

Introduction

In August 2008 Hampton Architects Inc. was requested by Labrador Grenfell Health to carry out a brief code review of their existing Aircraft Hanger Building located at the St. Anthony Airport.

The Code Review was initiated following a concern from OH&S with the height of the curb between the Hanger Area and the Office Section of the Building.

Preliminary drawings of the building prepared by The BAE Group and dated April 1984 were provided to HAI by QuadraTec Inc. The list of drawings includes:

	Cover Sheet
A-01	Site Plan
SD1	Site Development Plan
A1	Floor Plan
A2	Elevations and Section
M1	Mechanical Floor Plan
M2	Mezzanine Mechanical Plan & Section
E1	Electrical Layout and Details

As requested, and based on the drawings provided, which contained a limited amount of information, HAI carried out a brief Architectural Code Review. HAI used the 2005 National Building Code (NBCC) and the 2006 NFPA 101 Life Safety Code (LSC) for the basis of the review.

Code Review

The Building has a Gross Footprint Area (NBCC - *building area*) of 687 SM with a Mezzanine level of approximately 73 SM. The Mezzanine area represents approximately 10% of the *Building Area*. With the Mezzanine area at this percentage (less than 10% of the Mezzanine Area +/- 5 SM, the building can be considered as One Storey.

The Building is in general accordance with the codes; however, there are some exceptions. The Building is classified under NBCC Clause 3.2.2.66 as an Industrial Occupancy, Group F, Division 1, One Storey. The Building cannot exceed a *Building Area* of 800 SM. It can be of combustible or non-combustible construction. Clauses 40.1 to 40.6 and 42.1 to 42.6 of the NFPA 101 Code for Aircraft Hangers also apply to this Building.

The distance between Exits from the Building must not exceed 46 meters around the perimeter. The distances between exits from this building are 41 M in one direction and 59 M in the other direction. In order to comply with NFPA, a third exit should be added near the southeast corner.

The exit from the Mezzanine Level does not meet NFPA Clause 40.6.2, which requires the distance to be no more than 23M from any point within the floor area and be enclosed as an exit leading directly to the exterior. The distance within the Mezzanine of this building is acceptable; however, the exit is not enclosed.

The number of persons that can be accommodated on the Mezzanine Level is in accordance with the NBCC 3.1.17 at 13. This occupancy level coupled with an area of 73 SM and a Travel Distance to the stair of 12m +/- only requires one exit or access to exit from the Mezzanine.

There were no details on the drawings related to curbs between the Hanger Area and the offices and storage areas; however, NBCC Clause 3.3.5.4.(6) requires a curb of 150 mm high to contain fumes from the hanger area. HAI was advised that the height of the existing curb was 250 mm +/- . It may be possible to lower the curb to 150 mm as per NDCC to reduce the tripping hazard, unless there is a governing clause in the Mechanical portions of the Codes.

According to the drawings the building is primarily non-combustible construction including the construction of the Mezzanine.

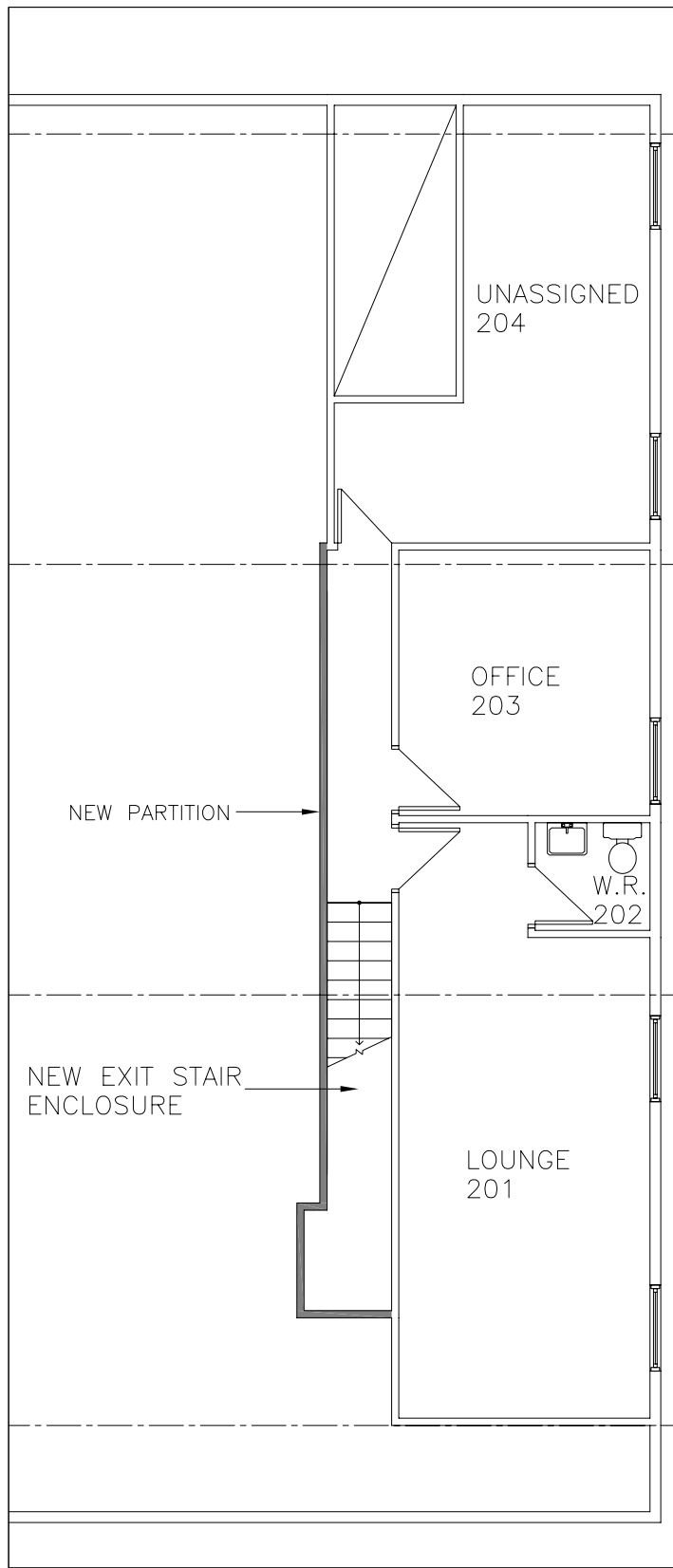
Due to the lack of information on the drawings, review of door hardware, finishes and other miscellaneous items could not be addressed at this time.

Recommendations

The only Architectural Recommendations that can be made at this time relates to the exit from the Mezzanine and the distance between the exits from the Hanger Area.

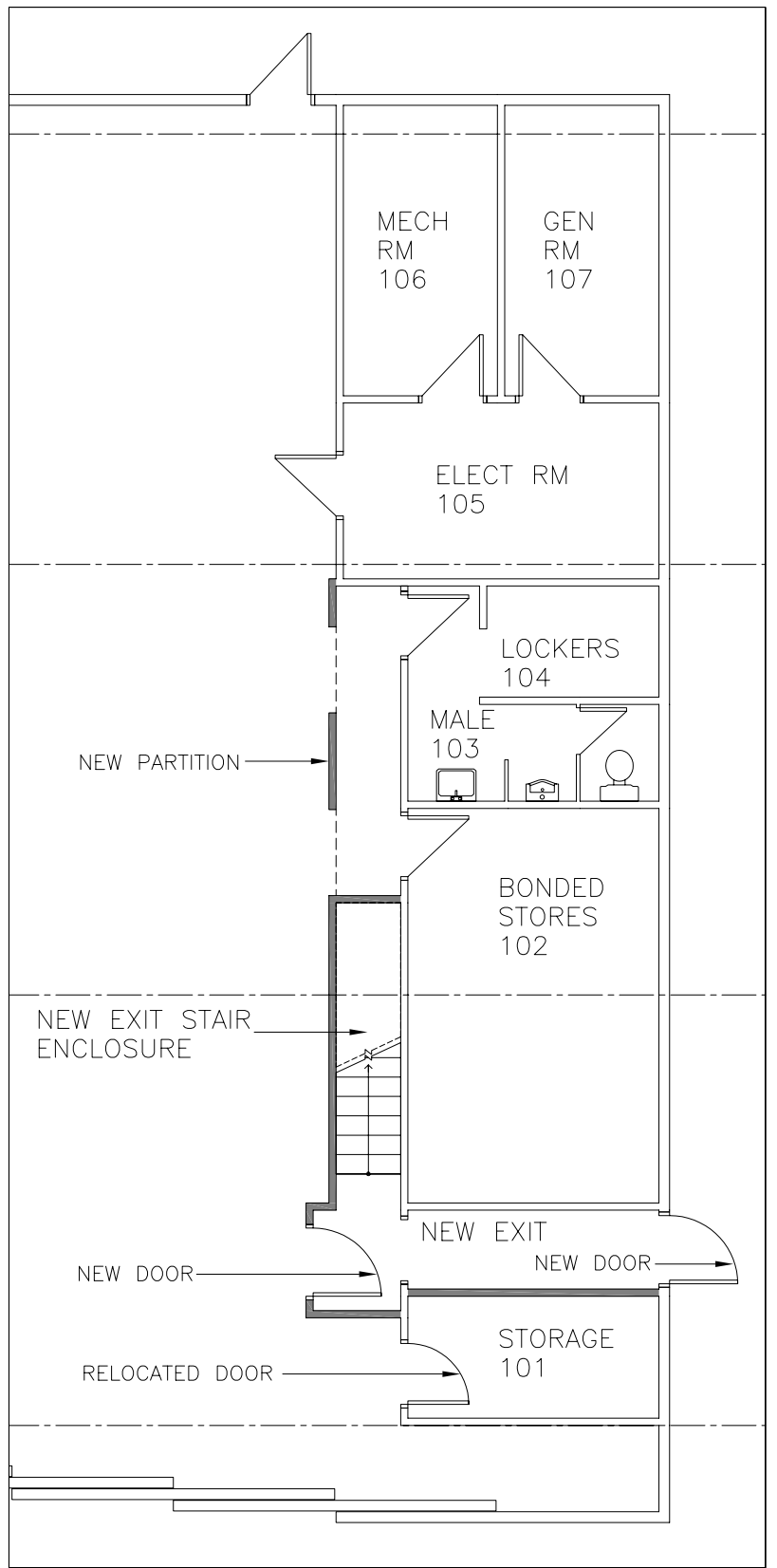
The exiting issues can be resolved with the addition of an enclosed stair between the Mezzanine Level and the ground floor that exits directly to the exterior. This can be accomplished by running a corridor through the Storage Room 101 and utilizing this corridor as another exit from the Hanger Area. The door to the storage can be relocated south towards the large hanger doors.

Refer to attached Plan showing the New Exit.



PART PLAN – MEZZANINE

SCALE 1:100



PART PLAN – GROUND FLOOR

SCALE 1:100



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PROJECT TITLE

HANGAR BUILDING
LABRADOR GRENFELL HEALTH
ST. ANTHONY AIRPORT
PROPOSED NEW EXIT PLAN

ST. ANTHONY

DRAWING TITLE

PROPOSED NEW
EXIT PLAN

SCALE 1:75

DATE SEPT 2008

DRAWN MD

CLIENT PROJECT No. ----

DRAWING No. ----

REF DWG No. ----

HAI PROJECT No. 102-21