

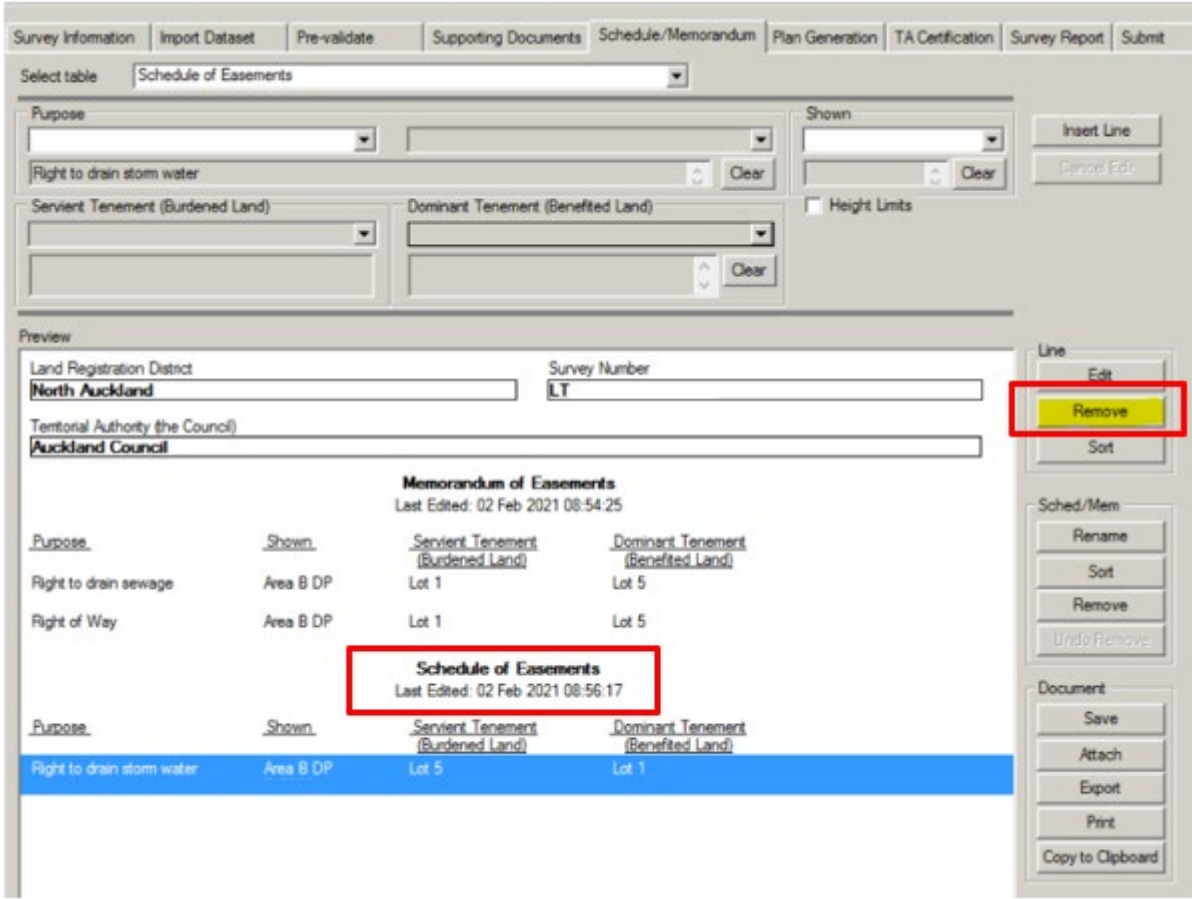
Survey Release Notes for Landonline Release 3.24 (30 Aug 2021)

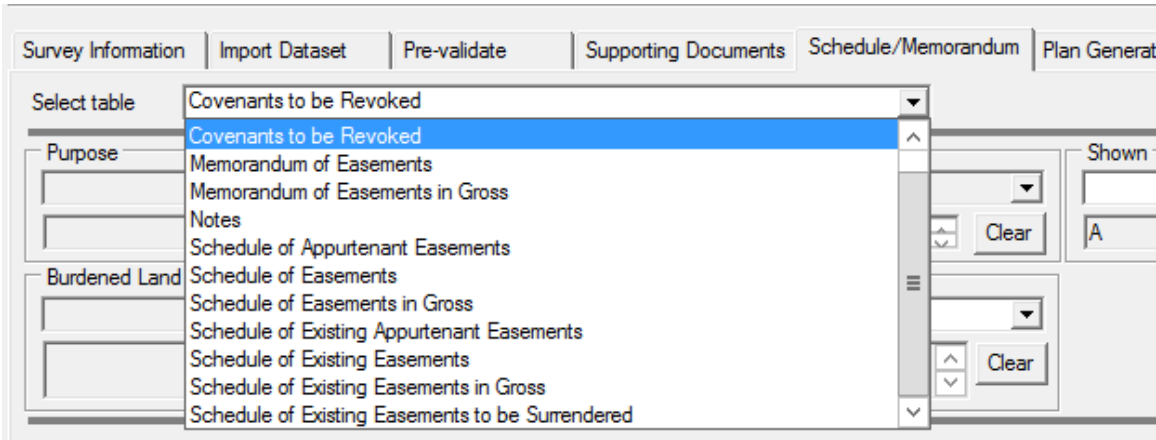
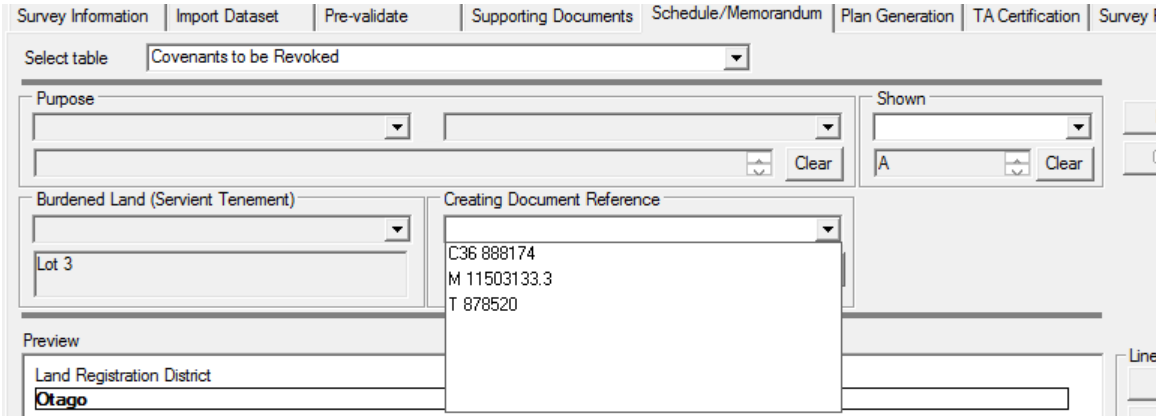
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Title	Adding Mark Conditions to the Mark & Vector Report																																																																																																														
Enhancement	LOLCM-2085 (Internal and External)																																																																																																														
Description	<p>A CSD must identify whether a survey mark is disturbed, renewed, removed, searched for and not found or destroyed CSR 2021 r80(5) & (7). Existing functionality in the CSC_S03b-Mark Details screen already records this information for disturbed and renewed marks (radio buttons under the Mark Reliability Details field).</p> <p>A new column has been created in the Mark and Vector report to display information in the CSD for identifying if marks are Destroyed and Not Found (2010 rules) or Destroyed and Searched for and Not Found (2021 rules).</p> <p>This enhancement has been applied to plans created under either RCS 2010 or CSR 2021.</p>																																																																																																														
Action	<p><u>Mark Condition column under the RCS 2010 showing Destroyed and Not Found mark conditions:</u></p> <div><p>Mark and Vector</p><p>Survey Number DP 435642 Meridional Circuit Observation Point 2000</p><table><tr><th>From</th><th>To</th><th>Code</th><th>Chord Bearing</th><th>Arc Length</th><th>Radius</th><th>Adpt Surv</th></tr><tr><td>PEG A DP 23575</td><td>PEG (15) DP 23575</td><td>ob49</td><td>127°35'00"</td><td>2.99</td><td>15.00</td><td>A DP 23575</td></tr><tr><td>PEG (15) DP 23575</td><td>PEG 2</td><td>ob50</td><td>139°15'00"</td><td>3.07</td><td>15.00</td><td>A DP 23575</td></tr><tr><td>PEG 2</td><td>PEG (13) DP 23575</td><td>ob51</td><td>156°33'00"</td><td>5.99</td><td>15.00</td><td>A DP 23575</td></tr></table><table><tr><th>Mark Name</th><th>Mark Condition</th><th>Description</th></tr><tr><td>IT 3 DP 319850</td><td></td><td>Flush</td></tr><tr><td>IT 1 DP 23575</td><td></td><td>0.2 down</td></tr><tr><td>IT V DP 23575</td><td></td><td>Iron tube flush in seal 3 metres from kerb.</td></tr><tr><td>PEG 3</td><td></td><td>2.1m SE from MH</td></tr><tr><td>IS IV DP 23575</td><td>Destroyed</td><td></td></tr><tr><td>PEG (10) DP 23575</td><td>Not Found</td><td></td></tr><tr><td>PEG (11) DP 23575</td><td>Not Found</td><td></td></tr><tr><td>PEG (12) DP 23575</td><td>Not Found</td><td></td></tr></table></div> <p><u>Mark Condition column under the CSR 2021 showing Destroyed and Not Found mark conditions:</u></p> <div><p>Mark and Vector</p><p>Survey Number DP 435642 Meridional Circuit Observation Point 2000</p><table><tr><th>From</th><th>To</th><th>Code</th><th>Chord Bearing</th><th>Arc Length</th><th>Radius</th><th>Adpt Surv</th></tr><tr><td>PEG A DP 23575</td><td>PEG (15) DP 23575</td><td>ob49</td><td>127°35'00"</td><td>2.99</td><td>15.00</td><td>A DP 23575</td></tr><tr><td>PEG (15) DP 23575</td><td>PEG 2</td><td>ob50</td><td>139°15'00"</td><td>3.07</td><td>15.00</td><td>A DP 23575</td></tr><tr><td>PEG 2</td><td>PEG (13) DP 23575</td><td>ob51</td><td>156°33'00"</td><td>5.99</td><td>15.00</td><td>A DP 23575</td></tr></table><table><tr><th>Mark Name</th><th>Mark Condition</th><th>Description</th></tr><tr><td>IT 3 DP 319850</td><td></td><td>Flush</td></tr><tr><td>IT 1 DP 23575</td><td></td><td>0.2 down</td></tr><tr><td>IT V DP 23575</td><td></td><td>Iron tube flush in seal 3 metres from kerb.</td></tr><tr><td>PEG 3</td><td></td><td>2.1m SE from MH</td></tr><tr><td>IS IV DP 23575</td><td>Destroyed</td><td></td></tr><tr><td>PEG (10) DP 23575</td><td>Searched For and Not Found</td><td></td></tr><tr><td>PEG (11) DP 23575</td><td>Searched For and Not Found</td><td></td></tr><tr><td>PEG (12) DP 23575</td><td>Searched For and Not Found</td><td></td></tr></table></div>	From	To	Code	Chord Bearing	Arc Length	Radius	Adpt Surv	PEG A DP 23575	PEG (15) DP 23575	ob49	127°35'00"	2.99	15.00	A DP 23575	PEG (15) DP 23575	PEG 2	ob50	139°15'00"	3.07	15.00	A DP 23575	PEG 2	PEG (13) DP 23575	ob51	156°33'00"	5.99	15.00	A DP 23575	Mark Name	Mark Condition	Description	IT 3 DP 319850		Flush	IT 1 DP 23575		0.2 down	IT V DP 23575		Iron tube flush in seal 3 metres from kerb.	PEG 3		2.1m SE from MH	IS IV DP 23575	Destroyed		PEG (10) DP 23575	Not Found		PEG (11) DP 23575	Not Found		PEG (12) DP 23575	Not Found		From	To	Code	Chord Bearing	Arc Length	Radius	Adpt Surv	PEG A DP 23575	PEG (15) DP 23575	ob49	127°35'00"	2.99	15.00	A DP 23575	PEG (15) DP 23575	PEG 2	ob50	139°15'00"	3.07	15.00	A DP 23575	PEG 2	PEG (13) DP 23575	ob51	156°33'00"	5.99	15.00	A DP 23575	Mark Name	Mark Condition	Description	IT 3 DP 319850		Flush	IT 1 DP 23575		0.2 down	IT V DP 23575		Iron tube flush in seal 3 metres from kerb.	PEG 3		2.1m SE from MH	IS IV DP 23575	Destroyed		PEG (10) DP 23575	Searched For and Not Found		PEG (11) DP 23575	Searched For and Not Found		PEG (12) DP 23575	Searched For and Not Found	
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Title	Bundle Area Schedule Supporting Documents
Enhancement	LOLCM-2122 (Internal and External)
Description	<p>All CSDs with a survey purpose 'Legalisation' must include an area schedule as a supporting document CSR 2021 r96.</p> <p>This enhancement ensures that once Plan Generation has been run, the Area Schedule will also be bundled to the Title Plan.</p> <p>Where no area schedule is included with a legalisation survey business rule C696 will alert surveyors at pre-validation</p>
Action	Supporting document 'Area Schedule' now bundles to the CSD Plan (RCS 2010), Record of Survey (CSR 2021) and the Title Plan.

Title	Automated Schedule/Memorandum Last Edited Date is not Recording all Actions
Defect	LOLCM-2699 (Internal and External)
Description	When edits are made to the automated Schedule/Memorandum, the 'Last Edited' date/time was not reflecting when those edits were made.
Action	<p>Fixed</p> <p>Last edited date/time now reflect the last edit made:</p> 

Title	Automated Schedule/Memorandum – Additional Information
Enhancement	LOLCM-2119 and LOLCM-2067 (Internal and External)
Description	<p>Changes to the Cadastral Survey Rules 2021 require the following changes:</p> <ul style="list-style-type: none"> • A Title Plan must include details of every easement to be surrendered and covenant to be revoked, including the creating document reference for each (r92(h)). • The ability to add multiple parcels to the burdened land (servient tenement) field of the easement schedule as permitted by rule r47 • Update the automated schedule/memorandum wording to reflect rules 93(2)(d), (e) and 94(2)(e) as required by the Land Transfer Act 2017
Action	<p>Automated Schedule/Memorandum tab:</p> <ul style="list-style-type: none"> • New table 'Covenants to be Revoked'  <ul style="list-style-type: none"> • Covenants to be Revoked only has ability to have 'Shown', 'Burdened Land (Servient Tenement)' and 'Creating Document Reference' fields populated  <ul style="list-style-type: none"> • Burdened and Benefited Land wording changes - Servient Tenement and Dominant Tenement now in brackets

Schedule of Easements

Purpose

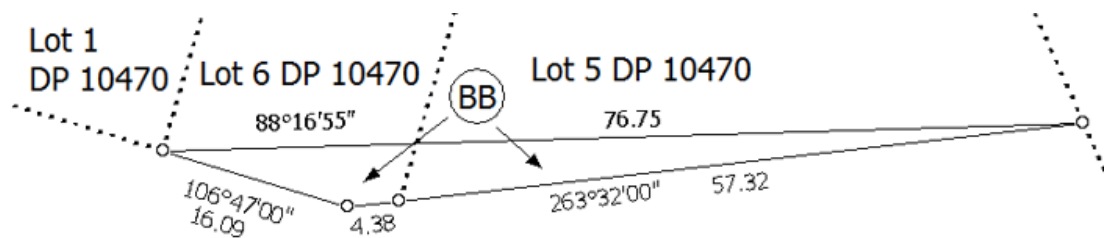
Burdened Land (Servient Tenement)

Benefited Land (Dominant Tenement)

Capturing Non-Primary parcels over more than one Primary parcel

- A non-primary parcel may cross a primary parcel boundary, but not an estate boundary (r47).
- If there are multiple parcels in the one title you now only need to create a single easement parcel.

This is illustrated by easement BB crossing Lots 5 and 6 DP 10470:



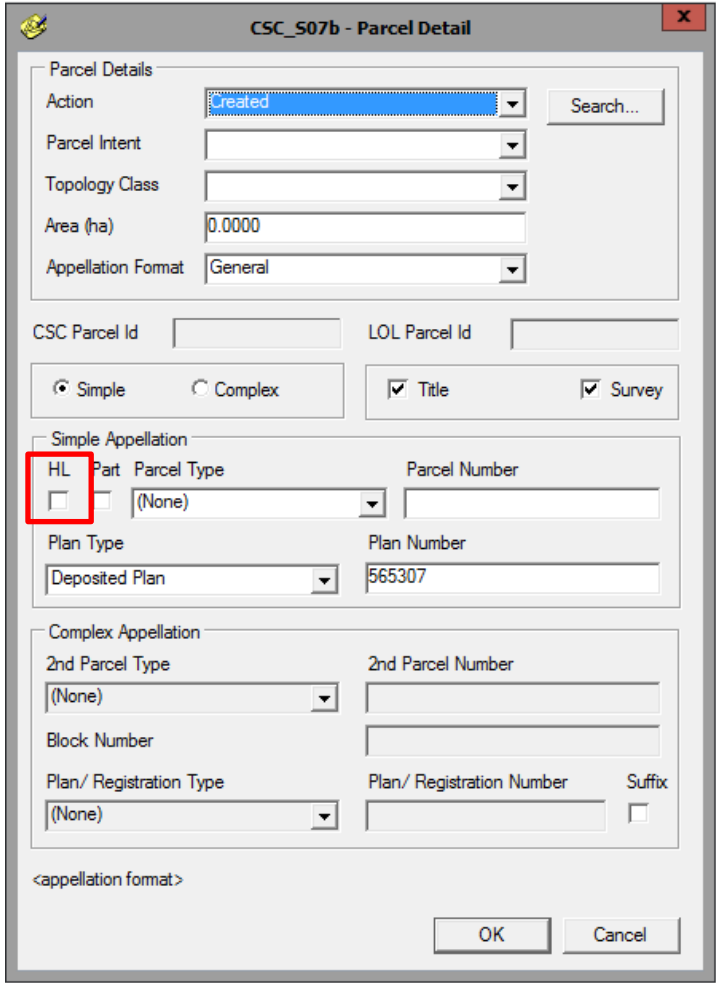
The automated Schedule/Memorandum tab allows more than one Burdened Land (Servient Tenement) to be entered with this scenario:

Schedule of Easements in Gross			
Last Edited: 23 Jun 2021 10:56:06			
<u>Purpose</u>	<u>Shown</u>	<u>Burdened Land (Servient Tenement)</u>	<u>Grantee</u>
Right to convey electricity	BB	Lot 5 DP 10470, Lot 6 DP 10470	Orion NZ

Title	Automated Schedule/Memorandum – Line Spacing has disappeared
Defect	LOLCM-2665 (Internal and External)
Description	Line spacing in the Automated Schedule/Memorandum is not displaying correctly.
Action	FIXED Line spacing between different ‘Purposes’ and ‘Schedules’ has been amended.

Title	Automated Schedule/Memorandum – Increase Characters for Fields
Enhancement	LOLCM-2332 (Internal & External)
Description	The Benefitted Land (Dominant Tenement) field, in the automated Schedule/Memorandum, has had the number of characters allowed to be entered increased to allow for more entries to be entered.
Action	FIXED The number of characters has increased.

Title	Supporting Documents – Field Information and Water Boundary Record
Enhancement	LOLCM-2611 (Internal and External)
Description	Changes to the Cadastral Survey Rules 2021 require a CSD to include: <ul style="list-style-type: none"> • All relevant field information (r71(e)) • An accurate record of the position of any new water boundary (r71(f))
Action	The following two documents can be attached to the CSD as a machine-readable colour pdf. <ul style="list-style-type: none"> • Supporting document type ‘Field Note’ – now renamed ‘Field Information’ • New supporting document type ‘Water Boundary Record’

Title	Appellations – Height Limited
Enhancement	LOLCM-2066 (Internal and External)
Description	<p>Where a primary or non-primary parcel is height-limited, the pre-fix 'Height Limited' must be used in the appellation CSR 2021 r43.</p> <p>Note this only applies to Lots, Areas and Sections. It does not apply to Unit parcels or Maori Land.</p> <p>The CSC_S07b – Parcel Detail screen has been modified to accommodate this enhancement.</p>
Action	<ul style="list-style-type: none"> A Height Limited (HL) checkbox has been added to the CSC_S07b – Parcel Detail screen Where your primary or non primary parcels have an upper or lower limit, this checkbox must be selected  <p>The Height Limited checkbox shall only be used against the following Parcel Types:</p> <ul style="list-style-type: none"> Lots Areas (includes Flats/Cross lease plans) Sections

CSC_S07b - Parcel Detail

Parcel Details

Action: Created [Search...]

Parcel Intent: Fee Simple Title

Topology Class: Primary

Area (ha): 0.0862

Appellation Format: General

CSC Parcel Id: 1 LOL Parcel Id:

☒ Simple ☐ Complex ☒ Title ☒ Survey

Simple Appellation

HL ☒ Part: Lot Parcel Type: Parcel Number: 1

Plan Type: Deposited Plan Plan Number: 4000024

Complex Appellation

2nd Parcel Type: (None) 2nd Parcel Number:

Block Number:

Plan/ Registration Type: (None) Plan/ Registration Number: Suffix: ☐

Height-Limited Lot 1 Deposited Plan 4000024

OK Cancel

NOTE:

The Height Limited checkbox has no connection to the Easement 'Height Limited' field in the automated Schedule/Memorandum

The Height Limited checkbox will not be applied to the following Parcel Types:

- Principal Units
- Accessory Units
- FDU
- Units

Where the Height Limited checkbox has been selected, the appellation will display in the following formats

- The CSC_S07a – Parcel List screen – appellations will be displayed as Height-Limited Lot 1 DP <number>'

CSC_S07a - Parcel List

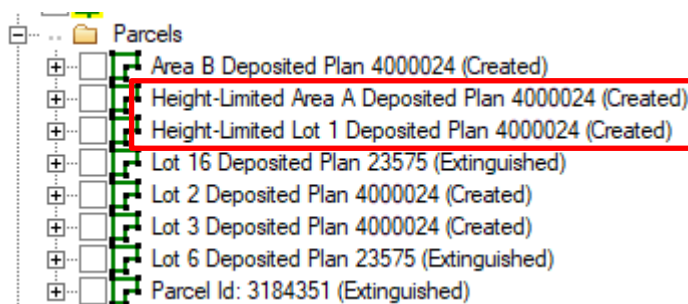
Parcel Id	Parcel Appellation	Area (ha)	Action	Parcel Intent
1	Height-Limited Lot 1 Deposited Plan 4000024	0.0862	Created	Fee Simple Title
2	Lot 2 Deposited Plan 4000024	0.1306	Created	Fee Simple Title
3	Lot 3 Deposited Plan 4000024	0.1277	Created	Fee Simple Title
4	Height-Limited Area A Deposited Plan 4000024		Created	Easement
5	Area B Deposited Plan 4000024		Created	Easement
6	Lot 6 Deposited Plan 23575	0.0977	Extinguished	DCDB
7	Parcel Id: 3184351		Extinguished	Road
8	Lot 16 Deposited Plan 23575	0.2420	Extinguished	DCDB

-
- HL Area A DP 4000024
- Area B DP 4000024
- Lot 6 DP 23575
- HL Lot 1 DP 4000024

-
- Lot 5 DP 23575
- HL Lot 1
0.0862Ha
- Lot 7 DP 23575
- Ch 12 Ch 129 29 156 23 1
- Arc 215 3 07 5 59 R
- Place
- 37°39'00"
- 37°39'00"
- 37°39'00"
- 38.96
- 113°02'00"
- 15.30
- 92°33'00"
- 9.22
- 110°48'
- 6.69
- 33°31'00"
- 28.50
- 78°01'00"
- 29.63
- A
- B

- | Referenced Surveys | | | |
|--|------------------|--------------------|--------------|
| Survey Number | Land District | Bearing Correction | |
| DP 11033 | Otago | 0°00'00" | |
| DP 23575 | Otago | 0°00'00" | |
| DP 319850 | Otago | 0°00'00" | |
| Territorial Authorities | | | |
| Waitaki District | | | |
| Created Parcels | | | |
| Parcels | Parcel Intent | Area | RT Reference |
| Height-Limited Lot 1 Deposited Plan 4000024 | Fee Simple Title | 0.0862 Ha | |
| Lot 2 Deposited Plan 4000024 | Fee Simple Title | 0.1306 Ha | |
| Lot 3 Deposited Plan 4000024 | Fee Simple Title | 0.1277 Ha | |
| Height-Limited Area A Deposited Plan 4000024 | Easement | | |
| Area B Deposited Plan 4000024 | Easement | | |
| Total Area | | 0.3445 Ha | |

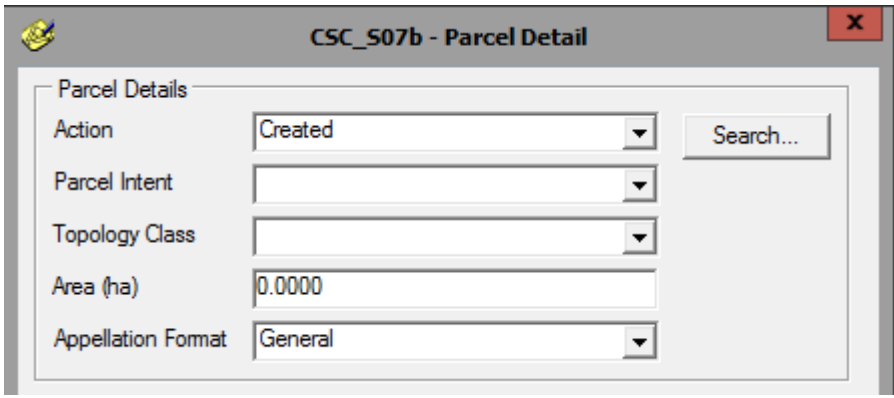
- Searches Tree – appellations will be displayed as shown below:



Where a parcel has a height limited appellation (as well as cross leases etc), vertical extents must be depicted in the survey and title diagrams.

LandXML

- Parcels being created in the LandXML file must be “HL Lot 1’ (NOTE this only applies once 3rd party vendors have applied this to their software to allow selection of this element)
- Parcel imported without ‘HL’ in the LandXML file can be edited in the CSC_S07b – Parcel Detail screen.

Title	New Parcel Intents
Enhancement	LOLCM-2105 (External)
Description	<p>New Parcel Intents have been created to ensure that upon final registration, the parcels reflect their intent.</p> <p>These new intents can be found in the CSC_S07b – Parcel Detail Screen</p> 
Action	<p><u>New Parcel Intent – Reserve Reclassification</u></p> <ul style="list-style-type: none"> A CSD defining part(s) of an existing reserve for reclassification purposes should have a survey purpose of ‘Legalisation’, and the portions to be re-classified should be non-primary parcels, with a parcel intent of “Reserve reclassification”.

CSC_S07b - Parcel Detail

Parcel Details

Action: Created

Parcel Intent: **Reserve Reclassification**

Topology Class:

Area (ha): Secondary
Tertiary

Appellation Format: General

CSC Parcel Id: LOL Parcel Id:

☒ Simple ☐ Complex ☒ Title ☒ Survey

Simple Appellation

HL Part Parcel Type Parcel Number

☐ ☐ Area

Plan Type Plan Number

Survey Office Plan 4000000

New Parcel Intent – Easements to be Surrendered

- Where a portion of an easement is to be surrendered it must use the parcel intent 'Easements to be Surrendered'.

CSC_S07b - Parcel Detail

Parcel Details

Action: Created

Parcel Intent: **Easements to be Surrendered**

Topology Class:

Area (ha): Secondary
Tertiary

Appellation Format: General

CSC Parcel Id: LOL Parcel Id:

☒ Simple ☐ Complex ☒ Title ☒ Survey

Simple Appellation

HL Part Parcel Type Parcel Number

☐ ☐ Area

Plan Type Plan Number

Deposited Plan 4000001

New Parcel Intent – Covenants to be Revoked

- Portions of covenants to be revoked must use the parcel intent 'Covenants to be Revoked'.

The screenshot shows the 'CSC_S07b - Parcel Detail' window. In the 'Parcel Details' section, the 'Parcel Intent' dropdown menu is highlighted with a red rectangle and contains the text 'Covenants to be Revoked'. Other fields include 'Action' (Created), 'Topology Class' (empty), 'Area (ha)' (Secondary/Tertiary), and 'Appellation Format' (General). Below this, there are input fields for 'CSC Parcel Id' and 'LOL Parcel Id', radio buttons for 'Simple' (selected) and 'Complex', and checkboxes for 'Title' and 'Survey' (both checked). The 'Simple Appellation' section includes 'HL' and 'Part' checkboxes, 'Parcel Type' (Area), 'Parcel Number' (empty), 'Plan Type' (Deposited Plan), and 'Plan Number' (4000001).

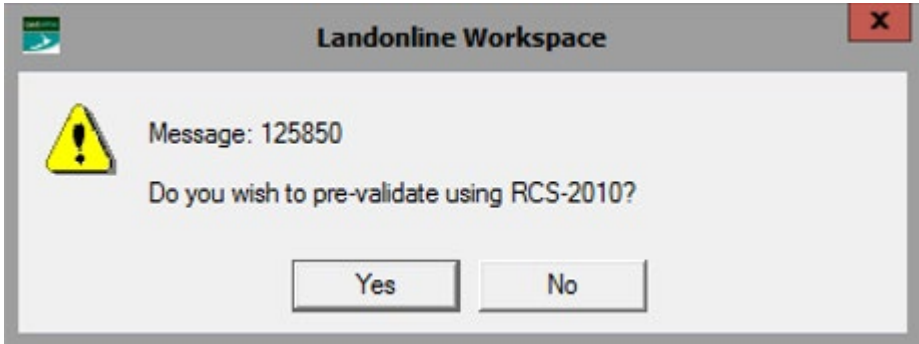
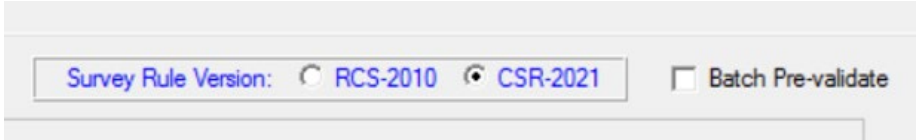
New Parcel Intent – Erosion

- Erosion must now be used instead of Hydro to identify parcels of land that have been eroded in terms of CSR 2021 r10(2)(b)

The screenshot shows the 'CSC_S07b - Parcel Detail' window. In the 'Parcel Details' section, the 'Parcel Intent' dropdown menu is highlighted with a red rectangle and contains the text 'Erosion'. Other fields include 'Action' (Created), 'Topology Class' (Primary), 'Area (ha)' (0.0000), and 'Appellation Format' (General). Below this, there are input fields for 'CSC Parcel Id' and 'LOL Parcel Id', radio buttons for 'Simple' (selected) and 'Complex', and checkboxes for 'Title' and 'Survey' (both unchecked). The 'Simple Appellation' section includes 'HL' and 'Part' checkboxes, 'Parcel Type' ((None)), 'Parcel Number' (empty), 'Plan Type' (Deposited Plan), and 'Plan Number' (4000001).

- An area is not required for erosion parcels

	<ul style="list-style-type: none"> For erosion parcels, ensure the Title and Survey boxes in the CSC_S07b – Parcel Detail screen are unchecked (same as if creating a Hydro parcel) In Layout Sheets, user annotation 'Erosion' is still required to be added to one of these parcels (r87 and 103)
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Title	Transition Period
Enhancement	LOLCM-2094 (Internal & External)
Description	<p>Landonline must be able to run two versions of the business rules in parallel during the transition period.</p> <p>The transition period commences 30th August 2021 and ends 24th February 2022.</p> <p>During the transition period, surveys can be created and validated either against the RCS 2010 or the CSR 2021 business rules.</p> <p>After the transition period, all surveys in Landonline must be worked on in terms of the CSR 2021 business rules. Surveys certified, but not yet validated can continue to be processed in terms of the RCS 2010 business rules.</p>
Action	<p>DURING THE TRANSITION PERIOD (30th August 2021 – 24th February 2022)</p> <p><u>Workspace - CSL S02 – Manage Survey Transaction</u></p> <p>LandXML - When a LandXML file is imported during the transition period, there is an option to choose if the data should be pre-validated against RCS 2010 or CSR 2021 rules – choose the appropriate rule version for your XML file</p>  <ul style="list-style-type: none"> If you choose 'Yes' your dataset will be pre-validated using RCS 2010 If you choose 'NO' your dataset will be pre-validated using CSR 2021 <p>Make sure you select the correct option for the data you have imported/captured.</p> <p>Pre-validation - During the transition period, there is an option to change the pre-validation rule version (RCS 2010 or CSR 2021) on the Pre-validate tab. (It is recommended NOT to go from CSR 2021 back to RCS 2010)</p> 

Dataset Capture - During the transition period, the affected drop-down lists on the Dataset Capture screens will display RCS 2010 values if the rule selected for pre-validation is RCS 2010. Otherwise, CSR 2021 values will be displayed. The values will be validated against the rule version selected on the Pre-validate tab.

Survey Report - The Survey Report tab will display the RCS 2010 questions if the selected RCS version is RCS 2010. Otherwise, CSR 2021 survey report questions will be displayed.

The screenshot shows two versions of the Survey Report interface. The top version is for RCS 2010, with a 'DRAFT' status and a 'Jump to section' dropdown set to 'A. Purpose of Survey'. The bottom version is for CSR 2021, also with a 'DRAFT' status and a 'Jump to section' dropdown set to '1 General Information'. Both versions show a navigation bar with tabs: Survey Information, Import Dataset, Pre-validate, Supporting Documents, Schedule/Memorandum, Plan Generation, TA Certification, Survey Report, and Submit. The 'Survey Report' tab is highlighted in red in both versions.

Certification - If the pre-validation is set to RCS 2010 the RCS 2010 certification will be used. Otherwise, CSR 2021 certification will be used

Submit - The submit validation rules for the selected rule version will be used when a user submits their survey.

Online Messages/Notices | Reports

Online messages/notices –any wording in the online messages/notices will reflect the rule version used at Capture

	435642 Job Number 6 Complete		The Plan Compilation process has been completed. Attached are the compiled Record of Survey and Title Plans.
	435642 Job Number 6 Complete		The Plan Compilation process has been completed. Attached are the compiled CSD and Title Plans.

CSD Plan – If the rules version of the survey is RCS 2010, then 'CSD Plan' will be used

The screenshot shows a 'Details' section with a timestamp '16/08/2021 07:59:42 Landonline' and a message: 'The Plan Compilation process has been completed. Attached are the compiled CSD and Title Plans.' Below the message, there are two icons representing documents, labeled 'CSD Plan' and 'Title Plan', which are highlighted with a red box.

Record of Survey - If the rules version of the survey is RCS-2021, then 'Record of Survey' will be used. (Refer to LOLCM-2073 for the wording changes).

Details

16/08/2021 08:11:46 Landonline

The Plan Compilation process has been completed. Attached are the compiled Record of Survey and Title Plans.



Record of
Survey



Title Plan

AFTER THE TRANSITION PERIOD ENDS

Workspace - CSL S02 – Manage Survey Transaction

The following must comply with CSR 2021:

- **LandXML** – Any 2010 elements that are no longer used under the CSR 2021 will not import
- **Dataset Capture**
- **Survey Report**
- **Submit**

Online Messages/Notices | Reports

- **Online Messages/Notices** – All messages and notices will refer to CSR 2021
- **Record of Survey** – All new plans created will be called Record of Survey and Title Plan.

NOTE:

For other further transitional documentation click on the following link:

<https://www.linz.govt.nz/land/surveying/rules-standards-and-guidelines/cadastral-survey-rules-2021-csr-2021-implementation#transitional>

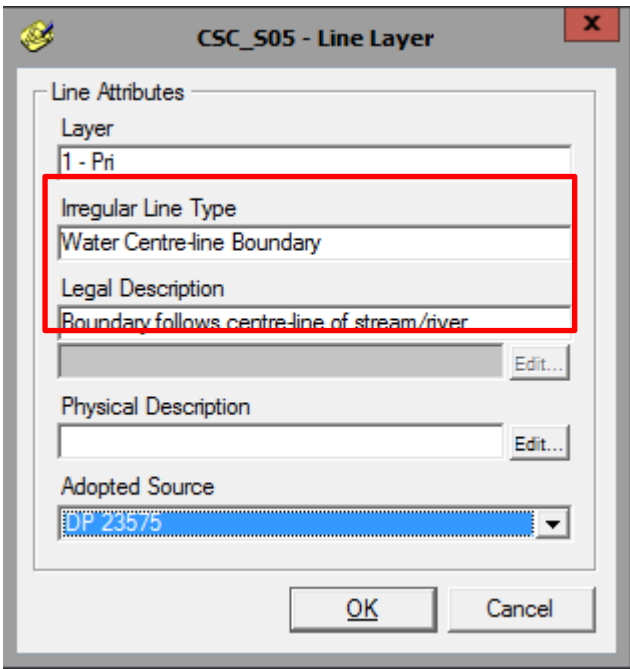
Title	Business Rules C481, C488 and C499 to be made Historic
Enhancement	LOLCM-2072 (Internal and External)
Description	Some rules, run under the RCS 2010, are no longer required to be run under the CSR 2021 so will be removed.
Action	<p>Removed under the CSR 2021 as ‘Defined by Survey’, ‘Defined by Adoption’ and ‘Accepted’ no longer apply:</p> <ul style="list-style-type: none"> • C481 - Boundary points required to be Defined by Survey, • C488 - Class of adopted boundaries appropriate (Class C) • C499 - Class of Accepted boundaries appropriate <p>All boundary marks and points are now captured as ‘Boundary’.</p>

Title	Record of Survey – Wording Changes
Enhancement	LOLCM-2073 (Internal and External)
Description	Wording that was used under the RCS 2010 has been updated to reflect the CSR 2021
Action	<p><u>‘CSD Plan’ has been renamed ‘Record of Survey’</u></p> <p>All references to ‘CSD Plan’ have been removed and will now display ‘Record of Survey’ in the following areas:</p> <ul style="list-style-type: none"> • Business rules run at Pre-validation • Plan Layout Sheets (Preview) • Plan Generation Compilation messages • Plan Generation compiled images • Searches Tree • Structured Text View <p><u>Surveyors Declaration:</u></p> <p>Survey Declaration shall be shown with the following wording:</p> <p><i>‘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 Cadastral Survey Rules 2021; and (b) the survey was undertaken by me or under my personal direction.’</i></p> <p><u>References to Rules:</u></p> <p>All references to rules will be CSR 2021</p>

	<p><u>Survey Finish Date is now Date of Survey</u></p> <p>All references to Survey Finish Date have been updated to 'Date of survey' in the following areas:</p> <ul style="list-style-type: none"> • Survey Header • Business rules run at Pre-validation
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Title	Rule Numbering
Enhancement	LOLCM-2070 – (Internal and External)
Description	The CSR 2021 has introduced the need for renumbering or creating new business rules.
Action	<p>All business rules associated with CSR 2021 have been given a pre-fix 600 to distinguish them from existing business rules that begin with a 400 or 500. For example, C640 checks for CSNMs on a CSR 2021 CSD and C440 checks for CSNMs in an RCS 2010 CSD. Some entirely new business rules have also been developed as described in this document.</p> <p>For more information on business rules see our pre-validation report explanation version 7.0 for CSR 2021 click on the following link:</p> <p>https://www.linz.govt.nz/land/surveying/csd-preparation/landonline-e-survey-pre-validation</p>

Title	Horizontal Datum Connection
Enhancement	LOLCM-2071
Description	<p>The Cadastral Survey Rules 2021 require a new boundary point or an old and new boundary mark on a primary parcel being created to be connected to a cadastral survey network mark (CSNM) r17(1).</p> <p>A new business rule has been created to replace the existing C440 rule.</p>
Action	<p>Rule C640 verifies a qualifying boundary point is connected to a CSNM where one exists within 1000m. If there is no CSNM within 1000m it checks that any CSNM is connected to.</p> <p>The C640 test is based on the CSNM being assigned a NZGD2000 coordinate with a Landonline order 6 or better and is not dependent on the mark purpose being set as CSNM/VCM. For the C640, connection to a CSNM is no longer dependant on class.</p>

Title	Water, Water Centre-line and Irregular Boundaries
Enhancement	LOLCM-2074, LOLCM-2110 (Internal and External)
Description	CSR 2021 rule 11 provides for a new form of boundary ‘water centre-line boundary’. Rule 29 no-longer requires a class against a Water or Irregular Boundary.
Action	<p>Changes made to the CSC_S05 – Line Layer screen:</p> <ul style="list-style-type: none"> • CSC_S05 – Line Layer screen no longer displays a field for Class • CSC_S05 – Line layer screen new Irregular Line Type = “Water Centre-line Boundary” • Where “Water Centre-line boundary” is selected the Legal Description field will be auto populated with “Boundary follows centre-line of stream/river”. • The Physical Description field must remain blank where Water Centre-line Boundary line type is used.  <p>Pre-validation no longer runs a rule to test for Class on a water or irregular boundary.</p> <ul style="list-style-type: none"> • C602 runs if a legal and/or physical description has not been specified in the CSC_S05 – Line Layer screen: <p><small>ⓘ C602 - Warning - A legal and/or physical description has not been specified for the following water boundaries between marks (CSR 2021 r88 & r104). (1)</small></p>

On the Submit tab the second Attribute question has been altered to account for this new line type:

Survey Information	Import Dataset	Pre-validate	Supporting Documents	Schedule/Memorandum	Plan Generation	TA Certification	Survey Report	Submit
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Submit Options

☐ Notify when Scanning Complete

Approved Copy

☐ Send Approved Copy ☒ Online Messaging ☐ email

Batch Options

☐ Batch Submit

Survey Attributes

Does this survey:

define a stratum boundary or reference a vertical datum? ☐ Yes ☐ No

right-line a water, water centre-line or irregular boundary? ☐ Yes ☐ No

define any Permanent Structure Boundaries (other than Unit Title and Cross lease boundaries)? ☐ Yes ☐ No

contain a limited as to parcels record of title or Hawkes Bay interim record of title or support a claim for Adverse Possession? ☐ Yes ☐ No

contain land defined by a Diagram on Transfer? ☐ Yes ☐ No

contain boundaries that have been recalculated in excess of applicable accuracy requirements? ☐ Yes ☐ No

Title	Intersections of Right Lined Vectors with Water, Irregular Boundaries
Enhancement	LOLCM-2082 (Internal and External)
Description	<p>Where a right line boundary intersects a Water, Irregular or Water centre-line Boundary, the class of the boundary will be different for the bearing and distance.</p> <p>The bearing will have the class (A, B or C) as appropriate.</p> <p>The distance must match the accuracy of the water boundary as determined under rule 29 and must be class D (CSR 2021 r30).</p> <p>These vectors must be captured as class AD, BD, or CD (the first letter represents the bearing class and the second the distance class). Existing capture functionality in CSC_S04 - Vector Capture screen has been amended to allow for this.</p>
Action	<p>Capture Spatial window example:</p>

Vector Capture screen:

- Incorrect Class against right lines intersecting irregular boundaries:

17	15	16	0 - Adopted PEG	(b)	DP 23575	0 - Right Line	299.38000	9.010	1 - Pri	A	A	0.00000	Class A	Peg
18	16	17	0 - Adopted PEG	(6)	DP 23575	0 - Right Line	33.30000	20.100	1 - Pri	A	A	0.00000	Class A	Peg
19	17	5	2 - Old IT	III	DP 23575	0 - Right Line	202.04000	16.580	0 - Nbdy	A	A	0.00000	(None)	Tube
20	9	18	0 - Adopted IT	VII	DP 11033	0 - Right Line	33.25200	32.510	0 - Nbdy	A	A	0.000000	(None)	Tube
21	18	19	0 - Adopted POST		DP 11452	0 - Right Line	13.15000	8.810	0 - Nbdy	A	A	0.00000	(None)	Post
22	19	20	0 - Adopted UNMARKED	(1)	DP 23575	0 - Right Line	303.23000	0.400	1 - Pri	A	A	0.00000	Class A	Unmarked
23	20	21	0 - Adopted UNMARKED	(2)	DP 23575	0 - Right Line	303.23000	4.380	0 - Nbdy	A	A	0.00000	(None)	Unmarked
24	21	10	2 - Old IS	VII	DP 23575	0 - Right Line	214.13300	41.370	0 - Nbdy	A	A	0.000000	(None)	Spike, Bar
25	4	22	2 - Old PEG	(7)	DP 23575	0 - Right Line	19.45300	42.780	0 - Nbdy	A	A	0.000000	(None)	Peg
26	22	31	1 - New PEG	1		0 - Right Line	113.02000	3.100	0 - Nbdy	A	C	0.000000	(None)	Peg
27	31	23	0 - Adopted PEG	(8)	DP 23575	0 - Right Line	113.02000	15.300	1 - Pri	A	C	0.000000	Class A	Peg
28	23	24	0 - Adopted PEG	(9)	DP 23575	0 - Right Line	92.33000	9.220	1 - Pri	A	A	0.000000	Class A	Peg
29	24	25	0 - Adopted PEG	(10)	DP 23575	0 - Right Line	110.48000	6.690	1 - Pri	A	A	0.000000	Class A	Peg
30	25	26	0 - Adopted PEG	(11)	DP 23575	0 - Right Line	33.30000	24.000	1 - Pri	A	A	0.000000	Class A	Peg
31	26	27	0 - Adopted PEG	(12)	DP 23575	0 - Right Line	123.26200	24.010	1 - Pri	A	A	0.000000	Class A	Peg
32	27	19	0 - Adopted POST		DP 11452	0 - Right Line	33.29400	30.610	1 - Pri	A	A	0.000000	Class A	Post
33	1	28	2 - Old PEG	(13)	DP 23575	0 - Right Line	68.20000	33.030	0 - Nbdy	M	M		(None)	Peg
34	28	29	0 - Adopted PEG	(14)	DP 23575	0 - Right Line	78.01000	29.630	1 - Pri	A	A	0.000000	Class A	Peg
35	29	24	0 - Adopted PEG	(9)	DP 23575	0 - Right Line	33.31000	28.500	1 - Pri	A	A	0.000000	Class A	Peg
36	1	30	2 - Old PEG	(15)	DP 23575	0 - Right Line	52.49000	33.040	0 - Nbdy	M	M		(None)	Peg
37	30	22	2 - Old PEG	(7)	DP 23575	0 - Right Line	37.39000	37.550	3 - Pri,Sec	A	A	0.000000	Class A	Peg
38	1	32	1 - New PEG	2		0 - Right Line	58.03000	33.380	0 - Nbdy	M	M		(None)	Peg
39	32	31	1 - New PEG	1		0 - Right Line	37.39000	38.960	3 - Pri,Sec	C	C		Class A	Peg
40	11	33	1 - New UNMK	1		0 - Right Line	98.25000	9.550	0 - Nbdy	A	A	0.000000	(None)	Unmarked
41	22	34	1 - New PEG	3		0 - Right Line	37.39000	6.000	3 - Pri,Sec	C	C		Class A	Peg
42	34	35	1 - New PEG	4		0 - Right Line	37.39000	15.800	1 - Pri	C	C		Class A	Peg
43	35	33	1 - New UNMK	1		0 - Right Line	37.39000	1.000	1 - Pri	C	C		Class A	Unmarked
44	11	35	1 - New PEG	4		0 - Right Line	103.55000	9.100	0 - Nbdy	M	M		(None)	Peg

- Corrected Class against one of the above vectors:

43	35	33	1 - New UNMK	1		0 - Right Line	37.39000	1.000	1 - Pri	C	C		Class AD	Unmarked
44	11	35	1 - New PEG	4		0 - Right Line	103.55000	9.100	0 - Nbdy	M	M		(None)	Peg
45	11	34	1 - New PEG	3		0 - Right Line	183.10000	14.720	0 - Nbdy	M	M		(None)	Peg
46	11	31	1 - New PEG	1		0 - Right Line	184.30000	20.730	0 - Nbdy	M	M		(None)	Peg
47	11	13	2 - Old PEG	B	DP 23575	0 - Right Line	201.52000	19.670	0 - Nbdy	M	M		(None)	Peg

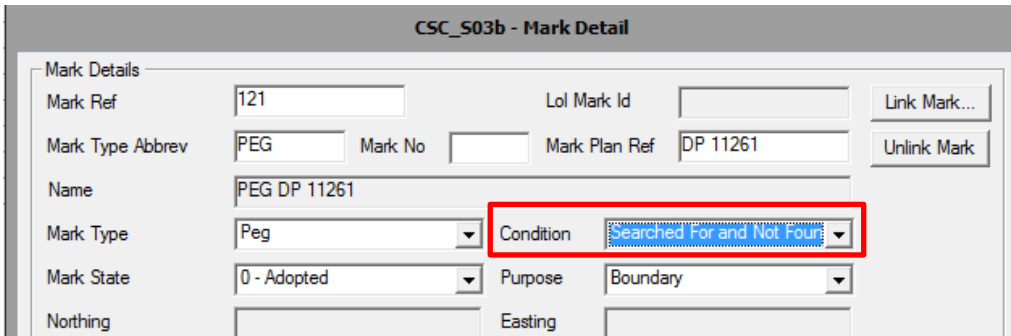
Vector Details
 Bear Type: Source: Bear Source: Bear Correction: Layer:
 Dist Type: Source: Dist Source: Survey Class: Equip:

Pre-validation Report:

- Should the Class on a right line intersecting a water boundary be non-compliant, C697 will report.
- To edit, go to the vectors reported and edit the Class against each vector e.g., AD, BD, or CD (whichever is relevant):

☐ C697 - Warning - Survey class must be one of AD, BD, CD where a right-line boundary vector intersects a water, water centre-line or irregular boundary (3)
 Observation seq id 18 has invalid survey class (Class A)
 Observation seq id 22 has invalid survey class (Class A)
 Observation seq id 43 has invalid survey class (Class A)

Title	Accuracy Standards
Enhancement	LOLCM-2065
Description	With changes to the CSR 2021, Landonline has moved to a single tier of accuracy standards and some standards are changing.
Action	Accuracy standards now meet the CSR 2021 rules. These are applied and run against each Survey Purpose and the data captured. Results can be seen in the two adjustment reports after Pre-validation has been run.

Title	Mark Condition and Mark Purpose
Enhancement	LOLCM-2083
Description	Mark Conditions and Purposes have been amended to align with the CSR 2021.
Action	<p><u>Mark Conditions:</u></p> <ul style="list-style-type: none"> • New: <ul style="list-style-type: none"> - 'Impracticable to Mark' – to be used when a boundary point cannot be marked. - 'Uncertain Existence' – used only by LINZ when members of the public provide feedback on geodetic marks unable to be located. • Amended: <ul style="list-style-type: none"> - 'Not Found' is now 'Searched for and Not Found' - 'Reliably Placed/Found' is now 'Reliably Placed' • Removed (no longer used): <ul style="list-style-type: none"> - 'Conversion' - 'Emplaced' <p>The full list of new and existing Mark Conditions can be found in the CSC_S03b – Mark Detail screen</p>  <p><u>Mark Purposes:</u></p> <ul style="list-style-type: none"> • New: <ul style="list-style-type: none"> - 'Boundary' – to be used for all primary and non-primary boundary points. - 'CSNM/VCM' – used to depict cadastral survey network marks or vertical control marks with a triangle symbol. <p>NOTE: Where a survey mark is both a CSNM/VCM and PRM the PRM mark purpose must be used.</p> <ul style="list-style-type: none"> • Removed (no longer used for CSR 2021): <ul style="list-style-type: none"> - 'Witness' - 'Witness/Boundary' - 'Defined by Survey' - 'Defined by Adoption' - 'Accepted' <p>The full list of new and existing Mark Purposes can be found in the CSC_S03b – Mark Detail screen</p>

CSC_S03b - Mark Detail

Mark Details

Mark Ref

121

Lol Mark Id

Link Mark...

Mark Type Abbrev

PEG

Mark No

Mark Plan Ref

DP 11261

Unlink Mark

Name

PEG DP 11261

Mark Type

Peg

Condition

Searched For and Not Found

Mark State

0 - Adopted

Purpose

Boundary

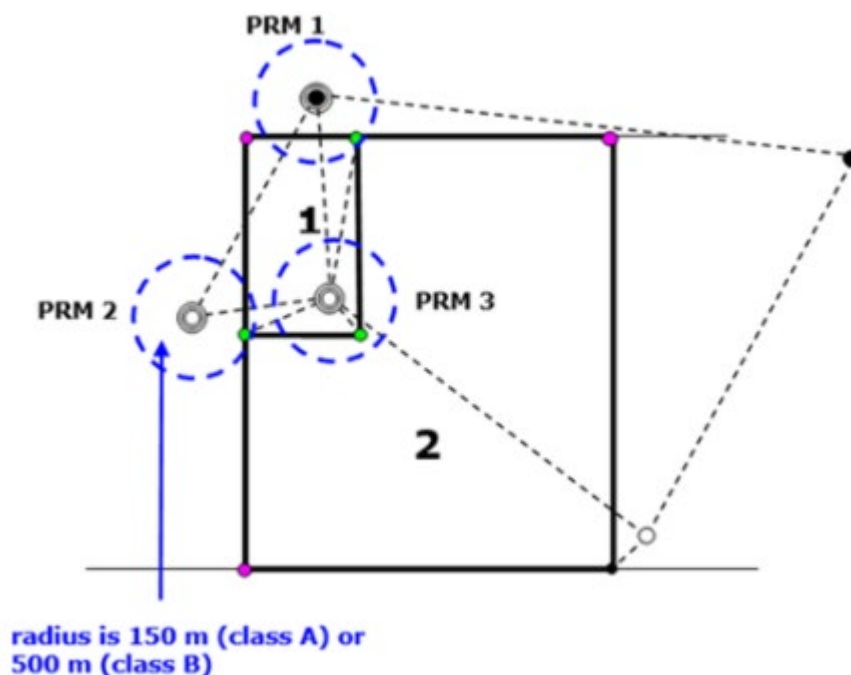
Nothing

Easting

Title	New Rule to Validate Mark Purposes																				
Enhancement	LOLCM-2924																				
Description	A new Y rule has been created to validate Mark Purposes for CSR 2021																				
Action	<p>Y629 is a fatal rule that must be complied with to allow submission of a dataset.</p> <p>Upon import of a LandXML file, if the Mark Purposes are not compliant with the rule version selected, Y629 will display in the pre-validation Report.</p> <p>Below is an example of the Y629 rule after importing a LandXML file that was RCS 2010 compliant but the CSR 2021 rule version for pre-validation was selected upon import:</p> <div><div><div>Pre-validate</div><div>Supporting Documents</div><div>Schedule/Memorandum</div><div>Plan Generation</div><div>TA Certification</div><div>Survey Report</div><div>Submit</div></div><div><div>15</div><div>Survey Rule Version: <div><div>RCS-2010</div><div>CSR-2021</div></div><div><input type="checkbox"/> Batch Pre-val</div></div></div><div><div>on Report for LT 4000038</div><div>3 Aug 2021 09:33:55</div><div><div>Copy Current View</div><div>Copy All</div><div>Expand A</div></div></div><div><div>Items reported for Survey Capture > Preventing Submission</div><div><div><div>Y021 - Fatal - A Landonline Diagram has not been generated and/or a Plan Graphic supporting document has not been attached. Either generate a Landonline Diagram or attach an appropriate Plan Graphic supporting document.</div><div>Y022 - Fatal - A Landonline Diagram of this survey has been changed but has not been regenerated. Ensure a Landonline Diagram is regenerated.</div><div>Y629 - Fatal - The following marks referenced by this survey dataset (CSR 2021) have invalid purposes/conditions supplied: (4)</div></div></div></div><p>Expand the rule to see the Mark Purpose values that require changing in Capture:</p><div><div>Y629 - Fatal - The following marks referenced by</div><table><tr><th>Mark Ref</th><th>Mark Name</th><th>Condition</th><th>Purpose</th></tr><tr><td>1000</td><td>PEG (1) DP 10470</td><td>Reliably Placed</td><td>BNDA</td></tr><tr><td>1001</td><td>PEG (2) DP 10470</td><td>Reliably Placed</td><td>BNDA</td></tr><tr><td>1002</td><td>PEG (3) DP 10470</td><td>Reliably Placed</td><td>BNDA</td></tr><tr><td>1003</td><td>DCDB</td><td>Reliably Placed</td><td>BNDA</td></tr></table></div><p>To edit this either:</p><ul style="list-style-type: none">change the rule version back to RCS 2010 – all the values will be correct.if the plan is supposed to be captured in CSR 2021 go to the Mark List and edit the Purpose fields to the appropriate value. This can be done using the ‘multiple’ button where more than one mark with the same purpose is being edited.</div>	Mark Ref	Mark Name	Condition	Purpose	1000	PEG (1) DP 10470	Reliably Placed	BNDA	1001	PEG (2) DP 10470	Reliably Placed	BNDA	1002	PEG (3) DP 10470	Reliably Placed	BNDA	1003	DCDB	Reliably Placed	BNDA
Mark Ref	Mark Name	Condition	Purpose																		
1000	PEG (1) DP 10470	Reliably Placed	BNDA																		
1001	PEG (2) DP 10470	Reliably Placed	BNDA																		
1002	PEG (3) DP 10470	Reliably Placed	BNDA																		
1003	DCDB	Reliably Placed	BNDA																		

Title	Vector Capture
Enhancement	LOLCM-2121
Description	Under rule 89 of Cadastral Survey Rules 2021, measured vectors are required to be shown on the survey diagram. To show vectors on the survey diagram they must be captured in the Record of Survey. Therefore, the new business rules will focus on the capture requirements in the record of survey and not what is shown on the survey diagram.
Action	<p>New business rules created:</p> <ul style="list-style-type: none"> • C620 - This rule checks the Record of Survey includes at least 1 measured vector to every new or old survey mark as required by CSR 2021 r89(a). • C621 - This rule checks the Record of Survey includes measured vectors to at least 2 other new or old non-boundary marks for every new non-boundary mark that is not disturbed as required by CSR 2021 r89(b). • C622 - This rule checks to ensure Record of Survey includes measured vectors between each new or old boundary mark and a PRM as required by CSR 2021 r89(c). • C623 - This rule checks to ensure at least 2 points on every non-primary parcel are connected to a minimum of 2 underlying primary parcel points either through being coincident or by vectors as required by CSR 2021 r89(g)(i). (Note this only runs where Dataset Type = Survey)

Title	Reference Mark Rules
Enhancement	LOLCM-2068
Description	<p>With changes to the CSR 2021, the following changes are required with relation to reference marks (r32).</p> <p>Where a boundary point is defined by survey it must:</p> <ol style="list-style-type: none"> a) be within 150m of a PRM if it is Class A (currently this is 300m) b) be within 500m of a PRM if it is Class B c) be within 1000m of a PRM if it is Class C <p>The survey must include a minimum of 3 PRM's and each PRM must be within the applicable distance.</p> <p>An adopted mark must not be used as a PRM (this is current functionality)</p>
Action	<p>New business rules C681 and C682 have been created to run tests against PRM marks.</p> <p>Below is an example of the pre-validation results - C681 is compliant but C682 is reporting as a warning and should be addressed:</p> <div style="border: 1px solid red; padding: 2px; margin-bottom: 2px;"> <p>☒ C681 - Compliant - A PRM is within the prescribed distance of a boundary point that is required to be referenced [CSR 2021 r32(1)].</p> </div> <div style="border: 1px solid red; padding: 2px;"> <p>☒ C682 - Warning - The minimum number of PRMs (3) have not been included in the survey [CSR 2021 r32(2)].</p> </div>



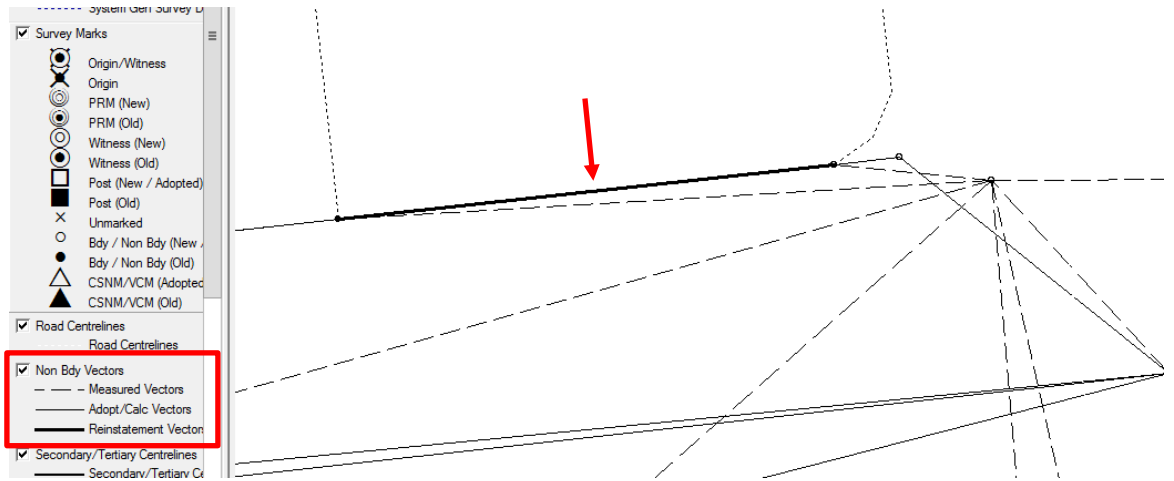
This diagram illustrates the new requirements for reference marks on a simple 2 lot rural subdivision. The 3 new boundary positions illustrated by the solid green circles must be defined by survey and require PRMs within 150m.

The survey must include 3 PRMs. On a smaller urban subdivision, it may be possible that each new boundary position is within 150m of a single PRM. In this case 2 additional PRMs are still required, each within 150m of one of these boundary points.

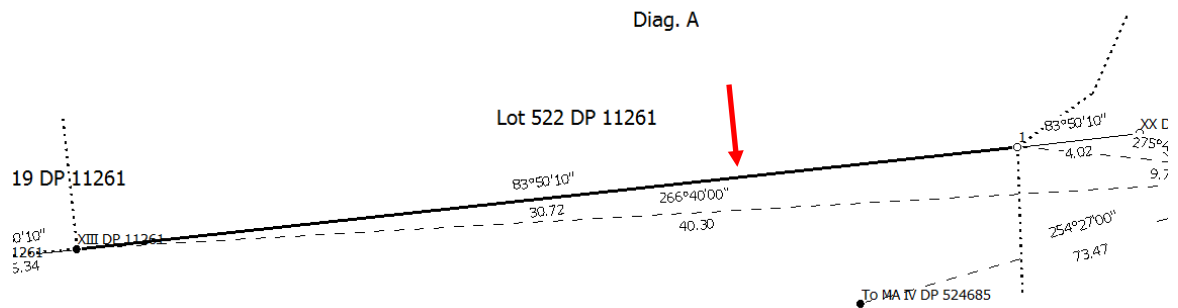
Title	New Survey Purposes for Reinstatement Surveys
Enhancement	LOLCM-2069 and LOLCM-2239 (Internal and External)
Description	Where the boundary is subject to conflict or is affected, a 'Complex Boundary Reinstatement' CSD will be required CSR 2021 r114 (2). In other situations, a 'Simple Boundary Reinstatement' CSD can be used CSR 2021 r114 (4).
Action	<p>Two new Survey Purposes have been created:</p> <ul style="list-style-type: none"> • Simple Boundary Reinstatement' (replaces 'Boundary Marking – Monumentation CSD' and 'Boundary Marking – Reinstatement CSD') • Complex Boundary Reinstatement' (replaces 'Boundary Marking - Full CSD – Conflict') <p>NOTE: A simple boundary reinstatement survey must have (CSR 2021 r117):</p> <ul style="list-style-type: none"> - Record of Survey (Digital data) which includes a reinstatement diagram - Dataset Description - Simplified Survey Report - All relevant field information

Title	Line Styles and Captured Vectors for Reinstatement Surveys																																																																		
Enhancement	LOLCM-2440																																																																		
Description	<p>With changes to the CSR 2021, the following has been applied to boundaries being reinstated.</p> <ul style="list-style-type: none">Boundary is depicted as a thick non-boundary lineSurvey Class must be entered for boundaries being reinstated																																																																		
Action	<p>The new line style and vector details can be seen in the following areas of Capture:</p> <ul style="list-style-type: none">Vector showing boundary being reinstated indicated with 'R' 'R' and Class of survey <table border="1"><tr><td>10</td><td>16</td><td>109</td><td>2 - Old</td><td>PEG</td><td>XIII</td><td>DP 11261</td><td>0 - Right Line</td><td>266.40000</td><td>40.300</td><td><input type="checkbox"/></td><td>0 - Nbdy</td><td>M</td><td>M</td><td>(None)</td><td>Reg</td></tr><tr><td>11</td><td>109</td><td>24</td><td>1 - New</td><td>PEG</td><td>I</td><td>SO 4000039</td><td>0 - Right Line</td><td>83.50100</td><td>30.720</td><td><input type="checkbox"/></td><td>0 - Nbdy</td><td>R</td><td>R</td><td>0.011000 Class A</td><td>Reg</td></tr><tr><td>12</td><td>124</td><td>126</td><td>10 - Adopted</td><td>PEG</td><td>IX</td><td>DP 11261</td><td>0 - Right Line</td><td>83.50100</td><td>4.020</td><td><input type="checkbox"/></td><td>0 - Nbdy</td><td>A</td><td>A</td><td>0.011000 (None)</td><td>Pen</td></tr></table> <ul style="list-style-type: none">Vector details of boundary being reinstated<ul style="list-style-type: none">Bearing Type = Rein AdoptedDistance Type = Rein CalculatedSurvey Class = Class ALayer = 0-Nbdy <div><p>Vector Details</p><table><tr><td>Bear Type</td><td>Rein Adopted</td><td>Source</td><td>DP 11261</td><td>Bear Source ...</td><td>Bear Correction</td><td>0.011000</td><td>Layer</td><td>0 - Nbdy</td></tr><tr><td>Dist Type</td><td>Rein Calculated</td><td>Source</td><td>(None)</td><td>Dist Source...</td><td>Survey Class</td><td>Class A</td><td>Equip</td><td>Unknown</td></tr></table></div> <ul style="list-style-type: none">Current Layers showing the new Non Bdy Vector layer <div><p><input checked="" type="checkbox"/> Captured Non Bdy Vectors</p><ul style="list-style-type: none">----- Measured Vectors----- Adopt/Calc Vectors----- Reinstatement Vectors</div> <ul style="list-style-type: none">Spatial window showing boundary being reinstated	10	16	109	2 - Old	PEG	XIII	DP 11261	0 - Right Line	266.40000	40.300	<input type="checkbox"/>	0 - Nbdy	M	M	(None)	Reg	11	109	24	1 - New	PEG	I	SO 4000039	0 - Right Line	83.50100	30.720	<input type="checkbox"/>	0 - Nbdy	R	R	0.011000 Class A	Reg	12	124	126	10 - Adopted	PEG	IX	DP 11261	0 - Right Line	83.50100	4.020	<input type="checkbox"/>	0 - Nbdy	A	A	0.011000 (None)	Pen	Bear Type	Rein Adopted	Source	DP 11261	Bear Source ...	Bear Correction	0.011000	Layer	0 - Nbdy	Dist Type	Rein Calculated	Source	(None)	Dist Source...	Survey Class	Class A	Equip	Unknown
10	16	109	2 - Old	PEG	XIII	DP 11261	0 - Right Line	266.40000	40.300	<input type="checkbox"/>	0 - Nbdy	M	M	(None)	Reg																																																				
11	109	24	1 - New	PEG	I	SO 4000039	0 - Right Line	83.50100	30.720	<input type="checkbox"/>	0 - Nbdy	R	R	0.011000 Class A	Reg																																																				
12	124	126	10 - Adopted	PEG	IX	DP 11261	0 - Right Line	83.50100	4.020	<input type="checkbox"/>	0 - Nbdy	A	A	0.011000 (None)	Pen																																																				
Bear Type	Rein Adopted	Source	DP 11261	Bear Source ...	Bear Correction	0.011000	Layer	0 - Nbdy																																																											
Dist Type	Rein Calculated	Source	(None)	Dist Source...	Survey Class	Class A	Equip	Unknown																																																											

- Plan Generation | Define Diagrams



- Plan Generation | Layout Sheets showing boundary being reinstated

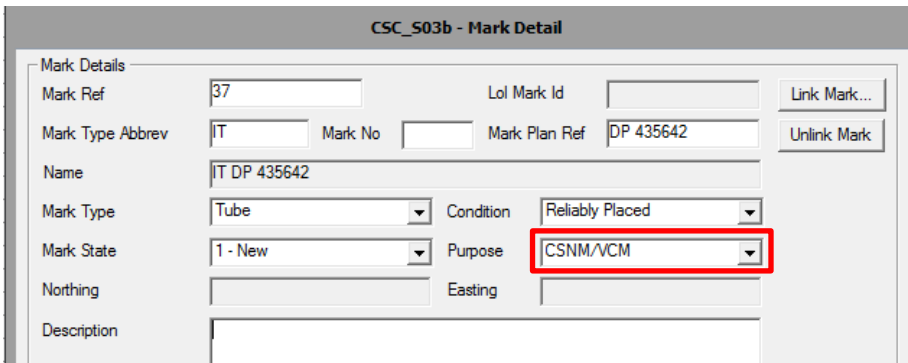
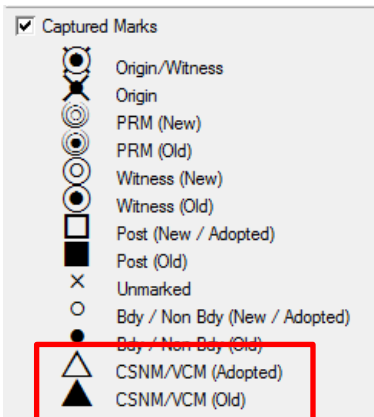
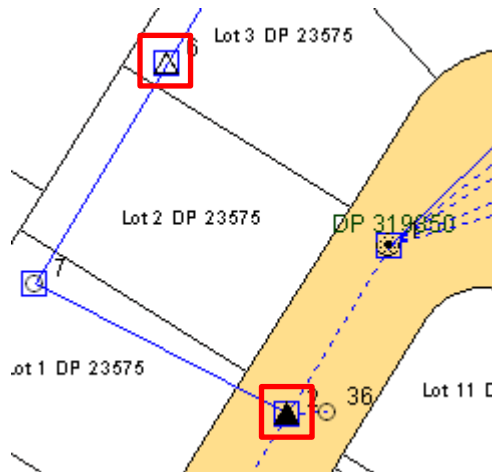


- Mark and Vector Report

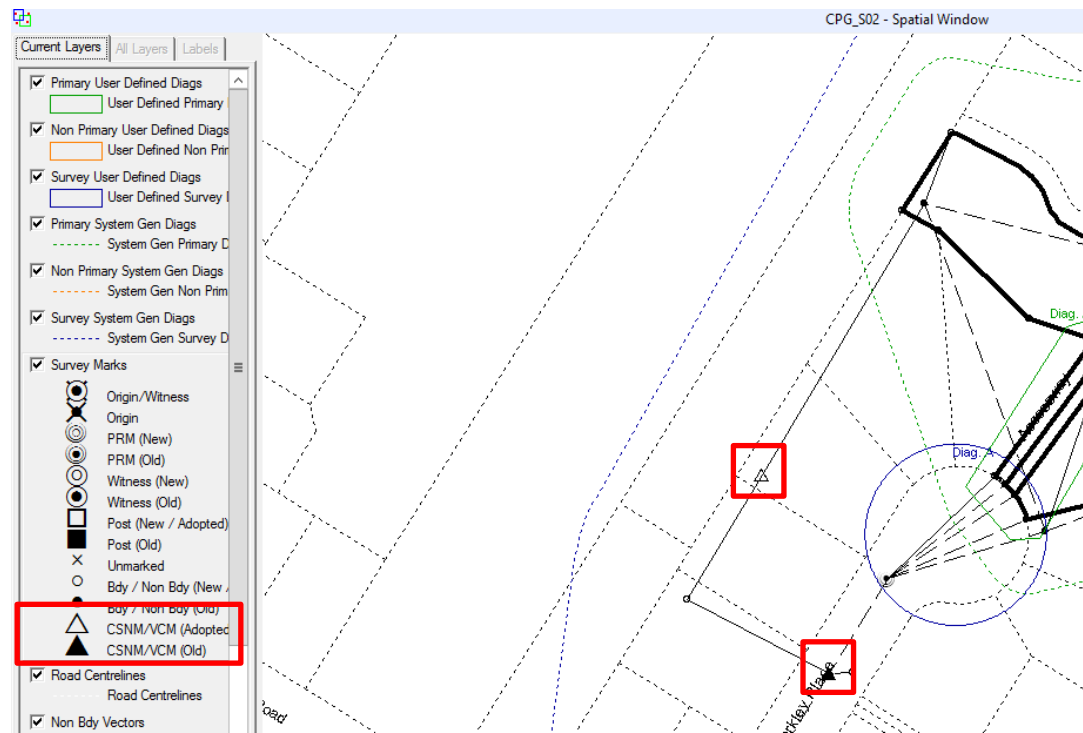
Mark and Vector

Survey Number SO 4000039
Meridional Circuit Mount Pleasant 2000

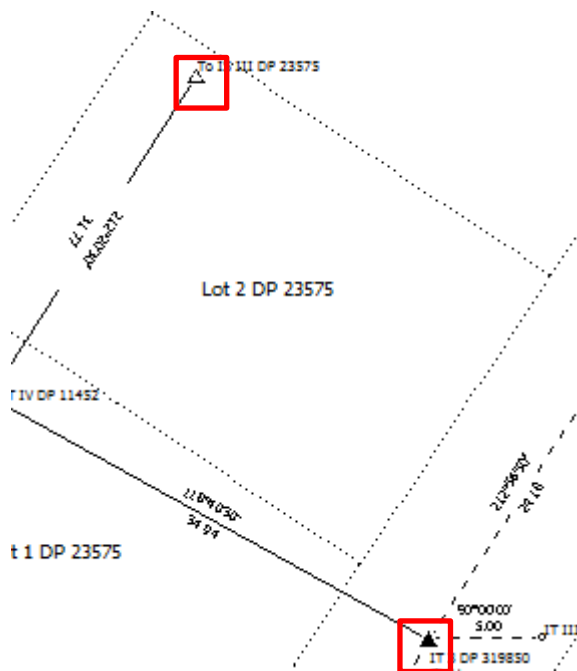
From	To	Code	Bearing	Adpt Surv	Bearing Correction	Distance	Adpt Surv	Class
BP RIMU SO 4000039	IT II DP 62967	ob4	89°53'30"	M		259.17 M		
BP RIMU SO 4000039	IS X DP 461688	ob5	167°26'00"	M		85.87 M		
IS X DP 461688	MA II SO 401883	ob14	271°45'00"	A DP 461688	0°00'00"	11.96 A DP 461688		
MA II SO 401883	BP RIMU SO 4000039	ob15	355°23'30"	M		83.73 M		
BP RIMU SO 4000039	MA IV DP 524685	ob6	254°27'00"	M		73.47 M		
MA IV DP 524685	NA I DP 302416	ob13	84°35'30"	C		82.04 C		
NA I DP 302416	BP RIMU SO 4000039	ob11	317°38'00"	M		16.18 M		
BP RIMU SO 4000039	MA DP 70818	ob7	228°37'00"	M		31.37 M		
MA DP 70818	NA I DP 302416	ob10	75°42'00"	A DP 70818	0°00'00"	35.56 A DP 70818		
BP RIMU SO 4000039	PEG XIII DP 11261	ob8	266°40'00"	M		40.30 M		
PEG XIII DP 11261	PEG I SO 4000039	ob16	83°50'10"	R DP 11261	0°01'10"	30.72 R DP 11261		Class A
PEG I SO 4000039	PEG XX DP 11261	ob17	83°50'10"	A DP 11261	0°01'10"	4.02 A DP 11261		
PEG XX DP 11261	NA I DP 302416	ob18	128°50'10"	A DP 11261	0°01'10"	21.33 A DP 11261		

Title	New Mark Symbols
Enhancement	LOLCM-2064
Description	With changes to the CSR 2021 a new triangle symbol has been added for a Cadastral survey network mark (CSNM) and a vertical control mark (VCM) – CSNM/VCM (Schedule 7 Table 9).
Action	<p>Mark Purpose = CSNM/VCM</p>  <p>Capture 'Current Layers' tab displays the new symbols for CSMM/VCM:</p>  <p>Capture Spatial window displays the new symbols for CSMM/VCM:</p> 

Plan Generation Define Diagrams displays the new symbols for CSMM/VCM:



Plan Generation Layout Sheets displays the new symbols for CSMM/VCM:



Title	Automated Survey Report Changes
Enhancement	LOLCM-2117
Description	Changes to the Survey Report were required to ensure the automated survey report reflects the new requirements of the CSR 2021 r72.
Action	<ul style="list-style-type: none"> When using the Automated Survey Report, questions have been updated to align with rule 72. Depending on the Survey Purpose and data captured will also depend on the questions to report against.

Title	LandXML Changes
Enhancement	LOLCM-2891
Description	<p>LandXML mappings related to CSR 2021 changes.</p> <p>This involves changing the exchange mapping between the XML and Landonline for use by external surveyors. There are new and updated elements to the XML.</p> <p>3rd party vendors have been sent information on the changes required to update their software.</p> <p>NOTE: LandXML files will only contain these changes once vendors have updated their software. The transition period still allows for the current versions to be imported.</p> <p>See transition period and converting data after import documentation at the following link: https://www.linz.govt.nz/land/surveying/rules-standards-and-guidelines/cadastral-survey-rules-2021-csr-2021-implementation#transitional</p>
Action	<p><u>Survey Class:</u></p> <ul style="list-style-type: none"> XML Attribute is 'class' and is optional in the XML file. <p>When 'class' is used in a LandXML file it will import into the Survey Header in Landonline. Three new classes have been created – AD, BD, and CD:</p> <p>Example for survey – SurveyHeader class="A" Example for survey – SurveyHeader class="B" Example for survey – SurveyHeader class="C" Example for survey – SurveyHeader class="D" Example for survey – SurveyHeader class="AD" Example for survey – SurveyHeader class="BD" Example for survey – SurveyHeader class="CD"</p> <p><u>Observation Survey Class:</u></p> <ul style="list-style-type: none"> XML Attribute is azimuthAccClass and is optional in the XML file. XML Attribute is distanceAccClass and is optional in the XML file. <p>The boundary vector intersecting a water, water centreline and irregular boundary must be defined to class A, B or C accuracies and the distance is class D.</p>

Classes AD, BD and CD have been added to the Survey Header screen to allow for individual vectors to have these captured against them. The first letter represents the bearing class (A) and the second letter the distance (D).

Example for observational basis – ReducedObservation azimuthAccClass="AD"

Example for observational basis – ReducedObservation distanceAccClass="AD"

Example for observational basis – ReducedObservation azimuthAccClass="BD"

Example for observational basis – ReducedObservation distanceAccClass="BD"

Example for observational basis – ReducedObservation azimuthAccClass="CD"

Example for observational basis – ReducedObservation distanceAccClass="CD"

Example for observational basis – ReducedArcObservation azimuthAccClass="AD"

Example for observational basis – ReducedArcObservation azimuthAccClass="BD"

Example for observational basis – ReducedArcObservation azimuthAccClass="CD"

Surveys may include multiple classes. The XML file may have a class of survey for the survey. This class of survey may or may not map to each observation. So, if there are one or more observations with a different class of survey, this will be applied on an observation basis in the XML file.

- XML Attribute is azimuthAccClass and is optional in the XML file.

Example for survey – SurveyHeader class="A"

Example for observational basis – ReducedObservation azimuthAccClass="A"

Example for observational basis – ReducedObservation azimuthAccClass="AD"

Example for observational basis – ReducedArcObservation azimuthAccClass="B"

Observation Type:

A new bearing/distance type has been introduced for reinstated boundaries where the primary parcel is not being created. This can also be used on a LT easement plan or similar.

They can be entered against an observation as either 'reinadopted' or 'reincalculated' or 'rein adopted' or 'rein calculated' These vector types display with a thick line type once imported into Landonline.

- XML Attributes are azimuthType, distanceType, and arcType, and all are recommended in the XML file.

Example – ReducedObservation azimuthType="adopted" distanceType="calculated"

Example – ReducedObservation azimuthType="reinadopted" distanceType="reincalculated"

Example - ReducedObservation azimuthType="rein adopted" distanceType="rein calculated"

Example – ReducedArcObservation arcType="calculated"

Equipment Type:

- XML Attribute is equipmentUsed and is optional in the XML file.

Example – ReducedObservation equipmentUsed="theodolite EDM"

Example – ReducedArcObservation equipmentUsed="unknown"

There is no action is required when using the above two attributes, however, please note the following:

equipmentUsed = "GPS" will map to "GNSS" in the Landonline table

equipmentUsed = "theodolite EDM" will map to "Total Station" in the Landonline table.

Mark Purpose:

- XML Attribute is purpose and is required in the XML file.

Two new mark purposes have been created. Boundary (a mark that is used as a boundary mark in the survey) and CSNM/VCM (a mark that is used as either a cadastral survey network mark or vertical control mark).

Example – SurveyMonument purpose="non boundary"

Example – SurveyMonument purpose="boundary"

Example – SurveyMonument purpose="csnm/vcm"

Mark Condition:

- XML Attribute is condition and is recommended in the XML file.

Example – Monument condition="reliable"

Below are two changes made to Mark Conditions the first replaces the former "not found" and the second one is new:

Example – Monument condition="searched for and not found"

Example – Monument condition="impracticable to mark"

The following still values still map, but will appear with the new value in the Landonline table:

- "not found" will import with the new value "Searched for and Not Found"
- "reliable" will import with the new value "Reliably Placed"

Parcel Class:

Parcel Class indicates the use of the parcel. Landonline uses this information in combination with the Survey Purpose to derive the Parcel Intent as well as the Topology Class.

- XML Attribute is class and is recommended in the XML file.

Example – Parcel class="allotment"

The following table indicates what each parcel class (LandXML enumeration) maps to in Landonline - based on the Survey Purpose (e.g. LT Subdivision). Changes made are highlighted yellow:

Landonline Survey Purpose	LandXML Enumeration	Landonline Parcel Intent	Landonline Topology Class
Amalgamations	allotment	Maori	Primary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	strata	Maori	Strata
Application	allotment	Fee Simple Title	Primary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	erosion	Erosion	Primary
	hydrography	Hydro	Primary

	road	Road	Primary
	strata	Fee Simple Title	Strata
Complete Stage Unit Plan	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Complete Stage Unit Plan with Survey Sheet	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Consolidations	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	erosion	Erosion	Primary
	hydrography	Hydro	Primary
	road	Road	Primary
	strata	Maori	Strata
Crown Subdivision	allotment	Fee Simple Title	Primary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
(LandXML schema v1.1)	marginal strip	Marginal Strip	Tertiary
	erosion	Erosion	Primary
	hydrography	Hydro	Primary
	reserve	N/A	Primary
	road	Road	Primary
	strata	Fee Simple Title	Strata
CT Diagram Plan	allotment	Fee Simple Title	Primary
	hydrography	Hydro	Primary
	road	Road	Primary
	strata	Fee Simple Title	Strata
Customary Entitlement	covenant	Customary Entitlement	Tertiary
Easement	covenant	Land Covenant	Tertiary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	surrendered easement	Easement to be surrendered	Secondary
	revoked covenant	Covenant to be revoked	Secondary
	easement centerline	Easement	Secondary Centreline
First Stage Unit Plan	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology

	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
First Stage Unit Plan with Survey Sheet	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Flat plan/Cross-lease	accessory building	Cross lease Subsidiary Building	No Topology
	building	Cross Lease Building	No Topology
	covenant	Right of Use Area	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Flat plan/Cross-lease with Survey Sheet	accessory building	Cross lease Subsidiary Building	No Topology
	building	Cross Lease Building	No Topology
	covenant	Right of Use Area	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Graphical Description	No mappings for Graphical Description		
Lease	covenant	Land Covenant	Tertiary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary Centreline
	easement centerline	Easement	Secondary
	lease	Lease	Tertiary
Legalisation	allotment	Fee Simple Title	Primary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	erosion	Erosion	Primary
	hydrography	Hydro	Primary
	legalisation	Legalisation	Primary
	railway	Railway	Primary
	road	Road	Primary
	strata	N/A	Strata
	reserve	Reserve reclassification	Secondary
Limited Title	accretion	Accretion	Primary
	allotment	Fee Simple Title	Primary
	cross parcel easement	Easement	Tertiary

	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	erosion	Erosion	Primary
	hydrography	Hydro	Primary
	strata	Fee Simple Title	Strata
LT Subdivision	accretion	Accretion	Primary
	allotment	Fee Simple Title	Primary
	covenant	Land Covenant	Tertiary
(LandXML schema v1.1)	marginal strip	Marginal Strip	Tertiary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	surrendered easement	Easement to be surrendered	Secondary
	revoked covenant	Covenant to be revoked	Secondary
	erosion	Erosion	Primary
	hydrography	Hydro	Primary
	strata	Fee Simple Title	Strata
Mining	covenant	Covenant Area	Tertiary
Nohoanga (Campsite)	covenant	Nohoanga (Campsite) Entitlements	Tertiary
Parliamentary	allotment	Statutory	Primary
	cross parcel easement	Statutory	Tertiary
	cross parcel easement centerline	Statutory	Tertiary Centreline
	easement	Statutory	Secondary
	easement centerline	Statutory	Secondary Centreline
	strata	Statutory	Strata
Partition	allotment	Maori	Primary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	road	Road	Primary
Proposed Unit Development	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Proposed Unit Development with Survey Sheet	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary

		easement centerline	Easement	Secondary Centreline
Reclamation		reclamation	Reclamation Area	Primary
		hydrography	Hydro	Primary
Redevelopment Unit Plan		accessory building	Accessory Unit	No Topology
		building	Principal Unit	No Topology
Redevelopment Unit Plan with Survey Sheet		accessory building	Accessory Unit	No Topology
		building	Principal Unit	No Topology
		covenant	Common Property	No Topology
		cross parcel easement	Easement	Tertiary
		cross parcel easement centerline	Easement	Tertiary Centreline
		easement	Easement	Secondary
		easement centerline	Easement	Secondary Centerline
Revesting		allotment	In Lieu of a Reserve	Primary
Roadway		road	Road	Primary
		covenant	Common Property	No Topology
		cross parcel easement	Easement	Tertiary
		cross parcel easement centerline	Easement	Tertiary Centreline
		easement	Easement	Secondary
		easement centerline	Easement	Secondary Centreline
		strata	Road Strata	Strata
Stage Unit Plan		accessory building	Accessory Unit	No Topology
		building	Principal Unit	No Topology
		covenant	Common Property	No Topology
		cross parcel easement	Easement	Tertiary
		cross parcel easement centerline	Easement	Tertiary Centreline
		easement	Easement	Secondary
		easement centerline	Easement	Secondary Centreline
Stage Unit Plan with Survey Sheet		accessory building	Accessory Unit	No Topology
		building	Principal Unit	No Topology
		covenant	Common Property	No Topology
		cross parcel easement	Easement	Tertiary
		cross parcel easement centerline	Easement	Tertiary Centreline
		easement	Easement	Secondary
		easement centerline	Easement	Secondary Centreline
Standard Unit Plan		accessory building	Accessory Unit	No Topology
		building	Principal Unit	No Topology
		covenant	Common Property	No Topology
		cross parcel easement	Easement	Tertiary
		cross parcel easement centerline	Easement	Tertiary Centreline
		easement	Easement	Secondary
		easement centerline	Easement	Secondary Centreline
Standard Unit Plan with Survey Sheet		accessory building	Accessory Unit	No Topology
		building	Principal Unit	No Topology
		covenant	Common Property	No Topology
		cross parcel easement	Easement	Tertiary
		cross parcel easement centerline	Easement	Tertiary Centreline
		easement	Easement	Secondary
		easement centerline	Easement	Secondary Centreline

Statutory Easement/Right	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
(LandXML schema v1.1)	marginal strip	Marginal Strip	Tertiary
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	surrendered easement	Easement to be surrendered	Secondary
	revoked covenant	Covenant to be revoked	Secondary
Statutory Vesting	allotment	Fee Simple Title	Primary
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
	strata	Fee Simple Title	Strata
Substituted Proposed Unit Development	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Substituted Proposed Unit Development with Survey Sheet	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Units Plan in Substitution	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centreline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline
Units Plan in Substitution with Survey Sheet	accessory building	Accessory Unit	No Topology
	building	Principal Unit	No Topology
	covenant	Common Property	No Topology
	cross parcel easement	Easement	Tertiary
	cross parcel easement centerline	Easement	Tertiary Centerline
	easement	Easement	Secondary
	easement centerline	Easement	Secondary Centreline

Parcels:

Where a primary or non-primary parcel (applies to Lots, Areas and Sections only) has an upper or lower limit, the pre-fix 'Height Limited' must be used in the appellation. **The LandXML Enumeration must be 'HL' as per example below:**

- XML Attribute is "name" and is required in the XML file.

Example – Parcel name="Lot 1"

Example – Parcel name="Marked A"

Example – Parcel name="Section 1"

Example – Parcel name="Principal Unit 1"

Example – Parcel name="HL Area A"

NOTE:

Height Limited (HL) in the appellation applied to Lots, Areas and Sections. It does not apply to Maori Land, Principal Units, Accessory Units, Units or Future Development Units.

If Height Limited is entered in full in the LandXML file it will not map into the Landonline tables.

In schedule/memorandums, easements can have height limited values added against them. This is different to having HL added against the appellation and there is no connection between the two.

A Height Limited parcel is different from a strata parcel – it will not always have the height information reflected in the use of the strata layer

Changes were made to Landonline Release 3.23 around acceptable appellation formats for Principal Units, Accessory Units and Future Development Unit parcels. The following table outlines those changes:

Parcel Type	Unique Identifier format	Correct Examples	Incorrect Examples
Principal Unit	A number or a number followed by a letter, or a letter followed by a number	<ul style="list-style-type: none">▪ Principal Unit 1▪ Principal Unit 99Z▪ Principal Unit A2	<ul style="list-style-type: none">▪ Principal Unit A▪ Principal Unit A1A▪ Principal 2A1
Accessory Unit	A number or a number followed by a letter, or a letter followed by a number	<ul style="list-style-type: none">▪ Accessory Unit 1▪ Accessory Unit 1A▪ Accessory Unit A2	<ul style="list-style-type: none">▪ Accessory Unit A▪ Accessory 2A1
Future Development Unit	A number or a number followed by a letter, or a letter followed by a number	<ul style="list-style-type: none">▪ Future Development Unit 1▪ Future Development Unit 1A▪ Future Development Unit A2	<ul style="list-style-type: none">▪ Future Development Unit A▪ Future Development Unit 2A1