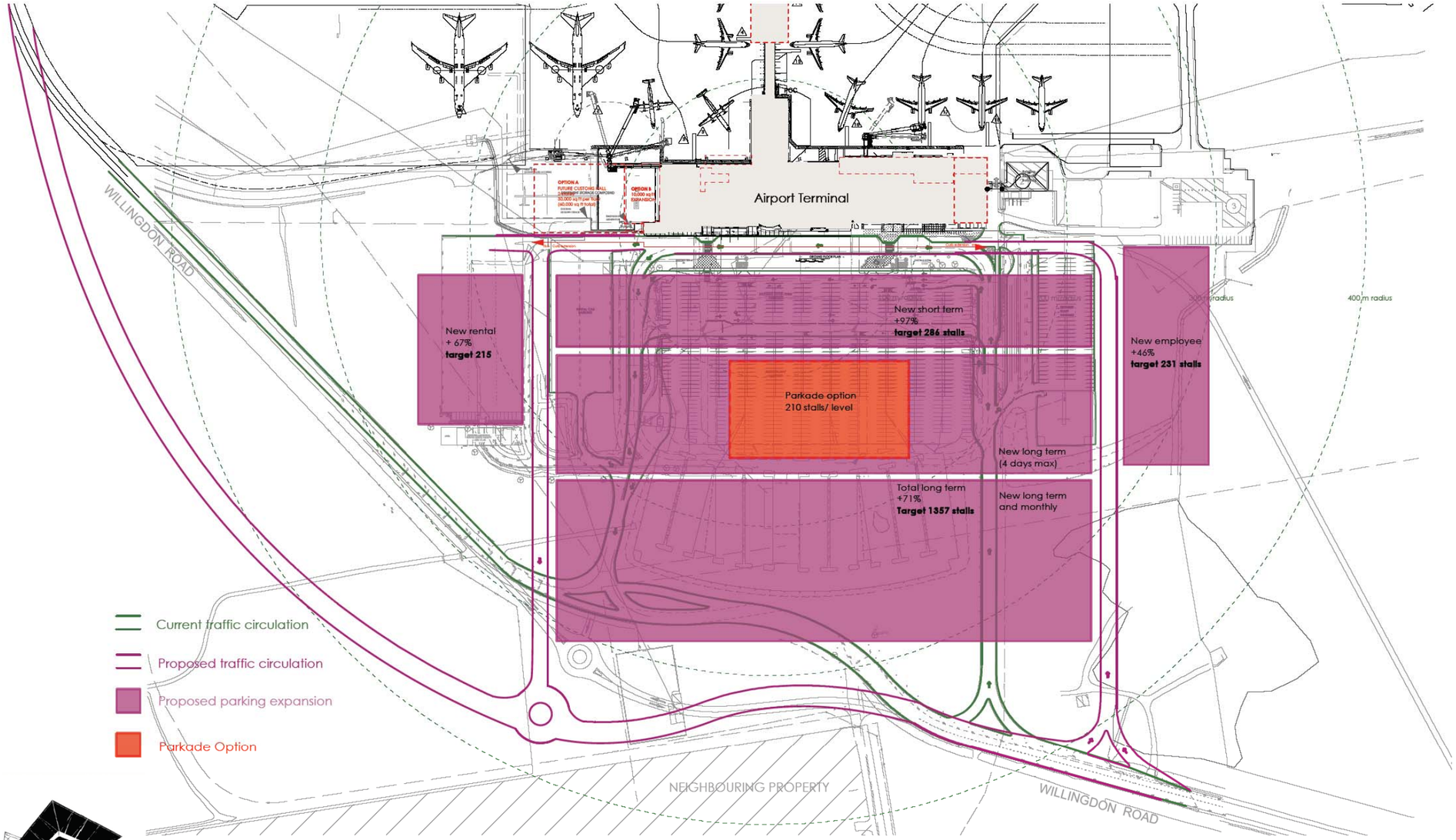
Overall, these modifications and expansions would extend the life of the Terminal well beyond the planning period.

Terminal Building Concessions

Along with the development of the operational space requirements, concession space will be allocated in key areas of the Terminal Building. Car rental, gift and convenience concession space will be enlarged in the main concourse. Post-security food and beverage, gift and convenience shops will be enlarged in the lower holdrooms and new shops will be added to the upper level holdrooms. Car rental, gift and convenience concession space will be designed into the new International Customs Hall and U.S. Pre-Clearance Facility.


RUNWAY 02-27
APRON IV
Apron Vehicle Lane
RUNWAY 13-31
Apron Vehicle Lane
Apron Vehicle Lane
Apron Expansion
New Expansion Building Area
Misc.
Holdrooms
Concessions
Restrooms + Circulations
International Arrival
Domestic Baggage
Mechanical
Customs/ Immigration
Arrivals Hall
Car Rental
Security
Departures Concourse
Departures Hall
Baggage Make Up
Airline offices
Check-in
TAXI B
TAXI A
Existing Apron
Existing Apron
OPTION A
FUTURE CUSTOMS HALL
2-storey EQUIPMENT STORAGE COMPOUND
30,000 sq ft per floor
(60,000 sq ft total)
OPTION B
10,000 sq ft
EXPANSION
Existing Security Building
Curb extension
Curb extension
Ground Floor Plan
MOORE PATERSON ARCHITECTS INC.
839 Herald Street
Victoria BC V8W1S8
Phone: 250 384 2131
Fax: 250 384 8141
mail@moorepaterson.com
www.moorepaterson.com
PROJ. NO: 710
SCALE:
DATE: 23 Mar., 2007
VAA Master Plan
Terminal Spatial Study
EXHIBIT V-5
JACOBS CONSULTANCY
AIRPORT MANAGEMENT CONSULTING


RUNWAY 02-27
APRON IV
Apron Vehicle Lane
RUNWAY 13-31
Misc.
New Expansion Building Area
Apron Expansion
Holdrooms
Concessions
VAA Administrative Offices
Restrooms + Circulations
TAXI B
TAXI A
Apron Vehicle Lane
Apron Vehicle Lane
Existing Apron
Existing Apron
FCC
OPTION A
FUTURE CUSTOMS HALL
2-storey
30,000 sq ft per floor
OPTION B
Existing Security Building
Second Floor Plan
MOORE PATERSON ARCHITECTS INC.
839 Herald Street
Victoria BC V8W1S8
Phone: 250 384 2131
Fax: 250 384 5141
mail@moorepaterson.com
www.moorepaterson.com
PROJ. NO: 710
SCALE:
DATE: 23 Mar., 2007
VAA Master Plan
Terminal Spatial Study
EXHIBIT V-6
JACOBS CONSULTANCY
AIRPORT MANAGEMENT CONSULTING



Parking and Traffic Circulation Plan

MOORE PATERSON ARCHITECTS INC.
639 Herald Street
Victoria BC V8W 1S5
Phone: 250 384 2131
Fax: 250 386 6141
mail@moorepaterson.com
www.moorepaterson.com

PROJ. NO: 710
SCALE:
DATE: 23 Mar., 2007

VAA Master Plan
Terminal Spatial Study

EXHIBIT V-7

JACOBS CONSULTANCY
AIRPORT MANAGEMENT CONSULTING

D. Development Plan Phasing

Phasing of the Development Plan was based on three periods. Exhibits V-8 to V-10 present the phasing of the development activities over the 20 year planning period.

Year 1-5 Development Plan

- Full Parallel Taxiway E to Runway 09-27;
- New taxiway exit from Runway 09 to Taxiway S;
- New maintenance facility and firehall on the west side of the airport;
- First phase of Apron IV expansion to accommodate interim demand;
- Extend approach lighting on Runway 27 by 320 metres;
- Additional Terminal Building public parking;
- Construct a bicycle/walking path around the parameter of the airport property; and,
- Add two new passenger loading bridges.

Year 6-10 Development Plan

- Upgrading of approach lighting on Runway 09;
- Decommission Taxiway D;
- Apron IV expansion to the north;
- New taxiway from Apron IV to Runway 02-20;
- Construct a new General Aviation taxiway;
- Construct road access from Mills Road;
- Realign Willingdon Road to accommodate additional Terminal Building parking; and,
- First phase of Terminal expansion (upper level holdroom and two additional loading bridges.

Year 11-20 Development Plan

- New Canadian Customs and U.S. Pre-Clearance facilities;
- North Concourse Terminal expansion;
- Construct a car parking structure; and,
- A 427 metre (1,400 foot) runway expansion of Runway 09-27.

VICTORIA AIRPORT AUTHORITY

AIRPORT 1-5 YEAR DEVELOPMENT PLAN

VICTORIA INTERNATIONAL AIRPORT MASTER PLAN

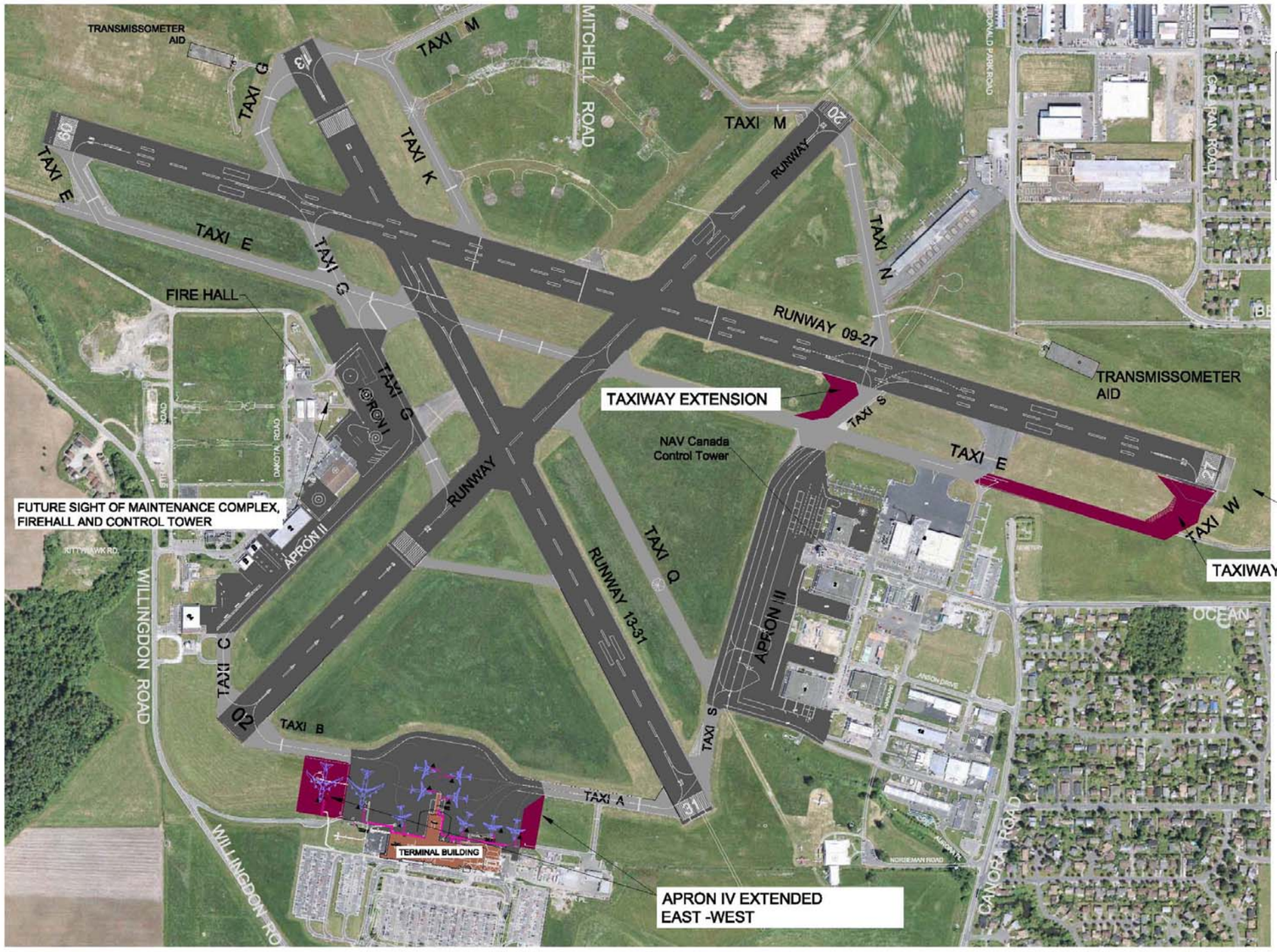


EXHIBIT V-8

JACOBS CONSULTANCY
AIRPORT MANAGEMENT CONSULTING

VICTORIA AIRPORT AUTHORITY

AIRPORT 6-10 YEAR DEVELOPMENT PLAN

VICTORIA INTERNATIONAL AIRPORT MASTER PLAN

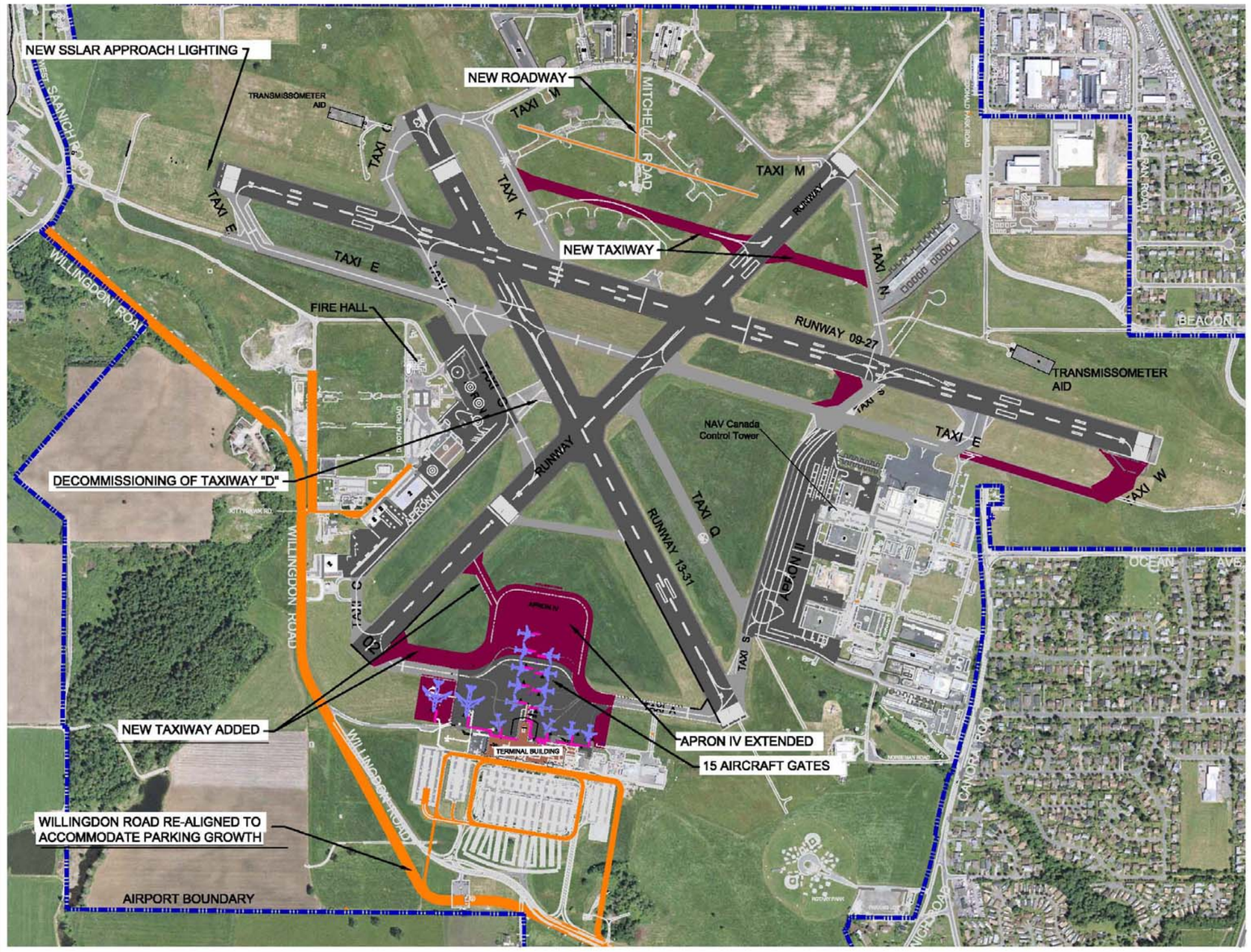


EXHIBIT V-9

JACOBS CONSULTANCY
AIRPORT MANAGEMENT CONSULTING

VICTORIA AIRPORT AUTHORITY

AIRPORT 11-20 YEAR DEVELOPMENT PLAN

VICTORIA INTERNATIONAL AIRPORT MASTER PLAN

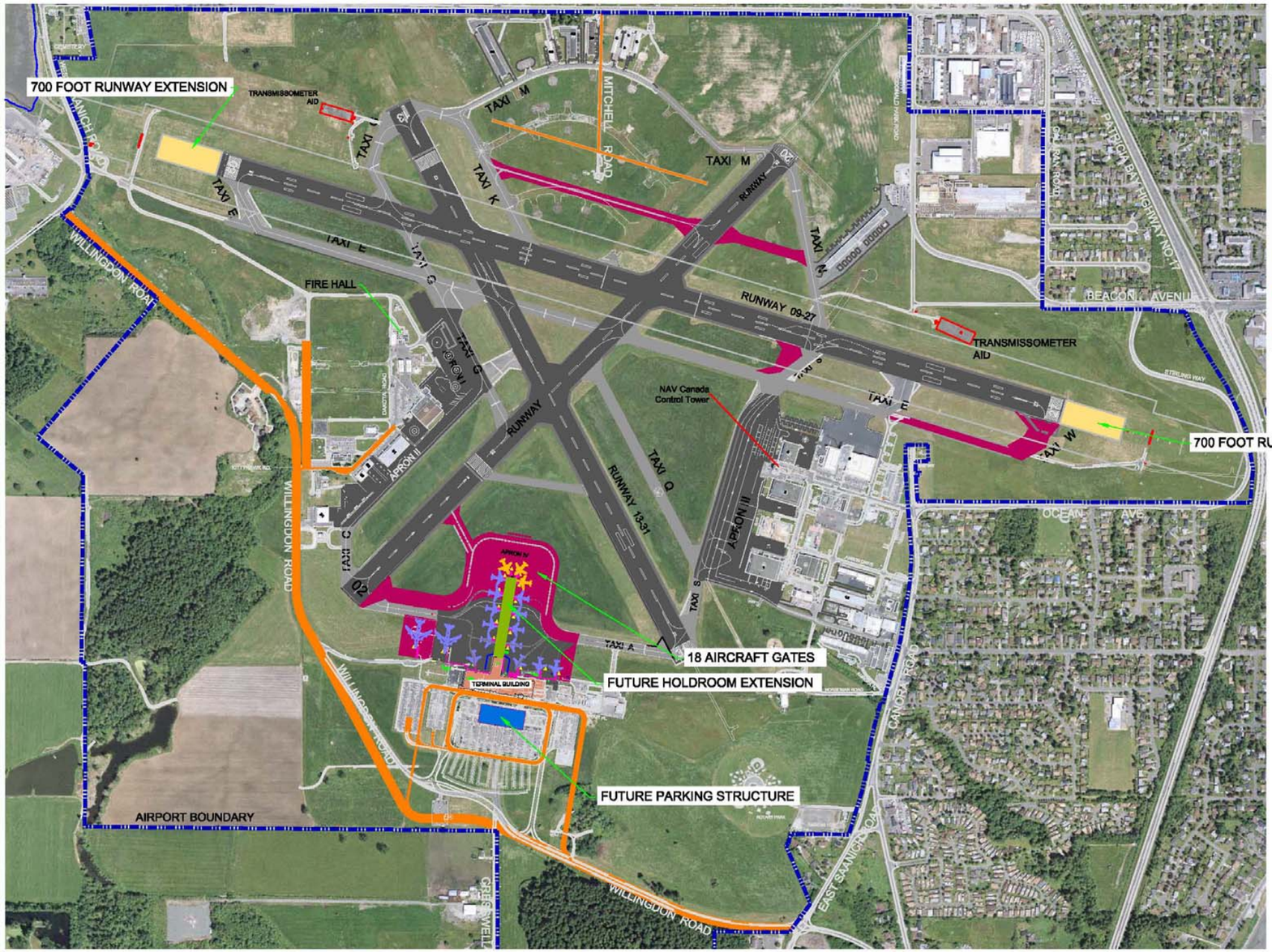


EXHIBIT V-10

JACOBS CONSULTANCY
AIRPORT MANAGEMENT CONSULTING

VI. MAJOR CAPITAL IMPROVEMENTS

The major capital improvements have been subdivided into Airside, Landside, Terminal and Support Areas, as well as being subdivided over short (2006-2010), medium (2011-2015) and long (2016-2025) terms. Exhibit VI-1 presents the major capital improvements. Over the planning period, the total proposed expenditure of major capital improvements is $132.6 million, with $16.0 million spent within the first five years, and $30.6 million spent in the following five years, and $86.0 million spent over the last 10 years. These improvements do not include the ongoing maintenance capital projects at the airport.

Exhibit VI-1. Major Capital Improvements

(000's of Dollars)

Item	Description	Total Estimated Short Term 1 to 5 yrs	Total Estimated Medium Term 6 to 10 yrs	Total Estimated Long Term 11 to 20 yrs	Total Capital Costs
1.0	**AIRSIDE**				
	Runway 09-27 Extension			$18,000	$18,000
1.1	**TAXIWAYS**				
	Taxiway E	$2,000			$2,000
	Taxiway S	$500			$500
	Apron IV Taxiway		$500		$500
	General Aviation Taxiway		$1,600		$1,600
1.2	**APRON and LIGHTING**				
	Apron IV Expansions	$2,000	$7,000		$9,000
	Airfield Lighting Upgrades	$1,000	$2,500	$2,000	$5,500
2.0	**LANDSIDE**				
2.1	Willingdon Road and Access Road Realignment		$3,000		$3,000
2.2	Surface Parking		$3,000		$3,000
2.3	Parking Structure			$30,000	$30,000
2.4	Mills Road Access		$1,000		$1,000
2.5	Contribution to McTavish/Pat Bay	$3,000			$3,000
3.0	**TERMINAL**				
3.1	Add Two Loading Bridges	$1,500			$1,500
3.2	Terminal Expansion		$12,000	$15,000	$27,000
3.3	New Customs Facility			$21,000	$21,000
4.0	**SUPPORT SERVICES**				
4.1	Maintenance and Fire Hall	$6,000			$6,000
	TOTAL CAPITAL COSTS	**$16,000**	**$30,600**	**$86,000**	**$132,600**

Note: All figures are in 2006 dollars.

VII. LAND USE PLAN

The Victoria Airport Authority Land Use Plan establishes the long term (20 year) uses permitted at the airport, and provides for orderly development of the airport lands. The Land Use Plan also protects lands for the purposes of future aviation growth, aeronautical zoning, electronic zoning and obstruction markings, building height limitations, obstacle limitations, and navigational and airfield lighting systems.

The VAA has a Memorandum of Understanding with the Town of Sidney and the District of North Saanich on land use and development guidelines. The land uses included in these agreements correspond with the permitted uses included in VAA's lease with the federal Crown.

The Victoria International Airport occupies approximately 1,190 acres within the District of North Saanich and the Town of Sidney. The airport lands are divided into the following eight categories.

✈ Aviation Services	237 acres
✈ Business Park	68.4 acres
✈ Commercial	15.5 acres
✈ Industrial	34.5 acres
✈ Terminal Reserve	112.4 acres
✈ Airport Reserve	196 acres
✈ Runway System	504.6 acres
✈ Environmental Protection Zones	22.0 acres

Projected Future Land Use

Based on the proposed 20 year development plan, the projected land use plan remains the same as the existing plan with a few exceptions.

- Apron IV and its proposed expansion will become Air Terminal Reserve;
- Aviation Services for DND will be relocated to the west of the existing DND lease; and,
- A new Business Park, west of Willingdon Road in the area currently designated for Airport Reserve, is anticipated when the existing Business Park lands have been fully leased. In total 44 acres are identified to be included in the future Business Park area.

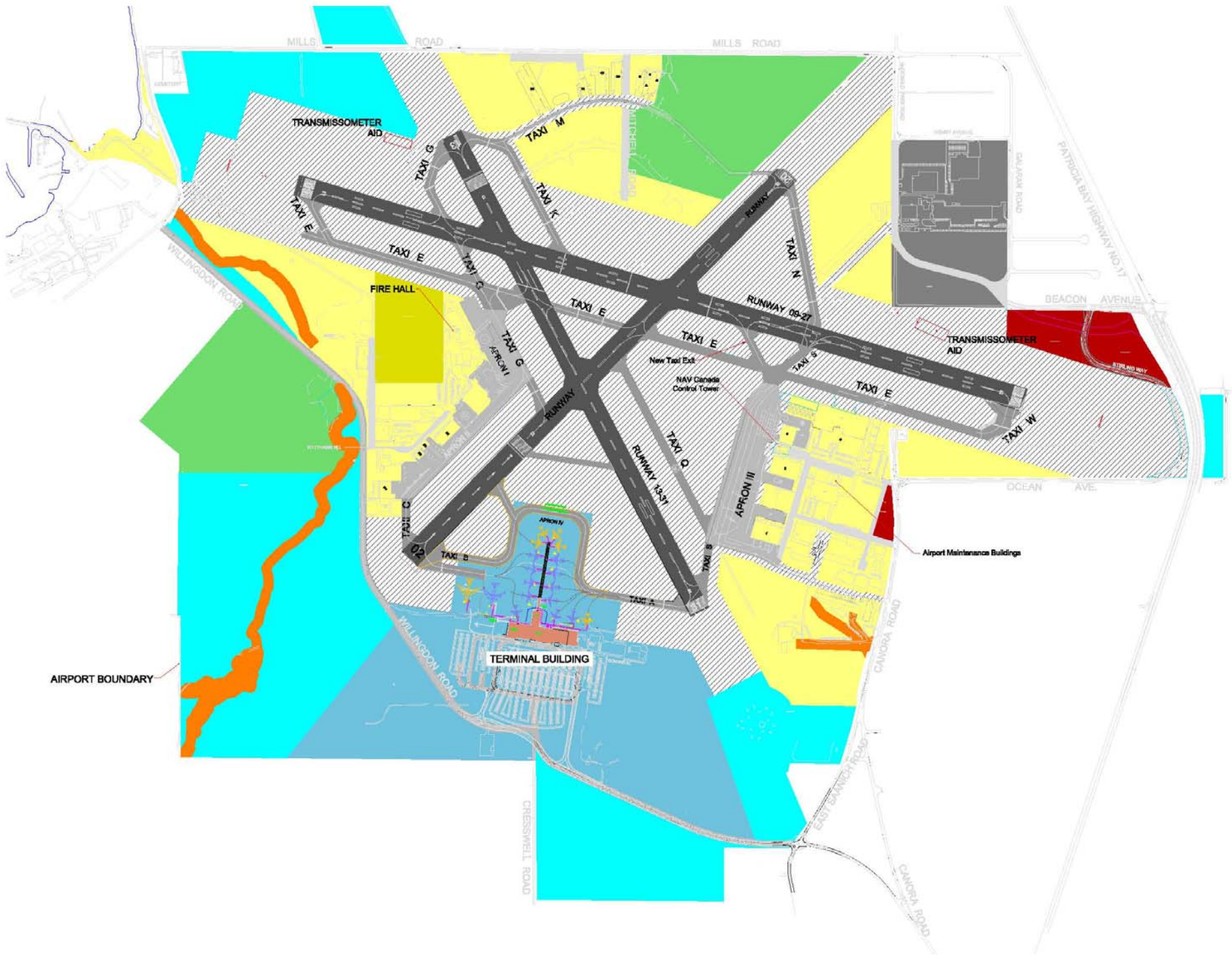
Exhibit VII-1 presents the proposed land use plan.

The purpose of the Land Use Plan is to identify expected future land use development. The VAA will present detailed proposals to the affected municipalities, and other jurisdictions as necessary, prior to making a request to the federal Minister of Transport for changes to the official land use provisions of its lease.

VICTORIA AIRPORT AUTHORITY

PROPOSED AIRPORT LAND USE PLAN

VICTORIA INTERNATIONAL AIRPORT MASTER PLAN



LEGEND

- RUNWAY
- TAXIWAY
- AVIATION SERVICES
- AVIATION SERVICES DND
- BUSINESS PARK
- COMMERCIAL AREA
- RUNWAY RESERVE
- AIR TERMINAL RESERVE
- AIRPORT RESERVE
- ENVIRONMENTAL PROTECTION ZONES
- INDUSTRIAL

EXHIBIT VII-1

JACOBS CONSULTANCY
AIRPORT MANAGEMENT CONSULTING

NOTES:

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