

5. NOTICE OF MOTION

The following Notice of Motion was submitted by Oscar Alpers under Council Standing Orders 3.10.1.

That the Spreydon Heathcote Community Board urge the Council to improve the amount and quality of information provided in Land Information Memoranda.

Explanatory Note

Most City residents have obtained a LIM prior to purchasing their homes since Section 44 of the Local Government Official Information and Meetings Act (copy attached) came into force on 1 December 1992.

The Christchurch City Council's practice has always been to provide only the minimum level of information required by the Act to be contained in a LIM, presumably for financial reasons or fears of exposure to claims. The Council now charges \$215 for a LIM and an additional \$25 for a CD containing Building Act and Resource Management Act information which has to be obtained separately.

This minimalist approach is particularly relevant where information regarding the risk of liquefaction is concerned. Although the liquefaction potential in Christchurch has been known to vary from high to very low, the standard statement in a LIM for all residential properties in recent times has been under the heading:

"Other Related Property Information"

- **Property located in XYZ Community Board Area.**
- **Property located in XYZ Ward.**
- **Property or part of property located within urban area.**
- **ECan Liquefaction Assessment**

ECan holds indicative information on liquefaction hazard in the Christchurch area. Information on liquefaction can be found on the ECan website at www.ecan.govt.nz/liq or by calling ECan Customer services on Ph.03 353 9007. The Christchurch City Council may require site-specific investigations before granting future subdivision or building consent for the property, depending on the liquefaction potential of the area that the property is in.

- **ECan Natural Resources Regional Plan**

There may be policies or rules within Environment Canterbury's Natural resources Regional Plan that regulate land use on this site. Queries regarding the impact of the Natural resources Regional Plan on the property should be made to ECan Customer services on Ph.03 353 9007

Following the link to the ECan website leads to a single page of information including 4 lines on liquefaction risk in Christchurch City which I have underlined on the attached pages, which tells you that the City Council has the detailed information,(not ECan!) and now provides 4 relevant FAQs including a recently added information sheet regarding liquefaction risk potential.

I think most City homeowners affected by liquefaction would say that the LIM they got from the Council gave them no idea of the hazard they faced.

Other Councils have provided much more information with their LIMs, including planning maps and other information that is in the District Plan, copies of building and resource consent applications and plans, information regarding planned Council work in the vicinity and even non- Council information such as school zones etc. Waimakariri District have provided with LIMs for properties in Kaiapoi maps showing the level of risk of liquefaction, as well as the other information mentioned, for \$170.

44A Land information memorandum

(1) A person may apply to a territorial authority for the issue, within 10 working days, of a land information memorandum in relation to matters affecting any land in the district of the authority.

(2) The matters which shall be included in that memorandum are—

(a) Information identifying each (if any) special feature or characteristic of the land concerned, including but not limited to potential erosion, avulsion, falling debris, subsidence, slippage, alluvion, or inundation, or likely presence of hazardous contaminants, being a feature or characteristic that—

(i) Is known to the territorial authority; but

(ii) Is not apparent from the district scheme under the Town and Country Planning Act 1977 or a district plan under the Resource Management Act 1991:

(b) Information on private and public stormwater and sewerage drains as shown in the territorial authority's records:

(c) Information relating to any rates owing in relation to the land:

(d) Information concerning any consent, certificate, notice, order, or requisition affecting the land or any building on the land previously issued by the territorial authority (whether under the Building Act 1991, the Building Act 2004, or any other Act):

(e) Information concerning any certificate issued by a building certifier pursuant to the Building Act 1991 or the Building Act 2004:

(ea) information notified to the territorial authority under section 124 of the Weathertight Homes Resolution Services Act 2006:

(f) Information relating to the use to which that land may be put and conditions attached to that use:

(g) Information which, in terms of any other Act, has been notified to the territorial authority by any statutory organisation having the power to classify land or buildings for any purpose:

(h) Any information which has been notified to the territorial authority by any network utility operator pursuant to the Building Act 1991 or the Building Act 2004.

(3) In addition to the information provided for under subsection (2) of this section, a territorial authority may provide in the memorandum such other information concerning the land as the authority considers, at its discretion, to be relevant.

(4) An application for a land information memorandum shall be in writing and shall be accompanied by any charge fixed by the territorial authority in relation thereto.

(5) In the absence of proof to the contrary, a land information memorandum shall be sufficient evidence of the correctness, as at the date of its issue, of any information included in it pursuant to subsection (2) of this section.

(6) Notwithstanding anything to the contrary in this Act, there shall be no grounds for the territorial authority to withhold information specified in terms of subsection (2) of this section or to refuse to provide a land information memorandum where this has been requested.

ECan's website

The link provided in the LIM to ECan's website still provides the following information:

Earthquakes and hazards

Canterbury is susceptible to significant adverse effects from earthquakes and tsunamis. While it is not possible to reduce the incidence of these events, steps can be taken to reduce the vulnerability of the community to their impacts. Lessening the impacts of earthquakes and tsunamis will save lives, reduce damage and disruption, and enable a faster recovery.

Introduction

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Earthquake source information

Environment Canterbury has a database of known active faults and fold structures in Canterbury and nearby. Earthquakes are generated on faults, fold and other structures. The faults are mapped at a scale of 1:250,000 for the whole region and at 1:50,000 for part of the northern area of the region. Information on fault type, length, average displacement, slip rates, last rupture and recurrence interval is available for most of the faults.

Fault location information is largely restricted to the hilly and mountainous parts of the region. Some offshore fault information north of Christchurch is also available.

Instrumentally recorded seismicity beneath the Canterbury Plains is indicative of active earth deformation. However, there are very few known ground surface expressions of active faults or fold structures on the Canterbury Plains. For this reason, there is very limited information on earthquake sources beneath the Canterbury Plains.

Historic earthquake hazard information

Information on historic earthquakes impacting on Christchurch, Hurunui District and Timaru District is available.

Earthquake effects information

General

Earthquake scenarios and general likely damage information for Kaikoura, Arthur's Pass, Rangiora, Kaiapoi, Christchurch, Ashburton, Temuka and Timaru is available. Peak ground acceleration, spectral acceleration and Modified Mercalli Intensity for 50, 150, 475 and 1000 year return times are also available for these urban areas. This information is available as contour maps (hard copy) for the whole region.

Tsunami

Tsunami inundation information is available for Timaru and Hurunui Districts, and Christchurch City.

Liquefaction

General information on the potential for liquefaction in the Waimakariri District (the area between the coast and State Highway 1) is available.

[Liquefaction information for Christchurch \(1:35,000 scale\) is also available. More detailed work on the liquefaction susceptibility in Christchurch is currently being carried out. Christchurch City Council has detailed information on the potential effects of liquefaction in some parts of Christchurch.](#)

Regional scale liquefaction information is also available for Hurunui and Timaru Districts.

Ground shaking

Regional scale information on the variation in ground shaking hazard in Timaru and Hurunui Districts, and within Christchurch City is available. No information on the modification of ground shaking from topographic shielding or focusing is available. These generally localised effects can be very pronounced.

Limitations and constraints of the information

* Earthquake and tsunami hazard information available is regional in scope and cannot be substituted for a site specific investigation. Local variation in ground response from earthquakes is likely to occur. The site specific potential for and consequent damage from earthquakes and tsunami should be assessed by a suitably qualified and experienced practitioner.

* Hazard information provided is based on the best information available at the time of the studies and was supplied to Environment Canterbury under specific contract arrangements including financial and time constraints.

* The hazard information may be liable to change or review if new information is made available.

* Earthquake hazard and tsunami inundation zone boundaries are approximate and indicative only.

* The liquefaction and ground shaking hazard classifications are indicative only, and do not imply any level of damage to particular structures or services.

Trolling through the FAQ's on the page can give you this information:

What is liquefaction?

Liquefaction (pronounced "lick-we-fack-shin") happens during earthquakes.

The ground shaking that occurs during an earthquake can cause some soils to liquefy. This means during an earthquake these soils will behave more like a liquid than a solid.

Sometimes a Land Information Memorandum (LIM) issued by a territorial authority mentions that a property is part of the Liquefaction Risk Study area and that the property may potentially be susceptible to liquefaction problems if there is an earthquake.

Environment Canterbury has maps of Christchurch City showing which parts of the City are potentially more susceptible to liquefaction than others.

What does the liquefaction hazard rating for my property mean?

There are four classes of liquefaction potential for Christchurch: high, moderate, low and no or unknown liquefaction potential.

* Areas of Christchurch rated as high liquefaction potential have soil types that are the most prone to liquefaction.

* Areas rated as low liquefaction potential have soil types that are least prone to liquefaction.

* Areas of moderate liquefaction potential have soil types between the high and low classes.

* Areas rated as having no or unknown liquefaction potential generally do not have soils prone to liquefaction, or there is currently not enough soil information to determine liquefaction potential.

Additionally there are five classes of liquefaction ground damage potential for Christchurch: very high, high, moderate, low and no liquefaction ground damage potential. These give a more detailed indication of the damage to the ground that can occur during an earthquake.

The liquefaction potential and liquefaction ground damage potential ratings are only an indication of the liquefaction potential in your area based on available soil and water table information. The information is not specific to your individual property.

What does the note from Christchurch City Council on my LIM about liquefaction mean?

The note about liquefaction is about a study the Christchurch City Council has undertaken in the Christchurch metropolitan area, looking at known soil types and other available data to work out what is likely to happen to the soil in the event of a large earthquake.

For instance sandy soils will react differently to strong ground shaking than clay or gravel soils. What may happen is that buildings may tilt or pipes and tanks may work their way out of the ground. The Christchurch City Council puts this note on all LIMs it issues (including those for Banks Peninsula that were outside the study area). The study was not site or property specific.

If you are redeveloping the site (particularly if you are building a multi-storey building) you may need to get specialist advice for foundation requirements, otherwise it should not affect what you can do on your property. If you want more information I can send you our booklet on liquefaction.

What can be done to reduce the chance of liquefaction?

There are two main ways to reduce the effects of liquefaction – by improving the ground condition or by specific foundation design.

There are various methods available to reduce the susceptibility of a soil to liquefaction. These methods increase the density of the soil thereby increasing the resistance of the soil to liquefaction. Most of the methods are expensive and would be uneconomic for residential structures. Lower cost compaction methods such as repetitive dropping of a heavy weight or using a heavy roller may be economic for residential developments.

Specific foundation designs reduce the likelihood of damage to the foundation and deformation of the structure. Stronger foundations, deep piles and piling to non-liquefiable soil layers are the more common methods used to reduce the effect of liquefaction on structures.

For further assistance please contact Customer Service on 03 353 9007 or toll free on 0800 324 636.

You can also visit our website www.ecan.govt.nz