
BULLETIN 2012-001-BU

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DEMOLITION OF BUILDINGS

Demolition projects, by their nature, are a higher risk activity requiring preplanning and care to ensure that both the public and workers are safe as well as to minimize impacts on adjacent properties.

The City of Vancouver is implementing new procedures to ensure that demolition activities in the city are undertaken in a safe, reasonable and sustainable manner. These requirements complement those already in place by WorkSafe BC and will be effective March 29, 2012.

General City Requirements

Demolition can range from very simple to complex depending on the building's type of construction, size, location and soil conditions. The experience of the contractor and preplanning of the contractor and/or consultant are also important considerations when undertaking a demolition project. Knowledge of the type of construction and materials used is required to ensure that the building can be safely disassembled, materials can be separated and hazardous materials removed and disposed of in an appropriate manner. It is expected that any items not allowed in landfills be recycled or reused in an appropriate manner.

Demolition of 1 and 2 Family Houses

Demolition of 1 and 2 Family Houses account for the majority of demolition projects in the City of Vancouver. These demolitions are generally simple in nature, but still require some degree of preplanning and preparation. One of the major issues is the identification of any hazardous materials and appropriate disposal of these materials. Please see [Bulletin 2000-065-EV Hazardous Materials Reporting](#). Another is ensuring adjacent neighbours and the public in the vicinity of the project are protected and that debris and dust are fully contained.

These simple demolition projects are less likely to require an extensive construction safety program or demolition plans prepared by a Professional Engineer. A simplified construction safety plan is acceptable provided all major safety issues are addressed. An example of some major safety issues that would need to be addressed are: when buildings are located close to property lines; on sloped or unstable sites; have masonry chimneys; and when the removal of the foundation walls result in an excavation having a depth greater than the distance from the adjacent property line (45 degree slope maximum). In the event of unusual or challenging site conditions, a detailed Construction Safety Plan and Demolition Plan or a Demolition Plan prepared by a Professional Engineer registered in the Province of BC may be required at the discretion of the Building Inspector.

A declaration is required to be signed by the owner, or owner's representative and Demolition Contractor for all 1 and 2 family house demolition projects in order to ensure that all parties are aware of and follow these requirements.

Demolition of Commercial, Industrial and Residential Buildings Containing More Than Two Dwelling Units

Demolition of commercial, industrial and residential buildings containing more than two dwelling units tend to be more complicated and will require an enhanced level of planning and preparation by the professionals involved in the demolition and building process. These buildings will require a Construction Safety Plan

including contact numbers of the General Contractor and Demolition Contractor, demolition details, a site plan, traffic management plan and fire safety plan.

In addition, all buildings greater than three storeys in building height, over 600 m² in building area, constructed with pre-stressed concrete, located on sloped or unstable sites or an excavation depth over 1.2m, will require a demolition plan signed and sealed by a Professional Engineer registered in the Province of BC. These buildings will also require a Construction Safety Officer on site during the demolition. Commercial, industrial and residential buildings containing two or more dwelling units not meeting the above noted criteria will require review by a Building Inspector to determine if a demolition plan prepared by a Professional Engineer registered in the Province of BC and a Construction Safety Officer are required.

A declaration is required to be signed by the owner, or owner's representative and Demolition Contractor for all Demolition of Commercial, Industrial and Residential Buildings Containing More Than Two Dwelling Units demolition projects in order to ensure that all parties are aware of and follow these requirements.

Demolition Plan

A "Demolition Plan" is a detailed description of the systematic and sequential procedure for cutting, destroying, removing or otherwise demolishing a building or structure in a manner that does not endanger the health or safety of any persons or negatively affect the integrity of any other buildings, structures, buried or above ground utilities or any other real property. This plan must be provided by the Demolition Contractor or Professional Engineer where required.

Engineered Demolition Plans (Deconstruction Procedures)

The City's new demolition requirements are consistent with WorkSafe BC requirements which require demolition plans prepared by a Professional Engineer registered in the Province of BC if the demolition could endanger a person or stability of the property, adjoining property or structures.

Geotechnical Review

A geotechnical review by a Professional Engineer registered in the Province of BC is required for the demolition of buildings located on unstable slopes, adjacent to fisheries sensitive areas, in peat soils and where the excavation is greater than 1.2m in depth. The geotechnical review should address the entire construction process from demolition through to final occupancy.

Hazardous Materials

The demolition process can expose hazardous materials such as asbestos, PCBs, and oils tanks. A Hazardous Material assessment and completed Hazardous Materials Report Form must be filled out and reviewed by City staff before a permit can be issued and any demolition can occur.

Please see [Bulletin 2000-065-EV Hazardous Materials Reporting](#).

Salvaging and Reuse (Green Demolition)

Demolition carried out in the traditional manner may generate large amounts of waste in landfills some of which could be easily recycled and/or reused. The City is actively working to develop its green building program which will include more appropriate salvaging and recycling activities as part of demolition work. It is expected that demolition contractors will recycle construction materials which are currently banned or prohibited from disposal, such as asphalt, cardboard, cement and concrete, clean fill and soil, gypsum / drywall, and green waste (landscaping). The remaining material is to be transported and disposed of in an appropriate manner unless it can be reused or recycled.

Truck Safety and Enforcement Program

The City of Vancouver has a truck safety and enforcement program in partnership with the Vancouver Police. A major focus of this program is aimed at contractors and trucking companies carrying out activities at construction sites and businesses. Some specific requirements of this program are:

1. All truck operators must operate the vehicle in a safe and courteous manner and in full compliance with Provincial and Federal Motor Vehicle and Trucking Regulations.
2. All truck operators must comply with City of Vancouver By-laws regulating truck use, including truck route, engine brake noise, weight and load securement (tarping) provisions.
3. All vehicles must be inspected prior to leaving a site to ensure no debris is on the vehicle and that no debris or rocks are between the dual tires.

Penalties

Failure to meet any of the requirements in this bulletin may result in a stop work order, a request for charges under the applicable by-laws, or a review of your business licence.

For additional information regarding the Demolition Permitting process please contact the Enquiry Centre at 604-873-7611.

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