

# Inter Office Memo

## Planning Services

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**To:** Chair and Members, Planning Advisory Committee

**From:** Beverley Hillier – Manager, Planning Services

**Subject:** Proposed Official Plan Amendment for the City of North Bay Jack Garland Airport – Noise Exposure Forecast (NEF) Contours

**Date:** January 20, 2015

### **Recommendation**

That the proposed Official Plan Amendment for the purpose of implementing an Airport Protection Zone and updated Noise Exposure Forecast (NEF) Contours for the North Bay Jack Garland Airport be approved.

### **Site Information**

**Site Description:** The lands within the NEF Contours consist of a large number of properties, which are all existing lots of record in the area surrounding the airport, as shown on Schedule A attached hereto and on Schedule 1 and Schedule 2 to the City of North Bay Official Plan. The properties have a wide variety of designations under the Official Plan including Residential, Rural, Industrial, and Open Space; the lands are also composed of a wide variety of zonings under the City's Zoning By-law No. 28-80, including Airport Industrial Park, Rural, and a variety of Residential zonings.

### **Surrounding Land Uses:**

The land within the NEF Contour area, as well as the surrounding areas, consists of a wide variety of land uses covering most of the spectrum of categories. The uses range from a variety of residential uses to commercial buildings, to the department of defence base, to industrial lands.

### **Proposal / Background Information:**

The North Bay Jack Garland Airport has submitted a request to the City to implement recommendations from their updated Land Use Plan for the Airport including the creation of an Airport Protection Zone and updated Noise Exposure Forecast Contours. The updated Noise Exposure Forecast Contours are shown on Schedule B. This request includes using a more restrictive NEF Contour (25 NEF vs. 30 NEF) and the creation of a new Airport Protection Zone to review development applications.

Noise Exposure Forecast (NEF) Contours and Noise Exposure Planning (NEP) Contours are used as a tool to predict the expected noise levels from Airport operations. This information is used to help mitigate the negative effects of aircraft movement on surrounding sensitive land uses (residential, institutional etc.). The higher the number of

the contour line, the greater the expected level of noise. For example, a property owner residing above the 35 NEF Contour line would expect to encounter more noise than a property owner residing above the 30 NEF contour.

Through planning documents such as the Provincial Policy Statement (PPS) and the City's Official Plan restrictions are in place based upon these established NEF/NEP Contours. The PPS and the OP both prohibit new residential lot creation above the 30 NEF except in the case of infill.

The existing NEF Contours for the Airport were developed in 1985 and represent a time in our community when there were significant military operations occurring at the Airport. Staff have been supportive of establishing revised NEF Contours for the Airport that are realistic and protect the long term economic viability of the Airport.

The Airport undertook an update to the Land Use and Airport Protection Plan and submitted it to the City in January 2014. Planning and Economic Development staff participated in the development of the study and are confident that the assumptions made regarding future airport usage levels are appropriate and realistic.

### **Provincial Policy**

#### **Growth Plan for Northern Ontario (GPNO 2011)**

The Growth Plan for Northern Ontario (GPNO 2011) was introduced on March 3rd, 2011. All Planning Applications must consider this Plan as part of the evaluation process.

The GPNO 2011 is broad in scope and is aimed at shaping development in Northern Ontario over the next 25 years. It outlines strategies that deal with economic development, education, community planning, transportation/infrastructure, environment, and aboriginal peoples. This Plan is primarily an economic development tool that encourages growth in Northern Ontario. Specific Planning related policies, including regional economic planning, the identification of strategic core areas, and targets for intensification have not yet been defined by the Province or incorporated into the Official Plan.

In Section 2.2.2 the GPNO 2011 lists key priority economic sectors of which 'aviation and aerospace' are listed. The adoption of both an Airport Protection Zone and new 25 NEF Contours for the Airport will continue to ensure the long-term economic viability of the Airport. In addition the clear boundary of the Airport Protection Zone will allow for the continued and appropriate separation of the Airport from surrounding sensitive land uses.

In my professional opinion, the proposed Official Plan Amendment conforms with the policies and direction provided by the Growth Plan for Northern Ontario (GPNO 2011).

## Provincial Policy Statement (PPS 2014)

The Provincial Policy Statement provides policy direction on matters of provincial interest related to land use planning and development. The Provincial Policy Statement is issued under Section 3 of the Planning Act which requires that decisions affecting planning matters be 'consistent with' Policy Statements issued under the Act.

A new Provincial Policy Statement came into effect on April 30, 2014. All decisions made regarding planning matters on or after this date must be consistent with the new Policy Statement.

Section 1.6.9 of the PPS 2014 provides policy regarding "Airports, Rail and Marine Facilities".

Section 1.6.9.1 reads:

- "1.6.9.1 Planning for land uses in the vicinity of *airports, rail facilities and marine facilities* shall be undertaken so that:
- a) their long-term operation and economic role is protected; and
  - b) *airports, rail facilities and marine facilities and sensitive land uses* are appropriately designed, buffered and/or separated from each other, in accordance with policy 1.2.6."

Section 1.6.9.2 reads:

- "1.6.9.2 *Airports* shall be protected from incompatible land uses and development by:
- a) prohibiting new residential *development* and other sensitive land uses in areas near *airports* above 30 NEF/NEP;
  - b) considering redevelopment of existing residential uses and other sensitive land uses or infilling of residential and other sensitive land uses in areas above 30 NEF/NEP only if it has been demonstrated that there will be no negative impacts on the long-term function of the *airport*; and
  - c) discouraging land uses which may cause a potential aviation safety hazard."

In addition, Section 1.2.6, Land Use Compatibility, identifies that "*Major facilities and sensitive land uses should be planned to ensure they are appropriately designed, buffered and/or separated from each other to prevent or mitigate adverse effects from*

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*odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term viability of major facilities."*

Under the PPS an Airport is considered a major facility. Sensitive land uses include such things as residences, day care centres and educations and health facilities. Each of these are found within the existing NEF Contours.

The PPS sets out the policies for implementation and interpretation in Section 4. Section 4.9:

*"The policies of this Provincial Policy Statement represent minimum standards. This Provincial Policy Statement does not prevent planning authorities and decision-makers from going beyond the minimum standards established in specific policies, unless doing so would conflict with any policy of this Provincial Policy Statement."*

Given that aerospace is a key pillar of the City's economic development growth sectors staff are of the opinion that a more strict criteria should be used to protect the long-term economic viability of the Airport.

It is proposed that an Airport Protection Zone (APZ) be established for the Airport. The APZ would be based on property lines that correspond to the new proposed contours and would correspond with the policies in the Official Plan with respect to the restriction of lot creation for residential or other sensitive land uses, except for minor infilling.

The proposed Official Plan Amendment for a new Airport Protection Zone and establishment of new NEF Contours of the airport based on the 2032 day/night contours is consistent with the Provincial Policy Statement 2014.

### **Official Plan**

The area within the NEF Contours contains a variety of Official Plan designations from Residential to General Industry to Aggregate. However, there are no proposed changes to the designation of any properties within the area; policy changes are only directed towards the size of the NEF Contours and their application to policy regarding new development.

This Official Plan Amendment seeks to use the new updated 25 NEF Contour to form a 'Restricted Residential Zone' that would function similar to the current policies directing development above the 30 NEF Contour.

Various section of the Official Plan would be required to be amended to reflect this change. Both the current and proposed new policies are contained in Appendix A.

Schedule 1 and 2 of the City Official Plan represent the Settlement Area and the Rural Area respectively. Each of these schedules displays the extent of the current 1985

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NEF Contours surrounding the airport. This Official Plan amendment seeks to modify the NEF Contours on both of these schedules to reflect the 2014 "Airport Land Use and Airport Protection Plan Update Study" completed by Tetra Tech. The proposed amended Schedules 1 and 2 on attached as Schedules D and E to this report. This study takes into consideration all current airport operations, future development and expansion considerations, and current aviation technology and its general impact on airport noise production.

The 2014 plan update has redefined the NEF contours based on the newest and best available data. NEF contour calculations in Canada are done under Transport Canada guidelines using a nationwide model that considers noise levels, perceived noise levels, as well as other factors.

Planning Staff are of the opinion that the "Airport Land Use and Airport Protection Plan Update" is reflective of the existing and projected conditions around the Jack Garland Airport and support the adoption of new NEF Contours put forth in the updated plan. Planning Staff also agree that the request of the airport to use the Restricted Residential Zone based on the 25 NEF Contour instead of the 30 NEF Contour as a guideline for development restriction is a reasonable request and is in line with the overall intent of the Official Plan to protect our airport and aviation industry resources.

The proposed APZ has been developed based on reviewing existing designated and serviced residential lands, future transportation routes, General Industrial Lands and the City's Settlement Boundary. The APZ continues to allow for the growth anticipated south of the Airport. Generally, in comparison with the existing 1985 NEF Contours, the proposed APZ takes in less area and impacts less properties as shown on Schedule C.

### **Zoning By-Law No. 28-80**

The area surrounding the airport is currently comprised of a vast diversity of municipal zoning classifications and the proposed new area to be covered by the NEF Contours would be much the same. However, as this Official Plan Amendment is not proposing any Zoning By-law changes associated with it there is no concern related to Zoning By-law 28-80.

### **Correspondence**

This proposal was circulated to property owners within 120 metres (400 feet) of the subject area, as well as to several municipal departments and agencies that may have an interest in the application. In terms of correspondence received from these departments and agencies, the Planning Department received the following comments:

No concerns or comments were provided by any of the internal departments or external agencies that were circulated.

Staff received a number of comments and inquiries from the general public throughout the first Planning Advisory Committee presentation as well as through email and phone correspondence at other times. Some of the comments received were as follows:

- Issues with helicopter traffic being consistent and at lower than allowable heights near their properties.
  - This issue is unrelated to the NEF Contours in this Official Plan Amendment. The contours and the study that produced them took into consideration all form of air traffic at the airport including helicopters. Any issues arising from improper conduct on the part of operators should be dealt with directly with them and is outside of the scope of this Official Plan Amendment.
- Why the NEF Contour that was being used for development restriction policy needed to be changed from the 30 NEF to the 25 NEF. They suggested that they would rather see it remain the same.
  - The 30 NEF is a minimum standard and based on the Airport Land Use and Airport Protection Plan Update as well as airport requests the 25 NEF is appropriate for the long term protection of the airport and its activities.
- Why the NEF Contours have expanded in the north and south directions while shrinking in the east and west directions.
  - The expansion in the north and south directions is a result of increased use of the runway that is aligned in that direction as well as increased helicopter activity that makes use of that airspace.
- Whether changes in technology and projected future uses of the airport and airspace were taken into consideration.
  - The Plan Update prepared for the Airport covers all of these aspects and all of this is built into the plan and its recommendations.
- Concern over how the study was conducted and whether or not the people doing the study were qualified to be doing so.
  - The study was completed by professional consultants from Tetra Tech and all aspects of the study were completed within Transport Canada regulations. The people involved in producing the study are fully qualified to provide expert data and analysis on the subject.
- Concern about military related air activity not being included in the study.
  - The study was completed taking all activity into consideration, both civilian and military related activities.
- Concern about environmental issues such as exhaust and pollution that could affect people sensitive to those things.
  - The NEF contours deal specifically with noise and make recommendations



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for distances to limit noise pollution exclusively. They do not speak to environmental concerns or deal with other types of pollution.

No further correspondence was received with regard to this proposal.

### **Summary**

This proposal for an Official Plan Amendment by the North Bay Jack Garland Airport is a result of an update study to the airports "Land Use and Airport Protection Plan". The study redefines the location of the Noise Exposure Forecast (NEF) Contours and recommends the establishment of an Airport Protection Zone. The purpose of this Official Plan Amendment is to adopt the revised NEF contours and the Airport Protection Zone as per the study.

The study to update the airport plan was conducted by Tetra Tech consultants dated January 2014. This study was completed by professionals consistent with Transport Canada guidelines and regulations. It details many aspects of the airport operations including NEF Contours. This plan considers current and projected future uses and operations at and around the airport.

The proposed Official Plan Amendment would see the City modify Schedule 1 (Settlement Area) and Schedule 2 (Rural Area) to reflect the new NEF Contours in the updated airport plan. It would also see an 'Airport Protection Zone (APZ)' established around the airport. The APZ would be based on the 25 NEF Contour line and would be adjusted as to not split properties whenever possible. With the creation of the APZ it would be necessary to draft new policy reflecting the development restrictions in that area. New policy would be added to Section 3 and Section 4 of the Official Plan, as described in this report, to reflect the update.

The current airport NEF Contours are from 1985 data. They are not reflective of current day and future usage patterns surrounding the airport and need to be updated. Planning staff support this Official Plan Amendment, as it will provide up to date data and a better foundation for airport protection going forward. Staff also supports the airports request to base the Airport Protection Zone on the 25 NEF Contour.

Staff recognizes that utilizing the 25 NEF Contour line is more restrictive than the minimum standard required by the PPS 2014. However, given the City's ongoing development of an Areospace Industrial Park and significant investments made to this end, it is staff's opinion that it is advisable to implement a higher standard in order to reduce the risk of land use conflict between operations at Jack Garland Airport and nearby sensitive land uses.

Part III of the PPS grants the municipality the options to implement more stringent regulations "to address matters of importance to a specific community". It is staff's opinion that protection of the Airport is of specific interest to the community and is

deserving of a greater degree of protection than what is conveyed by the PPS.

Although this is stricter than required by the PPS 2014 planning staff are of the opinion that this is appropriate for the long term protection of the airport lands and activity in light of the City of North Bay Official Plan and other PPS policy. The PPS is intended to be a minimum standards guide and a municipality is free to raise the standards if they feel it to be in the best interest of the city

It is my professional opinion that the proposed Official Plan Amendment conforms to the Growth Plan for Northern Ontario (GPNO 2011) and is consistent with the Provincial Policy Statement (PPS 2014).

Respectfully submitted,

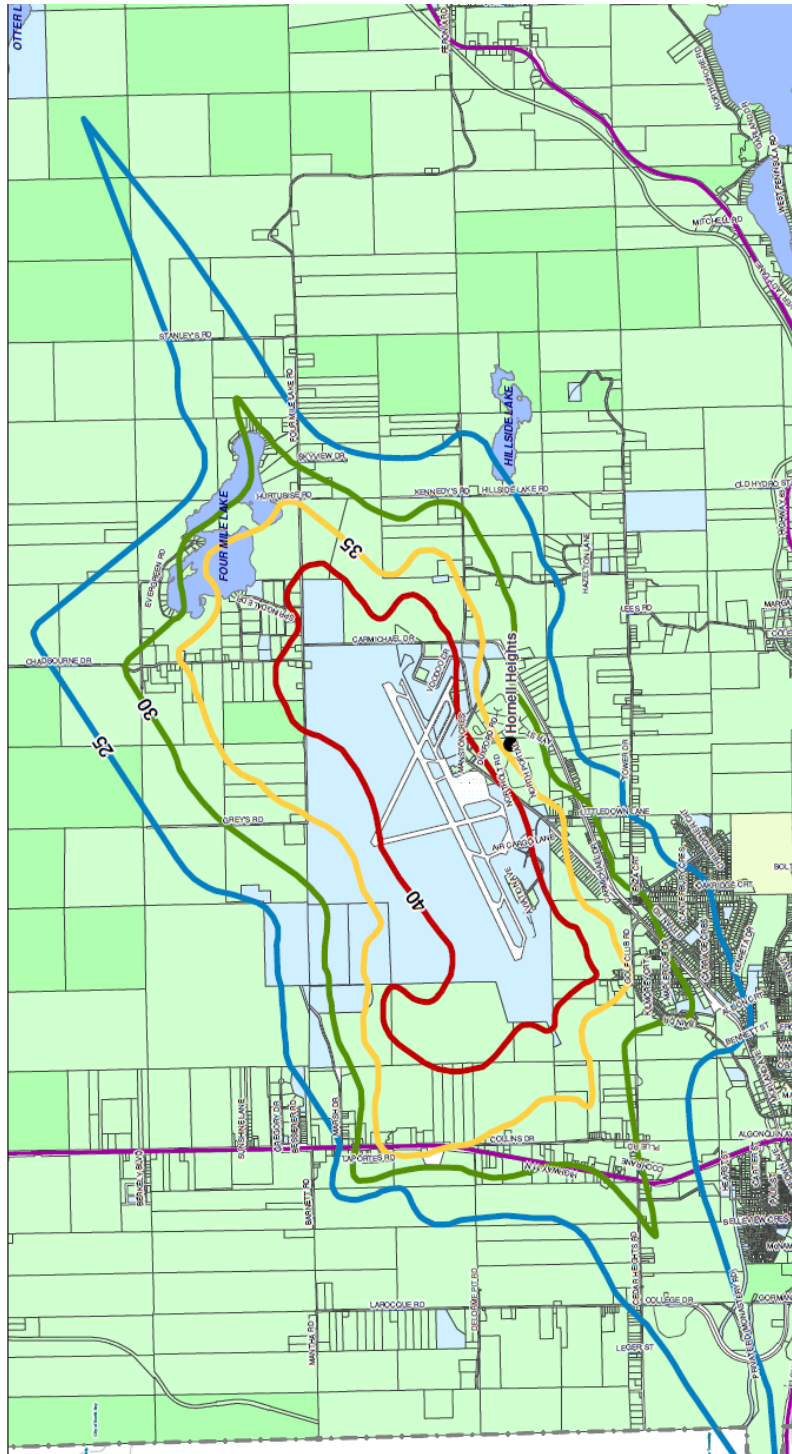
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Beverley Hillier, MCIP, RPP  
Manager, Planning Services



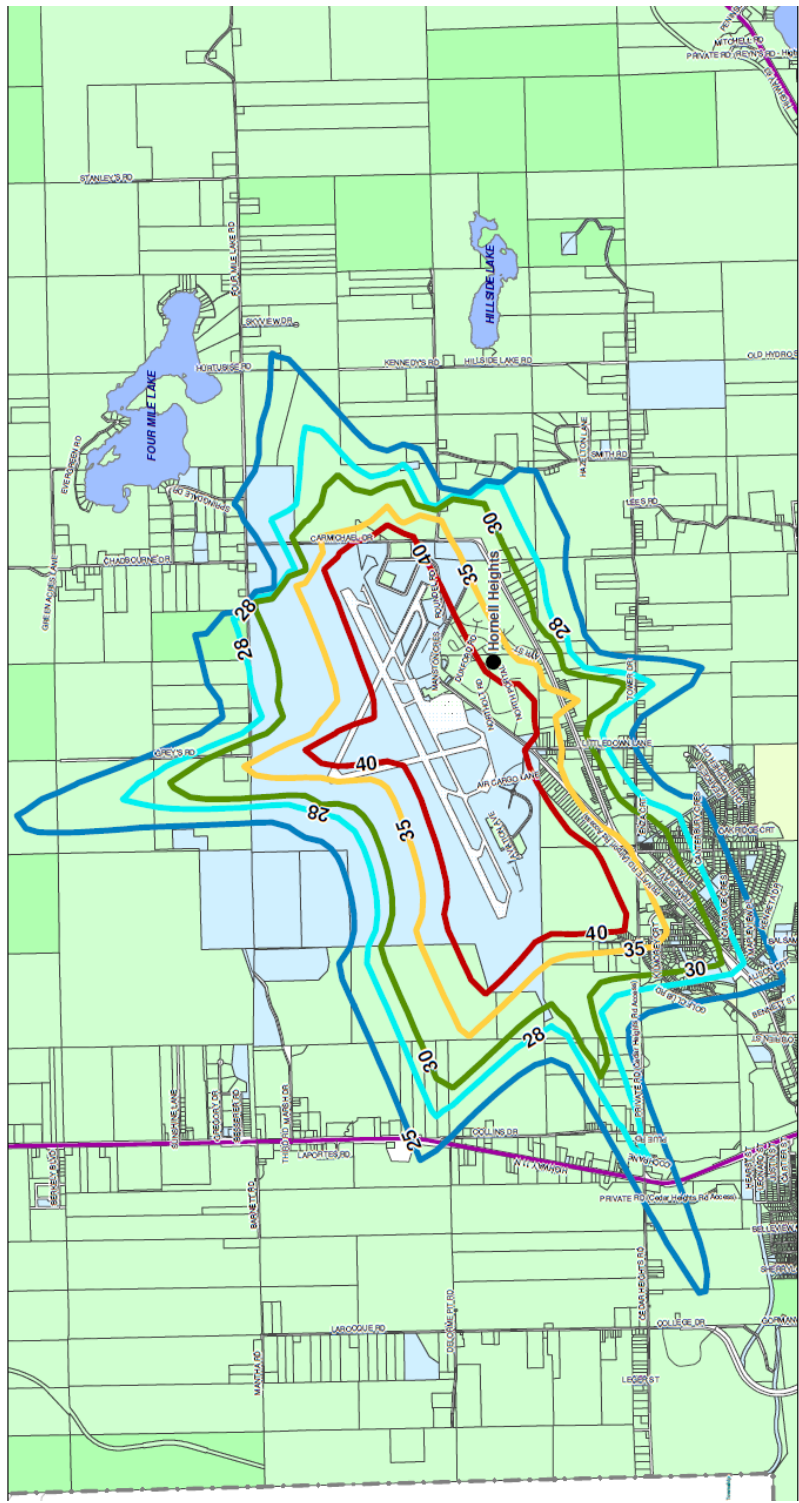
# Schedule A

## Existing 1985 NEF Contours



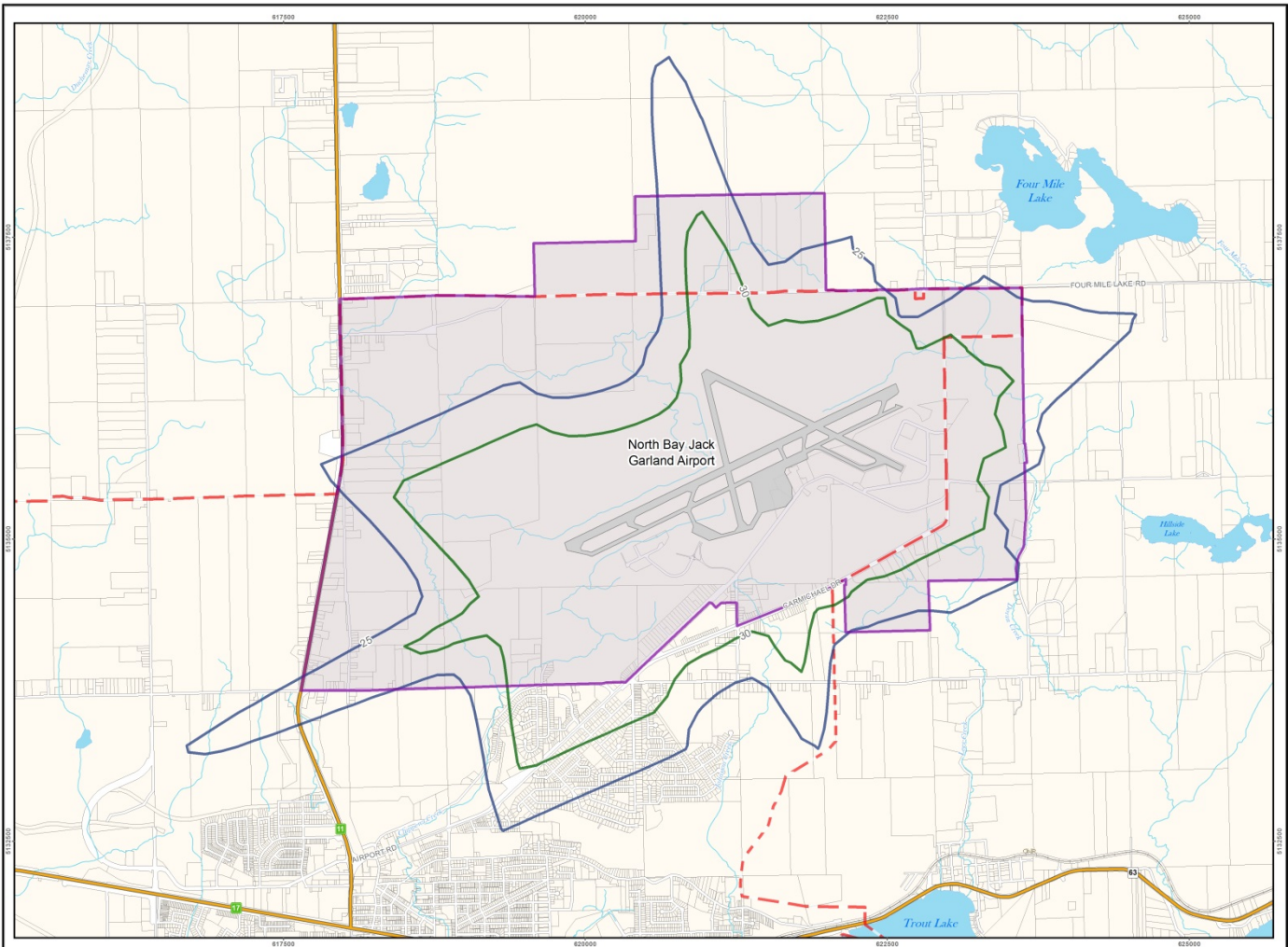
# Schedule B

## Proposed new NEF Contours based on the 2032 Civil Day Night Flight Training



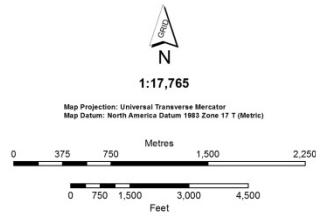
# Schedule C

## Proposed Airport Protection Zone and new NEF Contours



### Proposed Official Plan Amendment Airport Protection Area

- Airport Protection Area
- Noise Exposure Forecast 2032  
(Civil-Day Night Flight Training)
- Contour 30
- Contour 25
- Settlement Boundary
- Assessment Parcel



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Data Sources: City of North Bay GIS, Airport Landuse Plans, EBA Engineering Consultants and LPS Aviation inc.

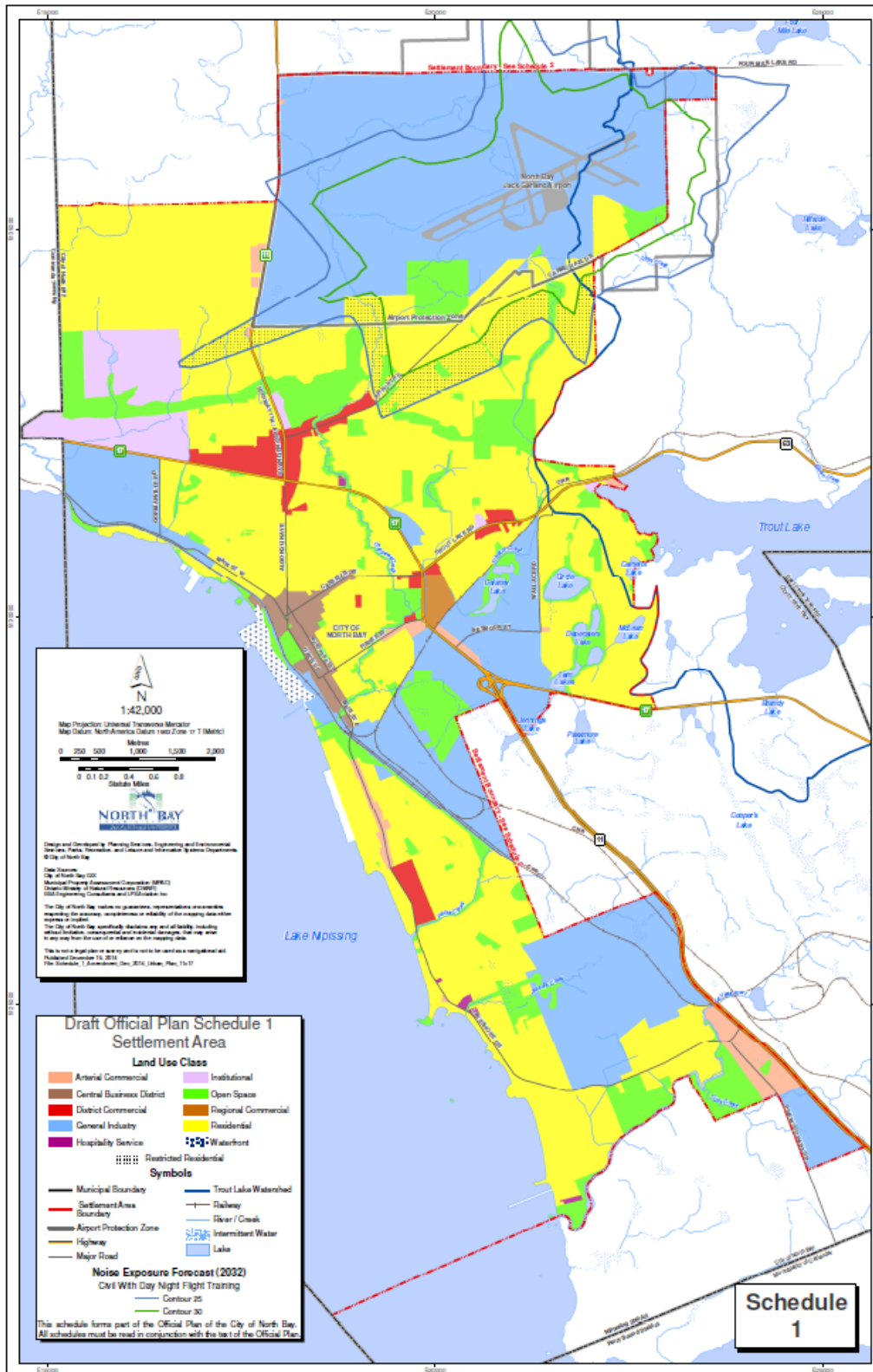
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Published December 8, 2014  
File: OP\_Airport Protection Area\_Presentation

# Schedule D

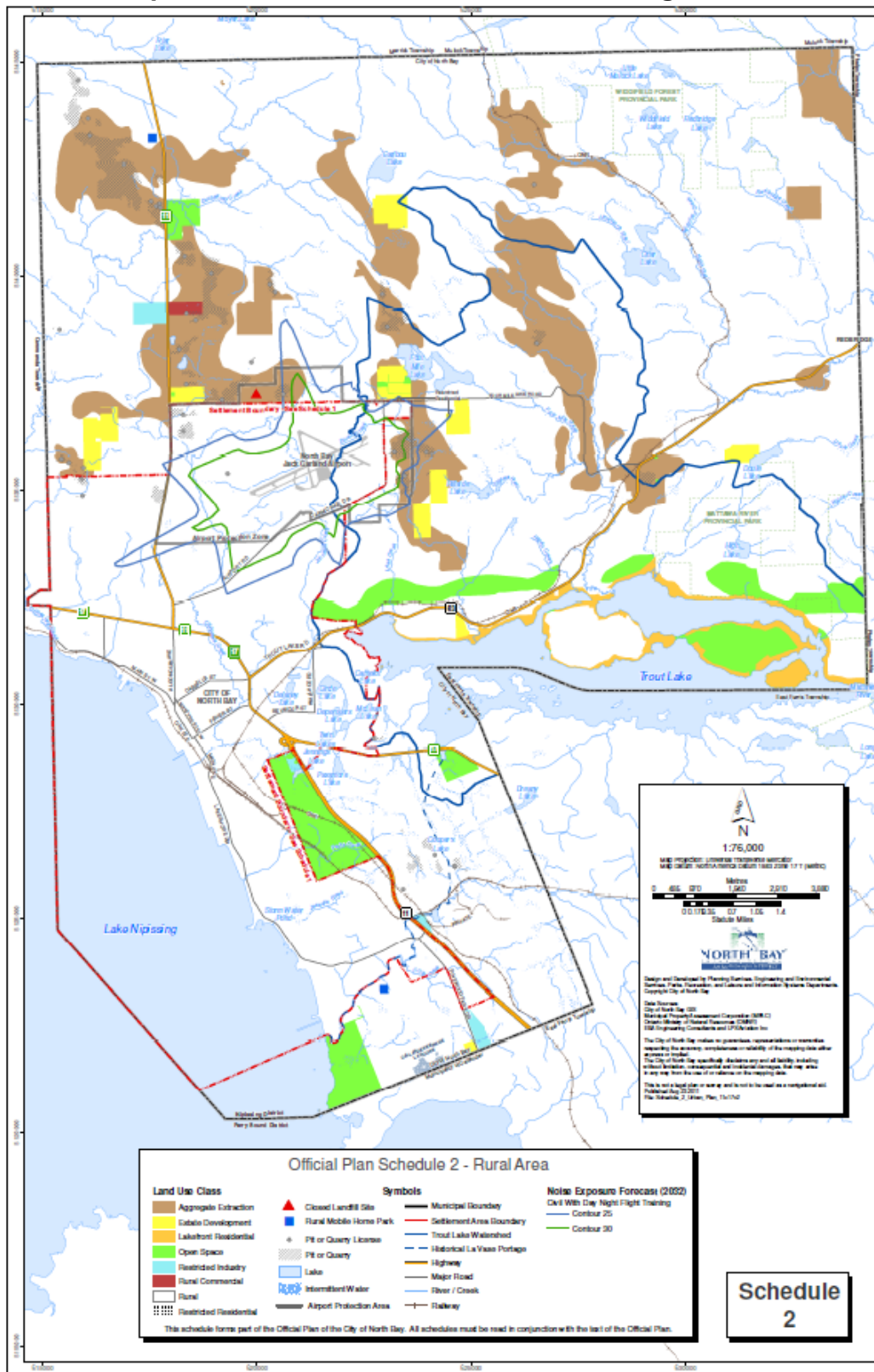
Proposed new Schedule 1 showing new Airport Protection Zone, new Contours and updated "Restricted Residential" designation





# Schedule E

Proposed new Schedule 2 showing new Airport Protection Zone, new Contours and updated "Restricted Residential" designation



## Appendix A

<u>Section Number</u>	<u>Current Policy</u>	<u>Proposed Policy</u>
Section 3.1.3	<p>"No new residential development shall be permitted above the 30 NEF contour; redevelopment of existing residential uses and other sensitive land uses or infilling of residential or other sensitive land uses in areas above 30 NEF may be considered only if it has been demonstrated that there will be no negative impact on the long term function of the airport. The federal guideline entitled "Aviation: Land Use in the Vicinity of Airports" will be used to assess impacts of proposals near the airport."</p>	<p>"No new residential development shall be permitted <a href="#">within the Airport Protection Zone, as shown on schedule 1 and 2 of this Plan</a><del>above the 30 NEF contour</del>; redevelopment of existing residential uses and other sensitive land uses or infilling of residential or other sensitive land uses in areas <a href="#">with the Airport Protection Zone above 30 NEF</a> may be considered only if it has been demonstrated that there will be no negative impact on the long term function of the airport. The federal guideline entitled "Aviation: Land Use in the Vicinity of Airports" will be used to assess impacts of proposals near the airport."</p>
Section 3.4.8	<p>"No new residential lot creation shall be permitted above the 30 NEF Contour. Infill development may be permitted only when it has been demonstrated by the proponent that there will be no negative impacts on the long term function of the airport."</p>	<p>"No new residential lot creation shall be permitted <a href="#">within the Airport Protection Zone, as shown on Schedule 1 and 2 of this Plan</a><del>above the 30 NEF Contour</del>. Infill development may be permitted only when it has been demonstrated by the proponent that there will be no negative impacts on the long term function of the airport."</p>
	<p>"no new estate development shall be permitted above the 30 NEF Contour; "</p>	<p>"no new estate development shall be permitted <a href="#">within the Airport Protection Zone, as shown on Schedule 1 and 2 of this Plan</a>; <del>above the 30 NEF Contour</del></p>
Sections 4.11.1 through 4.11.3	<p><i>"North Bay Jack Garland Airport</i>                      4.11.1 Certain areas along the axis of Runway 0826 of the North Bay Jack Garland</p>	<p>No policy change. Application of policy will change based on new NEF Contours in the Official Plan.</p>

<u>Section Number</u>	<u>Current Policy</u>	<u>Proposed Policy</u>
	<p>Airport are indicated on Schedule "1" and Schedule "2" as being restricted, because possible noise nuisance from jet aircraft could reach critical proportions in these areas.</p> <p>4.11.2 In addition to conforming with all other requirements of this Plan, the developer of any residential unit within the Restricted Residential designation shall be made aware of the airport noise problem. The developer shall to inform, in writing, all purchasers and subsequent owners of residential unit that the property in question is in an area where possible airport noise problems may exist, or develop. In addition, the construction of any residence, school, library, church, theatre, auditorium, hospital, nursing home, recreational building, camping or picnic area, shall conform to the Acoustic Design Criteria set out in the Federal Guideline entitled "Aviation: Land Use in the Vicinity of Airports.</p> <p>4.11.3 A detailed analysis of noise reduction requirements related to a particular development will be required, and required noise control features must be established for any building to be constructed in a</p>	



<b><u>Section Number</u></b>	<b><u>Current Policy</u></b>	<b><u>Proposed Policy</u></b>
	Restricted Residential Area."	
<a href="#"><u>Section 4.11.4</u></a>		<a href="#"><u>"4.11.4 It is the intention of this plan to restrict residential development within the Restricted Residential Zone, as shown on Schedule 1 and 2 of this plan. No new lot creation shall be permitted. Infill development may be permitted only when the proponent can demonstrate that there will be no negative impacts on the long term operation of the airport."</u></a>