

Ensuring a Survey in terms of the 2002/2 Rules also complies with the 2010 Rules for Cadastral Survey

Overview

Purpose

The purpose of this document is to provide Licensed Cadastral Surveyors with some guidance as to the steps they can take to ensure that a survey that complies with the current Rules [Rules for Cadastral Survey 2002/2] is also able to comply with the new Rules [Rules for Cadastral Survey 2010].

The intent of this document is to minimize any changes to a survey that might otherwise be needed if the lodgment of a CSD initially prepared in terms of the current Rules is delayed until after the implementation of the new Rules.

Responsibility

This document cannot anticipate all the situations that may apply and cannot be quoted as an authority.

Surveyors can use this document as a guide to their own study of the 2010 Rules and 2010 Rulings to ensure that datasets prepared by them are compliant with the set of Rules under which they are lodged.

The Interpretation Guide to the Rules for Cadastral Survey 2010 can be used to help interpret the Rules.

Audience

Licensed Cadastral Surveyors who lodge cadastral survey datasets with LINZ, and staff acting under their direction.

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Class of Survey and Accuracies

Class II surveys Ensure that where a class II boundary under the 2002/2 Rules would be class A under the 2010 Rules, the tighter class A boundary accuracy standards [r 3.3.1] are met.

Other rules that are affected include:

- Accuracy of boundary witnessing [r 3.6]; and
 - Witnessing distance requirements [r 7.3.2].
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Accuracy of boundary adoptions

Ensure that adopted boundary vectors comply with r 3.3.1 (accuracy of right-line boundaries) & r 3.3.2 (accuracy sufficient to avoid overlap).

Note:

- Class C or D is available if the specified criteria for those boundary classes are met;
 - Should the accuracies not meet r 3.3.1 or r 3.3.2 then the boundary may need to be defined by survey [r 6.2(vi) – (vii)].
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Accuracy of “traverse” adoptions

Ensure that adopted “traverse” vectors comply with r 3.1 (accuracy of non-boundary survey marks).

Note:

- Should the vectors not comply with r 3.1(b) then the errors must be resolved or an appropriate alternative method of defining a boundary must be used.
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Accuracy of water and irregular boundaries

Ensure that new and existing class A, B and C water boundaries and irregular boundaries comply with r3.4 (accuracy of water boundaries and irregular boundaries) & r 3.3.2 (accuracy sufficient to avoid overlap).

Note:

- This applies also to the boundaries of esplanade strips and movable marginal strips.
 - In some cases boundaries may be accepted and be Class D [r 6.3].
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Accuracy of non-boundary marks within witnessing distances

Ensure that all non-boundary marks within the witnessing distances of r 7.3.2(a) meet the witnessing accuracy requirements of r 3.6.

Note:

- the CSD must also include sufficient vectors to validate this accuracy requirement [r 8.1(d)(iii)].
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Accuracy of permanent structure boundaries

Ensure that all permanent structure boundaries that are not coincident with a permanent structure comply with r 3.5 (accuracy of permanent structure boundary witnessing).

Note:

- This applies also to existing unit / lease / restrictive area boundaries on staged developments where the existing boundaries are being brought forward and depicted on later stages.
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Datums

Horizontal orientation

Ensure that the horizontal bearing orientation is in terms of a NZGD2000 meridional circuit.

Note:

- This requirement only applies where the survey defines or marks a new primary parcel boundary point [r 4.1].
 - A new Ruling will provide some relief from NZGD2000 orientation for the first 12 months.
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Horizontal connection to control marks

Ensure that the survey is connected to a 6th order or better mark if one exists within 500m for class A or 1000m for class B of a new boundary point or old boundary mark [r 4.2].

Note:

- This requirement only applies where the survey defines or marks a new primary parcel boundary point or connects to an old boundary mark on the primary parcel [r 4.2].
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Vertical datum

Where a reduced level is used to define as boundary, ensure that the level is in terms of an official vertical datum if an order 3V or better mark exists within 200m for class A, or 500m for class B of a heightened boundary mark [r 4.3].

Note:

- This applies also to existing unit / lease / restrictive area boundaries on staged developments where they are being brought forward and depicted on later stages.
 - A Ruling will list the NZVD2009 and the 13 regional MSL datums as official datums.
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Parcels and Parcel Appellations

Esplanade strips and access strips

Ensure that sufficient information is available to allow esplanade strips and access strips to be portrayed as non-primary parcels in the CSD.

Note:

- See Accuracy of water and irregular boundaries above.
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Legalisation balance parcels

Ensure that all the extinguished parcels are accounted for where land to be acquired under the Public Works Act [r 5.1].

Note:

- The portion of land not being acquired must meet the normal Rules requirements including boundary accuracies and must be given a new appellation.
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Tertiary parcels crossing primary parcels

Ensure that "tertiary" parcels are split into separate non-primary parcels if they cross primary parcel boundaries [r 5.2].

Minimum parcel width

Ensure all parcels are at least 0.10m wide for class A or 0.20m wide for classes B, C or D [r 5.4].

Note:

- Some parcels are exempt [r 5.4(b)].
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Appellations

Ensure parcel appellations are consistent with the new parcel identifier formats [r 5.5].

Note:

- Applications now being prepared for subdivisional resource consents should use the new parcel identifiers;
 - CSDs should use the "Area" parcel type for easements, covenants, and leases, rather than "marked", "shown", or "easement" [r 5.5.2].
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Boundary Definition, Form of Boundary and Occupation

Class A boundaries to defined by survey

Ensure that all class A boundary points on a primary parcel less than 0.4ha are defined by survey [r 6.2(a)(iv)].

Note:

- This requirement applies to new and existing boundary angles;
 - All boundary points are to be witnessed [r 7.3.1(a)];
 - Existing boundary points are to be marked where required by r 7.1(b).
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Where the water's edge has moved

Ensure the legal water boundary is correctly dealt with where the physical water's edge has moved [r 6.7].

Note:

- Where r 6.7(a)(i) applies to a class A boundary, the boundary angles are to be marked [r 7.1(c)].
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Right-lining of existing irregular boundaries

Ensure existing irregular boundaries are converted to right-line boundaries where required [r 6.6].

Note:

- Where r 6.6(b) applies to a class A boundary, the boundary angles are to be marked [r 7.1(c)].
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Permanent structure boundaries

Ensure that permanent structure boundaries comply with the related requirements [r 6.9(b)].

Note:

- Boundaries are to be witnessed by permanent structures that comply with the required degree of permanence [r 2 definition of "permanent structure"]. Wooden fences and kerbs are unlikely to comply;
 - Where the boundary does not coincide with the structure, the accuracy of witnessing is specified in r 3.5.
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Occupation

Ensure the extent of occupation is adequately assessed and recorded [r 2 definition of "occupation"].

Stratum boundaries

Ensure that stratum boundaries are mathematically described [r 6.8].

Note:

- Surfaces must be mathematically described with at least one point with a reduced level; or be the surface or bed of a water boundary.
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Ground Marking & Boundaries to be Marked

Permanent reference marks

Ensure two marks are placed that meet the PRM requirements for:

- longevity and other requirements [r 7.4.3];
- being within the maximum distance from a boundary point [r 7.4.2].

Note:

- The circumstances where PRMs are required are set out in r7.4.1.
 - If these marks are within 125m for class A or 250m for class B, they could be used as witness marks under the 2002/2 Rules.
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Witness marks

Ensure that four witness marks are included in the case of class B or C boundaries [r 7.3.2(c)].

Note:

- The circumstances where witness marks are required are set out in r 7.3.1;
 - If the witness marks are within 125m for class A or 250m for class B, they could serve as witness marks under the 2002/2 Rules.
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Boundary marks

Ensure that a boundary mark that is not a traditional peg or a post is labelled as a boundary mark, unless impractical [r 7.2(a)].

Boundaries to be marked

Ensure that each primary parcel boundary angle is marked [r 7.1(b)] where:

- Conflict is being resolved [r 6.2(a)(vi)];
 - Limitation as to parcels is being uplifted [r 6.2(a)(viii)];
 - The interim nature of a Hawke's Bay interim title is being removed [r 6.2(a)(x)].
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OP No Record

Ensure a mark found, but which is not already recorded in the cadastre, is treated as a new mark [r 2 definition of "old boundary mark" and definition of "old survey mark"] or as occupation [r 9.5(a)(iv)].

Note:

- The term "OP No record" is not permitted.
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Cadastral Survey Dataset Information

Survey report Ensure the survey report contains all the items required by r 8.2.

Vectors for a water boundary Ensure the diagram of survey includes at least 2 vectors to the ends of every water boundary [r 9.6.13(c)].

Vectors for an irregular boundary Ensure the diagram of survey includes at least 2 vectors to the ends of every irregular boundary [r 9.6.13(c)].

Area calculation for heightened parcels Ensure the area of a parcel whose shape varies with height is calculated from its widest extent projected onto a horizontal plane [r 5.3(b)].

Permanent structure boundaries Ensure the diagram or survey shows all boundaries and relevant information in relation to the permanent structure [r 9.6.9].

Note:

- The description of the permanent structure and its relationship to the permanent structure boundary is to be described.
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