

Memo



Date: September 14, 2010
File: 0705-55
To: City Manager
From: City Clerk and Manager, Urban Land Use
Subject: Kelowna General Hospital Heliport Application - Request for Letter of Non-Objection

Recommendation:

THAT Council authorize the Mayor to write a letter of no objection to the proposed elevated heliport at the Kelowna General Hospital Ambulatory Care Centre.

Purpose:

To provide a letter of non-opposition to the heliport proposed at Kelowna General Hospital.

Background:

Helicopter access to Kelowna General Hospital (KGH) has been under consideration for a number of years. A British Columbia Ambulance Service-Interior Health Joint Task Force submitted a report on enhancing air ambulance transportation in the Interior Health area in 2004 that included a recommendation that a heliport be constructed at KGH as soon as possible. Specifically, it was recommended that a dedicated helicopter air ambulance service should be established in Interior Health to provide emergency transport of critically ill and injured patients. The IH-BCAS helicopter would be fully integrated with the existing ground based and fixed wing air ambulance systems to maximize flexibility of response.

There is sufficient volume of critical care transports within IH to justify the need for a dedicated air ambulance helicopter. It was estimated in the 2004 report there are up to 473 critical care transports within IH per year that would be eligible for helicopter transport. These transports are a mixture of trauma and critical medical cases. Accordingly, an elevated heliport has been proposed for the roof of the seven (7) storey Ambulatory Care Centre under construction at KGH.

The heliport will be used only for medical purposes and will not be used for non hospital or non-medical purposes. Estimated number of flights could be up to 2 per day; this is based on KGH statistics that show approximately 1.36% of emergency visits are referred to as CTAS 1 & 2 high risk visits. Alternatively, the number of flights could be as low as 100-150 annually. The recommendation in the 2004 report stated that initially, the IH dedicated helicopter service would be 12 hours a day, expanding to 24 hours a day based

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on patient need identified through annual program evaluation. Approximately 373 (79%) of the transports would occur during daylight hours.

The primary approach path is from Okanagan Lake east to KGH, with the secondary flight path from KGH towards the east (as attached). The proposed Hospital Precinct Zone has a maximum building height of four (4) storeys and the proposed flightpaths are not anticipated to create a conflict with the heights proposed in this new Zone.

Interior Health staff has indicated the proposed heliport has been known to the public for quite some time and that there has been communication with the neighbourhood regarding it.

IHA staff will be available during the Council meeting should Council have any questions pertaining to the design, construction or operation of the heliport. Development Services has no outstanding concerns with the proposed construction from a British Columbia Building Code or Building Bylaw perspective.

Internal Circulation:

Director, Airport
Director, Development Services
Director, Policy and Planning

Legal/Statutory Authority:

Transport Canada Canadian Aviation Regulations Standard 325 - Heliports. Once a heliport is approved by Transport Canada, the jurisdiction in dealing with the land use including the airspace and any complaints regarding operation or noise will shift from the City to Transport Canada.

Legal/Statutory Procedural Requirements:

Transport Canada requires local government consultation as part of the heliport application process.

Existing Policy:

Official Community Plan Chapter 18.1.24 “supports the provision of a helicopter landing pad that would provide convenient access to the Kelowna General hospital.” This policy is repeated in the new draft OCP.

Council Policy 351 Senior Government Referral Policy requires Council to seek public input on senior government referrals only when the referral is “inconsistent with established policies and guidelines.” This application is not inconsistent with any City policies or guidelines and consequently no public input is required.

External Agency/Public Comments:

Interior Health has provided an email of support from the Director, Airevac & CCT, British Columbia Ambulance Service.

Considerations not applicable to this report:

Financial/Budgetary Considerations:

Personnel Implications:

Community & Media Relations Comments:

Alternate Recommendation:

Submitted by:

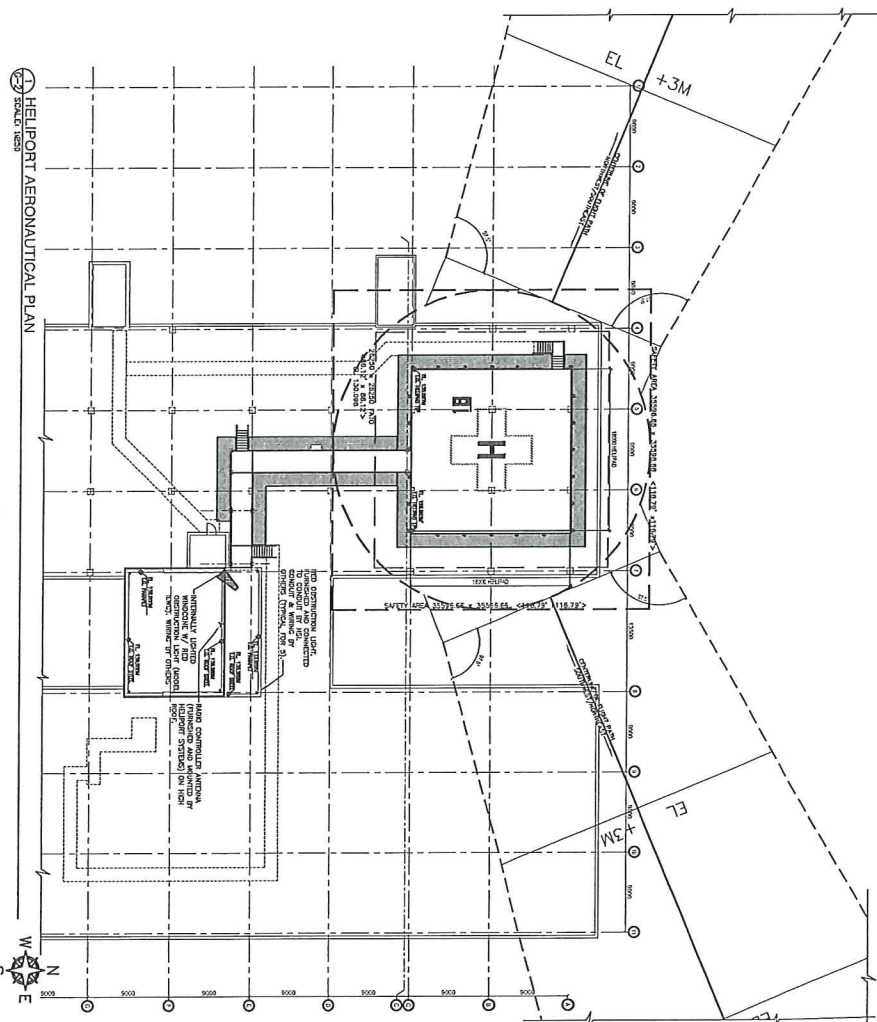
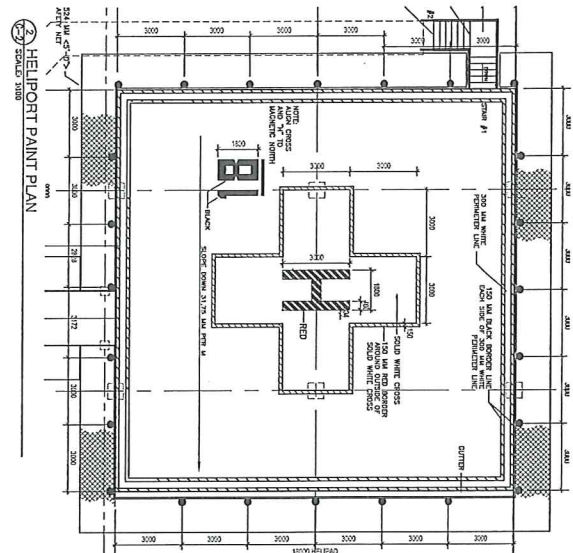


Stephen Fleming, City Clerk



Danielle Noble, Manager Urban Land Use

cc: Director, Airport
Director, Development Services
Director, Policy and Planning
D. Fowler, Director Central Okanagan Redevelopment, IHA



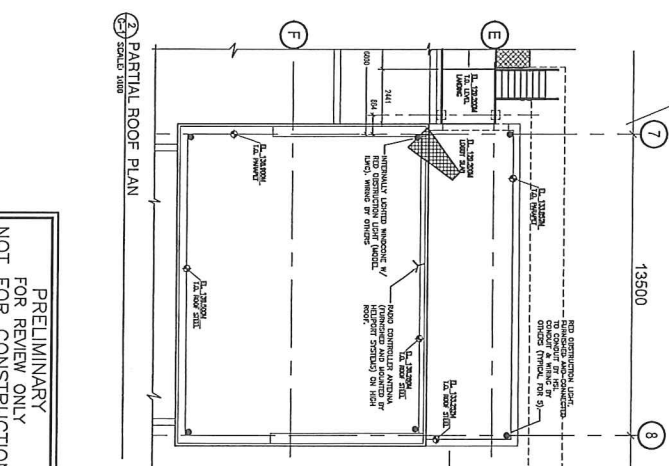
PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION

SHEET NO.
G-2

DESIGNED BY
DRAWN BY
CHECKED BY
DATE
PROJECT NO.

NEW ROOFTOP HELIPORT
FOR
KELOWNA GENERAL HOSPITAL
KELOWNA, BRITISH COLUMBIA

HELIPORT SYSTEMS INC.
55 Hudson Avenue
Suite 100
Montclair, NJ 07042
USA
Voice 1-973-509-0211
Fax 1-973-509-0131
E-mail info@heliport.com
Web www.heliport.com



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DRAWN: JH	REVISIONS:
SHEET NO.	
G-1	110C17X900 27OCT12000 25NOV12000 110B12X600 18JAN2010 18FEB2010 01MAY2010
	27APR2010 25MAY2010 15JUN2010 25AUG2010 01JUN2010

NEW ROOFTOP HELIPORT
FOR
KELOWNA GENERAL HOSPITAL
KELOWNA, BRITISH COLUMBIA


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Frank Mattia, ASCT
Alan M. Jung, ASCT
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Mark W. Urwin, C.A.*

*SENIOR ASSOCIATES:
Eric D. Teevens, C.Tech.
Richard G. Boulton, ASCT
Kin Man Wong, M.Sc., P.ENG., CP
James R. Ware, FPET*

July 9, 2010

VIA EMAIL: hal.owens@stantec.com

Stantec Consulting Ltd.
1100 - 111 Dunsmuir Street
Vancouver, B.C. V6B 6A3

Attention: Mr. Hal Owens, MAIBC, MRAIC, LEED A.P.

Dear Hal:

RE: **BUILDING CODE SUMMARY - LEVEL 7 HELIPORT
AMBULATORY CARE CENTRE
KELOWNA GENERAL HOSPITAL, KELOWNA, B.C.**

Our file 07-274

Further to our Fire Protection and Life Safety Building Code Concepts Report dated "Revised" April 29, 2010, this letter outlines the applicable building code requirements pertaining to the proposed rooftop "heliport" at Level 7 of the Ambulatory Care Centre at the Kelowna General Hospital currently under construction in Kelowna, B.C.

The Level 7 roof area consists of a helicopter landing area with a pre-manufactured helipad system, a "heliport" mechanical room, a service elevator lobby, a fire fighter's equipment closet, an elevator machine room, and two exit stairs. Also refer to the reduced floor plan included as **Attachment No. 1** to this report.

1.0 CONSTRUCTION REQUIREMENTS

The following outlines the applicable construction requirements for the Level 7 heliport:

Applicable Building Code:	British Columbia Building Code (BCBC 2006)
Applicable Building Code Part:	3
Number of Buildings:	1
Building Area:	6995 m ²
1st Storey:	Level 1
Building Height:	7 storeys
Sprinklered:	Yes (NFPA 13)
Major Occupancies:	Group B, Division 1 (Psychiatric Patient Care) Group B, Division 2 (Care Facility)
Construction Type:	Noncombustible
Floor Assemblies/Occupied Roof:	2-hour fire-resistance rating

1.1 Exits

In accordance with BCBC Sentence 3.3.1.3.(3), a means of egress is required from every roof intended for occupancy. Sentence 3.3.1.3.(5) specifies that a rooftop enclosure shall be provided with an access to exit that leads to an exit at the roof level (or on the storey immediately below the roof).

Mr. Hal Owens, MAIBC, MRAIC, LEED A.P.
Stantec Consulting Ltd.
Re: Level 7 Heliport, KGH

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As indicated on the floor plan included in Attachment No. 1, two exit stair shafts extend to the Level 7 roof, thereby providing access to two exits.

1.2 Structural

In accordance with Article 4.1.5.14., helicopter landing areas on roofs are required to be constructed in conformance with the requirements contained in the Canadian Aviation Regulations - Part III, published by Transport Canada.

1.3 Additional Requirements

Further to the requirements specified in the BCBC 2006, Section 2.13 of the British Columbia Fire Code 2006 (BCFC) contains additional requirements pertaining to helicopter landing areas on roofs. The fire safety measures specified in the BCFC include the provision of a fire alarm station, communication provisions to notify the Fire Department, smoking restrictions, fire watch provisions, refuelling requirements and inspection requirements for aviation fuel and oil separators. It is noted that NFPA 418, "Standard for Heliports," contains requirements for rooftop landing facilities. However, this standard for Heliports is not a referenced document in the BCBC 2006 and, as such, is not applicable relative to compliance with the B.C. Building Code.

2.0 CONCLUSION

In conclusion, the building code requirements pertaining to the provision of a helicopter landing area on the roof of the Ambulatory Care Centre as described in this letter will provide a level of fire protection and life safety which meets the minimum acceptable levels established by the requirements of the British Columbia Building Code 2006.

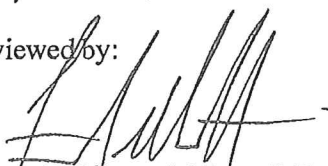
We trust that this is the information you require at this time. However, if you have any questions or comments, please do not hesitate to contact our office.

Yours truly,

LMDG BUILDING CODE CONSULTANTS LTD.


Eric D. Teevens, C.Tech.

Reviewed by:


for/ Glenn A. Gibson, M.Eng., P.Eng., CP

EDT/dd 07274070910.ltr.wpd
Attachment

cc: Mr. Brian Menzies, Graham Design Builders (Via Email: brianmen@graham.ca)
Mr. Frank Mattia, ASCT, LMDG Building Code Consultants Ltd.

ATTACHMENT NO. 1
REDUCED FLOOR PLAN

JULY 9, 2010

LEGEND

FIRE SEPARATIONS:

== 0-HOUR FIRE-RESISTANCE RATING

18 JUL 1976 00Z

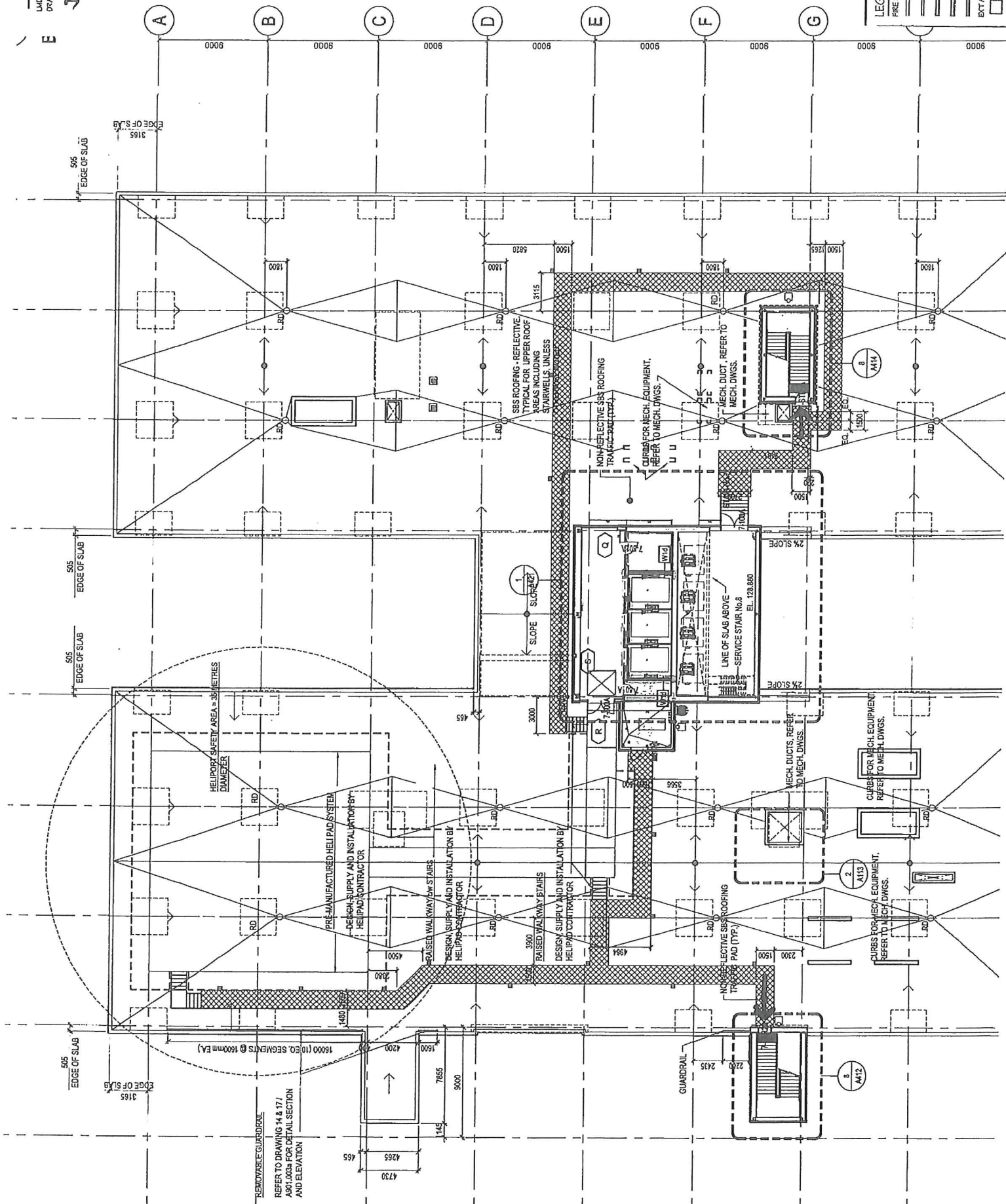
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— FIRE-RESISTANCE RATING —

1-1/2-HOUR FIRE-RESISTANCE R:

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EXT ANALYSIS:





Transport Canada
Safety and Security

Transports Canada
Sécurité et sûreté

Your file Votre référence

Our file Notre référence
5151-P882

2010-06-02

Mr. Mo Bayat
Chief Building Official - City of Kelowna
Development Services Department
1435 Water Street
Kelowna, BC V1Y 1J4

Dear Mr. Bayat

Re: Kelowna General Hospital - Heliport Construction

This letter has been prepared in response to a request from Graham Design Builders. The rooftop heliport proposal for Kelowna General Hospital, prepared by Graham Design Builders and Heliport Systems Inc, has been reviewed by Transport Canada Aerodrome Safety. The heliport location is in a built-up area, thereby requiring certification by Transport Canada.

Transport Canada will inspect the facility when it is completed to verify that it complies with Canadian Aviation Regulations (CAR) 305 and 325. We do not approve drawings or plans prior to construction. The heliport that has been proposed would be able to be certified if it meets the following requirements.

The heliport classification would be H1, requiring the use of multi-engine helicopters having the capability to continue flight or land safely with one engine inoperative. The heliport must meet CAR 305 and 325 and the National Fire Protection Association (NFPA 418). An emergency response plan is required for the heliport. The local fire department and all organizations identified in the plan shall be consulted.

Yours truly,

Ron German, Inspector
Transport Canada - Aerodrome Safety
400-3600 Lysander Lane,
Richmond, BC V7B 1C3

Canada

www.tc.gc.ca

21-0017 (0801-05)