Strata Space Plan Subdivision Guide Variance Application Requirements

Introduction

The *Alberta Land Titles Act* allows a type of subdivision called strata space plan subdivision (strata). Strata are independent of physical structures and are determined by planes or curved surfaces having a defined geodetic elevation. They create volumetric spaces divided by property lines.

Strata allow ownership of parcels that may be side-by-side or one above the other or overlapping in many different configurations. Generally there are one or more strata parcels, as well as a "remainder parcel" that is related to the original parcel. To view the text of the *Alberta Land Titles Act* related to strata, see Appendix A.

Developments with strata affect regulations of several different City departments. Therefore the applicant and their project team (architect, surveyor, lawyers, etc.) are advised to contact the City's Local Area Planning and Implementation Business Unit in order to arrange an initial meeting with the appropriate City representatives (Local Area Planning and Implementation, Law, Development Engineering, Building Regulations, etc.) to discuss their project. Furthermore, an application for subdivision must be made before the building code implications of a development with strata can be considered.

Developments incorporating strata often do not comply with the 2006 edition of the Alberta Building Code (ABC). The ABC does not specifically mention what to do when strata boundaries pass through a development - therefore the City interprets strata boundaries to be equivalent to fee-simple property lines. Numerous ABC requirements apply when fee-simple property lines pass through a development. Many of these requirements are impracticable to comply with in developments with strata. As a result, a Variance (Alternative Solution) application is required for developments with strata.

The City proposed changes to the ABC that will specifically address requirements for buildings subdivided into strata. These changes have been accepted by the Government of Alberta and will be included in the next edition of the ABC, which is expected to be issued by the Government in the coming months. As a result, when the next edition of the ABC is issued, there will probably be no need for a Variance when a building is subdivided into strata. However, until that time, a Variance is still required.

Variance applications are permitted to be based on the expected changes to the ABC (see Appendix B of this document). The information required in support of these Variances, and the explanation for them, is listed below.

Variance Application Requirements and Process

The following is required in support of a Variance application for a development incorporating strata:

- 1) Completed 'Request for Specific Variance' form, which includes the following information:
 - a) In the 'Code or Standard to be Varied' section of the form, the following provisions of the ABC should be listed:
 - i) 3.2.3.1.(1) Limiting Distance and Area of Unprotected Openings.
 - ii) 3.2.3.4.(1) Party Walls There is no requirement to build walls along the strata boundaries that pass through the building. However, if walls are voluntarily being constructed along a strata boundary, 3.2.3.4.(1) is considered to be varied if those walls will not comply with 3.2.3.4.(1).
 - iii) 3.4.2.5.(3) Location of Exits this is considered varied if it is necessary for occupants to cross over an adjacent strata or fee simple lot in order to reach a public thoroughfare such as a sidewalk.
 - iv) Other varied provisions of the code, if any.
 - v) For each varied provision above, the associated 'Objectives' and 'Functional Statements' should be provided these can be found in Division A, Part 4 of the ABC.
 - b) Confirmation that the project is considered a single 'building' as defined in the ABC. If the project will be divided into multiple separate buildings, verification that the methods used to divide the project into separate buildings (firewalls, walkways, physical separation, etc.) comply with the ABC.
 - c) If walls are being constructed along strata boundaries that pass through the building, and those walls do not comply with Sentence 3.2.3.4.(1), confirmation that 2 hour masonry or concrete fire separations will be constructed at these locations as an alternative.
 - d) Identification of any of the following building services and systems that are shared among strata owners.
 - structural systems
 - building envelope
 - exits
 - firefighting access
 - firewalls and fire separations
 - fire alarm, communication and control facilities
 - sprinkler and standpipe systems
 - emergency power generation and distribution systems
 - emergency lighting systems
 - electrical supply and distribution systems
 - plumbing and water supply systems
 - elevators
 - smoke control and pressurization systems
 - heating ventilating and air conditioning systems
 - any other systems or services not specified above

- e) Identification of locations where it is necessary for occupants to cross over another strata or fee simple lot in order to reach an open public thoroughfare such as a sidewalk.
- f) Explain what alternative measures will be put in place to offset the hazard associated with the items above (i.e. compliance with expected changes to the ABC and legal provisions in an Easements, Covenants and Restrictions (ECR) or other type of legal agreement).
- 2) Site plan (11" x 17" size) showing an outline of the properties included in the development; the dimensions of every existing and proposed parcel, at grade level; and the names and locations of the streets and lanes which abut the site.
- 3) Coloured architectural plans and sections (11" x 17" size) which show where the strata are located throughout the building.
- 4) Legal agreement(s) associated with the strata proposal (i.e. ECR agreement), addressing areas of non-compliance with the building code.
- 5) Strata Space Subdivision Plan (survey drawings)

Items 1, 2, 3 and 5 are required to be submitted prior to issuance of the full building permit. If all the required information does not fit on the Request for Specific Variance form it is acceptable to attach a supplementary letter or report to the form. Tentative survey drawings are acceptable at the time of application.

Note that a subdivision application for the strata must be made before building regulations will review the Variance request. Detailed instruction on the subdivision application process will be provided at the project Pre-Application (initial) meeting.

Note also that if a strata subdivision of a development is desired after a building permit has already been issued for the development, an application for revised building permit must be made, in accordance with Division C, Clause 2.2.11.1.(1)(d) of ABC 2006.

Building Regulations must be satisfied that the appropriate legal agreements will be provided by the applicant before full building permits will be issued. If a full building permit is desired prior to execution of the legal agreements, the owner of each strata is required to confirm, in writing, that the legal agreements will be provided.

The registered subdivision plan and the executed legal agreements must be received by Building Regulations before the Variance can be issued and before final occupancy of the development will be permitted.

Explanation of Variance Application Requirements

The numbering in the explanation refers to the list above.

(1)(a)(i) 3.2.3.1.(1) – Limiting Distance and Area of Unprotected Openings is varied.

This provision of the ABC requires a measurement to be made from the exterior wall to a property line, centerline of a street, or a line between two buildings, in order to determine the area of unprotected openings that are allowed in the exterior wall. Once the area of unprotected openings is determined, specific requirements for the fire resistance rating, construction type and cladding type of the exterior wall apply. This provision is considered varied in projects with strata because it is impracticable to build an 'exterior wall' along the internal strata boundaries, particularly where they run horizontally through the building.

Where strata boundaries pass very close to an exterior wall, the design of the exterior wall often precludes compliance with requirements for the area of unprotected openings. It is often punitive to require that limiting distance be measured between the exterior wall and the strata boundary. In many cases, there is ample space between the exterior wall and an adjacent property or building.

In consideration of this, it is considered adequate to measure the limiting distance between the exterior wall and the 'outside property lines of the land shown as a single parcel on a plan of survey registered under the Land Titles Act,' otherwise known as the outside property lines of the fee simple parcel from which the strata parcels are subdivided. As a result, no fire separations are required to be constructed along strata boundaries, and in most cases, restrictive covenants or easement agreements for "nobuild" zones will not be required in order to satisfy the requirements of the ABC. These requirements are reflected in the expected changes to the ABC (see Appendix B of this document). Note that no-build zones may be required by other City departments for other reasons.

(1)(a)(ii) 3.2.3.4.(1) - Party Walls is varied.

This is considered varied if walls are being constructed along a strata boundary and those walls will not comply with 3.2.3.4.(1). If the owners wish to construct a subdividing wall for the purpose of separating the two real estate entities, and that wall is shared by two different owners, the wall is deemed to be a party wall, as defined in the ABC. A party wall is required to be constructed as a firewall in accordance with Subsection 3.1.10. of the ABC. This requirement is based on a change that was made to the 2010 edition of National Building Code of Canada (NBC), which is expected to be included in the next edition of the ABC (see Appendix C of this document).

In many cases it will be impracticable to meet these requirements in buildings with strata, especially in very tall buildings. If the party wall/firewall requirements of the ABC cannot be met, a Variance to 3.2.3.4.(1) must be requested - 2 hour masonry or concrete fire separations are permitted to be constructed as an alternative to firewalls in projects with strata.

(1)(a)(iii) - 3.4.2.5.(3) - Location of Exits is varied.

This is considered varied if it is necessary for occupants to cross over an adjacent strata or fee simple lot in order to reach a public thoroughfare such as a sidewalk. This provision requires exits to be 'accessible at all times.' In developments with strata, there

is a concern that the owners of the various strata will block off exits – either inadvertently or deliberately - such that they are not 'accessible at all times.' Therefore, in some cases, the interpretation is that 3.4.2.5.(3) is not complied with. The hazard associated with this non-compliance is usually offset by providing an ECR or other type of legal agreement that requires all owners to ensure that all parties have adequate access to exits, and that all owners maintain the means of egress in a usable and safe condition.

(1)(b) - Confirmation that the project is considered a single 'building.'

If each strata within a development is considered a separate building, it might be possible to use the ABC to reduce the level of fire protection and life safety to an unacceptable level. For example, each strata could be classified individually under Subsection 3.2.2., which in many cases would allow reduced levels of fire protection for that part of the building. In addition, separate fire alarm and sprinkler systems might be installed, which could further endanger the building and its occupants. Conversely, if the project is classified as a single building, most of these concerns are minimized. The entire extent of the building, including all of its strata, must be taken into account when classifying the building under Subsection 3.2.2., which usually results in more robust fire protection features. It also makes it more likely that a single fire alarm and sprinkler system will serve the entire building, which adds to the level of fire protection and life safety. The expected changes to the ABC acknowledge this.

However, if the building is considered a single building, various building services and systems, such as fire alarm and sprinkler systems, may cross strata boundaries. This creates some additional concerns which are addressed later in this document.

Note that it is acceptable to divide projects with strata into separate 'buildings,' as defined in the ABC, as long as the separate buildings are divided in a code-compliant fashion (i.e. by firewalls, walkways or by physical separation).

(1)(c) - If walls are being constructed along strata boundaries...

See explanation for (1)(a)(ii) above.

(1)(d) – Identification of any of the following building services and systems that are shared ...

The sharing of building services and systems among strata owners is a concern. Shared building services or systems could be damaged or shut down, either inadvertently or deliberately, to the detriment of other strata owners and occupants of the building. In order to offset the hazard, legal agreements can be drafted that ensure all owners use and maintain the shared building services and systems in a co-operative manner.

Note that certain City of Calgary services may be required to be provided to each individual strata (e.g., water, sewer). Applicants should contact 3-1-1 and ask to be directed to Water Resources - Infrastructure Planning - Development Engineering, for more information.

(1)(e) - Identification of locations where it is necessary for occupants to cross over another strata or fee simple lot in order to reach an open public thoroughfare...

See explanation for (1)(a)(iii) above.

(1)(f) - Explain what alternative measures will be put in place to offset the hazard associated with the items above...

The expected changes to the next edition of the ABC are included In Appendix B of this document. The requirements listed are considered to be one of the acceptable alternatives to Sentence 3.2.3.1.(1) in projects incorporating strata.

If 3.2.3.4.(1) is varied, 2 hour masonry or concrete fire separations are considered an acceptable alternative to code-compliant party walls/firewalls.

If 3.4.2.5.(3) is varied, or if building services or systems are shared, the hazard is offset by providing certain provisions in an ECR or other type of legal agreement.

Appendix A

Alberta Land Titles Act – Strata Space - Section 86

- 86(1) In this section, "strata space" means volumetric space whether it is
 - (a) located below or above or below and above the surface of the land, or
 - (b) occupied in whole or in part by any structure,

and that is shown as a strata space on a strata space plan.

- (2) A registered owner subdividing volumetric space, other than mines and minerals lying on or under the surface of the land, into strata spaces shall present a plan of survey to the Registrar for registration under this Act.
- (3) Volumetric spaces shall not be subdivided into strata spaces unless the land in relation to which the subdivision is to be made is shown as a single parcel on a plan of survey registered under this Act.
- (4) The boundaries of a strata space
 - (a) may consist of vertical, horizontal or inclined planes or curved surfaces that are satisfactory to the Registrar, and
 - (b) shall conform to or lie within the boundaries of a single parcel referred to in subsection (3).
- (5) A strata space plan shall
 - (a) show
 - (i) the boundaries of the volumetric space that is to be subdivided into strata spaces, and
 - (ii) the boundaries of each strata space,
 - (b) include a diagram to scale of the survey of the perimeter of the land affected,
 - (c) have noted on it the elevation of each corner or angle of the strata spaces in relation to monuments of known elevation or survey control markers in accordance with the *Surveys Act*,
 - (d) assign a suitable letter or number to each strata space and designate each space as a strata space,
 - (e) be signed by the registered owner of the land, and
 - (f) show any other details that the Registrar may require.
- (6) On registration of the strata space plan, the Registrar shall cancel the existing certificate to title to the extent necessary and issue new certificates of title to the strata spaces shown on the strata space plan.

Appendix B

Expected Changes to the Alberta Building Code – Addressing Strata Space Plan Subdivisions

The expected changes regarding strata to the next edition of ABC are shown in bold text below:

Division A, Alberta Building Code 1.3.3.5. Buildings Divided into Strata Space Plan (see Appendix A)

1) Where subdividing volumetric space creates a boundary in or through a building which otherwise complies with this Code, and shown as strata space on a strata space plan, such a building or portion of a building:
a) is considered to be a single building not requiring internal firewalls or party walls along the strata space property lines, and
b) limiting distances are measured only to the outside property lines of the land shown as a single parcel on a plan of survey registered under the Land Titles Act and need not be considered between strata space plan parcels where these parcels are a part of the same building.

Division A, Alberta Building Code Appendix A-1.3.3.5. Buildings Divided into Strata Space Plan Lots

The Alberta Land Titles Act allows a type of subdivision called strata space plan subdivision. Strata space plan boundaries are independent of physical structures and are determined by planes or curved surfaces having a defined geodetic elevation. The subdivision creates volumetric spaces divided by property lines. This type of subdivision allows ownership of parcels that may be side-by-side or one above the other or overlapping in many different configurations. The parcels are defined by property lines and may be in single or multiple buildings sharing some or all of these types of systems and services:

- structural systems
- building envelope
- exits
- firefighting access
- firewalls and fire separations
- fire alarm, communication and control facilities
- sprinkler and standpipe systems
- emergency power generation and distribution systems
- emergency lighting systems
- electrical supply and distribution systems
- plumbing and water supply systems
- elevators
- smoke control and pressurization systems
- heating ventilating and air conditioning systems
- building control and security systems, and
- any other systems not specified above

The effects of the code article are that:

- There is no requirement for adjacent parcels to be separated by firewalls. The separations required by Subsections 3.1.3. and 3.2.2. are used as though the building is one building.
- Spatial separation is not enforced across strata space plan boundaries, as long as the building as a whole conforms to spatial separation requirements from the outside walls of the building to the boundaries of the parcels, as well as any building to building requirements.
- Exit routes are not required to lead directly to the outside from each parcel, as the parcels often share the exit facilities.
- Structural systems, life safety systems and building services are not required to be separate for each parcel, as they are often shared by the various parcels.

The above is based on the following documents:

- Alberta Municipal Affairs, Building and Fire Codes, Proposed Change -01.03.03.05 Buildings Divided into Strata Space Plan Lots.docx, created 2011-04-26, Last modified:12/19/12.
- 2. E-mail, re: Strata Draft for BTC, prepared by Alberta Municipal Affairs, dated January 10, 2013.
- 3. Minutes of the First Building Technical Council Meeting of 2013, prepared by the Safety Codes Council, dated January 9 and 10, 2013.

These documents are available from the City of Calgary if requested. Note that the actual text of the next edition of the ABC may be different.

Appendix C

Expected Changes to the Alberta Building Code – Addressing Party Walls

The expected changes regarding party walls to the next edition of ABC are shown in bold text below:

Division B, Alberta Building Code 3.2.3.4. Party Wall

1) A party wall shall be constructed as a firewall. (See Appendix A)

Division B, Alberta Building Code Appendix A-3.2.3.4. Party Walls

By definition, a party wall is a wall jointly owned and used by two parties under easement agreement or by right in law, and is erected at or upon a line that separates two parcels of land that are, or are capable of being, separate real estate entities. With the exception of some Part 9 residential occupancies, both Part 3 and Part 9 of the Code require that, where party walls are constructed on property lines, they be constructed as a 2- or 4-hour firewall (see also Article 9.10.11.1.). Buildings on each side of a party wall that is constructed as a firewall are considered as separate buildings (see Article 1.3.3.4. of Division A).

In a Part 9 residential building that has no dwelling unit above another, a party wall constructed on a property line between two dwelling units need not be constructed as a firewall, but must be constructed as a continuous fire separation that extends from the top of the footings to the underside of the roof, with a fire-resistance rating of at least 1 hour (see Article 9.10.11.2.). These party walls do not create separate buildings.

Where two parties share a party wall on a property line, each party is responsible for fire safety in their unit, but is still subject to possible fire risks from activities in the adjoining units. The separating party wall is intended to provide a significant degree of fire protection between adjacent units, often exceeding even that required between suites in multiple-unit residential and non-residential occupancies.

When a building spans a property line, constructing a party wall on the property line is not mandated by the Code, but subdividing the building at the property line is an option the owner can consider. The Code permits a building constructed on more than one property to be designed as a single undivided building, whether the properties have a common owner or not. However, if a subdividing wall is constructed on the property line within the building for the purpose of separating the two real estate entities and is shared by two different owners, the wall would, by definition, be deemed a party wall. As such, this party wall would need to meet the construction requirements described above, depending on the building's occupancy classification and size.

A building that spans two or more properties, but that does not have a party wall at the property line, may need to address the Code requirements for party walls in the future.

The above is based on the National Building Code, 2010. Note that the actual text of the next edition of the ABC may be different.

This Strata Space Plan Subdivision Guide is effective 2014 November 27.