

# Cadastral Survey Rules 2021

(CSR 2021)

**Lyndon Telfer & Lloyd McGarvey**  
Assistant Surveyor-General

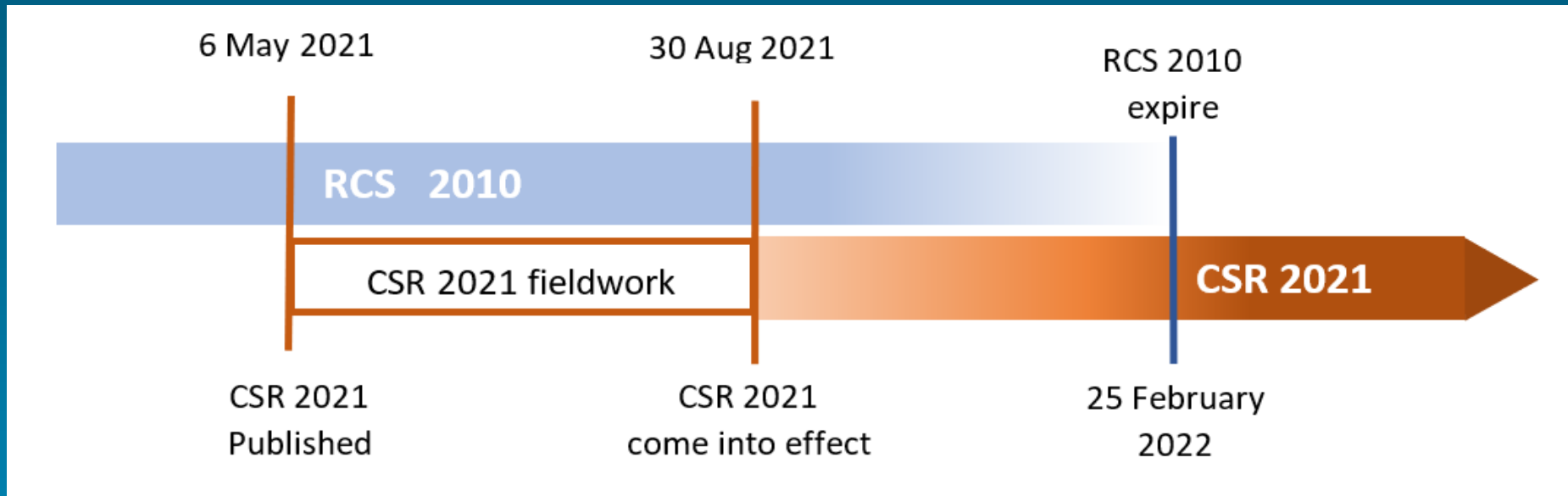
5 August 2021

# What I will cover

- Transition arrangements
- Key concepts relating to non-primary parcels
- Discussion: How to undertake easement survey over a limited title
- Key changes to Landonline
- Mock-up CSD showing easement
- How to get more information

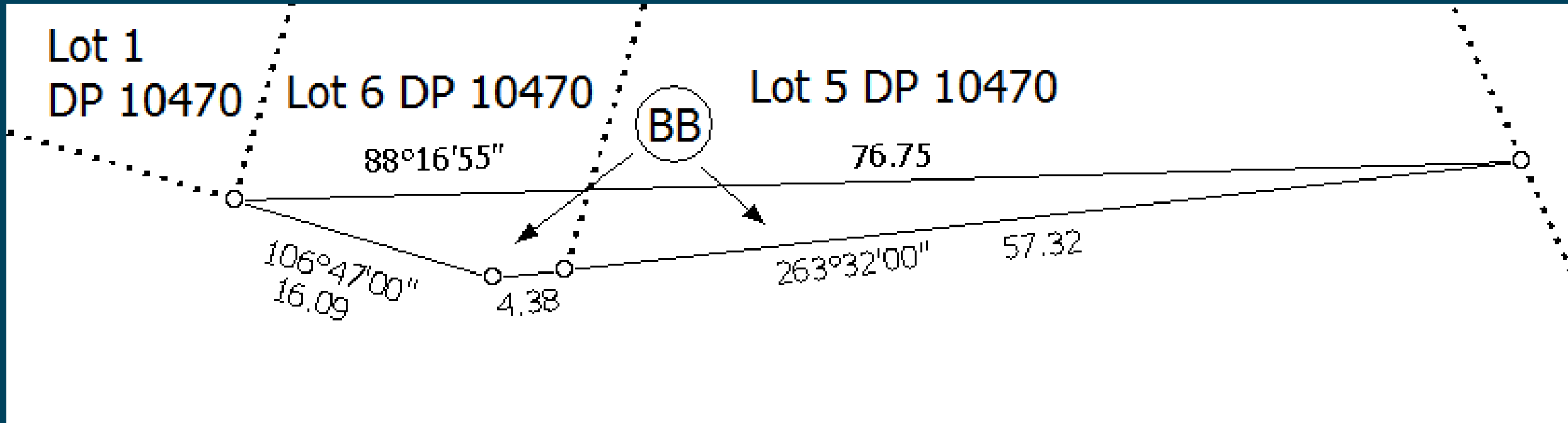
# Transition

- Rules published **6 May 2021**
- Rules go-live **30 August 2021**
- Transition period through until **22 February 2022**
- Requisition after then will require conversion to CSR 2021
- Safe latest time for lodgement **end of January 2022**



# Non-primary parcels key concept 1

## Non-primary parcel may cross a primary parcel



# Non-primary parcels key concept 2

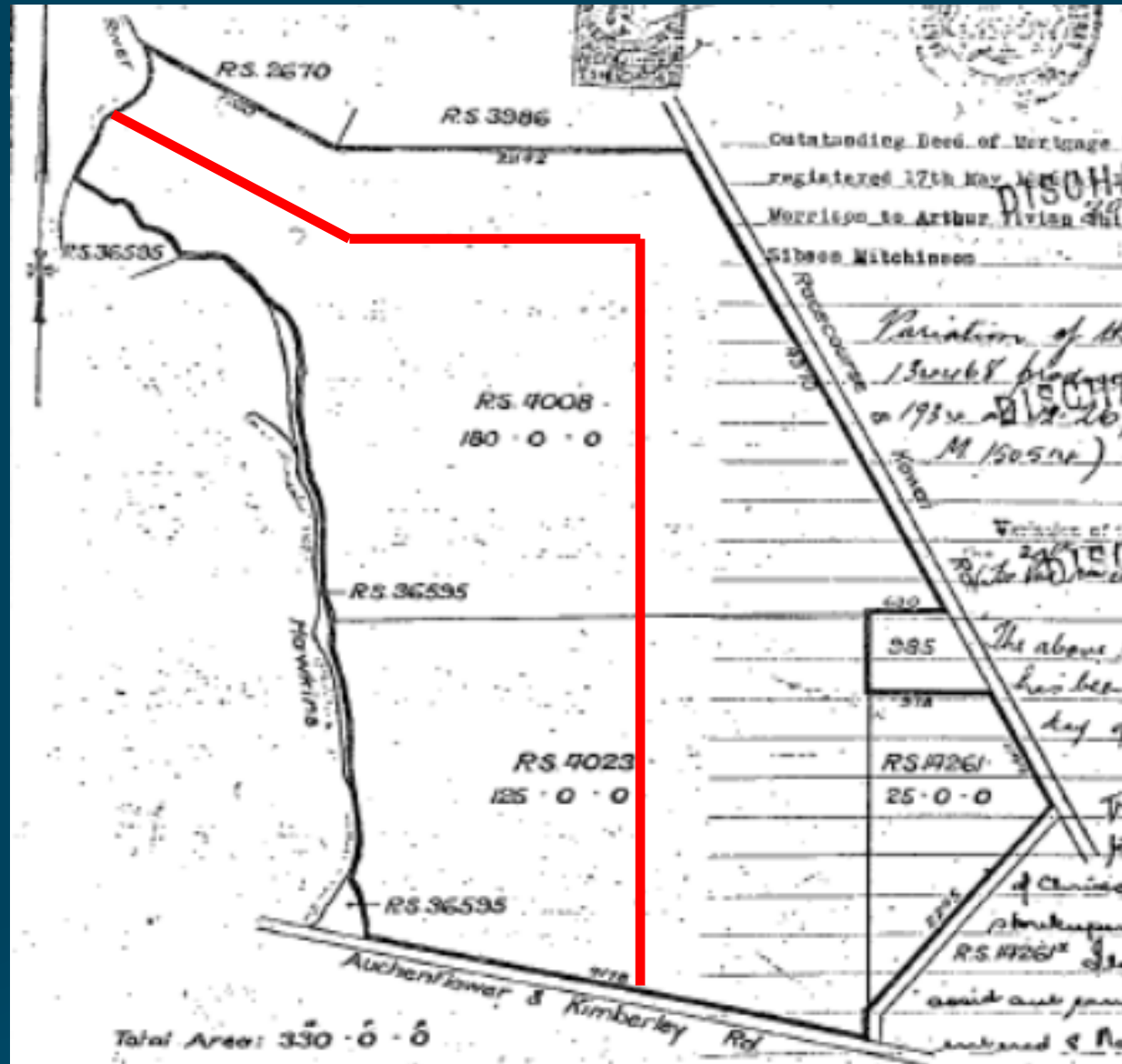
Two options for defining non-primary parcels

1. The underlying parcel
2. The control network

# Non-primary parcels key concept 3

- A non-primary parcel may be inaccurately determined where
  - Class B accuracies would normally apply
  - None of the underlying primary parcel boundaries meet the applicable accuracy standard
- Specific survey requirements when relationship inaccurately determined
  - Bearings in terms of an official projection
  - 2 X CSNMs
  - PRMs required

# Scope of work



# How would you go about creating this survey efficiently and cost effectively?

- **In the field**

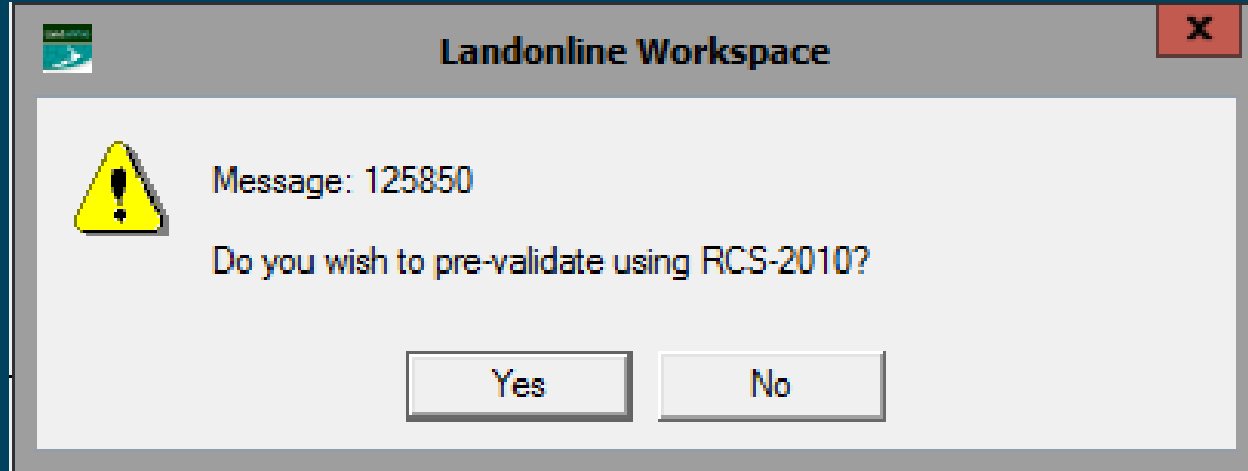
- Survey the infrastructure
- 2 x CSNM connections
- Ensure there are 3 PRMs

- **In the office**

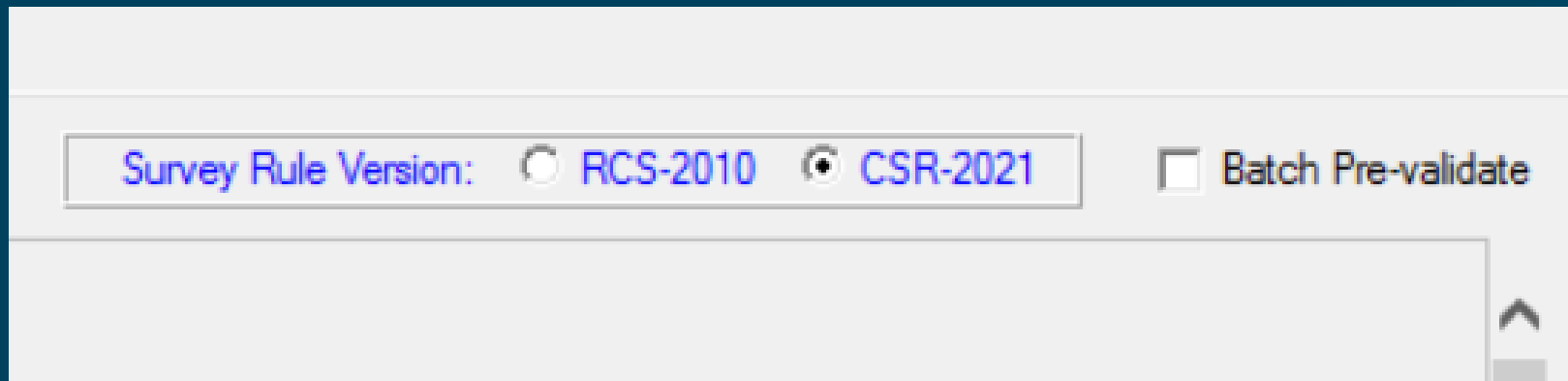
- Extract parcel boundaries from Landonline
- Overlay field data with parcel boundaries
- Create new easement corridor
- Create XML file for Landonline



# Creating a CSR 2021 CSD



# Converting a RCS 2010 CSD



# Landonline mark purpose

- Boundary
- PRM
- PRM/Boundary
- Non-boundary
- CSNM/VCM

# Edits to mark purpose

Y629 - Fatal - The following marks referenced by this survey dataset (CSR 2021) have invalid purposes/conditions supplied: (33)

Mark Ref	Mark Name	Condition	Purpose
14	PEG 2F DP 407637	Reliably Placed	BNDS
15	PEG 2A DP 407637	Reliably Placed	BNDS
16	PEG 2B DP 407637	Reliably Placed	BNDS
17	PEG 2C DP 407637	Reliably Placed	BNDS
18	PEG 2D DP 407637	Reliably Placed	BNDS
19	PEG 2E DP 407637	Reliably Placed	BNDS

# Mark capture

Mark Information

Name

PEG 2E DP 407637

Mark Type

Peg

Plan Ref

DP 407637

Purpose

Boundary

Condition

Reliably Placed

Mark State

0 - Adopted

Linked

☒

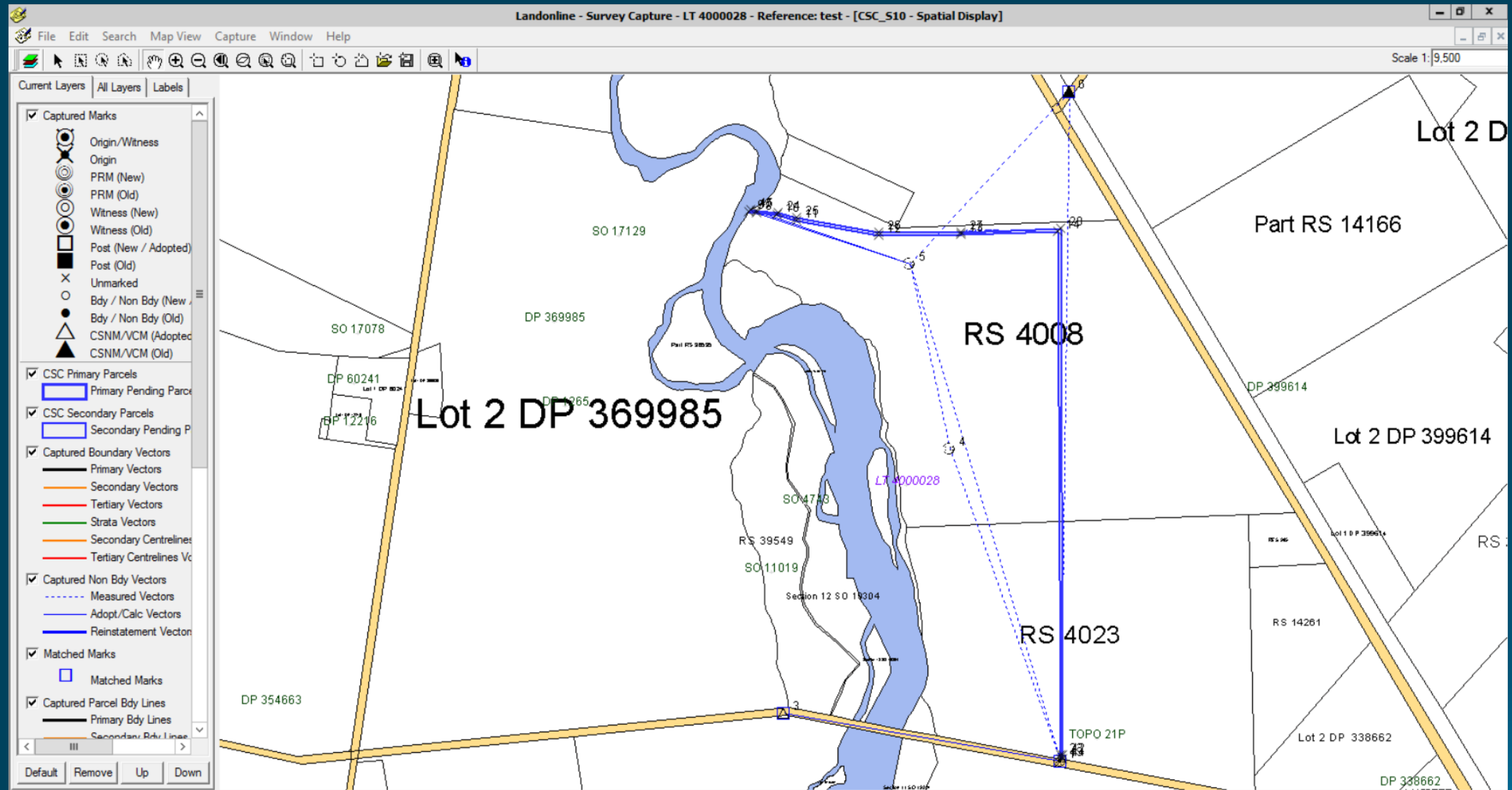
Mark Disturbed

☐

Mark Renewed

☐

# Landonline spatial view



# Landonline survey header

Survey Header

Survey Number

LT 4000028

Land District

Canterbury

Type of Dataset

Survey

Survey Class

Class B

Surveyor Ref

Surveyor

Telfer001

Surveyor's Firm

linznove

Legal Firm/Agent

Description

Easements over Rural Sections 4008 and 4023

Meridional Circuit

Mount Pleasant 2000

Vertical Datum

None

Survey Purpose

Easement

Submitted Date

Date of Survey

02 Jul 2021

Certified Date

Telfer, Lyndon Craig

LINZ National Operations

Comprised In Reference

Type	Reference	Limited
Title	CB396/246	<input checked="" type="checkbox"/>

Add Ref

Delete Ref

Referenced Survey

Survey Number	Land District	Bearing Corr
BM 22	Canterbury	
DP 522756	Canterbury	0.00000

Add Survey

Delete Sur

Search...

Territorial Authorities

Territorial Authority
Selwyn District

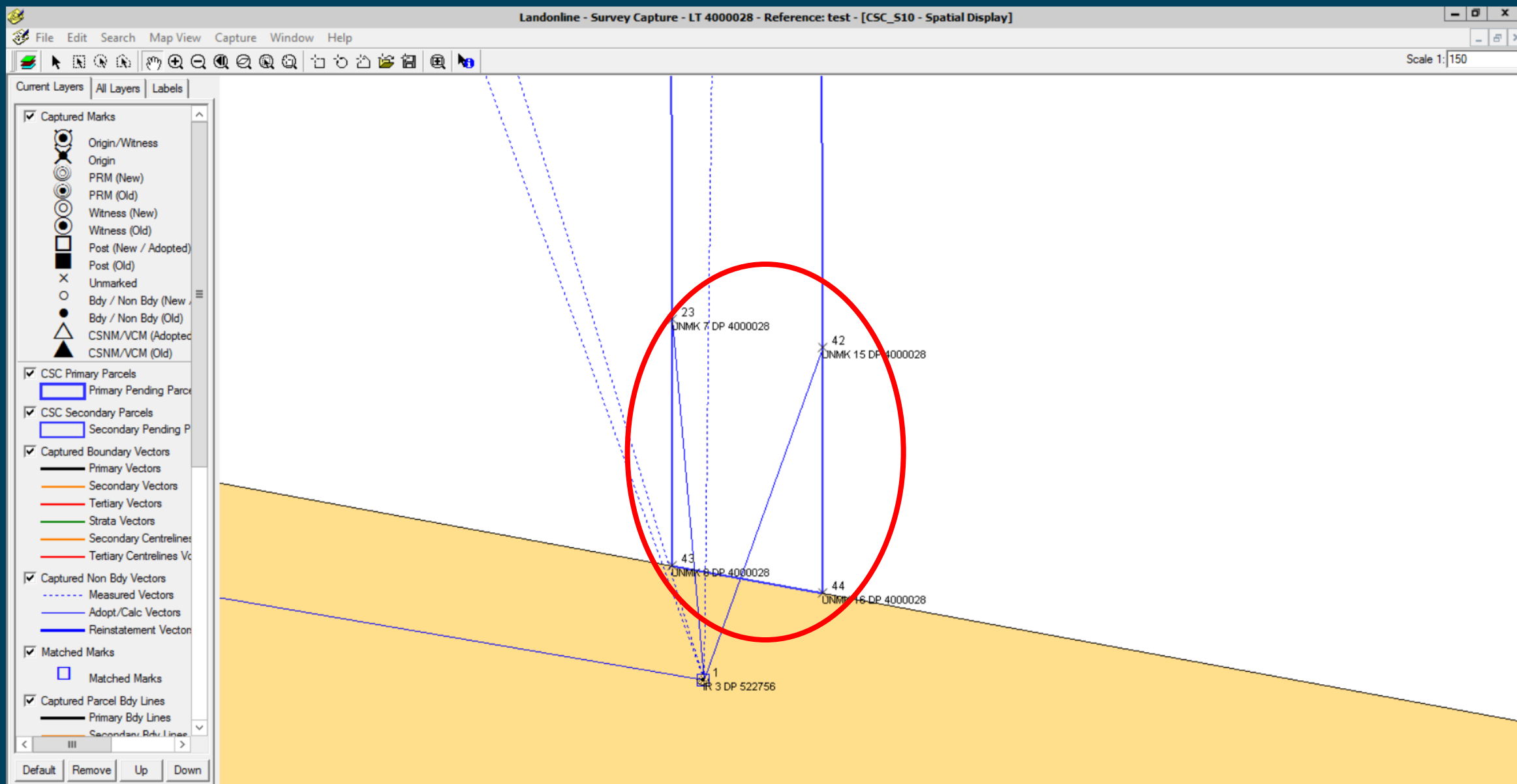
Add Auth

Delete Auth

OK

Cancel

# Inaccurately determined boundaries



# Intersections with water, centre-line and irregular boundaries

Vectors class AD, BD or CD

Vector Details

Bear Type	Calculated	Source	(None)	Bear Source ...	Bear Correction	Layer	2 - Sec
Dist Type	Calculated	Source	(None)	Dist Source...	<b>Survey Class</b>	Equip	Unknown

Mark Information

Name	UNMK 18 DP 4000028	Purpose	Boundary	Mark State	1 - New	Linked	<input checked="" type="checkbox"/>
Mark Type	Unmarked	Condition	Reliably Placed	Mark Disturbed	<input type="checkbox"/>	Mark Renewed	<input type="checkbox"/>
Description							Unlink
							Mark Details...

Apply Hide Details OK Cancel

# Landonline parcel capture

Parcel List

Parcel Id	Parcel Appellation	Area (ha)	Action	Parcel Intent	Linked
1	Area A Deposited Plan 4000028		Created	Easement	<input checked="" type="checkbox"/>
2	Rural Section 4008	72.8434	Referenced	DCDB	<input type="checkbox"/>
3	Rural Section 4023	50.5857	Referenced	DCDB	<input type="checkbox"/>

Add...

Edit...

Delete

Link...

Unlink

Link Lol

Move Label



# Schedule of easements

Survey Information

Import Dataset

Pre-validate

Supporting Documents

Schedule/Memorandum

Plan Generation

TA Certification

Survey Report

Submit

Select tableSchedule of Easements in Gross

Purpose

Right to convey water

Clear

Burdened Land (Servient Tenement)

RS 4008, RS 4023

Grantee

Clear

Shown

A

Clear

☐ Height Limits

Insert Line

Cancel Edit

Preview

Land Registration District

Canterbury

Survey Number

LT 4000028

Territorial Authority (the Council)

Selwyn District

Schedule of Easements in Gross

Last Edited: 06 Jul 2021 10:21:33

<u>Purpose</u>	<u>Shown</u>	<u>Burdened Land (Servient Tenement)</u>	<u>Grantee</u>
Right to convey water	A	RS 4008, RS 4023	Alpine Water Company Limited

Line

Edit

Remove

Sort

Sched/Mem

Rename

Sort

Remove

Undo Remove

Document

Save

Attach

Export

# Vectors required on the survey diagram

- Measured vector to each new or old survey mark
- Measured vectors to at least 2 other non-boundary marks for each new non-boundary mark
- Measured vectors between each boundary mark and a PRM (pegging tie)

# Field Information

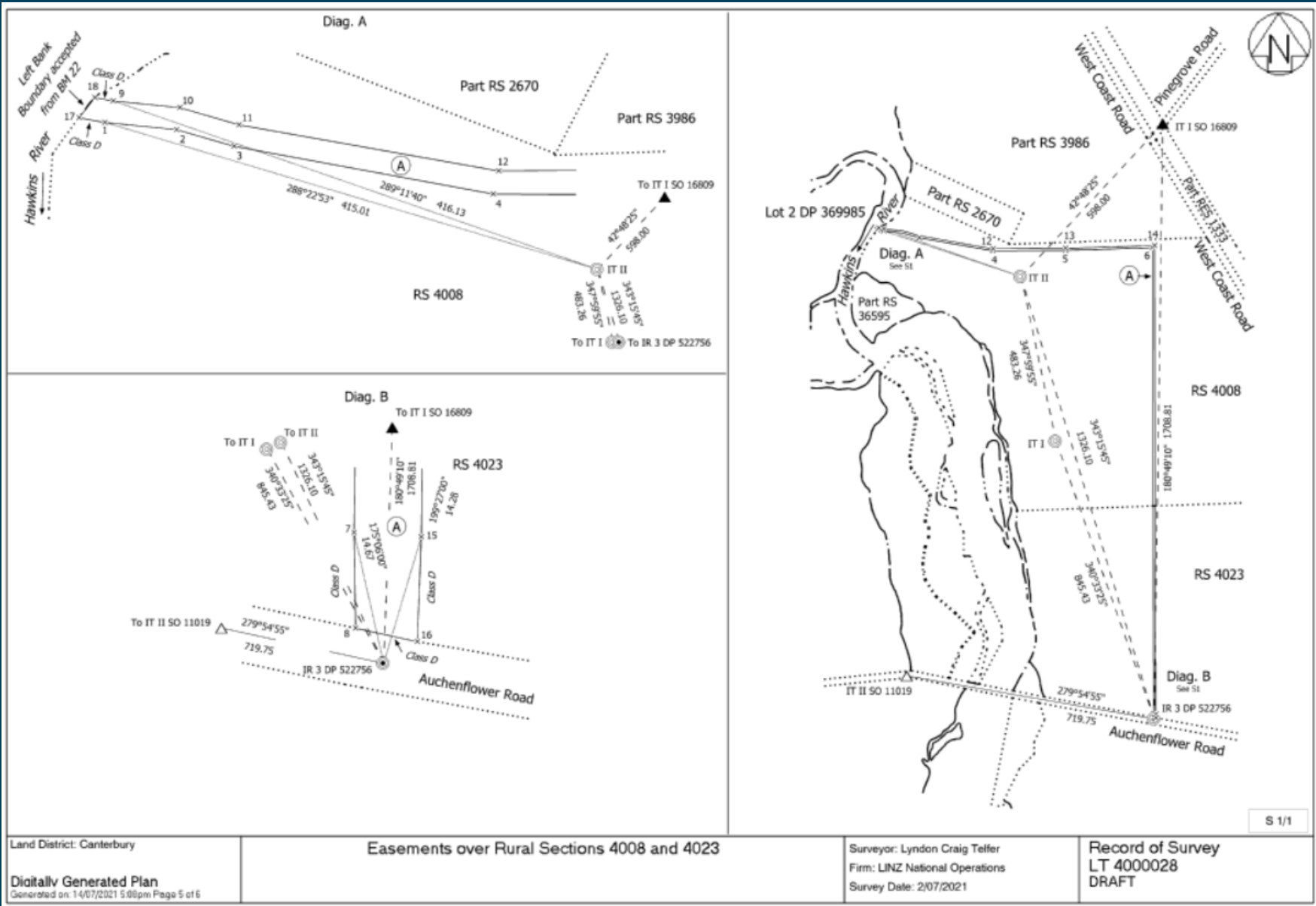
- Readable PDF format recommended

The screenshot shows a software window titled "CRI\_S24 - Record Supporting Documents". At the top, there are input fields for "Survey Number" (containing "LT 4000004") and "Reference". Below these is a section titled "Supporting Documents" containing a table with three columns: "Document Type", "Comment", and "File".

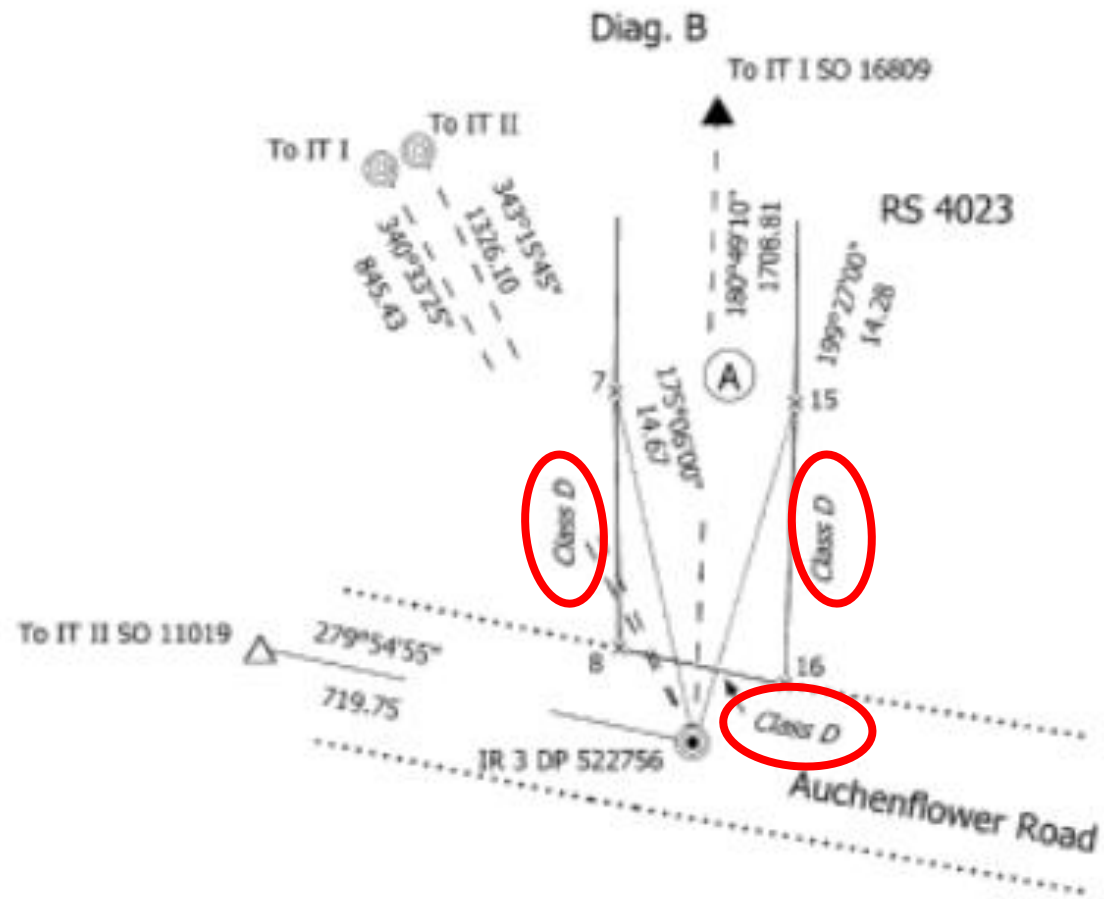
Document Type	Comment	File
Survey Report		S:\Survey Report.tif
Schedule / Memorandum	System attached schedule/memorandum	
Field Information		G:\Landonline\LT 4000004 Field informa
Water Boundary Record		G:\Landonline\LT 4000004 Water boun

To the right of the table are four buttons: "Add", "Attach", "Delete", and "View..". A red circle is drawn around the "Field Information" row in the table.

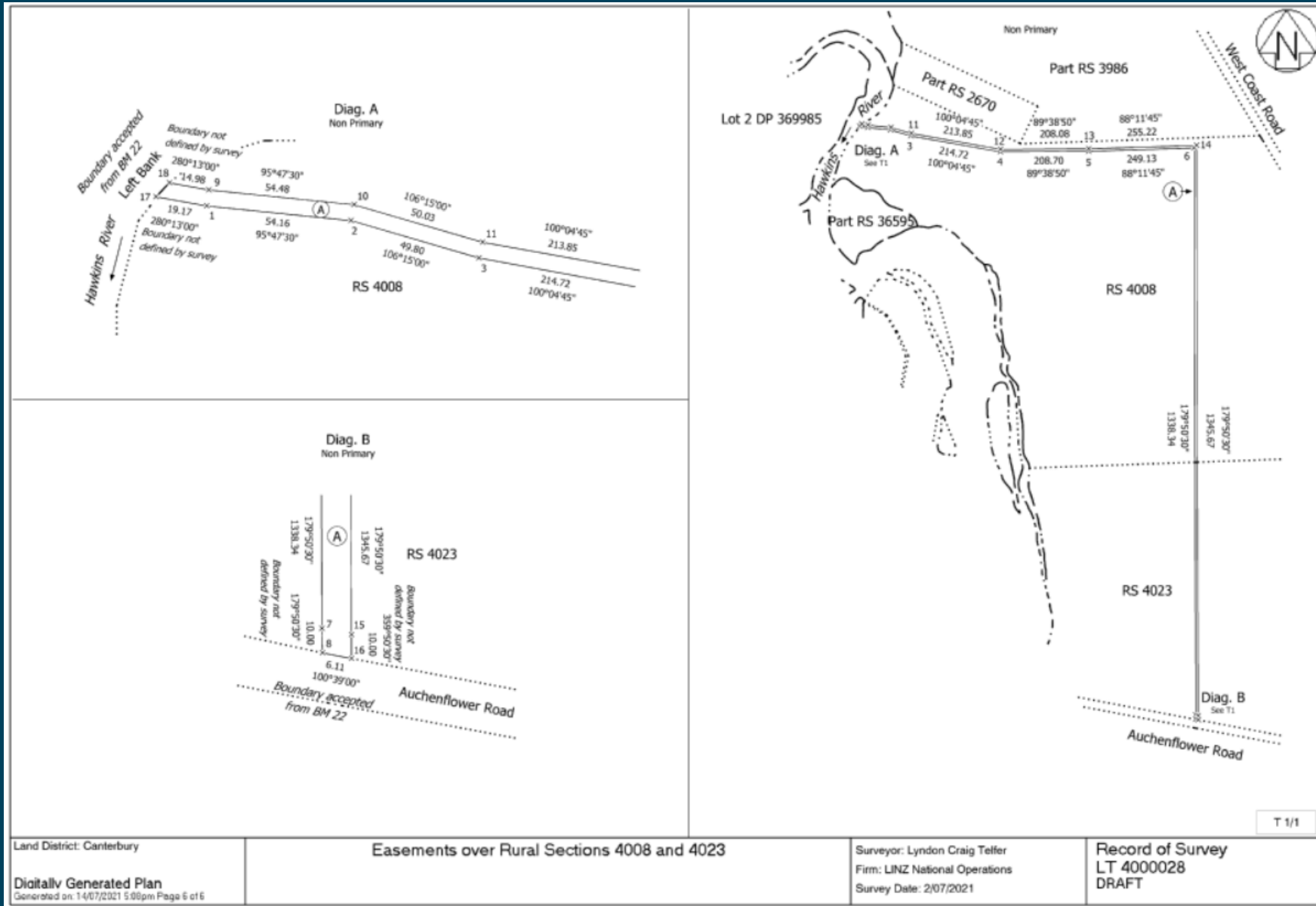
# Survey diagram



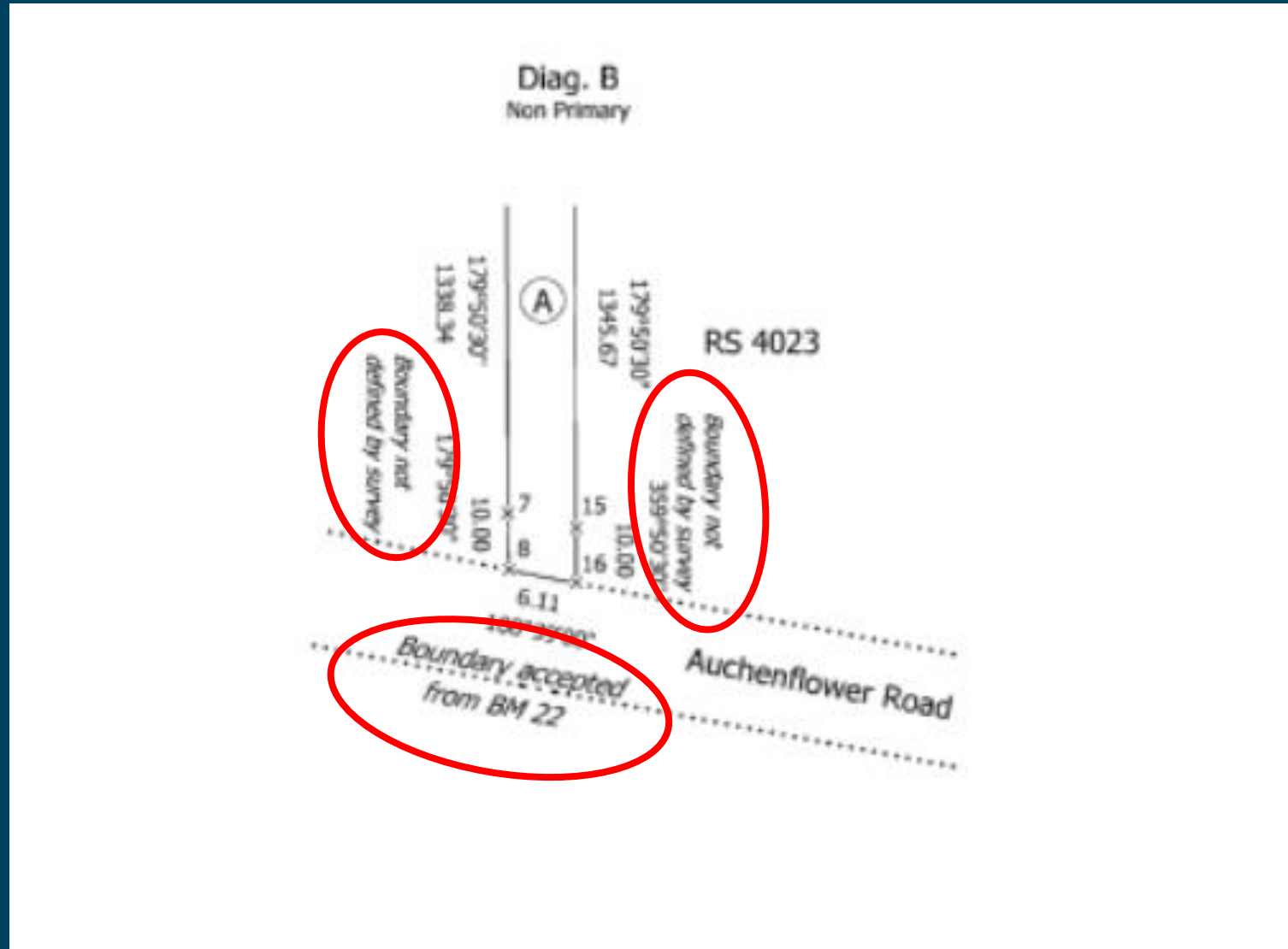
# Survey diagram B



# Title diagram



# Title diagram B



# Further Information

- Rules Implementation webpage
  - Cadastral Survey Guidelines
  - Transitioning from RCS 2010 to CSR 2021
- [SGRulesReview@linz.govt.nz](mailto:SGRulesReview@linz.govt.nz)



# Patai / Questions

# Thank you!