Toitu te Land whenua Information New Zealand

Rules for Cadastral Survey 2010

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New Zealand Government

Under section 49 of the Cadastral Survey Act 2002, I hereby make the Rules for Cadastral Survey 2010

These Rules are effective from 24 May 2010

These Rules have the status of regulations for the purpose of the Regulations (Disallowance) Act 1989

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Foreword

Introduction

The Rules for Cadastral Survey 2010 (Rules) are issued by the Surveyor-General under s 49 of the Cadastral Survey Act 2002.

Purpose of the Rules

Cadastral surveyors must comply with these Rules when carrying out a cadastral survey and then lodging a cadastral survey dataset with Land Information New Zealand.

The Rules reflect the needs of tenure systems and govern the conduct of cadastral surveying to meet those needs.

Superseded documents

These Rules supersede the Surveyor-General's Rules for Cadastral Survey 2002/2 dated 17 October 2002.

Scope

The Rules govern the conduct of cadastral surveying and specify how the spatial extent of interests in land must be defined and described (s 7(1)(c) of the Cadastral Survey Act 2002).

Intended use of the Rules

(a) Cadastral surveyors must comply with the Rules when carrying out a cadastral survey.

(b) The Chief Executive has a function to determine whether cadastral survey datasets and cadastral surveys comply with the Rules.

1 Title and commencement

(a) These Rules may be cited as the Rules for Cadastral Survey 2010.

(b) The Rules come into effect on 24 May 2010.

2 Terms and definitions

For the purposes of these Rules, the following terms and definitions apply.

accept	in relation to a boundary, means to adopt a boundary and boundary points where permitted by rule 6.3 and not have to comply with an accuracy standard. 'Acceptance' and 'accepted' have corresponding meanings.
adopt	to incorporate in a CSD information from a prior CSD that has already been integrated into the cadastre or, in the absence of suitable CSD information, from an estate record held by the tenure system manager. 'Adoption' and 'adopted' have corresponding meanings.
approved CSD	a CSD which has been approved as being in terms of cadastral survey rules or regulations, and excludes those lodged only for recording purposes
arc boundary	a boundary that follows part of the circumference of a circle
balance non-primary parcel	the portion of an easement or covenant parcel that is intended to remain after a part has been surrendered
balance parcel	the portion of one of the following primary parcels that is intended to remain after a part has been removed by survey: (a) a railway parcel that is not in a computer freehold register, or (b) a road parcel, or (c) a fixed marginal strip parcel, or (d) the bed of a lake, river, stream, or the sea
boundary mark	a cadastral survey mark positioned at a boundary point
boundary point	a uniquely identified point on a parcel boundary, whether marked or unmarked
boundary reinstatement survey	a survey that places one or more boundary marks at boundary points already defined in an approved CSD, where: (a) the boundary points are not required by rules 6.2(a)(vi) or (vii) to be defined by survey; and (b) the survey does not create a new parcel
cadastral survey dataset	as defined in s 4 of the Cadastral Survey Act 2002
cadastral survey network mark	a survey mark of a class specified by the Surveyor-General as suitable for the connection of a cadastral survey to the national survey control network

cadastre	as defined in s 4 of the Cadastral Survey Act 2002
centreline easement	an easement which is spatially represented by one or more lines along its centre
Chief Executive	as defined in s 4 of the Cadastral Survey Act 2002
conflict	a difference that exceeds the applicable accuracy standards: (a) between the estate boundary and the boundary recorded in a CSD integrated into the cadastre, or (b) between the same boundary as recorded in different CSDs integrated into the cadastre, or (c) between the same boundary as recorded in a CSD integrated into the cadastre and other evidence including field evidence (d) and which has not been resolved by one or more CSDs already integrated into the cadastre
CSD	cadastral survey dataset
CSD Plan	a plan as specified in rule 9 or rule 11
defined by adoption	an existing boundary or boundary point that is not defined by survey or accepted
defined by survey	a boundary defined in terms of rule 6.1
disturbed	in relation to an old survey mark, means that the mark is in a position different from that originally placed
esplanade strip	as defined in s 2 of the Resource Management Act 1991
estate boundary	the boundary of an estate recorded in a tenure system for: (a) a fee simple estate, or (b) Māori freehold land, or (c) Māori customary land, or (d) land of the Crown, or (e) a stratum estate, or (f) a leasehold estate
extensive rural boundary point	a class B boundary point in a rural area where each new primary parcel that includes that point has an area of more than 500 ha or is intended to be in a title with a total area of more than 500 ha
extinguished	in relation to a parcel means no longer available for the assignment of rights
fixed marginal strip	a marginal strip under s 24(3) of the Conservation Act 1987
Hawke's Bay interim title	a certificate of title issued under s 6 or s 8 of the Land Transfer (Hawke's Bay) Act 1931
higher class	a class of accuracy which has more precise tolerances than another; for example, class A is higher than class B, which is higher than class C

irregular boundary	a boundary that is depicted as an irregular line but does not include a water boundary
irregular line	a line consisting of a series of connected vertices that are usually irregularly spaced and not on a single alignment
lower class	a class of accuracy which has less precise tolerances than another; for example, class C is lower than class B, which is lower than class A
Māori customary land	as defined in s 4 of the Te Ture Whenua Māori Act 1993
Māori freehold land	as defined in s 4 of the Te Ture Whenua Māori Act 1993
marginal strip	as defined in s 2 of the Conservation Act 1987
monumentation CSD	a CSD for a boundary reinstatement survey that is in accordance with rule 11
movable marginal strip	a marginal strip as defined in s 2 of the Conservation Act 1987 except those created under s 24(3) of that Act
non-boundary mark	a survey mark which is not on a boundary point
non-primary parcel	any parcel that is not a primary parcel and includes the following examples: (a) an easement, including an esplanade strip or an access strip, (b) a covenant, (c) a lease or an area associated with a lease, (d) a licence or a permit area, (e) a unit or common property for the purposes of the Unit Titles Act 1972, (f) a movable marginal strip, and (g) a roadway or a restricted roadway that is an encumbrance over a primary parcel
occupation	the physical features that describe the extent of an occupier's use of land
official geodetic datum	a geodetic datum approved by the Surveyor-General and in force at the time of survey
official geodetic projection	a projection in terms of an official geodetic datum approved by the Surveyor-General for use in a specific area and in force at the time of survey
official vertical datum	a vertical datum approved by the Surveyor-General and in force at the time of survey
old boundary mark	a boundary mark that is an old survey mark
old survey mark	a survey mark measured to on the survey which is from the national survey control system or from a CSD that has already been integrated into the cadastre
parcel	an area or space that is a single contiguous portion of land separately identified in a CSD or in the integrated cadastre

parcel intent	a description of a right or interest intended to be assigned to a parcel
permanent structure	a building or recognisable physical structure that is likely to remain undisturbed for 50 years or more
permanent structure boundary	a boundary related to a permanent structure in accordance with rule 6.9
primary parcel	any parcel that is intended to be: (a) owned by the Crown, with the exception of a movable marginal strip parcel, (b) held in fee simple, (c) Māori freehold land or Māori customary land, (d) public foreshore and seabed, (e) the bed of a lake or river, (f) road or railway, or (g) vested in a local authority
PRM	a permanent reference mark in accordance with rule 7.4
reduced level	a height in terms of a vertical datum
reinstated	means a new survey mark has been placed in the position of a previous survey mark that has not been found
renewed	means a new survey mark has been placed in the same position as an old survey mark that has been found
residue parcel	the residual portion of a primary parcel: (a) which remains as a result of a survey: (i) for removal of limitations as to parcels, or (ii) for an adverse possession claim, or (iii) to change the registration of land from the Deeds Registration Act 1908 to the Land Transfer Act 1952, (b) or which is: (i) being defined as part of the bed of a lake, river, or foreshore and seabed, and (ii) not currently recorded in the cadastre as the bed of a lake, river, foreshore or seabed, and (iii) not intended to vest, and (iv) not intended to have a new estate record.
right-line boundary	a boundary that follows the shortest distance between two boundary points
Rules	Rules for Cadastral Survey 2010
stratum boundary	a boundary, not being a permanent structure boundary, that defines the upper or lower extent of a parcel

survey mark	as defined in s 4 of the Cadastral Survey Act 2002
Title Plan	a plan as specified in rule 10
underlying parcel	the parcel, whether primary or non-primary, whose interests are or will be directly affected or encumbered by a non-primary parcel
vector	a bearing and distance between two points
vertical control mark	a survey mark in the national survey control system and being a class of mark specified by the Surveyor-General as suitable for the vertical control of cadastral surveys
water boundary	a boundary set at the landward margin of: (a) a river bed or a stream bed, (b) a lake bed, or (c) the foreshore or sea bed and includes a natural boundary where this term is used in enactments

3 Accuracy standards

3.1 Accuracy of non-boundary survey marks

The accuracy requirements for non-boundary marks on a survey are set out in Table 1.

Table 1: Accuracy requirements for non-boundary marks on a survey

	The horizontal and vertical accuracy between…	**must not exceed[a]…**
(a)	all new and old non-boundary marks …	$\sqrt{0.025^2 + (dist \times 0.0001)^2}$ m, at the 95 % confidence level
(b)	any two non-boundary marks, including adopted non-boundary marks …	0.03 m + *dist* × 0.00015 m
(c)	any two new or old non-boundary marks…	0.50 m

[a] Where *dist* is the horizontal distance between the points in metres in the case of horizontal accuracy, and the vertical distance between the points in the case of vertical accuracy.

3.2 Accuracy class of boundaries

3.2.1 Class A

Class A accuracies:

(a) must be used for a boundary and its associated boundary points that are:

(i) in an urban area, or

(ii) are intended as a result of a survey to be in an urban area;

(b) must be used for the boundary and the associated boundary points of any parcel that is not in an urban area, but is used, or is intended as a result of a survey to be used, for intensive commercial, industrial, or residential purposes; and

(c) may be used in any other circumstances.

3.2.2 Class B

Class B accuracies must be used for a boundary and its associated boundary points except where:

(a) rule 3.2.1 requires class A to be used, or

(b) class C or class D is used in accordance with rules 3.2.3 and 3.2.4.

3.2.3 Class C

Class C accuracies may be used for:

(a) a primary parcel boundary and its associated boundary points that are defined by adoption where this boundary is either:

(i) part of a new parcel over 20 ha that comprises more than 80 % of the existing primary parcel being extinguished, or

(ii) part of a new parcel over 100 ha,

and

(iii) its boundary points do not meet class B accuracy tolerances in rule 3.3.1(a)(iv), or

(iv) it is part of a title that is to remain limited as to parcels or remain a Hawke's Bay interim title, or

(v) it is a water boundary or an irregular boundary;

or

(b) a non-primary parcel boundary and its associated boundary points where this boundary intersects with a primary parcel boundary that is defined by adoption and which meets the criteria in (a); or

(c) any other boundary, with the approval of the Surveyor-General.

3.2.4 Class D

(a) Class D must be used for a boundary or boundary point that meets the criteria for an accepted boundary in rule 6.3.

(b) Class D accuracies may be used for a non-primary parcel boundary and its associated boundary points where this boundary intersects with a primary parcel boundary that meets the criteria for an accepted boundary in rule 6.3.

3.2.5 Class of boundaries and boundary points

(a) The accuracy class that applies to a boundary point must be the highest class of the boundaries connected to that point.

(b) A boundary or boundary point defined by survey must be either class A or class B, unless otherwise approved by the Surveyor-General.

3.3 Accuracy of right-line boundaries and arc boundaries

3.3.1 Accuracy of boundary points

(a) The accuracy requirements for each class of boundary point on a survey are set out in Table 2.

Table 2: Accuracy requirements for boundary points on a survey

	Boundary class	The horizontal and vertical accuracy between…	must not exceed[a]…
(i)	A	all boundary points, other than adopted points, and irrespective of these points being marked or not…	$\sqrt{0.04^2 + (dist \times 0.0001)^2}$ m at the 95 % confidence level
(ii)	A	any boundary point and any other boundary point, including adopted points and irrespective of these points being marked or not…	0.06 m + *dist* × 0.00015 m
(iii)	B	all boundary points, other than adopted points, and irrespective of these points being marked or not…	$\sqrt{0.20^2 + (dist \times 0.0004)^2}$ m at the 95 % confidence level
(iv)	B	any boundary point and any other boundary point, including adopted points and irrespective of these points being marked or not…	0.30 m + *dist* × 0.0006 m
(v)	C	all boundary points, other than adopted points, and irrespective of these points being marked or not…	$\sqrt{0.60^2 + (dist \times 0.002)^2}$ m, at the 95 % confidence level
(vi)	C	any boundary point and any other boundary point, including adopted points and irrespective of these points being marked or not…	1.00 m + *dist* × 0.003 m
(vii)	D	not specified	

[a] Where *dist* is the horizontal distance between the points in metres in the case of horizontal accuracy, and the vertical distance between the points in the case of vertical accuracy.

(b) Where any two boundary points in (a) have different applicable accuracy classes, the lower class of boundary accuracy applies between those two points.

3.3.2 Accuracy sufficient to avoid overlap

Irrespective of rule 3.3.1, the relationship between a new boundary and any other boundary, including a boundary that is accepted or defined by adoption, must be determined to a sufficient level of accuracy to address the risk of incompatible rights overlapping.

3.4 Accuracy of water boundaries and irregular boundaries

The position of a water boundary or an irregular boundary, including a boundary defined by adoption, must be determined to a sufficient level of accuracy to take into account:

(a) the risk of overlap or ambiguity in boundaries, including the water boundary on the other side of the water body,

(b) any statutory requirement applying to the width or size of the related water bodies,

(c) the potential for the margin of the water body to move and for the related water boundary to move or become permanent as a result of that movement,

(d) the nature of the physical feature that defines the boundary, and

(e) the value of the land and the intensity of the land use.

3.5 Accuracy of permanent structure boundary witnessing

(a) Every boundary point on a permanent structure boundary that is permitted by rules 6.9(b)(iii) to (v) to be non-coincident with the permanent structure must be witnessed by a clearly identified point on the structure.

(b) The relationship between a boundary point and the witness point described in (a) must comply with the accuracy specified in rule 3.6.

(c) If a permanent structure boundary and any other boundary are:

(i) within 1 m of each other when both boundaries are class A, or

(ii) within 3 m of each other in other cases,

then the accuracy between the boundary points of both boundaries must comply with the applicable accuracy standards in rule 3.3.

3.6 Accuracy of boundary witnessing

The horizontal and vertical accuracy between a boundary point required to be witnessed by rule 7.3.1 and all old and new non-boundary marks within the distances specified in rule 7.3.2(a) must not exceed the tolerances specified in Table 3.

Table 3: Tolerances for boundary witnessing

Class of boundary point	Tolerance (m)
A	0.04
B	0.20
C	0.60
D	not applicable

3.7 Vector accuracy

A vector must meet the accuracy standards applicable between its end points.

4 Datums

4.1 Horizontal datum - orientation

(a) Every bearing in a cadastral survey that defines or marks a new primary parcel boundary point must be oriented in terms of an official geodetic projection applicable to the area.

(b) The requirement in (a) does not apply if the survey does not make a new field measurement.

(c) Every bearing in a cadastral survey must be expressed in terms of the same horizontal projection.

(d) The requirement in (c) does not apply to magnetic bearings for boundaries that are accepted in terms of rule 6.3(a)(iv).

4.2 Horizontal datum - connection

If one or more cadastral survey network marks exist within the distance specified in Table 4 of any new boundary point, new boundary mark, or old boundary mark on a primary parcel being created, then at least one of those cadastral survey network marks must be connected by vectors to the survey.

Table 4: Distance for boundary point connection to cadastral survey network mark

Class of boundary point	Distance (m)
A	500
B	1000
C	2000
D	not applicable

4.3 Vertical datum

A reduced level in a cadastral survey must be in terms of:

(a) an official vertical datum when a vertical control mark is within:

(i) 200 m of any class A boundary point that is defined by the use of a reduced level, or

(ii) 500 m of any class B boundary point that is defined by the use of a reduced level; or

(b) an alternative vertical datum or assumed vertical datum, if (a) does not apply.

5 Parcels

5.1 Accounting for parcels

(a) Where a CSD creates a new primary parcel:

(i) all land in existing primary parcels being extinguished must be included in one or more new primary parcels, residue parcels, or balance parcels, and

(ii) where the new primary parcel has a stratum boundary, all space occupied by existing primary parcels being extinguished must be included in one or more new primary parcels, residue parcels, or balance parcels.

(b) Where a CSD creates a new non-primary parcel to identify part of an existing easement or covenant to be surrendered, the remainder of that easement or covenant must be a balance non-primary parcel, or be replaced by a new non-primary parcel.

5.2 Overlap of non-primary parcels

A non-primary parcel must not cross an underlying primary parcel boundary unless that non-primary parcel is in a unit title development.

5.3 Parcel areas

(a) An area must be assigned to:

(i) each primary parcel except where it is a residue parcel or balance parcel. The area must include the areas of all movable marginal strips in that primary parcel,

(ii) each parcel intended for a lease except where the parcel is defined by one or more permanent structure boundaries, and

(iii) each portion of land being claimed as accretion.

(b) Where a parcel requires an area under (a) and its shape varies with height, the area must be for the polygon described by the extent of the parcel when vertically projected onto a horizontal plane.

(c) The area assigned to a parcel in (a):

(i) must be correctly calculated from its boundary information,

(ii) may be rounded to one part in 1000 or 0.0001 ha, whichever is greater, and

(iii) must not be less than 0.0001 ha.

5.4 Width of parcel

(a) A new primary parcel must be at least 0.10 m wide at its maximum width where its boundaries are class A, or 0.20 m where its boundaries are class B, C, or D.

(b) The requirement in (a) does not apply to a balance parcel, a residue parcel or an existing parcel that is already under-width.

5.5 Parcel appellation

5.5.1 General land appellation

(a) Every new parcel other than a parcel of Māori freehold land [refer to rule 5.5.3], a balance parcel, a balance non-primary parcel, or a residue parcel, must be identified in a CSD using the following components in this order:

(i) a parcel type [refer to rule 5.5.2],

(ii) a unique parcel identifier [refer to rule 5.5.4], and

(iii) the CSD type and number.

(b) Appellations for the following parcels must have the prefix 'Part':

(i) balance parcels that have existing unique parcel identifiers,

(ii) balance non-primary parcels, and

(iii) residue parcels, except those specified in (c).

(c) A residue parcel which is being defined as the bed of a lake, river, or foreshore and seabed must not be given an appellation.

5.5.2 Parcel-type components

The parcel type component of the appellation in rule 5.5.1(a)(i) must be as specified in Table 5.

Table 5: Parcel type component of appellation

Type of parcel	Parcel type component
primary parcel in a Land Transfer CSD	Lot
primary parcel in a Survey Office CSD	Section
unit title development	Principal Unit, Accessory Unit, Future Development Unit, or Common Property (as applicable)
movable marginal strip parcel	Marginal Strip
esplanade strip parcel	Esplanade Strip
any other non-primary parcel	Area

5.5.3 Māori land appellation

(a) Every new parcel of Māori freehold land must be described in a CSD using the following components in this order:

(i) a block name,

(ii) a unique parcel identifier [refer to rule 5.5.4], and

(iii) the type and number of the CSD creating the parcel.

(b) Irrespective of (a), an alternative legal description that has been confirmed by the Māori Land Court may be used for components (i) and (ii).

5.5.4 Unique parcel identifier

(a) The unique parcel identifier specified in rules 5.5.1(a)(ii) and 5.5.3(a)(ii) must follow the format specified in Table 6.

(b) Each number must be a positive integer.

(c) Each letter must be uppercase.

(d) Other characters or spaces must not be included in the parcel identifier.

(e) The parcel identifier must be unique within a CSD, irrespective of the parcel type.

Table 6: Unique parcel identifier format

Parcel tenure type	**Unique parcel identifier format**
Lot	number
Section	number
Māori Block	sequence of alternating letters and numbers
Unit as part of a unit title development	number which may be followed by a letter
Common property as part of a unit title development	(no identifier)
Lease or licence	number which may be followed by a letter
Right associated with any other non-primary parcel including a movable marginal strip or an esplanade strip	letter which may be followed by another letter

6 Boundaries

6.1 Duty of surveyor when defining a boundary by survey

When defining a boundary by survey, a cadastral surveyor must:

(a) gather all evidence relevant to the definition of the boundary and its boundary points,

(b) interpret that evidence in accordance with all relevant enactments and rules of law, and

(c) use that evidence to determine the correct position of the boundary and boundary points in relation to other boundaries and boundary points.

6.2 Boundaries to be defined by survey

(a) Unless permitted to be accepted by rule 6.3, the following boundaries or boundary points must be defined by survey:

(i) a new water boundary or irregular boundary,

(ii) a new boundary point, including the terminal point of an arc boundary,

(iii) an existing irregular boundary that has been converted into one or more right-line boundaries,

(iv) an existing class A boundary or boundary point on a primary parcel that is less than 0.4 ha, except where all that parcel's boundaries are primary parcel boundaries defined in approved CSDs and are right lines or arcs, and all the boundary points meet the accuracy standards in rule 3.3.1(a)(ii),

(v) an existing boundary point that is being marked,

(vi) a boundary or boundary point that is subject to conflict, unless it is a class C boundary in terms of rule 3.2.3,

(vii) a boundary where its extent and location as defined in an approved CSD are insufficient for the determination of its compliance with the applicable accuracy standard,

(viii) an existing boundary point of a parcel where its limitation as to parcels is being uplifted,

(ix) an existing boundary point of a parcel subject to a claim for adverse possession,

(x) an existing boundary point of a parcel where the interim nature of a Hawke's Bay interim title is being removed, and

(xi) a point that is on the boundary of a parcel which was created on a CSD previously approved under *LINZS10000: Interim standard for computed cadastral survey datasets for Māori freehold land*.[1]

(b) Boundaries and boundary points not specified in (a) may also be defined by survey.

6.3 Acceptance of a boundary

The following boundaries and boundary points may be accepted:

(a) an existing primary parcel boundary and its associated boundary points where there is no risk of this boundary encroaching on another parcel, and this boundary is either:

(i) part of a new parcel over 20 ha that comprises more than 80 % of the existing primary parcel being extinguished, or

(ii) part of a new parcel over 100 ha,

and the boundary

(iii) is a right-line boundary that does not have a boundary bearing or a boundary distance in a CSD that has been integrated into the cadastre, or

(iv) has a magnetic bearing and the reorientation of the bearing cannot be determined without measurement, or

(v) is part of the balance of a title that is to remain limited as to parcels or remain a Hawke's Bay interim title and its boundary points do not meet the class C boundary accuracy specified in rule 3.3.1(a)(vi), or

(vi) is an existing irregular boundary whose location is not dependent on the location of a water boundary;

(b) an existing boundary and boundary points of a balance parcel or residue parcel that is not common with another new parcel on the survey.

[1] LINZ 2006, LINZS10000: *Interim standard for computed cadastral survey datasets for Māori freehold land,* Office of the Surveyor-General, LINZ, Wellington

6.4 Boundaries defined by adoption

A boundary or boundary point that is not defined by survey or accepted must be defined by adoption.

6.5 Form of boundary

(a) A parcel boundary must be defined in its horizontal extent by:

(i) a right-line boundary, or

(ii) an arc boundary, or

(iii) a water boundary, or

(iv) an irregular boundary, or

(v) a permanent structure boundary.

(b) The vertical extent of a parcel, where the vertical extent is limited, must be defined by:

(i) a stratum boundary, or

(ii) a permanent structure boundary.

6.6 Irregular boundary

(a) Irregular boundaries are only permitted in terms of this rule or rule 6.7.

(b) An existing irregular boundary that is not a previous water boundary must be converted to one or more right-line boundaries, except that it may remain as an irregular boundary if:

(i) it is accepted in terms of rule 6.3(a)(v) or (vi), or

(ii) it is a class C boundary in terms of rule 3.2.3.

(c) Irrespective of (b), the landward boundary of a movable marginal strip or esplanade strip must be an irregular boundary.

6.7 Water boundary

(a) Where the margin of the water body defining a water boundary has moved but the boundary has not moved, that boundary:

(i) must be converted to one or more right-line boundaries, or

(ii) may become an irregular boundary if it meets the criteria for class C boundaries in rule 3.2.3.

(b) Where the margin of the water body has moved and:

(i) entitlement to accretion is not being claimed, or

(ii) entitlement to a dried up water body is not being claimed,

then the water boundary may continue to be a water boundary depicted in its former position.

(c) An existing water boundary that will become redundant when a parcel is added to an existing water boundary or the foreshore and seabed must be an irregular boundary.

6.8 Stratum boundary

A stratum boundary must be:

(a) a surface that is mathematically described where at least one point has a reduced level, or

(b) a surface of a water body or the bed of a water body.

6.9 Permanent structure boundary

(a) A permanent structure boundary may only be used for a parcel that is intended for:

(i) a right under the Unit Titles Act 1972, or

(ii) a lease where the lease boundary is located in relation to a permanent structure, or

(iii) a right over or appurtenant to a base right described in (i) or (ii), where this right will expire before or at the same time as the base right, or

(iv) an easement whose use is directly related to the permanent structure and the right is expected to become redundant if that permanent structure ceases to exist.

(b) A permanent structure boundary must:

(i) follow a described part of a permanent structure, or

(ii) be a straight line between clearly identified points on the interior or exterior of a permanent structure, or

(iii) be a straight line connecting boundary points located from clearly identified points on the interior or exterior of a permanent structure, provided that those boundary points are no more than 20 m from the permanent structure, or

(iv) be at a constant offset from a clearly identified interior or exterior part of a permanent structure, or

(v) where it is a surface, be unambiguously located from clearly identified points on the interior or exterior of a permanent structure.

(c) Irrespective of (b), the outline of a future development unit is a permanent structure boundary for the purposes of these Rules.

6.10 Boundary intersection to be defined

A boundary point must be defined by survey at every new intersection of a primary parcel boundary with another primary parcel boundary on the survey, including a primary stratum boundary.

7 Ground marking

7.1 Boundaries to be marked

The following boundary points must be marked, where practicable:

(a) each new boundary point, including the terminal point of an arc boundary on a new primary parcel, unless:

(i) it is a boundary point that is only between new parcels that are all intended to remain in Crown ownership, or

(ii) it is on a survey under the jurisdiction of the Māori Land Court, or

(iii) it is a boundary point that is only between parcels that are required to be, or as a result of the survey will be required to be, held in common ownership, or

(iv) it is on a boundary where the parcels on each side of that boundary are required to be, or as a result of the survey will be required to be, subject to reciprocal rights of way, or

(v) it is unlikely that it will need to be physically located in the foreseeable future because of the terrain, ground cover, or protected vegetation, or

(vi) the boundary point is readily identifiable by occupation along the boundary;

(b) each boundary point, including each terminal point of an arc boundary on an existing boundary of a new primary parcel that is required to be defined by survey by rules 6.2(a)(vi) to (x), unless a reliable boundary mark is already in place; and

(c) each boundary point that results from an existing irregular class A boundary that is being converted to one or more right-line boundaries.

7.2 New boundary marks

(a) A new boundary mark must be:

(i) a wooden peg, chamfered at the top, with a minimum width of 45 mm and at least 3000 mm² in cross-section, or

(ii) a post, or

(iii) any other type of peg that is clearly labelled as a boundary mark, or

(iv) if (i), (ii), and (iii) are impractical, any other type of mark which must, if practical, be clearly labelled as a boundary mark.

(b) A new boundary mark must be:

(i) soundly anchored in place, and

(ii) readily visible, where practical.

7.3 Witnessing of boundary points

7.3.1 Boundaries to be witnessed

The following points on a cadastral survey must be witnessed:

(a) every boundary point on a primary parcel boundary that is being defined by survey,

(b) every new boundary point on a parcel where the purpose of the parcel is for a lease and the boundary is not a permanent structure boundary,

(c) every new or old boundary mark on the boundary of a parcel under survey, and

(d) every new stratum boundary point.

7.3.2 Number and distance of witness marks

(a) A cadastral survey must have at least one witness mark within the applicable horizontal distance specified in Table 7 for each of the boundary points specified in rule 7.3.1.

Table 7: Distances between a boundary point and a witness mark

Class of boundary point	Distance (m)
A	150
B	500
C	1000
D	not applicable

(b) In the case of an extensive rural boundary point, the class B distance in Table 7 may be increased to 1000 m if the survey is connected by vectors to one or more cadastral survey network marks.

(c) A survey that requires a witness mark under rule 7.3.2 must include a minimum of three witness marks if all boundaries are class A, or a minimum of four witness marks in other cases.

(d) Irrespective of (c), a boundary reinstatement survey must include a minimum of one witness mark.

7.3.3 Witness marks

(a) An adopted mark cannot serve as a witness mark.

(b) A witness mark must be in a different position from the boundary point, and be:

(i) made of sufficiently durable material,

(ii) set in sufficiently stable material, and

(iii) located in a suitable position,

so that it can be reasonably expected to survive and remain useable for at least 10 years.

7.3.4 Witnessing stratum boundary points

In the case of a stratum boundary point that requires witnessing by rule 7.3.1(d):

(a) at least one of its witness marks required by rule 7.3.2(a) must have a reduced level, and

(b) if one or more vertical control marks exists within the distance specified in rule 7.3.2(a), then one of those marks, providing it satisfies the criteria for a witness mark in rule 7.3.3, must be used to witness the stratum boundary point unless it is impracticable to do so.

7.4 Permanent marks

7.4.1 Number of permanent reference marks

(a) Every cadastral survey that is required to have a witness mark by rule 7.3.2 must include a minimum of two permanent reference marks (PRMs).

(b) Irrespective of (a), a boundary reinstatement survey is not required to include a permanent reference mark.

7.4.2 Distances between permanent reference marks and a boundary point

(a) At least two PRMs must be within the applicable horizontal distance specified in Table 8 of a boundary point that is required to be witnessed by rule 7.3.1.

Table 8: Distances between permanent reference marks and a boundary point

Class of boundary point	Distance (m)
A	300
B	500
C	1000
D	not applicable

(b) In the case of an extensive rural boundary point, the class B distance in Table 8 may be increased to 1000 m if the survey is connected by vectors to one or more cadastral survey network marks.

7.4.3 Permanent reference marks

(a) An adopted mark cannot serve as a PRM.

(b) A PRM must be in a different position to the boundary point, and be

(i) made of sufficiently durable material,

(ii) set in sufficiently stable material, and

(iii) located in a suitable position,

so that it can be reasonably expected to survive and remain useable for at least 50 years.

(c) A PRM that complies with the distance requirements specified in rule 7.3.2(a) or (b) may be used as a witness mark.

(d) Two PRMs must also have reduced levels if any of the witness marks are required to have reduced levels.

7.5 Unique survey mark name

(a) The following survey marks and points must be given a unique name:

(i) a new PRM, new witness mark or new non-boundary survey point, and

(ii) a renewed, reinstated or disturbed PRM, witness mark, or non-boundary mark.

(b) The unique name in (a) must consist of the following components in this order:

(i) an abbreviation that describes the physical mark type, where applicable,

(ii) a unique alpha-numeric identifier, and

(iii) the CSD type and number.

(c) An undisturbed old mark with a unique name must retain that name.

7.6 Disturbed mark to be treated as new

An old survey mark that is determined as being disturbed must be treated as a new mark at its new location.

8 Cadastral survey datasets

8.1 Content of a CSD

A CSD must include:

(a) a CSD Plan in accordance with rule 9;

(b) a Title Plan, in accordance with rule 10, whenever a new parcel is being created;

(c) the appellation of each parcel that is to be extinguished;

(d) sufficient vectors to enable the relationship:

(i) between all non-boundary marks and points to be ascertained and verified in accordance with the accuracy standards in rule 3.1,

(ii) between all boundary points to be ascertained and verified in accordance with the accuracy standards in rule 3.3, and

(iii) between all boundary points and non-boundary marks to be ascertained and verified in accordance with the accuracy standards in rule 3.6;

(e) a minimum of two vectors for each boundary point and each new survey mark;

(f) where a reduced level is included:

(i) the origin mark used to obtain the reduced level,

(ii) the reduced level of the origin mark, and

(iii) the source of the origin information.

8.2 Survey report

(a) A CSD must include a survey report that contains the following:

(i) the purpose for which the survey was conducted,

(ii) the basis for determining the orientation of bearings,

(iii) the basis for any bearing adjustment applied to an adopted bearing or scale adjustment applied to an existing distance,

(iv) a description of the type of equipment and methods used to ensure compliance with the accuracy standards specified in these Rules,

(v) details of any conflict and how this was resolved,

(vi) reasons for not relying on an old survey mark,

(vii) information about old survey marks not located or reasons why they were not searched for,

(viii) an assessment of the adequacy of the number and location of old survey marks used to define boundaries,

(ix) reasons for, and details of decisions made regarding each existing boundary defined by survey, and the information considered in order to reach those decisions,

(x) details to support acceptance of a boundary in terms of rule 6.3,

(xi) where a movable marginal strip is included in a CSD, a description of the method used to determine its existence,

(xii) information about the accuracy of the determination of any water boundary or irregular boundary and the factors taken into account, as specified in rule 3.4,

(xiii) reasons why it was impracticable to mark any boundary point in terms of rule 7.1 or impracticable to use a vertical control mark as a witness mark in terms of rule 7.3.4(b),

(xiv) details to support an exemption from marking a boundary point under the provisions in rules 7.1(a)(i) to (vi),

(xv) reference to any prior correspondence with LINZ on issues relevant to the application of these Rules to the CSD, and

(xvi) notification from the Māori Land Court of a non-standard appellation used under rule 5.5.3(b).

(b) Where any of the information required in (a) is not included in the survey report, the report must state:

(i) where the information is located in the CSD, or

(ii) that the requirement for that information does not apply.

8.3 Units of measure for CSDs

8.3.1 General

The requirements in rule 8.3 apply to all CSDs.

8.3.2 Units

(a) Each distance and reduced level must be expressed in metres.

(b) Each bearing and angle must be expressed in sexagesimal degrees, minutes, and seconds notation.

(c) Each area must be expressed in hectares.

(d) Each bearing, distance, reduced level, and area must be recorded to sufficient significant figures to reflect the accuracy requirements specified in these Rules.

8.3.3 Distance and area reduction

Each horizontal distance and area must be reduced to the ellipsoid used for the official geodetic datum.

8.3.4 Bearings

Each bearing must be expressed clockwise from north.

8.3.5 Vertical angles

A vertical angle must be expressed in terms of the horizontal plane.

8.4 Adopted information to match source

Except for the conversion of units of measure or the application of a bearing adjustment, all adopted information, including accepted information, must be copied without change.

8.5 CSD to be lodged for boundary marking

(a) When a boundary mark is placed on a cadastral survey that does not create a parcel, a CSD of the survey must be lodged within six months of that placement.

(b) Where a boundary point referred to in (a) has been marked more than once within the six-month period, only one CSD is required to be lodged, recording the last placement.

(c) Where the criteria in rule 11.1 are satisfied, a monumentation CSD may be used.

9 CSD Plan

9.1 CSD Plan information

A CSD Plan must include:

(a) a list of CSDs used and, where a CSD number is not unique, the land district of the CSD,

(b) a description of the mark and its location for any PRM identified in the CSD, where that information is not already recorded in the cadastre, and

(c) a statement of certification in accordance with rule 13, once the CSD has been certified by the cadastral surveyor.

9.2 Datum information

A CSD Plan must include:

(a) the horizontal datum and circuit projection where a bearing is included, and

(b) the vertical datum where a reduced level is included.

9.3 Vector information

A CSD Plan must include:

(a) the source CSD type and number for each adopted vector, distance, bearing, and arc, including where these are accepted,

(b) any bearing adjustments applied to each CSD from which a bearing was adopted, including where these are accepted, and

(c) information identifying whether every bearing, distance, and arc included in the CSD Plan has been calculated, measured, or adopted.

9.4 Boundary information

A CSD Plan must include:

(a) the accuracy class of each boundary,

(b) the source CSD type and number for each adopted permanent structure boundary, adopted water boundary, and adopted irregular boundary, including where these are accepted, and

(c) a description of the physical feature where it defines a water boundary.

9.5 Information about occupation and physical features

(a) A CSD Plan must include the following occupation information:

(i) the nature of the physical feature,

(ii) the age of the physical feature,

(iii) the relationship, by vector, distance, or description, between the occupation and the boundary or boundary position, and

(iv) details of each mark that has the appearance of a boundary mark but which is not in the cadastre.

(b) Occupation information must be provided in relation to each of the following:

(i) a new boundary point defined by survey on an existing primary parcel boundary,

(ii) an existing boundary point that is being marked, and

(iii) a boundary point required to be defined by survey by rules 6.2(a)(vi)to (x), whether marked or not, and its related boundary lines. In this case the information must be provided in the form of a diagram.

(c) Information must be provided on the nature of a physical feature and its relationship, by vector, distance, or description, to a new boundary or boundary point where that feature is relevant to the boundary.

9.6 Diagram of Survey

9.6.1 CSD Plan to include Diagram of Survey

A CSD Plan must include a Diagram of Survey.

9.6.2 Survey mark and point information

A Diagram of Survey must include:

(a) a depiction of all survey marks used for the purposes of the cadastral survey,

(b) an abbreviation that describes the physical mark type for each new or old survey mark, other than a peg or post,

(c) an abbreviation that describes the former physical mark type for each old survey mark that has been renewed,

(d) the identifier for each:

(i) survey mark or point where an identifier is required by rule 7.5(b),

(ii) survey mark or point where an identifier already exists,

(e) the former identifier for each disturbed survey mark and each survey mark that has been renewed,

(f) the source CSD type and number for each old survey mark, each adopted survey mark and point, each disturbed mark, and each mark that has been renewed,

(g) a notation indicating that an existing survey mark has been renewed or found disturbed,

(h) the reduced level of each witness mark, where required under rule 7.3.4(a), and the reduced level of each PRM, where required under rule 7.4.3(d), and

(i) the name from the national survey control system for each mark used from that system, in which case (b) to (g) do not apply.

9.6.3 Parcel information

(a) A Diagram of Survey must depict the extent of all parcels, including all residue parcels, but need not include any balance parcel or balance non-primary parcel.

(b) A parcel on a Diagram of Survey must be represented as a polygon or polyhedron, unless (c) applies.

(c) A parcel may be represented as a centreline where it is for an existing centreline easement and:

(i) the extent of that easement to be retained is completely within a single underlying parcel, or

(ii) its width is unknown.

(d) A Diagram of Survey must depict the appellation of each new parcel, which can be in abbreviated form provided it is unique.

(e) A Diagram of Survey must depict an area for each new parcel as required by rule 5.3.

(f) A Diagram of Survey:

(i) must depict the relationships between a parcel and its boundaries and boundary points in the horizontal extent, and where applicable in the vertical extent,

(ii) irrespective of (i), need not depict boundary points of an existing non-primary parcel boundary defined in a CSD integrated into the cadastre.

(g) A Diagram of Survey must depict the spatial relationship between:

(i) all primary parcel boundaries on the survey, including a primary stratum boundary, and

(ii) each boundary of a non-primary parcel included in the CSD and each boundary of its underlying parcel.

(h) A Diagram of Survey must depict:

(i) an estate boundary where it passes through the land under survey, clearly annotated with the estate record references,

(ii) land being claimed as accretion, with the description 'accretion',

(iii) the name of the water body, or where no name is available a simple description, for a residue parcel subject to rule 5.5.1(c), or the description 'erosion' if the land has been eroded,

(iv) the name, or where no name is available a simple description, for any road, railway, or water body that abuts a new parcel, and

(v) the description 'marginal strip' for a balance parcel that is a fixed marginal strip.

9.6.4 Parcel information for a unit title development

In addition to rule 9.6.3, a Diagram of Survey for a unit title development must depict the spatial relationship between:

(a) each unit boundary and each other non-primary parcel boundary, and

(b) each non-primary parcel boundary and each underlying primary parcel boundary where the primary parcel boundary coincides with the estate boundary.

9.6.5 Parcel information for a cross lease development

In addition to rule 9.6.3, a Diagram of Survey for a cross lease development must depict the spatial relationship between:

(a) each cross lease area boundary and each other non-primary parcel boundary, and

(b) each non-primary parcel boundary and each underlying parcel boundary.

9.6.6 Parcel information for a movable marginal strip

A movable marginal strip that is included in the CSD must be depicted on a Diagram of Survey as being contained within its underlying primary parcel.

9.6.7 Water boundaries

A Diagram of Survey must:

(a) depict a water boundary as an irregular line at a scale that:

(i) clearly shows its shape and relationship to other boundaries, as required by rule 9.6.3(g), and

(ii) is adequate to meet the accuracy required by rule 3.4;

(b) where the former position of a water boundary is being depicted in terms of rule 6.7(b), depict the relationship of the physical water's edge to the boundary, or include a statement clearly indicating that the parcel boundary and the water's edge are not coincident; and

(c) describe the legal water boundary including where it is a stratum boundary.

9.6.8 Irregular boundaries

A Diagram of Survey must depict an irregular boundary as an irregular line at a scale that:

(a) clearly shows its shape and relationship to other boundaries, as required by rule 9.6.3(g), and

(b) is adequate to meet the accuracy required by rule 3.4.

9.6.9 Permanent structure boundaries

A Diagram of Survey must:

(a) depict each permanent structure boundary at a scale that clearly shows the shape and location of the boundary in relation to other boundaries in the CSD,

(b) show sufficient information to define the relationship of each permanent structure boundary to each nearby parcel boundary as required by rule 9.6.4 and in accordance with rule 3.5,

(c) show the permanent structure and its spatial relationship to the permanent structure boundary, including any parts that extend beyond the boundary,

(d) have a description of every permanent structure from which the permanent structure boundary is located by reference, and

(e) where a permanent structure boundary is not coincident with a permanent structure, show sufficient information to enable any point on the boundary to be accurately ascertained in relation to the permanent structure, in accordance with the accuracy standards specified in rule 3.5(b).

9.6.10 Stratum boundaries

For each stratum boundary that is mathematically described, a Diagram of Survey must show sufficient:

(a) vectors,

(b) bearings,

(c) distances,

(d) reduced levels,

(e) mathematical formulae, or

(f) similar information,

to enable the relationship between any position on the stratum boundary surface and any other boundary as required by rule 9.6.3(g) to be ascertained in accordance with the accuracy standards specified in rules 3.3 and 3.6.

9.6.11 Parcel annotations

A Diagram of Survey must depict the annotations set out in Table 9, clearly related to the relevant parcels.

Table 9: Parcel annotations for Diagrams of Survey

Parcel	Annotation
existing centreline easement of unknown width	‘width unknown’
parcel area derived from class D boundaries	'area not determined by survey'
land in a parcel intended to remain in a title limited as to parcels	'Limited as to parcels'
land in a parcel intended to remain in a Hawke's Bay interim title	'Hawke's Bay interim title'
land in a parcel intended for disposal by the Crown and not held under the Land Transfer Act 1952, or land disposed of by the Crown on or after 10 April 1990 and not held under the Land Transfer Act 1952 at the time of disposal	'Subject to Part 4A Conservation Act 1987'

9.6.12 Boundary annotations

A Diagram of Survey must depict the annotations set out in Table 10, clearly related to the relevant boundaries.

Table 10: Boundary annotations for Diagrams of Survey

Boundary	Annotation
boundary accepted in terms of rule 6.3(a)(iii) and no dimension is available	'bearing unknown' or 'distance unknown' as applicable
boundary accepted in terms of rule 6.3(a)(iv)	'magnetic bearing'

9.6.13 Vectors

(a) A Diagram of Survey must include sufficient vectors to enable the relationship:

(i) between all non-boundary marks and points to be ascertained in accordance with the accuracy standards in rule 3.1,

(ii) between all boundary points to be ascertained in accordance with rule 3.3, and

(iii) between all boundary points and non-boundary marks to be ascertained in accordance with the accuracy standards in rule 3.6.

(b) The requirements for vectors in (a) do not apply to:

(i) an existing non-primary parcel boundary depicted in accordance with rule 9.6.14(b)(i), or

(ii) accepted boundaries and boundary points.

(c) A Diagram of Survey must include sufficient vectors, that meet the accuracy standards specified in rule 3.3, to determine the position of the end points of each:

(i) water boundary, and

(ii) irregular boundary, including the points where the width of a movable marginal strip or esplanade strip changes.

(d) A Diagram of Survey must include each adopted vector used for the purposes of boundary definition.

(e) Where it is impractical to clearly show a vector on a Diagram of Survey, the line for the vector must be shown and the vector must be included in the CSD Plan.

9.6.14 Boundary dimensions

(a) For each parcel that is required to be included in a Diagram of Survey by rule 9.6.3(a), the Diagram of Survey must show the following:

(i) the vector for each right-line boundary,

(ii) the chord bearing, arc distance, and radius for each arc boundary, and

(iii) the width of each movable marginal strip or esplanade strip that is depicted in the CSD.

(b) Irrespective of (a)(i) and (ii):

(i) where a non-primary parcel boundary is depicted in terms of rule 9.6.3(f)(ii), a reference to the CSD from which the boundary has been sourced will be sufficient,

(ii) where a boundary is accepted in terms of rule 6.3(a)(iii) to (v), the Diagram of Survey must show the adopted boundary dimensions where they exist, and

(iii) where a boundary is accepted in terms of rule 6.3(b), the vector for the boundary is not required.

9.6.15 Interpretation of information on a Diagram of Survey

On a Diagram of Survey:

(a) all information must be clear and unambiguous,

(b) all information must be legible when printed at A3 size, and

(c) a north point must be shown on each sheet.

10 Title Plan

10.1 Title Plan information

A Title Plan must include the following information:

(a) the name of the territorial authority,

(b) the name of the certifying cadastral surveyor and the survey firm,

(c) the date of certification, once the CSD has been certified by the cadastral surveyor,

(d) on each sheet, the CSD type and number, and the sheet number and the total number of sheets,

(e) the parcel intent for each new parcel,

(f) the appellation of each underlying parcel, and

(g) all notations, memorials, or other matters required by law and referenced to the relevant parcels.

10.2 Easement information

10.2.1 New easement information

(a) A Title Plan must include the following:

(i) a memorandum containing information about a new easement where the easement is required by a territorial authority, or

(ii) a schedule containing information about a new easement where the easement is not a requirement of a territorial authority.

(b) A memorandum or schedule required by (a) must be in tabular form and must include the following information:

(i) the heading 'Memorandum of Easements' or 'Schedule of Easements' as appropriate,

(ii) the easement parcel identifier,

(iii) the purpose of the easement,

(iv) the servient tenement, and

(v) the dominant tenement or grantee as appropriate.

10.2.2 Existing easement information

(a) A Title Plan must include information about each existing subject easement that is to be retained, and in the case of a unit title development, each existing appurtenant easement that is to be retained.

(b) The information required by (a) must be provided as a schedule in tabular form and must include the following information:

(i) the heading 'Schedule of Existing Easements',

(ii) the easement parcel identifier,

(iii) the purpose of the easement,

(iv) the creating document reference, and

(v) the servient tenement.

10.3 Covenant information

(a) A Title Plan must include a notation for each new covenant or existing covenant that is to be retained.

(b) The notation required by (a) must include the following information:

(i) the covenant parcel identifier,

(ii) the parcel intent, and

(iii) in the case of an existing covenant, the creating document reference.

10.4 Diagram of Parcels

10.4.1 Title Plan to include Diagram of Parcels

A Title Plan must include a Diagram of Parcels.

10.4.2 Parcel information

(a) A Diagram of Parcels must depict the horizontal extent and, where applicable, the vertical extent of each parcel that has been spatially defined by the survey, and all residue parcels, but need not include any balance parcel or balance non-primary parcel.

(b) A parcel on a Diagram of Parcels must be represented as a polygon or polyhedron, unless (c) applies.

(c) A parcel may be represented as a centreline where it is for an existing centreline easement and:

(i) the extent of the easement to be retained is completely within a single underlying parcel, or

(ii) its width is unknown.

(d) Each parcel on a Diagram of Parcels must be depicted in its entirety on at least one sheet drawn to scale with:

(i) its boundaries,

(ii) its appellation, which can be in an abbreviated form provided it is unique,

(iii) in the case of a non-primary parcel, the appellation of the underlying parcel which can be in an abbreviated form provided it is unique, and

(iv) an area if required by rule 5.3. An area must not be shown for a movable marginal strip.

(e) A Diagram of Parcels must depict the spatial relationship between:

(i) each non-primary parcel and its underlying parcel, and

(ii) each cross lease area and each other non-primary parcel,

with the exception of a unit title development (refer to rule 10.4.3) or a movable marginal strip (refer to rule 10.4.4).

(f) A Diagram of Parcels must depict:

(i) an estate boundary where it passes through the land under survey, clearly annotated with the estate record references,

(ii) land being claimed as accretion, with the description 'accretion',

(iii) the name of the water body, or where no name is available a simple description, for a residue parcel subject to rule 5.5.1(c), or the description 'erosion' if the land has been eroded,

(iv) the name, or where no name is available a simple description, for any road, railway, or water body that abuts a new parcel,

(v) the description 'marginal strip' for a balance parcel that is a fixed marginal strip, and

(vi) any territorial authority boundary that passes through a parcel, clearly annotated with the names of the relevant territorial authorities.

10.4.3 Parcel information for a unit title development

In addition to rule 10.4.2, a Diagram of Parcels for a unit title development must clearly depict the spatial relationship between:

(a) each unit and each other non-primary parcel, and

(b) each non-primary parcel and the estate boundary.

10.4.4 Parcel information for a movable marginal strip

A movable marginal strip that is included in the CSD must be depicted on a Diagram of Parcels as being contained within its underlying primary parcel.

10.4.5 Water boundaries

A Diagram of Parcels must:

(a) depict a water boundary as an irregular line at a scale that clearly shows its shape and relationship to other boundaries of the parcel,

(b) where the former position of a water boundary is being depicted in terms of rule 6.7(b), depict the relationship of the physical water's edge to the boundary or include a statement clearly indicating that the parcel boundary and the water's edge are not coincident, and

(c) describe the legal water boundary including where it is a stratum boundary.

10.4.6 Irregular boundaries

A Diagram of Parcels must depict an irregular boundary as an irregular line at a scale that clearly shows its shape and relationship to other boundaries of the parcel.

10.4.7 Permanent structure boundaries

A Diagram of Parcels must:

(a) depict each permanent structure boundary at a scale that clearly shows the shape and location of the boundary in relation to other boundaries in the CSD,

(b) show the permanent structure and its spatial relationship to the permanent structure boundary, including any parts that extend beyond the boundary, and

(c) have a description of every permanent structure from which the permanent structure boundary is located by reference.

10.4.8 Parcel annotations

A Diagram of Parcels must depict the annotations set out in Table 11, clearly related to the relevant parcels.

Table 11: Annotations for Diagrams of Parcels

Parcel	Annotation
existing centreline easement of unknown width	'width unknown'
parcel area derived from class D boundaries	'area not determined by survey'
land in a parcel intended to remain in a title limited as to parcels	'Limited as to parcels'
land in a parcel intended to remain in a Hawke's Bay interim title	'Hawke's Bay interim title'
land in a parcel intended for disposal by the Crown and not held under the Land Transfer Act 1952, or land disposed of by the Crown on or after 10 April 1990 and not held under the Land Transfer Act 1952 at the time of disposal	'Subject to Part 4A Conservation Act 1987'

10.4.9 Boundary dimensions

A Diagram of Parcels must show the following:

(a) a distance for each right-line or arc boundary together with the boundary points related to this distance, unless it is:

  (i) an existing non-primary parcel boundary already defined in a CSD integrated into the cadastre, or

  (ii) a boundary that is accepted in terms of rule 6.3(a)(iii) or (v). In this case the diagram must show the adopted boundary distance where it exists, or

  (iii) a boundary that is accepted in terms of rule 6.3(b); and

(b) the width of each movable marginal strip or esplanade strip that is depicted in the CSD.

10.4.10 Interpretation of information on a Diagram of Parcels

On a Diagram of Parcels:

(a) all information must be clear and unambiguous,

(b) all information must be legible when printed at A4 size, and

(c) a north point must be shown on each sheet.

11 Monumentation CSD

11.1 Monumentation CSD usage

(a) A monumentation CSD must only be used to record the placement of a boundary mark on an existing boundary point where:

(i) the boundary point is a class A or class B boundary point, and

(ii) the boundary mark has been placed in terms of an old non-boundary survey mark, and

(iii) the boundary point and that old survey mark are recorded in a CSD that has been approved as to survey, and

(iv) the accuracy on that survey between the boundary point and the old survey mark meets the boundary witnessing accuracy standard specified in rule 3.6, and

the approved CSD

(v) has a direct measurement between the boundary point and the old survey mark, or

(vi) has a series of measured vectors between the boundary point and the old survey mark with a total length of less than 50 m in urban areas, or 100 m in rural areas, or

(vii) was certified under the Survey Regulations 1998 or the Surveyor-General's Rules for Cadastral Survey 2002/1 or 2002/2, and the boundary point and that old survey mark are within 125 m of each other in urban areas or 250 m of each other in rural areas, or

(viii) was certified under these Rules and the boundary point and the old survey mark are within 150 m of each other where the boundary point is class A or 500 m of each other where the boundary point is class B.

(b) A monumentation CSD must not be used where a boundary point is required to be marked by rules 7.1(b) or (c).

11.2 Monumentation CSD exempt from certain rules

The cadastral survey for a monumentation CSD is not required to comply with the following rules:

(a) 4.1(a)

(b) 7.3,

(c) 7.4,

(d) 8.1(a), (d), and (e), and

(e) 8.2.

11.3 Monumentation CSD Plan

(a) A monumentation CSD must include a CSD Plan.

(b) The CSD Plan in (a) must include the following:

(i) a statement of certification in accordance with rule 13, once the CSD has been certified by the cadastral surveyor,

(ii) the horizontal datum and circuit projection,

(iii) the type and number of the CSD that witnessed each marked boundary point,

(iv) occupation information in relation to each new boundary mark, and

(v) a Diagram of Survey in accordance with rule 11.4.

11.4 Diagram of Survey in a monumentation CSD Plan

11.4.1 Information on a Diagram of Survey

A Diagram of Survey must clearly depict the survey and include:

(a) each new boundary mark together with all boundaries that meet at that boundary mark,

(b) the appellation for each parcel that adjoins the boundary point that has been marked,

(c) the old non-boundary survey mark in terms of which the boundary mark was placed, and

(d) one or more vectors joining the new boundary mark and the old non-boundary survey mark.

11.4.2 Survey mark information

The following information must be included for each survey mark in a Diagram of Survey:

(a) an abbreviation that describes the physical mark type for each new or old survey mark, other than a peg or post;

(b) the identifier for each:

(i) survey mark or point where an identifier is required by rule 7.5(b),

(ii) survey mark or point where an identifier already exists; and

(c) the source CSD type and number for old survey marks.

11.4.3 Interpretation of information on a Diagram of Survey

On a Diagram of Survey:

(a) all information must be clear and unambiguous,

(b) all information must be legible when printed at A3 size, and

(c) a north point must be shown on each sheet.

12 Diagram plan symbols and text

12.1 Symbol and text depiction

(a) Information on a Diagram of Survey and a Diagram of Parcels must conform to the symbol and text requirements specified in this section.

(b) All symbols and text must be black in colour.

12.2 Survey mark symbols

(a) The symbols in Table 12 must be used for survey marks.

(b) When a survey mark serves more than one purpose, a symbol higher up the table takes precedence over a symbol below it.

(c) The symbol for a disturbed survey mark in its disturbed 'new' position must be the same as that for a new mark.

(d) The symbol for a renewed survey mark must be the same as that for an old mark.

Table 12: Symbols for survey marks

Mark type		Symbol
permanent reference mark that meets the requirements of rule 7.4	new	◎
	old	◉
witness mark that meets the requirements of rule 7.3	new	○
	old	●
boundary post	new	□
	old	■
	adopted	□
unmarked point	new	×
	adopted	×
other survey mark including a control mark or boundary mark	new	○
	old	●
	adopted	○

12.3 Line styles

(a) The styles and widths specified in Table 13 must be used for lines.

(b) When a line serves more than one purpose, a style higher up the table takes precedence over a style below it.

(c) The width of a heavy line must be at least twice the width of a light line.

Table 13: Line styles and widths

Line types	Line style	Line width
new primary, unit, or lease parcel boundary	▬▬▬▬▬	heavy
other non-primary parcel boundary	———	light
measured vector	– – – – –	light
calculated vector	.....	light
adopted vector or line	———	light
estate boundary	— · — · — ·	light
adjacent primary parcel boundary	.....	light

12.4 Font size for text

(a) The font size for each appellation and area must be significantly larger than the font size used for vectors, dimensions, descriptions, and survey mark information.

(b) The font size for each parcel annotation required by rules 9.6.11 and 10.4.8 must be significantly larger than the font size used for appellations.

13 Certification

Every CSD must be certified and dated by the cadastral surveyor as follows:

'I [*name*], being a licensed cadastral surveyor, certify that:

(a) this dataset provided by me and its related survey are accurate, correct and in accordance with the Cadastral Survey Act 2002 and the Rules for Cadastral Survey 2010, and

(b) the survey was undertaken by me or under my personal direction.'

14 Retention of field information

All relevant field information must either:

(a) be included in the CSD to which it relates, provided that it is in a form that ensures permanent usability, or

(b) be retained for a period of at least seven years from certification and made available to the Surveyor-General or the Chief Executive on request.

15 Revocation and savings

(a) The Surveyor-General's Rules for Cadastral Survey 2002/2 are revoked when the Rules for Cadastral Survey 2010 come into effect.

(b) A survey commenced under the Surveyor-General's Rules for Cadastral Survey 2002/2 that, prior to the commencement of these Rules, had appellations which would be required to change as a result of these Rules may continue to use those appellations if this change would make the resource consent of subdivision, obtained before the coming into effect of these Rules, invalid.