







# St. John's Development Regulations and St. John's Urban Region Regional Plan - NEF Zones

130 Aberdeen Avenue



N.E.F. LINES 2025	
	NEF25
	NEF30
	NEF35
	NEF40

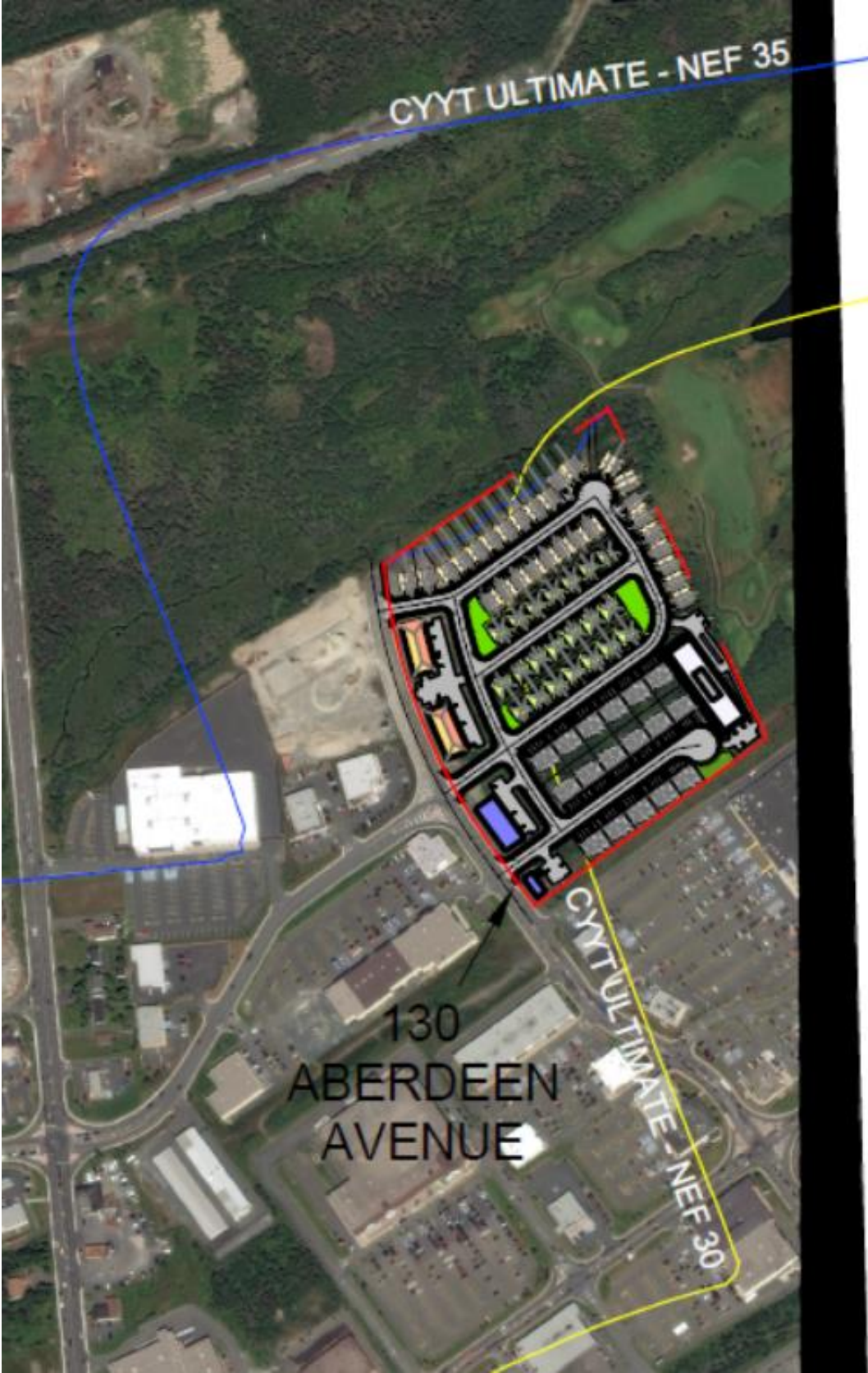
DISCLAIMER: This map is based on current information at the date of production.

March 17, 2020



PROJECT	YYT NEF ULTIMATE 130 ABERDEEN AVE	DATE	04/14/20
		SCALE	1:10000
		DRAWING No.	SK-4

St. John's International Airport Authority NEF contours showing the NEF 30 line bisecting the site at 130 Aberdeen Avenue.



**ST JOHN'S URBAN REGION**

**REGIONAL PLAN**

**1976**

**with**

**Forestry Policy Amendment, 1978**

**Watershed Protected Areas Policy Amendment, 1980**

**and**

**Subsequent Amendments**

**OCTOBER 1995**

**Unofficial Consolidation as of May 1, 2007**

**Prepared by**

**Engineering and Land Use Planning Division**

**Department of Municipal Affairs**

*Residential uses shall not be permitted in any industrial area except for a dwelling for an essential workman or caretaker and his family, or for transient accommodations.*

*(Amendment #2, 1994)*

*The amenity of surrounding non-industrial areas shall be protected by keeping noises, fumes and any hazardous aspects of industrial operations as far as possible from the property lines dividing the industrial and non-industrial areas.*

*[Insertion over Bay Industrial Site:]*

*a) the purpose of the site is to accommodate an offshore service base to provide docking and related loading, storage, repair, maintenance and administrative facilities in support of offshore oil and gas exploration, development and production effort.*

*b) development of the site will be dependent upon the approval of a Development Scheme prepared under the provisions of the Urban and Rural Planning Act.*

*(as amended 1987)*

**(b) Torbay Airport**

*Notwithstanding the land use designations on the Regional Plan Map and any other policies of this Regional Plan, the following special provisions shall apply within the vicinity of Torbay Airport:*

- i) No development shall infringe the height limitations in the vicinity of Torbay Airport unless otherwise approved by the Ministry of Transport.*
- ii) No development shall be permitted in the vicinity of Turbo Airport that would, in the opinion of the Ministry of Transport, pose a danger to the operations of aircraft by interfering with navigational aids or telecommunications equipment.*
- iii) Within the noise zones indicated on Annex I (Noise Exposure Forecast Values) decisions upon permitting development shall in the first instance have regard to the policies set out elsewhere in this Plan according to the*

*designation of the area in which they are to be located and, in addition, the policies set out in Annex II of the Plan shall be used as guidelines.*

*Within the area designated 'Airport' on the Regional Plan Map development shall be limited to uses associated with the operation of the airport and to which the Ministry of Transport have no objection.*

*(c) Regional Industrial Uses*

*Policy:*

*The policies set out above for Major Industrial Uses (a) will apply in the Regional Industrial areas, except that the types of uses which may be permitted include light industrial and certain additional commercial uses. Commercial uses that require large lots and floor areas and direct vehicular access for loading of purchased goods may be permitted in addition to those outlined in (a) above.*

*The Regional Industrial use designation shall not preclude the setting aside of conservation and other open space areas for the protection of waterbodies, for passive or active recreation, for reservation of heights of land or land which should not be developed because of steep slopes, hazard conditions, servicing or other development constraints.*

*(Amendment #3, 1994)*

## **H. TRANSPORTATION**

The transportation network forms the backbone of the Regional Plan; it is the component that ties all the parts together. The transportation policies of the Regional Plan have been developed in conjunction with the land use policies and the transportation plan is incorporated on the Regional Plan Map, providing for the following classes of roads:

**ST. JOHN'S AIRPORT ENVIRONS POLICY**

**1983  
as amended**

## TABLE OF CONTENTS

	Page
1. INTRODUCTION .....	1
2. AIMS FOR ST. JOHN'S AIRPORT ENVIRONS.....	1
3. GOALS AND OBJECTIVES .....	2
4. ST. JOHN'S AIRPORT ENVIRONS POLICY .....	4
4.1 Residential Uses.....	5
4.2 Commercial Uses.....	6
4.3 Airport-Related Commercial Uses <i>(deleted, Amdt. #2, 1991)</i>	
4.4 Industrial/Commercial Uses.....	6
4.5 Airport-Related Industrial/Commercial Uses <i>(Deleted, Amdt. #2, 1991)</i>	
4.6 Industrial Uses.....	7
4.7 Airport-Related Industrial Uses <i>(Deleted, Amdt. #2, 1991)</i>	
4.8 Aviation-Related Industrial Uses.....	8
4.9 Agricultural Use .....	8
4.10 Rural Use .....	9
4.11 Watershed Use.....	9
4.12 Noise .....	10
4.13 Bird Hazard Constraints.....	11
4.14 Servicing .....	12
4.15 Road Network .....	13
 ANNEX I. NOISE EXPOSURE FORECASTS (NEF)	
 ANNEX III. BIRD HAZARD ZONES	



## 1. INTRODUCTION

The area which is the subject of the St. John's Airport Environs Policy is generally bounded as follows:

- i) to the south by the 1981 boundary of the City of St. John's and by the boundary of the C.A. Pippy Park;
- ii) to the west by the far western boundary of St. John's Airport;
- iii) to the north by an east/west line running through the northern tip of South Pond; and
- iv) to the east by a north/south line to the east of Quidi Vidi Lake.

The above area is shown on the attached St. John's Airport Environs Policy Map, but is emphasized that there are other areas in the Urban Region, which lie outside of the above area and which are impacted by proposals for that area, and policies made relevant to that area which by their nature apply outside of the area.

The policies which follow are based on the findings contained in the report "St. John's Airport Environs Development Plan, Volume I Development Plan, and Volume II Background Report". Relevant statistical data, analysis and reasoning from which these policies were derived can be found in the above noted work.

## 2. AIMS FOR ST. JOHN'S AIRPORT ENVIRONS

The principal aims for the St. John's Airport Environs Policy are to allow for development of land uses which will:

- i) not hinder in any way the optimum use of the Airport;
- ii) provide for the highest and best use of the land around the Airport, for both trend growth and for economic development derived from growth of the offshore oil and gas industry; and
- iii) complement the surrounding regional context of both urban and rural uses.

## 3. GOALS AND OBJECTIVES

The following five broad goals for the St. John's Airport Environs are recognized:

- i) the optimization of Airport use;
- ii) the optimization of the potential for offshore oil and gas related developments around the Airport;
- iii) the optimization of the quality of the residential environment;  
the optimization of investment in municipal services; and
- iv) comprehensive regional planning.

From these goals are derived specific objectives which are set out below with, where appropriate, a brief explanatory note.

### **3.1 Goal: Optimization of Airport Use**

Optimization of airport use is seen as a development goal on three counts:

- i) To assist in the development of regular traffic growth.
- ii) To protect the significance of the airport as a critical transportation link for the economy of the whole province and, in particular, the St. John's Urban Region.
- iii) To enhance the role of the airport and thus the Urban Region in its service function for the offshore oil and gas industry.

Although the main tools to optimize the use of the airport relate more specifically to the future development, operation and management of the airport itself, the rational planning for and the use of lands surrounding the airport have significant impact. Thus, planning for the Airport Environs will encourage development of the right kind and at the right locations, and prevent development which would potentially reduce optimum use of the airport.

#### **Objectives:**

- a) Maximization of Land Availability for Airport-Derived Commercial Use.
- b) Maximization of Land Availability for Airport-Derived Industrial Use.

### **3.2 Goal: Optimization of the Potential for Offshore Industry Development Around the Airport**

Since the offshore industry is so dependent on airport use, adequate well located land around the airport should be reserved to assist potential industrial growth associated with development of this industry.

#### **Objectives:**

- a) Maximization of land Availability for Offshore/Airport-Related Industrial and Commercial Uses.
- b) Implementation of a Comprehensive Regional Road Network and Improvement of Airport-Port/Downtown Access.

### **3.3 Goal: Optimization of the Quality of the Residential Environment.**

Any disruption to already developed and still undeveloped areas due to airport activity should be minimized.

#### **Objectives:**

- a) Avoidance of All Noise Disturbance in Future Residential Areas.
- b) Minimization of Noise Disturbance in Existing Residential Areas.
- c) Allocation of Land Uses so as to Minimize Conflicts between Airport-related Industrial and Commercial Uses and Existing or Future Residential Uses.

#### 3.4 Goal: Optimization of Investment in Municipal Services

##### Objectives:

- a) Disposition of Land Uses so as to Fully Utilize Existing and Planned Municipal Infrastructure.
- b) Phasing of Land Development so as to Maximize Existing Infrastructure and planned phasing of New Servicing.
- c) Minimization of Right-of-way Impacts and Costs, by Implementation of a Multiple-use Service Corridor.

#### 3.5 Goal: Comprehensive Regional Planning

The Airport Environs is an integral part of the St. John's Urban Region and it must function within this context and respect, where appropriate, other regional policies.

##### Objectives:



- a) The Retention and Encouragement of Designated Agricultural Areas within the Airport Environs.
- b) The Retention of Designated Watershed Areas in or abutting the Airport Environs.

### 4. ST. JOHN'S AIRPORT ENVIRONS POLICY

The St. John's Airport Environs Policy Map shows the land uses proposed for the lands surrounding the airport. These are: residential; commercial, ~~airport-related commercial~~; ~~airport-related industrial/commercial~~; ~~airport-related industrial~~; industrial, agriculture, watershed and rural. Each of these uses is discussed below in general terms, followed by policies relating to their implementation. Following the policies relating to specific land uses are policies relating to noise impact, bird hazard constraints, and infrastructure.

*(Amendment #2, 1991)*

#### 4.1 Residential Uses

New areas of residential uses within the Airport Environs are designated only outside of the consolidated forecast 25  Noise Exposure Forecast (NEF) line. Other areas designated residential, lying both within and outside of the 25  NEF line, are all either developed, in the process of development or are approved subdivisions.

*(Amendment #1, 1991)*

*(Amendment #1, 1994)*

**Policies:**

- ▶ That new residential uses be restricted to only those areas lying outside of the ~~25~~ 35 NEF consolidated noise footprint.

*(Amendment #1, 1991)*

*(Amendment #1, 1994)*

- ▶ That infill development of new residential uses shall be permitted in existing or approved residential areas, but that the full acoustic insulation shall be incorporated into building design specifications.

- ▶ Any new residential development between the 30 NEF contour and the 35 NEF contour shall include sufficient sound insulation as established from time to time by appropriate authorities.

*(Amendment #1, 1994)*

## 4.2 Commercial Uses

In many instances this designation encompasses existing uses. In addition to commercial uses in general, specific-purpose commercial uses, i.e., airport-related, are identified and dealt with as a separate policy heading.

It is the intent of this Policy to consolidate commercial uses at nodes along arterial roads, and not to encourage the further proliferation of strip commercial development.

### **Policy:**

- ▶ That commercial uses only be permitted in the areas appropriately designated. The definition of such uses shall be the responsibility of the appropriate local authority but shall generally include retail and office activities, as well as commercial clubs, restaurants and service stations provided particular attention is given to site design and access.

## 4.3 Airport-Related Commercial Uses

*(Deleted in Amendment #2, 1991)*

## 4.4 Industrial/Commercial Uses

Within this designation light industrial or commercial uses will be permitted. Highway-related uses will not be permitted on that land so designated and lying to the south of the proposed Outer Ring Road because of the controlled access nature of this road. However, such uses will be permitted elsewhere in this designation provided strict consideration is given to site design and access.

**Policy:**

- ▶ That only industrial/commercial uses be permitted in this designation and that these uses shall accord with the Major Industrial Policy of the St. John's Urban Region Regional Plan, with the additional stipulation that heavy industrial uses shall not be permitted.

**4.5 Airport-Related Industrial/Commercial Uses**

*(Deleted in Amendment #2, 1991)*

**4.6 Industrial Uses**

A large area surrounding the airport is designated for industrial use. A large proportion of this, particularly to the east and northeast of the airport, is ideally suited for offshore-related industrial use.

This White Hills area is also designated for industrial use and possesses great locational advantages of good future regional road access to this airport and port.

**Policy:**

- ▶ That industrial uses only shall be permitted in the areas so designated and that these uses shall be subject to the "Major Industrial Policy" of the St. John's Urban Region Regional Plan.

**4.7 Airport-Related Industrial Uses**

*(Deleted in Amendment #2, 1991)*

**4.8 Aviation-Related Industrial Uses**

This designation is given to land lying on Airport property immediately east of runway 02/20 and between it and Turbo Road. The designation has been applied to this area since it is of such importance to support the helicopter and general aviation activity, with many of the former and its support uses likely being offshore-related.

**Policies:**

- ▶ That helicopter and specific aviation-related industrial uses only shall be permitted in the areas so designated.
- ▶ That a full definition of compliance with a helicopter and aviation-related use classification shall be developed by the appropriate jurisdictions for use in the development of this land and this definition shall be included in any implementing regulation for this plan and any municipal, local area plan, or airport plan prepared in accordance with it.

#### **4.9 Agricultural Use**

The St. John's Agricultural Development Area encompasses lands to the north and northeast of the airport. The lands are a regional and provincial resource which cannot be replaced if used for other purposes. Analysis of land demands for urban uses has indicated that there is no shortage of potentially developable land for such uses and that there is on these grounds no cause to consider amendment to existing agricultural policy.

**Policy:**

- ▶ That agricultural uses only be permitted in the areas so designated and that the policies relating to these uses be those of the St. John's Urban Region Regional Plan.

*(Section 4.9 is affected by amendments to the policies of Section F(a) of the Regional Plan).*

**4.10 Rural Use**

The rural designation has been applied to areas beyond current and proposed servicing limits or where topographic and drainage considerations might well hinder development. Land demand analysis indicates that there is no need to consider the urban use of these lands.

**Policy:**

- ▶ That rural uses only be permitted in the areas so designated and that policies relating to these uses be those of the St. John's Urban Region Regional Plan.

**4.11 Watershed Use**

The Windsor Lake and South Pond Watersheds fall partly within the Airport Environs. Their existing and future use as domestic water sources is undisputed and they will be accordingly protected.

**Policy:**

- ▶ That the Windsor Lake and South Pond Watersheds remain subject to the Watershed Protected Areas Policy of the St. John's Urban Region Regional Plan.



#### 4.12 Noise

Aircraft and helicopter movements are generally noisy and the disposition of the above noted land uses has been determined on the basis of anticipated movements and noise levels in order to minimize impacts. However, there are existingly developed areas and areas committed for development which are and will be affected by aircraft noise. It is essential that incompatible development not be permitted in potentially high noise areas and that, where possible, steps be taken to minimize impacts on existingly developed areas. Airport and aircraft operations are beyond the control of this plan, but certain steps can be taken beyond the boundaries of the airport to minimize adverse impacts. Annex I shows the Noise Exposure Forecast values for St. John's Airport for ~~1985~~ 1996, which replace the former NEF values of the St. John's Urban Region Regional Plan with effect from the approval of these policies. The following policies apply equally to areas beyond what this plan defines as the St. John's Airport Environs.

*(Amendment #1, 1992)*

##### **Policies:**

- ▶ That no noise sensitive uses, particularly residential ones, be permitted in existing and future high noise impact areas.
- ▶ That new infill housing in noise impact areas have mandatory acoustic insulation.
- ▶ That structures and landscaping on land in high noise areas be designed to also act as noise barriers or absorbers.
- ▶ That the change of use from noise-sensitive uses to noise-tolerant ones be encouraged in high noise impact areas.
- ▶ That noise levels, noise level forecasts and airport developments be monitored and, that the land use policies of this plan be reviewed on the basis of variations or forecast variations.
- ▶ The volume and frequency of helicopter movements be monitored with a view to considering with the appropriate federal, provincial, municipal, and industry authorities, the establishment of helicopter corridors to provide for safe operation with minimum impact on noise sensitive uses.

#### 4.13 Bird Hazard Constraints

Birds and aircraft are potentially dangerous to one another. In the vicinity of any airport, therefore, steps have to be made to minimize the risk of collision between them.

Certain land uses and activities by their nature attract birds and these land uses near airports should be discouraged if not prevented. The zones of potential danger to aircraft around the St. John's Airport are shown in Annex III as three concentric circles: A) 2 mile-radius; B) 3-mile radius; C) 5-mile radius.

Zone A is the area of greatest potential hazard. Most of the Airport Environs area lies within this zone, where the preferred uses, considering potential bird hazards would be industrial and commercial uses, excluding any drive-in restaurants or other food-related commercial uses. Residential uses in any zone do not normally exacerbate the bird hazard constraint. For a detailed list of land uses and related bird hazards, see Annex III.

**Policy:**

- ▶ Within the Bird Hazard Zones shown in Annex III decisions upon permitting development shall in the first instance have regard to the policies set out elsewhere in this plan according to the designation of the area in which they are to be located and in addition the policies set out in Annex III.

**4.14 Servicing**

Proposals to provide trunk water and sewer mains to the airport environs are in hand and are essential to the realization of the areas potential. Adequate land will be serviced to meet this potential and development will only be permitted on these lands in order to minimize servicing costs, fully use those to be provided and limit unnecessary outward sprawl.

**Policies:**

- ▶ That the water supply system to the St. John's Northeast Expansion Zone be implemented.
- ▶ That the Penetanguishene extension of the Pleasantville Trunk Sewer be implemented.
- ▶ That storm sewerage in the airport environs be given adequate consideration in the design and implementation of new developments.
- ▶ That no activity at or emission be undertaken from the Robin Hood Bay waste disposal site which could be a hindrance to air navigation.
- ▶ That the route of the proposed Outer Ring Road through the airport environs area be utilized as a multiple-use service corridor for linear services such as roads, water and sewer mains, hydro lines and pipelines. The full cooperation of concerned agencies will be solicited for this section of the Outer Ring Road, and elsewhere on its route where appropriate.

**4.15 Road Network**

The planned regional road network will be capable of accommodating the potential development of the areas surrounding St. John's Airport and in part by providing excellent regional access will promote the area's development. Consideration will be given to other improvements to aid traffic flow and promote development as the rate of development dictates.

**Policies:**

- ▶ That the regional road network as depicted in the St. John's Urban Region Regional Plan be implemented.
- ▶ That the Outer Ring Road be given the highest priority so that its construction will enable the realization of development potential in both the Airport Environs and the Region as a whole.
- ▶ That the Penetanguishene Bypass and Airport Access Road be constructed in conjunction with the Outer Ring Road and the development of St. John's Airport facilities.
- ▶ That an Airport-Port/Downtown St. John's link from the eastern limit of the Outer Ring Road be developed.
- ▶ That a link to the Outer Ring Road from the planned industrial area to the east of Turbo Road be investigated for possible realization as the industrial area develops.
- ▶ That further research be carried out into the potential truck traffic generated by Airport Environs industrial areas, with particular emphasis on port destined or derived traffic, with a view to establishing truck routes and/or defined times for truck movements through city streets.

**ANNEX I**  
**NOISE EXPOSURE FORECASTS**

## **NOISE EXPOSURE FORECASTS**

The Noise Exposure Forecast (NEF) system used by Transport Canada to evaluate the real extent of noise impacts is dependent upon a number of factors:

- i) number of traffic movements;
- ii) type of aircraft in use;
- iii) proportional mix of aircraft;
- iv) runways utilized;
- v) glide and approach paths;
- vi) height of traffic on approach and departure paths;
- vii) noise and characteristics of aircraft types, during both landing and take-off procedures;
- viii) duration of noise;
- ix) frequency components of the noise (pure tones); and
- x) subjective analysis of the degree of annoyance of the noise. This evaluation is a result of a combination of physical and behavioural studies and is considered the most up-to-date method of evaluating noise problems with an airport.

NEF contours to reflect the anticipated aircraft movements in 1985 have been projected by Transport Canada.\* These contours are shown on Annex I and are based on the Optimistic Oil Scenario for 1985.

No NEF contours have been supplied for traffic movements beyond 1985, although projections for traffic volumes have been calculated. This absence of NEF contours for beyond the near future is clearly a major constraint for land use planning in the Airport Environs area.

*(1985 NEF contours have been replaced with 1996 contours).*

\* It should be noted that NEF contours are computer-plotted at a scale of 1:50,000. This means that any enlargement of the scale, eg., to 1:12,500 runs the risk of an inherent distortion. The NEF lines thus have to be evaluated in this light. Nonetheless, they are the best estimated of the anticipated locations of noise-affected areas.

The NEF contours were plotted based on an assumption of a mix of summer day traffic. Offshore helicopter traffic was incorporated into the noise forecast, however, the helicopters were assumed to be operating under IFR conditions and therefore would be flying at a much higher level than they would be under VFR conditions. This fact also may have distorted the NEF contours.