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The Sterling Report: Builders, Developers and the Environment

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The building community must take a closer look at all environmental factors that affect a potential building site or even a property with an existing building considered for purchase or lease.

Why?

Because Environment is more than a word! It has, in the past, been used as a battle cry by critics against development.

These same critics seem to forget that we all occupy the same earth; that through development, building, and industry our cultures are defined.

Ultimately, there is very little virgin land left, in or around our urban and industrial centres. Even areas which appear untouched may have been used for mineral resource extraction, forestry or a dump site.

Development or building is our way of improving this existing environment. The prudent building owner or builder will work hand in hand with the community concerned about the environment. In some provinces and states, this approach is now mandated by law. In B.C. we are fortunate to have a government and people who belive that the building development community will be responsive to environmental considerations for reasons other than legislation. We should demonstrate that this confidence is deserved. Development can provide the opportunity to improve the environment.

We need to first determine its status by using an approach known as an *Environmental Audit*.

Essentially, an environmental audit is an investigation of historic and existing conditions to determine the current status and predict future problems as well as identifying opportunities for improving the quality of a building or site. Experience has shown that the most economical and effective method for conducting building environment and site audits is a phased approach.

The phased environmental audit involves the following steps:

Phase One: Historical Site Assessment

Phase One includes a review of the past land uses of the site to assess the potential for site contamination. The historical uses are determined through reference to city directories, land use maps, photographic materials and other archival information. Also, relevant findings of recent work such as geological surveys are included in the reviews. If the historic review determines a possibility of building contamination from past uses, the environmental audit will progress to Phase Two. However, if Phase One determines that site or building contamination would not have resulted from past (non-industrial) uses, the environmental audit would be complete.

Phase Two: Field Investigation

If required, Phase Two involves the development and implementation of a sampling strategy to quantify the degree of site or building contamination. Specific parameters to be monitored are determined from information gathered in Phase One, but likely include air quality, geophysical and soil vapour sampling.

Phase Three: Mitigation Plan

Phase Three is the development of a Mitigation Plan for the site or building, which would be dependant on the findings from Phases One and Two. The Mitigation Plan includes an evaluation of possible treatment technologies and the development of a cleanup and retrofit programme.

In the end, the environment of the site or the building is much improved and everyone benefits.