



## Aeronautical Information Management Detailed Land Use Proposal Guidelines

Following these Land Use Proposal guidelines will aid in the reduction of Land Use processing time.

### NAV CANADA Land Use

Generic information required for Land Use Submissions (specifics are described in this document) includes:

1. **Land Use Submission Form:** <https://www.navcanada.ca/en/aeronautical-information/land-use-program.aspx>
2. **Required fields:** Owner and proponent details; Project name; Project details
3. **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; surveys are always welcomed.
4. **Multiple Obstacles:** the Land Use Multiple Obstacle spreadsheet is required (*Multiple Obstacle Template* <https://www.navcanada.ca/en/aeronautical-information/land-use-program.aspx>).
5. **Submission Process:** make all submissions to [landuse@navcanada.ca](mailto:landuse@navcanada.ca); if you would like a tracking number, please request one.
6. **Email size:** email and attachments size cannot exceed 50 MB.

### Information Regarding NAV CANADA Processing Time

Processing times vary, but NAV CANADA attempts to respond within 8 to 12 weeks of receiving a complete proposal. The accuracy and completeness of the initial documentation and your cooperation and promptness in remedying deficiencies or inaccuracies will help to expedite the review process.

Any airport projects should be submitted in the early development stages of the project to ensure minimal disruptions. In some cases, where the threshold is impacted, 18+ months might be required to redesign instrument approaches.

Reference to multiple obstacle types might be required, depending on the project; for example, Tower and Crane. Refer to the following table.

Obstacle Type	Information Required to Proceed with a Land Use Assessment
Single Tower (New)	<ul style="list-style-type: none"> <li>Coordinates (NAD83/WGS84 (if available) DD MM SS.ss)</li> <li>Maximum height (above ground level) including lightning rods and antennas</li> <li>Ground elevation</li> <li>Type of tower (guyed, monopole, self-support)</li> <li>Legal survey (if available)</li> </ul>
Single Tower (Existing)	<ul style="list-style-type: none"> <li>Description of the change (height increase/decrease, location, etc.)</li> <li>Previous owner contact information (if available)</li> <li>Coordinates (NAD83/WGS84 (if available) DD MM SS.ss)</li> <li>Maximum height (above ground level) including lightning rods and antennas</li> <li>Ground elevation</li> <li>Type of tower (guyed, monopole, self-support)</li> <li>Legal survey (if available)</li> </ul>
Single Meteorological Tower	<ul style="list-style-type: none"> <li>Coordinates (NAD83/WGS84 (if available) DD MM SS.ss)</li> <li>Maximum height (above ground level) including lightning rods and antennas</li> <li>Duration of the meteorological study</li> <li>Legal survey (if available)</li> </ul>

Obstacle Type	Information Required to Proceed with a Land Use Assessment
Wind Farm	<ul style="list-style-type: none"> <li>• A Land Use Multiple Obstacle spreadsheet must be provided with Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) for each turbine</li> <li>• Turbine type/dimensions, composition, hub height and blade length</li> <li>• Substation/converter location Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) and height(s) along with new transmission line(s) to connect to a grid</li> <li>• Ground elevation of the location along with the source of the measurement(s) (example LIDAR) and/or Legal survey (if available)</li> </ul>
Transmission Line	<ul style="list-style-type: none"> <li>• A Land Use Multiple Obstacle spreadsheet must be provided with Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) for each post for the entire line; if not, turn points or post locations in the vicinity of bodies of water</li> <li>• Maximum height (above ground level) for each post</li> <li>• Ground elevation of the location along with the source of the measurement(s) (example LIDAR) and/or Legal survey (if available)</li> </ul>
Building	<ul style="list-style-type: none"> <li>• A Land Use Multiple Obstacle spreadsheet must be provided with Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) for each corner of the building</li> <li>• Maximum height of the building (including antennas, elevator shaft, all rooftop structures, etc.)</li> <li>• Architectural drawing (demonstrating elevations)</li> </ul>
Crane	<ul style="list-style-type: none"> <li>• If multiple cranes, a Land Use Multiple Obstacle spreadsheet must be provided with Coordinates (NAD83/WGS84 (if available) DD MM SS.ss)</li> <li>• Type of crane(s)</li> <li>• In the case of multiple cranes, set-up crane that exceeds height of tower crane(s)</li> <li>• Maximum height (above ground level) when in operation and rest mode</li> <li>• Crane(s) swing radius</li> <li>• Ground elevation of the location</li> <li>• Duration and time the crane(s) will be in operation</li> <li>• Information pertaining to short-term Install/Dismantle crane(s) and long-term crane(s)</li> </ul>
Blasting Zone	<ul style="list-style-type: none"> <li>• A Land Use Multiple Obstacle spreadsheet must be provided with Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) of the maximum shape of the blasting zone area or the centre Coordinates with the maximum radius including maximum horizontal rock fly</li> <li>• Maximum blast height (above ground level) or vertical rock fly</li> <li>• Duration and time</li> <li>• Ground elevation of the location</li> <li>• Will this be a matted blast?</li> <li>• Is this a quarry/mine? If so, how long will this quarry/mine be operational?</li> <li>• The frequency of the blasts per year</li> </ul>
Drilling Rig(s)	<ul style="list-style-type: none"> <li>• Coordinates (NAD83/WGS84 (if available) DD MM SS.ss)</li> <li>• An Excel spreadsheet must be provided for multiple top-of-hole locations project</li> <li>• Maximum height (above ground level) including possible set-up rig-crane if exceeding the height of the structure-rig</li> <li>• Duration and time</li> </ul>

Obstacle Type	Information Required to Proceed with a Land Use Assessment
Airport Projects	<ul style="list-style-type: none"> <li>• Geographical corner Coordinates (NAD83/WGS84 (if available) DD MM SS.ss), ground elevations and structure heights for any structures above ground level (buildings, hangars, etc.) along with height of the fly rock and blasting zone radius (if applicable)</li> <li>• Geographical corner Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) and ground elevations for any new or extended maneuvering surfaces (runways, taxiways, aprons)</li> <li>• Detailed information pertaining to Runway Extension Safety Area (RESA)</li> <li>• Detailed information pertaining to new infrastructure such as windsock, etc.</li> <li>• Maximum height above ground for any piece of equipment involved in the construction</li> <li>• If trenching, information about the locations and depth</li> <li>• Geographical Coordinates (NAD83/WGS84 (if available) DD MM SS.ss), ground elevations and heights of any construction equipment when in operation and also when not working</li> <li>• Contractor lay down area (for example, where vehicle and equipment are parked when not in use)</li> <li>• Geographical Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) and ground elevations for any displaced thresholds</li> <li>• Runway certification changes during and after the construction (if applicable)</li> <li>• Plan of construction activity or detailed design indicating the scope of work, work stages (phases) and applicable runway/taxiway closures</li> <li>• Identification of contact person(s) throughout the project</li> <li>• Lightning changes</li> </ul>
Area Development	<ul style="list-style-type: none"> <li>• Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) or lot address</li> <li>• Type of development and related information</li> <li>• Owner and Developer contact details</li> </ul>
Solar Panels	<ul style="list-style-type: none"> <li>• Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) of the project area</li> <li>• Reflective study</li> <li>• Corner coordinates for the layout of the panels</li> <li>• For fixed panels, provide angle and azimuth</li> <li>• Added height to existing roof, if higher than other roof-top-structures (if applicable)</li> <li>• Substation/converter location Coordinates (NAD83/WGS84 (if available) DD MM SS.ss) and height(s) along with new transmission line(s) to connect to a grid</li> <li>• Associated substations/poles</li> <li>• Reflectivity of units</li> </ul>

**Note:** NAV CANADA's 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.

## Transport Canada Obstruction Marking and Lighting

You are required to contact Transport Canada to request their review of obstruction marking and lighting; use the *Aeronautical Assessment Form for Obstruction Marking and Lighting* (AAF) to make the request.

AAF (English): [http://wwwapps.tc.gc.ca/Corp-Serv-Gen/5/forms-formulaires/download/26-0427\\_BO\\_PX](http://wwwapps.tc.gc.ca/Corp-Serv-Gen/5/forms-formulaires/download/26-0427_BO_PX)

AAF (French): [http://wwwapps.tc.gc.ca/Corp-Serv-Gen/5/forms-formulaires/telecharger/26-0427\\_BO\\_PX](http://wwwapps.tc.gc.ca/Corp-Serv-Gen/5/forms-formulaires/telecharger/26-0427_BO_PX)

Transport Canada email addresses can be found on their website  
<https://www.tc.gc.ca/en/services/aviation/contacts-offices.html>.

## Department of National Defence – Wind Turbines

You are required to contact the Department of National Defence to request their review of wind turbines assessment on their services, all instructions can be found on their website to make the request.

AAF (English): <http://www.rcaf-arc.forces.gc.ca/en/services/wind-turbine-impact-assessment-for-industry.page>

AAF (French): <http://www.rcaf-arc.forces.gc.ca/fr/services/evaluation-repercussions-eoliennes-sur-industrie.page>