



DEVELOPMENT GUIDELINES

for Federal Approvals and Land Use in the
Vicinity of the Abbotsford International
Airport (YXX)

MARCH 2023

PLANNING & DEVELOPMENT SERVICES
T 604-864-5510
abbotsford.ca



DEVELOPMENT GUIDELINES

for Federal Approvals and Land Use in the Vicinity of the Abbotsford International Airport (YXX)

This document has been prepared to help inform and guide developers and land owners of regulatory requirements concerning development and construction on private properties near the Abbotsford International Airport (YXX) .

Background

From a regulatory perspective, the authority for the designation of and control of the use of lands located outside of aerodrome property rests with provincial/municipal levels of government. However, areas surrounding the Abbotsford International Airport which are covered under the Airport Zoning Regulation (AZR) are subject to Transport Canada and NAV Canada regulations as well. The AZR contains restrictive clauses that describe activities and uses that are restricted or prohibited and contains a legal description of the lands to which it applies.

General Development Requirements for land under the AZR

No person shall erect or construct on any land to which these regulations apply, any building, structure or object or any addition to any existing building, structure or object, the highest point of which will exceed in elevation at the location of that point, any

- a) approach surface;
- b) outer surface; or
- c) transitional surface.

How to Develop on land in the AZR

1. The Developer / Owner shall submit to the City of Abbotsford Building Permits Division all necessary documentation and other requirements as to obtain a building permit for the work in question.
2. If a development lies within the areas as defined on the COA drawing M-500 (see Appendix A) and/or the legal zoning restrictions identify a requirement, the developer will seek approvals directly from both NAV CANADA and Transport Canada. (It is recommended that this process is performed in parallel with #1 above)
 - a) **Transport Canada:** must assess land use proposals as there may be restrictions and / or prohibitions contained in a zoning regulation that may limit the height of structures as well as uses that may cause interference with signals or communications to/from aircraft.
NOTE: Transport Canada has separate Aeronautical Assessment Form that must be submitted **prior to** development.
 - b) **NAV CANADA:** must assess and approve all proposals for land use near airports and air navigation infrastructure before construction begins. Processing times vary, however NAV CANADA attempts to respond within 8 to 12 weeks of receiving a complete proposal. **NOTE:** NAV Canada has separate Land Use Proposal Form that must be filled out **prior to** development.

3. The City of Abbotsford will release the COA Building permit once a copy of the Transport Canada and NAV CANADA approvals are presented in order to ensure that the project has been vetted through both agencies and requirements are understood and accepted by all parties.

The latest versions of the forms can be found at the blow links. Samples are included in Appendix B and C.

[Transport Canada - Aeronautical Assessment Form for Obstacle Evaluation](#)

[NAV CANADA – Land Use Submission form to assess and approve proposals for land use near YXX before construction begins.](#)

For more Information

There are private aviation surveying and consultancy firms available to assist developers and owners in this process. The City of Abbotsford recommends seeking professional support in the approval process; however it is not a requirement. A list of consultants is included as Appendix D.

Related Articles:

[Abbotsford Airport Zoning Regulations SOR/83-253](#)

[Transport Canada – TP1247E - Land Use in the Vicinity of Aerodromes](#)

[Transport Canada – Advisory Circular \(AC\) No. 602-003](#)

[NAV CANADA – Aeronautical Information Management Proponent Education Package: Land Use Proposal Guidelines](#)



APPENDIX A

City of Abbotsford Map
with Abbotsford International
Airport (YXX) specifications

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APPENDIX B

Transport Canada Aeronautical
Assessment Form (Sample)

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Transport Canada number

Applicant number

AERONAUTICAL ASSESSMENT FORM for obstacle notice and assessment

Owner (company name)

City Province/Territory Postal code (A1A 1A1)

Telephone number (999-999-9999) Email Address

Applicant (company name)

City Province/State Postal code (A1A 1A1)

Telephone number (999-999-9999) Email Address

Geographic Coordinates NAD83 NAD27 WGS84 N Latitude deg min sec
For extensive structures submit geographical coordinates separately (e.g. windturbines, transmission lines, building corners). W Longitude deg min sec

HEIGHTS	Feet	Metres	Structure alone	Structure with an addition
A Ground Elevation (AMSL)				
B Height of an addition to a structure				
C Total structure height including B (AGL)				
Overall height (A plus C) (AMSL)				

Is the location on lands affected by **Airport Zoning Regulations (AZRs)**? Yes No
Where the object is on lands affected by **AZRs**, a legal survey attesting conformance is required.

Nearest Aerodrome Have you contacted the aerodrome?
 Yes No

Description of Project (or attached)

Notice of New Structure Change to existing structure Duration Permanent Temporary

Proposed Construction Date: From (yyyy-mm-dd): To (yyyy-mm-dd):

Applicant Name Telephone (999-999-9999) Date (yyyy-mm-dd)

TRANSPORT CANADA ASSESSMENT (Transport Canada use only)

Marking and lighting required (as per Standard 621)
 Night Protection Day Protection Temporary Lighting No protection required

Completion of this form does not constitute authorization for construction nor replace other approvals or permits.

Transport Canada Civil Aviation Inspector Name Date (yyyy-mm-dd)

Note 1: This assessment expires 18 months from the date of assessment unless extended, revised, or terminated by the issuing office.
Note 2: If there is a change to the intended installation, a new submittal is required.



INSTRUCTIONS FOR COMPLETING FORM

Submittal: An Aeronautical Assessment Form (AAF) is submitted, If requested by Transport Canada or if there is intent for installation of the following types of construction or alteration, including any appurtenance of more than 12m in height:

- (a) of an overall height that exceeds 90 m AGL at the site;
- (b) of a height that exceeds an airport OIS (obstacle identification surface) or OLS (obstacle limitation surface) as specified in *Aerodrome Standards and Recommended Practices - TP312*;
- (c) for aerodromes (including airports), of a height that exceeds an imaginary surface extending outward and upward at a slope of 2%, from the nearest point of the nearest runway for a horizontal distance of 4500 m and thereafter exceeds a 90m height out to 6km;
- (d) for water aerodromes, as (c) except a slope of 4% with the start of the imaginary surface taken as the GPS location published in the Canada Water Aerodromes Supplement (CWAS);
- (e) for a heliport, of a height that exceeds an imaginary surface extending outward and upward at a slope of 4%, from the nearest point of the nearest landing and takeoff area, for a horizontal distance of 2250 m and thereafter exceeds a 90 m height out to 6 km;
- (f) for catenaries and similar crossings (e.g. bridges), of a height such that any portion of the object exceeds 60 m AGL above the crossed river or valley bottom; or
- (g) on lands affected by an Airport Zoning Regulation (AZR) a legal land survey is required with the submittal proving conformance to the AZR.

Completed applications are to be forwarded to the applicable Transport Canada Regional office listed in Standard 621, Appendix A.

Nav Canada: A separate submittal is made to NAV CANADA. Refer NAV CANADA Land Use Program website <http://www.navcanada.ca/EN/products-and-services/Pages/land-use-program.aspx>

Note: Transport Canada and NAV CANADA Land Use are notified, if the proposed construction does not take place.

Geographic Coordinates: Provide GPS coordinates [in degrees, minutes and seconds] of the object. For extensive objects (e.g. windfarms), provide a separate listing of GPS coordinates for each element of the object (e.g. each windturbine). For buildings, provide coordinates for each corner, and coordinates of the dominant structure on the roof.

Heights: Provide height of the ground elevation Above Mean Sea Level (AMSL), the total structure height Above Ground Level (AGL) and the combined overall height AMSL. For extensive obstacles composed of several objects, provide a separate listing of heights corresponding to GPS coordinates.

Description of Project:

- (a) Indicate the type of structure. (e.g. antenna, crane, building, power line, landfill, water tank, wind farm, moored balloon, kite, catenary/cable crossing, etc.)
- (b) For catenaries [e.g. electrical power transmission line crossings], include a drawing of the configuration of the wires and the supporting structures with their heights. Indicate the placement of marking/lighting [if used] on the wires.
- (c) For existing structures, explain the reason for notifying Transport Canada (e.g. corrections, request for new assessment, etc.).
- (d) If the object is on lands affected by Airport Zoning Regulations (AZRs), provide a legal land survey indicating conformance to AZR surfaces.
- (e) For a wind farm, include a spreadsheet with individual turbine identification numbers [ID], geographic coordinates [in minutes, degrees and seconds], ground elevation AMSL and the overall height of the object AGL. Identify those windturbines which will have lighting.
- (f) Indicate what obstacle marking, lighting and monitoring will be applied. It is the responsibility of the owner to apply the appropriate lighting/marketing/monitoring in accordance with Standard 621.

Nearest Aerodrome: Identify the nearest aerodrome. Certified / registered land aerodromes/heliports are contained in the Canada Flight Supplement (CFS) and certified / registered water aerodromes in the Canada Water Aerodrome Supplement (CWAS); both available directly from NAV CANADA.

This form does not constitute authority for construction. Nor does this form replace any approvals, permits or assessments required by NAV CANADA, Industry Canada, other Federal Government departments, Provincial or Municipal landuse authorities or any other agency from which approval/assessment is required.



APPENDIX C

NAV Canada Land Use Submission
Form (Sample)

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Land Use Program

Aviation safety may preclude certain land uses near airports or air navigation installations, regardless of whether other permits have been obtained.

NAV CANADA must assess all proposals for land use near airports and air navigation infrastructure before construction begins to ensure that air navigation system safety and efficiency are not compromised by proposed land development.

As soon as you start conceptualizing or planning a project, contact Land Use to test your idea. Consulting with Land Use often reveals impacts not easily detected before digging begins. These impacts may relate to aviation-specific regulations, operations, and safety standards that need to be considered.

Examples of Land Use Considerations



Line-of-sight Obstructions



**Development of New Flight Paths
(Subject to Airspace Change
Communications and Consultations
Protocol)**



**Electronic Interference
with ANS Equipment**



**Resolution of Light
Pollution Issues**

Selecting the Correct Submission Form

Are you planning a construction project on airport premises or are you making major changes to airport infrastructure? For example, are you developing parts of airport property into commercially used areas? Use the [Airport Submission Form](#).

Are you submitting a land use form for one or multiple cranes?

Use the [Crane Submission Form](#).

For all other land use proposals:

Use the [General Submission Form](#).

Detailed guidance and more information can be found in the [Detailed Land Use Proposal Guidelines](#).

Please send completed Land Use Proposal Submission Package by email to landuse@navcanada.ca.

Processing Times

Processing times vary as they are dependent on the complete and accurate submission of the respective form and the complexity of the project. Usually, NAV CANADA attempts to respond within 8 to 12 weeks.

Should you be planning a project in or around an airport, please be aware these times can go up to 12 to 18 months pending necessary mitigations. Let us know about your project as early in the planning process as possible.

Distribution

Specific information submitted to NAV CANADA's Land Use department (that is, coordinates, structure heights and owner's contact information) will be distributed externally.

These external stakeholders include, but are not limited to, Transport Canada, Aerodromes, NORAD, External Design Organizations (EDOs), Department of National Defence (DND), and Environment and Climate Change Canada (ECCC) for review of services for which they are responsible and maintain.

We recommend consulting:

- [Transport Canada's Land Use in the Vicinity of Airports \(TP 1247\)](#)
- [ICAO's European Guidance Material on Managing Building Restricted Areas \(EUR DOC 15\)](#)

Note

NAV CANADA's Land Use Office assesses the impact of a proposed physical structure as it may relate to the air navigation system.

This assessment does not affect or replace approvals or permits required by Transport Canada or any other federal government department or agency, provincial or municipal land-use authorities, or any other agency.

Issues regarding spectrum management should be directed to Innovation, Science and Economic Development Canada.

The Land Use assessment is not a permit to start or continue a construction project.

Once Construction Starts

It is imperative that you notify Land Use of your construction start date.

Should you have received Construction Notification Form(s) with your response letter, you are required to send completed form(s) to Land Use a minimum of ten days prior to the construction date to ensure sufficient time to implement potential changes.

After Construction Completion

Should you have received Construction Completion Notification Form(s) with your response letter, you are required to send completed form(s) to Land Use once the structure has been built.

Other

To maintain an up-to-date database, Land Use needs to be notified after a structure has been dismantled: Use the [Notice of Removal Form](#) or when a structure changes ownership: Email landuse@navcanada.ca

Additional Forms and Information

To report multiple obstacles:

Use the [Multiple Obstacle Template](#)

For general inquiries, please refer to [Transport Canada contacts](#)

Contacts

For information about land use proposals, contact:

Land Use Office

NAV CANADA

1601 Tom Roberts Road

P.O. Box 9824, Station T

Ottawa, ON K1G 6R2

landuse@navcanada.ca



Serving a world in motion
 Au service d'un monde en mouvement
 navcanada.ca

Land Use Proposal Submission Form – General

NAV CANADA file N° / Ref N°	Transport Canada File N° / Ref N°
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GENERAL INFORMATION

Company/Owner Name:		Contact Person:	
Address:		City:	Prov: -- Postal Code:
Tel:	Cell:	Email:	
Applicant:		Contact Person:	
Address:		City:	Prov: -- Postal Code:
Tel:	Cell:	Email:	

DETAILS OF PROPOSAL

- Please provide the data in the highest degree of accuracy available.
- For geographic coordinates, provide up to four (4) decimal places of a second.
- For ground elevation and tower height, provide up to four (4) decimal places.

Additional document(s) to be submitted:

- Map:** either 1:50,000 Topographical map (<http://atlas.gc.ca/site/english/toporama/index.html>) or a Google Earth map/kmz location of the proposed structure needs to be clearly marked; paper or digital surveys are always welcomed.

Project Identification:	Nearest Town:
Street Address, etc.:	Province: --

Geographic Coordinates of Site in NAD 83: Degrees Minutes Seconds Degrees Minutes Seconds
 Lat. N / / Long. W / /

For submissions containing more than one set of coordinates, please complete the Multiple Obstacle Template and return in Excel format. (Examples: Linear Structures, Wind Farms, Building Corner Coordinates, etc.)

Type of Structure:	New Structure? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	A. Ground Elevation (Above Sea Level)	<input type="checkbox"/> ft <input type="checkbox"/> m
	B. Structure Height Addition	<input type="checkbox"/> ft <input type="checkbox"/> m
	C. Structure Total Height (Above Ground Level) Include all appurtenances	<input type="checkbox"/> ft <input type="checkbox"/> m
	Total Height (Above Sea Level) (A + C)	<input type="checkbox"/> ft <input type="checkbox"/> m

Cranes to be used? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: Crane details shall be submitted separately using the Land Use Proposal Submission Form – Crane(s).	Approximate Duration of Construction:
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Proposed Construction Start Date: <u>Select</u>	If Temporary Structure, indicate Removal Date: <u>Select</u>
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Comments:

Known co-location with/on NAV CANADA Site: Yes No

A Third-Party Submission Form may be required for complex applications, fee applicable.

Applicant/Representative Signature

Print Name

Date

Select

Acknowledgement of reading [Detailed Land Use Proposal Guidelines](#) (Submitter's Initials)

For a detailed description on NAV CANADA's requirements and additional information, refer to the NAV CANADA website at www.navcanada.ca > Aeronautical Information > [Land Use Program](#).

NAV CANADA's land use evaluation is based on information known as of the date of this letter and is valid for a period of up to 18 months, subject to any legislative changes impacting land use submissions. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Innovation, Science and Economic Development Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA Engineering as deemed necessary.

Please submit by email to landuse@navcanada.ca

Land Use Proposal Submission Form – Airport

NAV CANADA file N° / Ref N°	Transport Canada File N° / Ref N°
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GENERAL INFORMATION

Company/Owner Name:		Contact Person:	
Address:		City:	Prov: -- Postal Code:
Tel:	Cell:	Email:	
Applicant:		Contact Person:	
Address:		City:	Prov: -- Postal Code:
Tel:	Cell:	Email:	
Aerodrome:		Contact Person:	
Tel:	Cell:	Email:	

DETAILS OF PROPOSAL

- Please provide the data in the highest degree of accuracy available.
- For geographic coordinates, provide up to four (4) decimal places of a second.
- For ground elevation and tower height, provide up to four (4) decimal places.

Additional document(s) to be submitted:

- Map:** either 1:50,000 Topographical map (<http://atlas.gc.ca/site/english/toporama/index.html>) or a Google Earth map/kmz location of the proposed structure needs to be clearly marked; paper or digital surveys are always welcomed.

Project Identification:	Nearest Town:
Street Address, etc.:	Province: --

Geographic Coordinates of Site in NAD 83: Degrees Minutes Seconds Degrees Minutes Seconds
 Lat. N / / Long. W / /

For submissions containing more than one set of coordinates, please complete the [Multiple Obstacle Template](#) and return in Excel format.

		A. Ground Elevation (Above Sea Level)	<input type="checkbox"/> ft <input type="checkbox"/> m
		B. Structure Height Addition	<input type="checkbox"/> ft <input type="checkbox"/> m
		C. Structure Total Height (Above Ground Level) Include all appurtenances	<input type="checkbox"/> ft <input type="checkbox"/> m
		Total Height (Above Sea Level) (A + C)	<input type="checkbox"/> ft <input type="checkbox"/> m

Note: Please be aware that mitigation may be required for certain airport projects. A minimum of 18 months prior notice is required for all permanent Runway Threshold changes.

Type of work:	Trenching: <input type="checkbox"/> Yes <input type="checkbox"/> No
Runway Threshold Displacement: <input type="checkbox"/> Yes <input type="checkbox"/> No	Runway Certification Change: <input type="checkbox"/> Yes <input type="checkbox"/> No
Plan of Construction Operations (PCO) Available: <input type="checkbox"/> Yes, please include <input type="checkbox"/> No	Transport Canada Notified: <input type="checkbox"/> Yes <input type="checkbox"/> No

Proposed Construction Start Date: <input type="text" value="Select"/>	Proposed Hours of Work: From: hrs To: hrs
Approximate Duration of Construction:	If Temporary Structure, indicate Removal Date: <input type="text" value="Select"/>
Comments and additional project details:	
Known co-location with/on NAV CANADA Site: <input type="checkbox"/> Yes <input type="checkbox"/> No A Third-Party Submission Form may be required for complex applications, fee applicable.	

Applicant/Representative Signature	Print Name	Date <input type="text" value="Select"/>
Acknowledgement of reading Detailed Land Use Proposal Guidelines (Submitter's Initials) <input type="text"/>		

For a detailed description on NAV CANADA's requirements and additional information, refer to the NAV CANADA website at www.navcanada.ca > Aeronautical Information > [Land Use Program](#).

NAV CANADA's land use evaluation is based on information known as of the date of this letter and is valid for a period of up to 18 months, subject to any legislative changes impacting land use submissions. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Innovation, Science and Economic Development Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA Engineering as deemed necessary.

Please submit by email to
commercialrelations@navcanada.ca

Land Use Proposal Submission Form – Crane(s)

NAV CANADA file N° / Ref N°	Transport Canada File N° / Ref N°
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GENERAL INFORMATION

Structure - Company/Owner Name:		Contact Person:	
Address:		City:	Prov: -- Postal Code:
Tel:	Cell:	Email:	
Crane Company/Applicant:		Contact Person:	
Address:		City:	Prov: -- Postal Code:
Tel:	Cell:	Email:	

DETAILS OF PROPOSAL

- Please provide the data in the highest degree of accuracy available.
- For geographic coordinates, provide up to four (4) decimal places of a second.
- For ground elevation and tower height, provide up to four (4) decimal places.

Additional document(s) to be submitted:

- Map:** either 1:50,000 Topographical map (<http://atlas.gc.ca/site/english/toporama/index.html>) or a Google Earth map/kmz location of the proposed structure needs to be clearly marked; paper or digital surveys are always welcomed.

Project Identification:	Nearest Town:
Street Address, etc.:	Province: --

Geographic Coordinates of Site in NAD 83: Degrees Minutes Seconds Degrees Minutes Seconds
 Lat. N / / Long. W / /

For submissions containing more than one set of coordinates, please complete the Multiple Obstacle Template and return in Excel format.

Crane Type:	New Structure? <input type="checkbox"/> Yes <input type="checkbox"/> No		
	Type of Structure:		
	A. Ground Elevation (Above Sea Level)		<input type="checkbox"/> ft <input type="checkbox"/> m
	B. Structure Height (Above Ground Level)		<input type="checkbox"/> ft <input type="checkbox"/> m
	C. Maximum Crane Height (Above Ground Level)		<input type="checkbox"/> ft <input type="checkbox"/> m
	D. Maximum Elevation (A + C)		<input type="checkbox"/> ft <input type="checkbox"/> m
	E. Swing Radius		<input type="checkbox"/> ft <input type="checkbox"/> m

Note: For Luffing crane, we require the height of the crane at rest. If installation and/or dismantlement crane exceed the height of the operating crane, this height is required.

Proposed Construction Start Date: <u>Select</u>	Times if Daily use: From hrs To: hrs
---	--

Approximate Duration of Construction:	If Temporary Structure, indicate Removal Date: <u>Select</u>
---------------------------------------	--

Note: If the plan is to erect the crane(s) multiple times during this project, please provide the approximate schedule (dates and times) in the Comments section below.

Comments:

Known co-location with/on NAV CANADA Site: Yes No

A Third-Party Submission Form may be required for complex applications, fee applicable.

Applicant/Representative Signature

Print Name

Date

Select

Acknowledgement of reading [Detailed Land Use Proposal Guidelines](#) (Submitter's Initials)

For a detailed description on NAV CANADA's requirements and additional information, refer to the NAV CANADA website at www.navcanada.ca > Aeronautical Information > [Land Use Program](#).

NAV CANADA's land use evaluation is based on information known as of the date of this letter and is valid for a period of up to 18 months, subject to any legislative changes impacting land use submissions. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Innovation, Science and Economic Development Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA Engineering as deemed necessary.

Please submit by email to landuse@navcanada.ca



APPENDIX D

Aviation Consultants

PLANNING & DEVELOPMENT SERVICES
T 604-864-5510
abbotsford.ca



Aviation Zoning Consultants

SKYLINE GEOMATICS

A Division of ELS Consulting Ltd
Jeffrey Hay ASCT.
Suite 202 - 225 East 17th Avenue
Vancouver, BC V5B 1A6
Tel: 604-269-3785
Cell: 604-831-1156
jeffrey.hay@skylinegeomatics.com

SNC-LAVALIN – AVIATION INFRASTRUCTURE ENGINEERING

[Contact us – SNC-Lavalin \(snclavalin.com\)](http://snclavalin.com)

HATCH

Harvie Buitelaar
Vice President, Global Director, Aviation
Tel: 604-639-1016
Cell: 778-808-6518
harvie.buitelaar@hatch.com