

SUBMISSION



# New Zealand Institute of Surveyors



## **Recommendations for the Canterbury Property Boundaries and Related Matters Bill**

New Zealand Institute of Surveyors' submission to Local  
Government and Environment Committee

15 January 2016

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## NZIS: We Are the Future of Location and Measurement

The New Zealand Institute of Surveyors (NZIS) is New Zealand's leading advocacy body for professions involved in location and measurement sciences. This includes a wide variety of surveying specialisations<sup>1</sup> as well as spatial scientists and surveying engineers. These professions all deal somewhat in the power of 'where'. This can involve anything from mapping building locations and their internal features, monitoring environmental changes, and international projects such as the boundary definition surveys between the Kingdom of Saudi Arabia and the State of Kuwait. New Zealand Surveyors are at the forefront of new technology and are early adopters of tools such as GPS, drones and laser scanning. Surveyors specifically, are always the first persons in on a major construction project and the last ones out.

Founded in 1888, the Institute celebrated its 127<sup>th</sup> anniversary this year with a membership in excess of 1300 professionals. Currently NZIS has 16 branches throughout New Zealand and one branch in Hong Kong. These branches are supported by a National Office based in Wellington and are guided by an elected President (Mark Allan), thirteen councillors, and a board. We are also an international organisation: what NZIS does is followed by and influential to our overseas peers.

We proudly support excellence within our community with services to members including continuing education, best professional practice guidelines and resources, research and development, advocacy, policy services, business support, advice, and awarding excellence within the profession. NZIS represents the national interests of the professionals within it by offering the only recognized higher status qualification for all surveyors in the industry: the 'Registered Professional Surveyor' (RPSurv).

NZIS membership takes pride in using their skills and knowledge to advise and lead the public, assisting in the strong development of New Zealand society where needed. Recently our members were involved in the Land Information New Zealand (LINZ) Sector Leaders Working Group and the Canterbury Working Group for consultation on this 'Canterbury Property Boundaries and Related Matters Bill'. Our members were also responsible in pioneering the New Zealand Spatial Excellence Awards<sup>2</sup> and, the organisation and hosting of an international industry conference this year in Christchurch: the International Federation of Surveyors (FIG) Working Week.<sup>3</sup>

Our sector wide values are: integrity; environmental sustainability; excellence; respect for the profession, and; ethical behaviour.<sup>4</sup> Our purpose is articulated in our vision to aspire to "An internationally recognised professional organisation that promotes growth, innovation, excellence and community needs for all facets of surveying and spatial science in New Zealand."<sup>5</sup>

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<sup>1</sup> Such as hydrographic, cadastral, and land development and urban design specialists.

<sup>2</sup> <http://nzspatialawards.org.nz/>

<sup>3</sup> <http://www.fig.net/fig2016/index.htm>

<sup>4</sup> See the NZIS Strategic Plan 2015-2020:

[http://www.surveyors.org.nz/Attachment?Action=Download&Attachment\\_id=1397](http://www.surveyors.org.nz/Attachment?Action=Download&Attachment_id=1397)

<sup>5</sup> Ibid, at 4

## Introduction

We thank the Local Government and Environment Committee for the opportunity to submit our recommendations on the Canterbury Property Boundaries and Related Matters Bill (the Bill). We submit this document on behalf of our membership and in advocating for the professions of surveying and spatial sciences.

This submission was created through consultation with our membership and aims to reflect a consensus on their views. However, this document does not intend to express all individual members' opinions and we have encouraged individual submissions as well as a contribution to this document throughout the consultation process. This submission has been approved by sign off of President Mark Allan and Canterbury Branch Chair Shane Dixon on behalf of the membership and NZIS.

*“Christchurch encapsulates the spirit of our profession.”<sup>6</sup>*

The Canterbury earthquakes of 2010 and 2011 were unprecedented events in which there was major liquefaction and lateral spread, and significant distortion to the land (beyond normal survey tolerances). Following the events, surveyors in Canterbury were faced with some of the biggest professional challenges of their careers. Not only were surveyors some of the first responders on the scene but their technical support, advice, and interpretation of information was key to assisting the Canterbury area on an ongoing basis with the emergency response. Similarly, as the city moved into the recovery period, surveying professionals continued to work at the coal-face of the aftermath of destruction. It became apparent that the rebuild of homes, buildings, public spaces and natural environments was to be even more of a difficult task: the entire cadastral and geodetic network had been seriously compromised. Boundary definition had never before been so complex.

With these networks forming the fundamental fabric required to define New Zealand's property and ownership rights, surveyors were faced with major trials in providing land owners with certainty regarding their boundary locations, and decision makers and the Crown with advice as to how to proceed in the inner-city business district and elsewhere. Surveyors developed innovative and pragmatic solutions for boundary definitions and precise measurement tasks to ensure the rebuild of Christchurch was not delayed. This included the use of GPS technology to precisely measure the differential movement of marks across the Greater Christchurch area. Surveyors were also involved in close consultation with LINZ and Local Authorities to define best practice in the changed environment.

*“We are coping with the significant challenges of global economic adjustment and the devastating reality of living with natural hazards. Whatever the challenge we face, it is people who are affected and discussions quickly turn into supporting and helping whole communities.”<sup>7</sup>*

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<sup>6</sup> Hallam, Debbie. 2011. Preliminary prose. *Survey Quarterly*, Issue 67, September at 2

<sup>7</sup> Dyer, Mark. 2011. From the President. *Survey Quarterly*, Issue 67, September at 3

Importantly, in the absence of legislative guidance, surveyors had to make the fundamental call as to whether property boundaries had moved with the land in the earthquakes or whether these boundaries maintained their original pre-earthquake boundary positions (“not moved with the land”). This was an intricate state of affairs. The extent of the boundary deformation varied throughout the city, between suburbs and also from parcel to parcel. The majority of the observed boundary movements have been measured at the 0-20cm level, a few less at the 20-50cm deformation level, and some at the extreme 1m+ range.

After the first earthquake in September 2010 LINZ consulted with the NZIS and together we held a series of seminars to bring about a common practice. Based on this consultation, LINZ published an Earthquake guidelines document. This guidance and LINZ’s advice to surveyors was a mix of principles of boundaries moving with and not moving with the land, depending on the geological status of the land. Most surveyors defined boundaries in shallow surface areas in a pragmatic manner using the principle of ‘boundaries move with the land’. In areas of lateral spreading towards a water course and mass movements areas, most surveyors used the principle of ‘boundaries did not move with the land’, which was in accordance with the common accepted practice of boundaries not moving in landslips.

However around mid-2014 LINZ changed its approach and advised surveyors to hold and apply the pre-earthquake boundary dimensions. This advice was based on the principle that boundaries did not move with the land. This change in approach caused conflict between surveys using different principles.

However, this advice was not universally adopted by surveyors and the decision was left to individual surveyors as they each saw fit. This meant that some surveyors opted to use boundary determinations made previous to the earthquakes in making a new definition, and others used the principle that the boundaries had actually moved with the land. This exacerbated the number of conflicting surveys.

Matters were further complicated in February 2015 with the LINZ release of the ‘Guidance for locating boundaries in shallow surface areas’ document which enforced the principle of boundaries not moving with the land based on pre-earthquake coordinates. This guidance was quickly abandoned following push-back from communities and surveyors. The release of this guidance also highlighted a number of other concerns including the liability of the surveyor for the boundary determinations carried out during this period of uncertainty.

For most surveyors there was never really a practical cost effective alternative other than to define boundaries in terms of the ‘boundaries move with the land’ principle and thus the majority of professionals adopted this approach (or a pragmatic best-fit methodology close to it). Despite this, over 300 conflicts have now been identified as a result of this ambiguous (interim) period and the conflicting state guidance.

Since the first earthquake event, NZIS membership has been involved heavily in all potential solutions, whether through formulating collective internal standards and responses, consulting with government bodies, or by leading the way on different working party groups. The expertise of NZIS membership in issues of land and property boundary definition is unrivalled. We eagerly contributed to feedback on the Christchurch Regeneration Bill and

again, our membership looks forward to helping create the solution to what has been one of the most trying and uncertain times for many of us.

We intend to make comment on all parts of the proposed Bill, though the depth of such comment will directly reflect the level of importance such parts or sections of the Bill held to our membership.

## Summary of Key Issues and Recommendations

NZIS generally supports the passing of this bill and supports its intended purposes. We are especially supportive of what we see as being the two most important aspects of the Bill: clarifying the principle that boundaries moved with the land, and; the removal of liability for surveyors simply based on which method of determination they used in the post-earthquake period. Despite this we had some concerns with the current Bill.

We were concerned with:

- a. The terms “approved interim survey” (Clause 8) and “boundary determinations” (in conjunction with Clause 10) are unclear and require further definition.
- b. The definition of “landslip” that is provided is not refined enough in terms of boundary definition.
- c. It is unclear whether the Bill covers riparian and moveable water boundaries. Inclusion may cause unforeseen hardship for Territorial Authorities.
- d. There is no provision for the resolution of identified boundary conflicts or conflicts that may arise in the foreseeable future.
- e. It is unclear which persons or parties the Bill intends to indemnify.
- f. The Bill seemingly purports to provide an absolute waiver of liability for all manner of survey work done.

We recommend:

1. In Clause 4 define ‘approved interim survey’ as: ‘A Cadastral Survey Dataset’ (as defined by Section 4 of the Cadastral Survey Act 2002) that was executed and approved by LINZ within the interim period.
2. NZIS and LINZ to work together to clarify the definition of landslip in terms of cadastral boundaries.
3. That expert legal advice be obtained to determine if the proposed wording of Clause 7(2) will over-ride established common law principles in dealing with the movement of moveable water boundaries due to avulsion. If so, then moveable water boundaries should be specifically excluded from the provisions of Clause 7(2).
4. The establishment of a process for resolution of conflict to property owners, initiated by the Registrar General of Land and/or Surveyor General or CEO of LINZ in circumstances where there is a real loss of property rights (not limited to certificate of title matters) or where a loss of property rights is not able to be addressed under the Land Transfer Act 1952 (LTA 1952).

5. Amending Clause 8(3) to include a boundary conflict resolution process initiated by the Surveyor General and/or the Registrar General of Land where those available under the LTA 1952 are unable to be applied.
6. Provide for compensation to property owners in circumstances where there is a loss of real property rights not necessarily limited to certificate of title matters.
7. Obligate surveyors to notify LINZ of boundary conflicts when they encounter it during their normal business.
8. The removal of liability in Clause 10 be limited to Licensed Cadastral Surveyors (and those working under their direct supervision).
9. The inclusion of wording to explicitly exclude negligent work from being indemnified. We suggest including a clause 1(c): *“that was done in good faith and without negligence.”*
10. Replacing the term “boundary determination” with “cadastral survey”

### Intent and Purpose: A Surveying Perspective

We support the general intent of the Bill (“boundaries move with the land”) as this provides much needed clarity as to how boundaries are to be interpreted post the 2010 and 2011 earthquake events. Without this legislative guidance, conflicts as to which interpretation is used will continue to occur; ultimately leading to a deterioration in the quality of the NZ cadastre. The cadastre is a fundamental component of the property rights system that underpins the land based economy of the country.

We are also supportive of the removal of liability for those surveys conducted up until the date of this Bill coming into force as an Act of Parliament, with the express provision that there is a clarification of the parties being indemnified (for example, a Licensed Cadastral Surveyor (LCS)). Surveyors were faced with a period of significant complexity and made the best of a confusing situation with what resources and knowledge was available to them at the time. So long as surveys were carried out by an LCS (or under their direction) in good faith and without negligence then we agree that the surveyor should not be liable simply for which method of boundary determination they chose to use in this interim period.

While supporting the general intent and purpose of this Bill we do have a number of concerns and recommendations for change on particular points which are further detailed in the sections following.

### Issue 1: Approved Interim Surveys

Clause 8 states that an ‘approved interim survey’ continues to determine the boundaries of any land surveyed within Greater Christchurch, however the term ‘approved interim survey’ is not defined. The term ‘approved interim survey’ is reasonably self-evident but for the avoidance of doubt we recommend that a definition be included in the Bill.

We recommend:

- 1) In Clause 4 define 'approved interim survey' as: 'A Cadastral Survey Dataset' (as defined by Section 4 of the Cadastral Survey Act 2002) that was executed and approved by Land Information NZ within the interim period.

## Issue 2: Landslips

There was some confusion within the membership regarding the definition of 'landslip' within Clause 4 of the Bill and the potential meaning of the term was debated by the membership at some length. This debate largely centred on whether this definition would include areas of mass movement such as is the case with the Port Hills.

Where further clarification over what a 'landslip' includes could be useful on the one hand, on the other is that this will end up relying on the judgement and pragmatic approach taken by the surveyor at the time. The balance between providing sufficient legislative specificity so as to give effect to the intent of Parliament and the freedom of the Surveyor to make a judgement call using their expertise is a difficult line in the case of Canterbury.

It was concluded that while the definition in its current form may be sufficient in the application of the Act, caution should be applied: if a lack of detail does prove to cause difficulty in application then legislators should be prepared to take quick action. NZIS and LINZ working together will be the key to this working effectively as a 'back-up' solution to any foreseeable issues.

We recommend:

- 1) NZIS and LINZ to work together to clarify the definition of landslip in terms of cadastral boundaries.

## Issue 3: Moveable Water Boundaries

The inclusion of moveable water boundaries within Clause 7(2), or other moveable boundaries whose position is dependent on a water boundary, could result in unintended hardship and difficulties for Territorial Authorities.

As discussed further in Issue 4 below, there is general support by NZIS members for the thrust of Clause 7 to legislate that boundaries affected by earthquake movement move with the land. However, some members expressed concern about whether Clause 7(2) should exclude moveable water boundaries and other moveable boundaries that are dependent on a water boundary (such as an esplanade or marginal strips). It was unclear to members whether existing case law on claims of land by the process of avulsion dealt with the movement of water boundaries due to earthquake movement (essentially lateral spread in the Christchurch scenario). If so, there was a concern that the legislation might over-ride the established process for dealing with avulsion. The current process for dealing with avulsion is long standing and more effective for addressing movable water boundary issues.

Because of the earthquake event, some watercourses have narrowed due to the lateral spread that has occurred on both banks. This legislation would mean that the ownership of the landward side of any bank that has shifted during the earthquake would automatically reside with the adjacent land-owner, rather than requiring a survey to claim the dry bed in the case of avulsion. An unintended consequence therefore is that the Territorial Authorities may find themselves in a position of having to purchase adjacent lands to get adequate flows through affected watercourses again. This is particularly critical in low-lying areas of Christchurch where earthquake movement of the land has already exacerbated flooding issues during high rainfall events.

We recommend:

- 1) That expert legal advice be obtained to determine if the proposed wording of Clause 7(2) will over-ride established common law principles in dealing with the movement of moveable water boundaries due to avulsion.
- 2) If so, then moveable water boundaries should be specifically excluded from the provisions of Clause 7(2).

#### Issue 4: Conflict Resolution

The boundary conflicts that surveyors will be dealing with in Canterbury and under this Bill will be unique in New Zealand and, at times, will be very complex. They will include both minor and significant boundary conflicts and may also create consequential conflicts, for example with buildings or structures over boundaries. They will also involve both willing and unwilling affected parties. Accordingly, the Bill needs to include clear mechanisms for: dealing with boundary conflicts (where different boundary determination principles have been applied); addressing all consequential conflicts; and adequately dealing with scenarios where property owners do not agree to the resolution of a conflict.

Clause 8(1) effectively validates surveys approved within the interim period, even if inconsistent and/or in conflict with Clause 7, while Clause 8(2) goes on to state that a boundary conflict created by this Bill is not automatically removed or resolved. Clause 8(3) then identifies that there are some legislative processes which may be used for resolving conflicts that relate to anything registered under the LTA 1952.

We are concerned that the resolution processes identified are not sufficient on their own, do not cover instances when consequential conflicts fall outside the LTA 1952, or provide for compensation in all instances.

In particular, Section 172 of the LTA 1952 provides for land owners to bring an action against the Crown for damages, but only if the title is subject to error, omission, misdescription, or damage by wrongful inclusion of land, estate or interest. For any of these protective measures to apply, the cadastral survey and resulting Certificate of Title would have to constitute an error, omission, misdescription or wrongful inclusion of land derived under the LTA 1952. But there is no mechanism for claiming damages or hardships that fall outside the LTA 1952.

In some circumstances the conflict in the boundary definition may not require an alteration to the Certificate of Title but may still result in a real loss. For example, when a boundary conflict causes an existing structure or improvement to be no longer compliant with relevant local authority consents or planning controls, such as height in relation to boundary controls. This may not trigger an amendment to the title but will still result in a real loss to a property owners rights to sunlight and privacy. The legislation as drafted does not address the resolution of such issues or allow for compensation.

In some scenarios, property owners will have built and occupied land up to the new 'inconsistent' boundaries (as approved by LINZ in the interim period). These surveys may result in a land 'shortage' or 'excess' on the properties involved (depending on the direction of land movement), which in many cases will result in hardships that fall outside the LTA 1952.

We also have concerns about the legacy consequences of not immediately correcting identified boundary conflicts (in particular, as time passes evidence supporting the efficient resolution of a boundary conflict will be lost).

When a boundary conflict is identified by surveyors, the conflict should be brought to the attention of LINZ for resolution. Again, there is no clear process in the legislation to outline how these conflicts are to be resolved, especially where they are unable to be dealt with under the LTA 1952 and/or where they result in losses not land related. Fundamentally, leaving any identified conflicts as they are will have a significantly negative effect on the integrity of the New Zealand cadastre and should not be left unresolved.

We recommend:

- 1) Provide a process for resolution of conflicts, which must be initiated by the RGL/SG or CEO of LINZ in circumstances where there is a real loss of land or other rights (not limited to certificate of title matters).
- 2) Amend Clause 8(3) to include a boundary conflict resolution process initiated by the SG/RGL where those available under the LTA 1952 cannot be applied.
- 3) Provide for compensation to property owners in circumstances where there is a real loss of property rights not necessarily limited to certificate of title matters.
- 4) Obligate surveyors to notify LINZ of boundary conflicts when they encounter it during their normal business.

## Issue 5: Indemnity and Liability

Clause 10 is not clear on exactly who it purports to indemnify. Membership was unsure as to the intention of this clause, in particular who it aims to indemnify and for what. It is not clear whether it aims to protect Licensed Cadastral Surveyors or any person carrying out a cadastral survey (including unqualified parties). Further, it is not clear how it intends to remove liability. Currently the Bill could be interpreted as indemnifying any person for anything related to any type of cadastral surveying, irrespective of their level of professionalism or competence. In addition to the poor public perception this may create,

we believe it could inadvertently result in protection for unqualified people carrying out unprofessional and substandard cadastral surveys.

We therefore recommend that the removal of liability under Clause 10 is solely applicable to Licensed Cadastral Surveyors (and those working under their direction) as they are the only professionals qualified to undertake cadastral surveys. In addition to their four years university training, they undergo licensing requirements (at least two further years), remain competent and current to obtain an annual license, and their work is subject to on-going examination and approval by LINZ.

We recommend:

- 1) Further clarity and definition in the terminology to clearly state the limits of what and who the Bill intends to indemnify.
- 2) The removal of liability in Clause 10 be limited to Licensed Cadastral Surveyors (and those working under their direct supervision).
- 3) The inclusion of wording to explicitly exclude negligent work from indemnification. We suggest including a clause 1 (c): *“that was done in good faith and without negligence.”*

## Issue 6: Boundary Determination

Section 10 uses the term ‘boundary determination’ but it is not further defined in the Bill. The definition of a ‘cadastral survey’ under the Cadastral Survey Act 2002 is clearly defined and meets the intention of this clause. As per the below:<sup>8</sup>

*“Cadastral survey means the determination and description of the spatial extent (including boundaries) of interests under a tenure system.”*

This covers the various scenarios where protection is required, including but not limited to boundaries on topographic surveys, survey office survey plans, building location certificates, etc.

We recommend:

- 1) Replacing the term ‘boundary determination’ with ‘cadastral survey’.

## Conclusion

The NZIS broadly supports this bill. The Bill will provide a welcome legal resolution to the problems that have arisen with respect to boundary determination post the earthquake events. Despite the broad support there are a number of issues set out above that we believe will need to be addressed prior to the passing of it into legislation.

We wish to appear before the Committee in person on this matter and we thank the Committee for their consideration of this submission.

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<sup>8</sup> Cadastral Survey Act 2002, section 4

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