DELIVERED BY LINZ

LANDONLINE *e-survey* USER GUIDE

Landonline

newzealand.govt.nz

Table of Contents

1 ABOUT THIS USER GUIDE

1.1 Purpose

The purpose of this guide is to explain how to use Landonline to perform the tasks required to:

- manage work
- search for Users and Firms
- create and submit *e-surveys*; and
- maintain firm details and the details of other users in your firm. (System Managers only).

This User Guide is part of a series of help and support tools that are available for you. The other support tools are:

- Quick Reference Cards,
- Online Help, where you can press F1 while in a Landonline screen to get help for the topic you are working on.

1.2 Intended readership

This user guide is intended for surveyors, and others involved with surveying, who use Landonline to process *e-surveys*. It is also intended for System Managers to enable them to maintain details of users in their firm.

1.3 How to use this guide

1.3.1 User guide structure

This guide is a reference guide. It is structured to enable readers to look up the parts of the text they require to perform specific tasks.

It has twelve chapters:

- Chapter one, this chapter, outlines the purpose of this guide, who it is intended for and how to use it.
- Chapter two, Introduction to Landonline, provides a brief description of Landonline and explains how to get started.
- Chapters three to ten present step by step instructions for managing work, searching for firms and users and preparing *e-surveys*.
- Chapter eleven provides instructions for System Managers to manage users within their firm.
- Chapter twelve, Special task overviews in Landonline, provides process charts of common surveying tasks. The process charts recommend an approach to completing these tasks using Landonline.

1.3.2 Layout

There are several layout conventions used in this guide to present information and aid comprehension.

1.3.2.1 Chapter overviews

Each chapter begins with an overview. The overview introduces the topics in the chapter and presents important concepts and terms.

1.3.2.2 Steps and tasks

Following the overview are steps and tasks. These are displayed at a high level in a boxed paragraph. Where tasks are sequential they are listed as steps. Where tasks are related but not sequential they are listed as bulleted tasks.

For example, here are the high level steps required to create *e-survey* information.

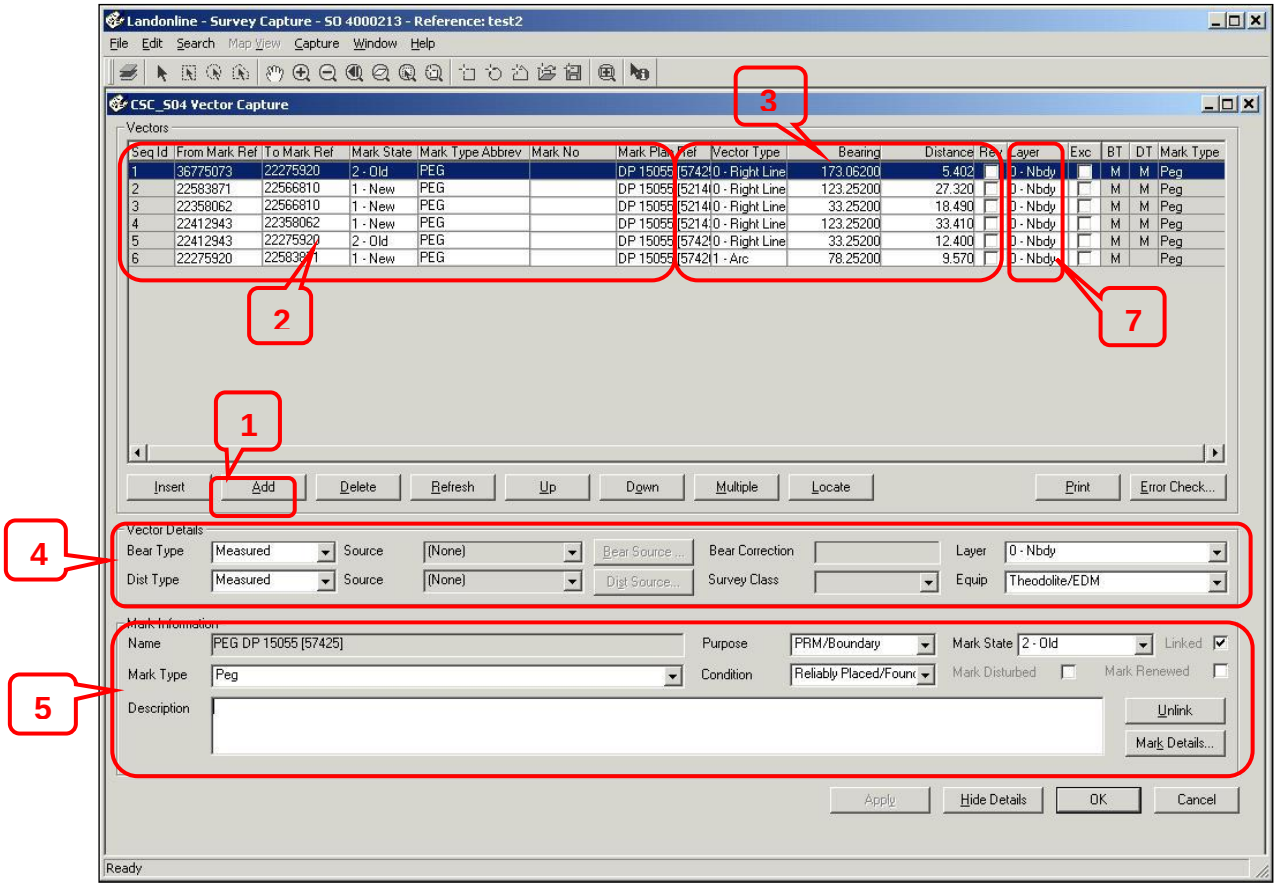
> Steps:
>
> The steps required to enter survey information are:
>
> 1. Display the Manage Survey Transaction screen.
> 2. Enter survey information.
> 3. Assign survey staff to the *e-survey*.
> 4. Save the *e-survey* Information.

The detail for each high level step or task is further explained in headings following the task list.

1.3.2.3 Screen shots

Where appropriate, screen shots have been incorporated in the guide. The purpose of each screen is explained the first time it is displayed. In addition, portions of screen shots and full screen shots are used to provide the detailed instructions for each step or task.

For example, this screen shows the steps required to capture a right line vector.



Detailed steps for each task are presented immediately following the screen shot.

1.3.2.4 Other Toolkit items

The Landonline Toolkit provides a set of resources to assist you to use Landonline. Toolkit resources include:

- User Guides: *e-survey* User Guide; *e-dealing* User Guide, *e-search* User Guide, *TA e-certification* User Guide, Notices User Guide and Requests User Guide.
- Wizards in Landonline
- *e-dealing* Practice Tool
- Quick Reference Cards
- Landonline Help.

1.3.2.5 References

The text uses cross references to refer to other parts of the guide.
For example:

- See topic 1.3.2.5 References.

In some instances other user guides are referenced. For example:

For more information about searches refer to the ***e-search*** **User Guide**.

1.3.2.6 Bolded text

The following items are **bolded** in the text:

- references to other topics and user guides
- references to figures and tables
- Notes and Cautions
- Menu selections.

1.3.2.7 Notes and cautions

Note: This format is used to emphasise points, remind readers of something, or to indicate information they need to be aware of.

Caution: This format is used to warn readers about certain actions that can have a serious impact on their work in Landonline.

2 INTRODUCTION TO LANDONLINE

2.1 Overview

Landonline is an electronic system which holds and manages land information in a national database. The database is the official, authoritative, and in the case of titles, the state guaranteed record.

Landonline allows for remote digital lodgement for surveyors of *e-surveys*, electronic registration of *e-dealings* for conveyancers and remote TA *e-certifications* for survey plans for Territorial Authorities (TA).

- An *e-survey* is prepared and submitted to LINZ electronically without the surveyor having to provide paperwork.

Landonline also allows comprehensive searching of the database as well as searching and viewing notices sent to your and your firm.

The rest of this chapter:

- introduces the Survey Process; and
- explains how to get started in Landonline.

2.1.1 Survey process

Survey professionals interact with Landonline at different stages of the Survey Process. Throughout this guide the relevant part of the Survey Process is displayed to help you identify how you interact with Landonline to complete survey tasks. **Figure 2-1** details the Survey Process as it relates to Landonline.

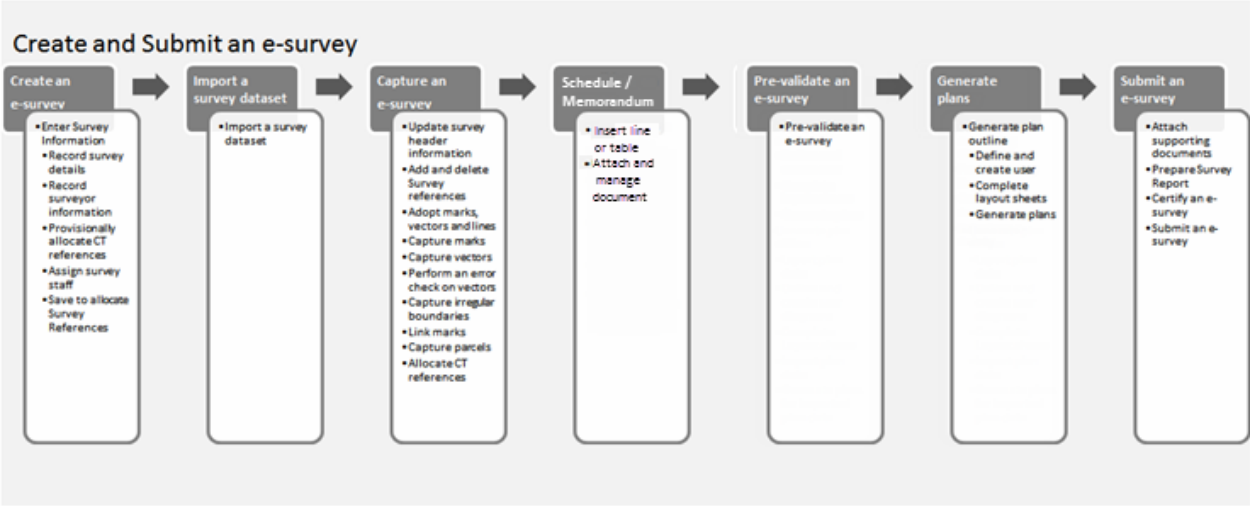


Figure 2-1 *e-survey* Process in Landonline

2.2 Getting started in Landonline

You connect to Landonline via the Landonline website. Once you have logged on to the Internet, you pass through a number of security checks to gain access to a Citrix server.

The Citrix server connects you to Landonline without requiring that the Landonline software is installed on your computer. Citrix is used in situations where users are widely distributed and need access to a centralised, server based application, such as Landonline, over the Internet. Citrix makes Landonline appear as if it runs on your PC when, in reality, it runs off a server in Auckland. The main benefit of using Citrix with Landonline is to reduce the quantity of data sent between your PC and the Landonline server via the Internet.

To maintain your security, and that of your clients, you must have a Landonline digital certificate. Your digital certificate is an electronic identifier, unique to you, created and stored on your computer. Your digital certificate permits you to log on to Landonline and, if you have the authority, certify and electronically sign an *e-survey*. For further information about digital certificates refer to the Landonline Toolkit.

During logon, you may be prompted to select:

- your firm - if you perform work for more than one firm; and
- a licence - if the firm you are working for has more than one type of Landonline licence.

Licences are issued to firms by Land Information New Zealand (LINZ). These enable users in a firm to perform pre-determined tasks in Landonline. Your firm's System Manager can set a default licence for you. Once set, this default licence will display every time you log on. You have the option to select a different licence if another one is available to you.

Once you select a licence, that licence cannot be used by another user in the firm until you log off Landonline.

Tasks:

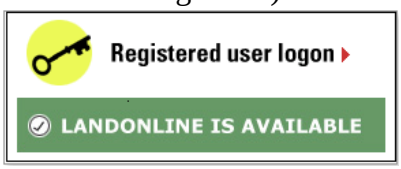
The tasks required to get started in Landonline are:

- Log on to Landonline
- Select your firm and licence.

The following headings correspond with these tasks and describe them in more detail.

2.2.1 Log on to Landonline

Caution: Keep your passwords secure and log off Landonline when you leave your computer. If you need to use another computer, you must transfer your digital certificate to it and make sure it is deleted from your previous computer. For more information about transferring your digital certificate, refer to the Landonline website, www.landonline.govt.nz.

1. Open the internet browser on your computer and display the Landonline Welcome page (www.landonline.govt.nz).
2. The 

(Registered User Logon access point) displays with a coloured band to advise the status of Landonline.

- **Green** – Landonline is available and you can logon.
- **Blue** – Landonline is available, but there are issues affecting some customers. A message displays to advise more details.

- **Red** – Landonline is not available. A message displays to advise why it is not available and approximately when it will be available again.

3. Click [Registered user logon ▸] to display a Client Authentication screen. The appearance of this screen can differ depending on the browser you use (eg Internet Explorer, Netscape).

- Select your digital signature.
- Click [OK] to display the Logon to Landonline screen.

4. Type your User Id and Password.
5. Click [Log On]

- If you log on successfully and you are a member of only one firm with only one licence, Landonline Workspace displays. See chapter **3 Workspace**.
- Otherwise, Landonline displays the Choose a Firm and Licence screen to select the licence to use. For more information, see topic **2.2.2 Select your firm and licence**.

Forgotten passwords: For details on how to reset a forgotten password, please refer to User Guide, "Reset Forgotten Landonline Password".

2.2.2 Select your firm and licence

If you work for more than one firm or a firm you work for has more than one licence, the **Choose a Firm and Licence** screen displays when you click [Log On] from the Landonline website. You may need to select:

- the firm you currently want to perform work for, and
- the licence you want to use.

To select your firm and licence, in the Choose a Firm and Licence screen:

1. Select the correct Firm Id from the drop down list.
2. Select the correct licence from the drop down list.
3. Click [OK] to confirm your selections and open Workspace.

Note: There are several licence options for Landonline. For more information about licence types refer to the Landonline website, www.landonline.govt.nz.

2.3 Using Landonline Help

This section explains how to use Help and some of its features.

Use Help to:

- Understand how to use Landonline to carry out tasks. Help is context sensitive.
- Find out the purpose and function of the current screen.

2.3.1 Displaying Help

You can display the Help file in three ways:

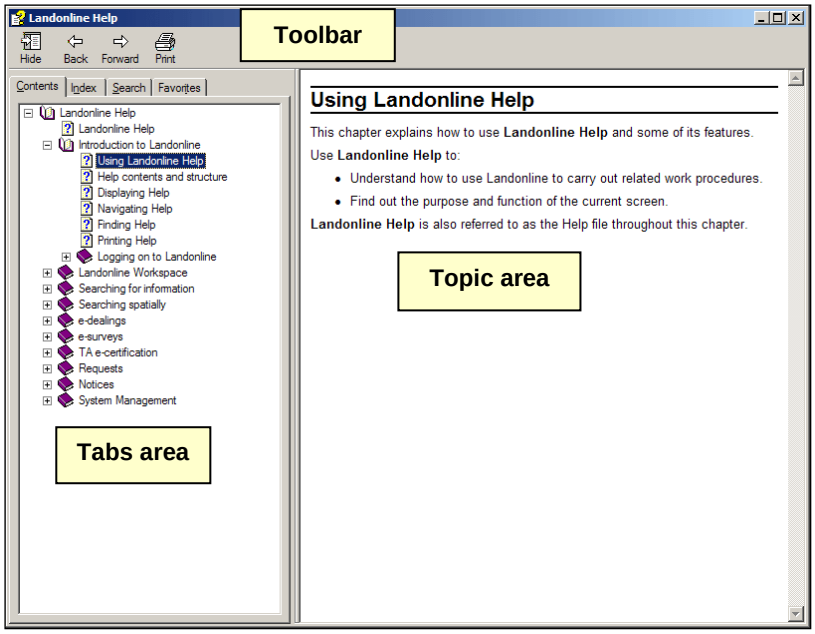
- Press F1 to display Help for the current screen.
- Click (Help) in Landonline Workspace.
- Select Help | Landonline Help Topics.

When activated, Help displays on top of all other screens.

2.3.2 Help contents and structure

There are three areas of Help. These are the:

- Toolbar
- Tabs area where you find a Help topic to view:
  - Contents - contains all Help topics in chapter order
  - Index - lists all help topics in alphabetical order
  - Search - to search for a keyword in Help topics
  - Favourites - to save a Help topic as your favourite
- Topic area where the contents of the selected Help topic displays.



2.3.3 Navigating Help

There are several ways to move through Help to display the topic you require:

- Click the buttons preceding each topic in the Tree. These buttons display as , and next to each topic in the contents area of your screen. As you select a topic in the Tree it displays the topic in the Topic area.
- Click the Back or Forward to view topics you have seen before.
- Click the underlined text (hypertext link) in the Topic area to go directly to the topic. The new topic will be selected in the Tree.

2.3.4 Finding Information in Help

You can find Help in several ways. In the Tree area:

- Use the Contents tab to select a topic and expand it to view a list of related topics.
- Use the Index tab to find a topic from the alphabetical list.
- Use the Search tab to find a topic based on a keyword.
- Use the Favourites tab to find a previously saved Help topic.

2.3.5 Printing Help

You can print the information in a topic. To print:

- Select a topic in the Tree and click 

. In the **Print Topics** screen, you can choose to print only the selected topic or the selected topic and all sub topics.
- Right click in the Topic area and select **Print…** from the menu. This only prints the selected topic.

3 WORKSPACE

3.1 Overview

The Workspace screen is the first screen you see when you log on to Landonline. You use Workspace to track your work and to access other parts of Landonline.

This chapter introduces Workspace. It explains:

- the components of Workspace
- how to use Workspace to open other parts of Landonline
- how to use Workspace to view, save and print *e-survey* information
- how to find *e-surveys* and requests listed in your Workspace
- the messages available in Workspace
- how to add, view, print, save and delete online messages
- how to view and save attachments to messages
- how to maintain your details in Landonline, specifically your user details and your password.

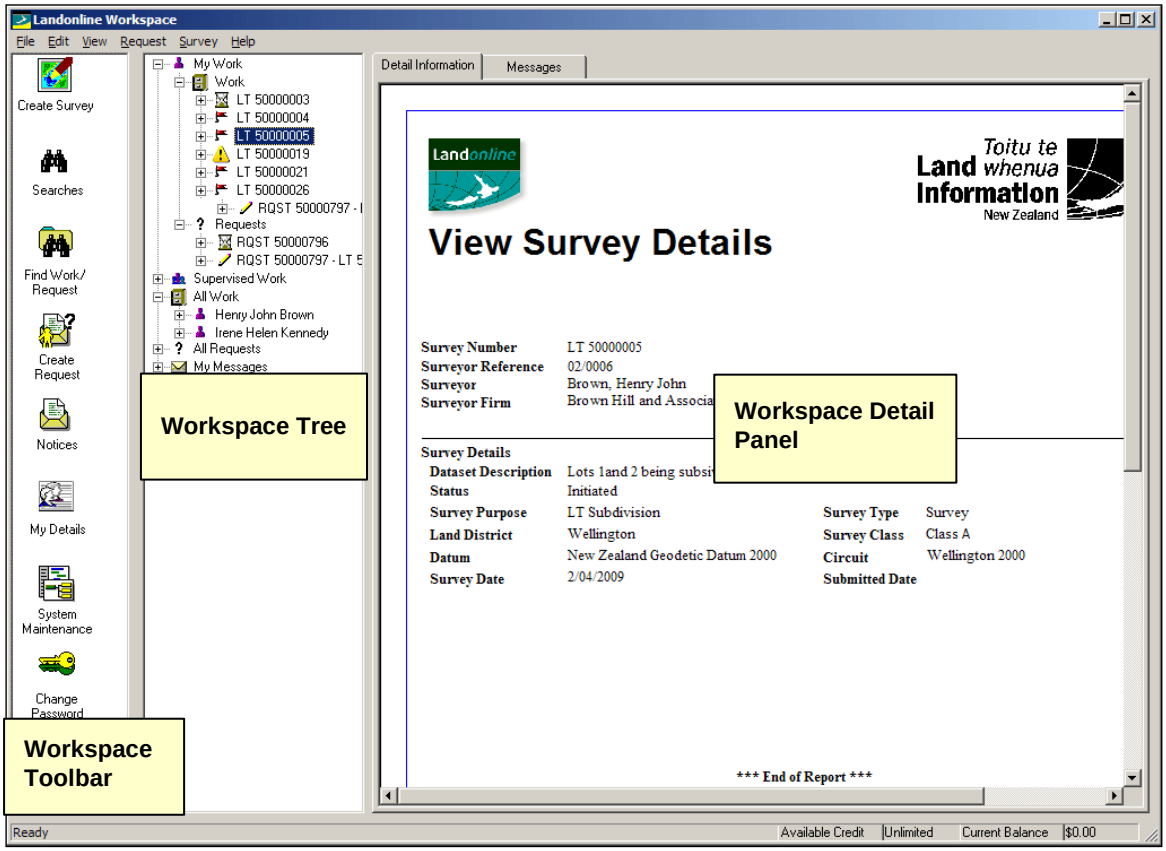
3.2 Workspace screen

Whenever you log on to Landonline Workspace displays. Workspace:

- provides you with access to all parts of Landonline
- lists all work you are involved with and identifies its status
- is your mailbox for all messages relating to *e-surveys* in Workspace
- is your mailbox for all messages about the Landonline environment
- displays your firm's available credit (ie Unlimited) and current balance with Land Information New Zealand (LINZ).

Workspace has three main areas:

- Workspace Toolbar
- Workspace Tree
- Workspace Detail Panel.



Henry Brown is a surveyor working for Brown Hill and Associates. This is his Workspace.

The following headings correspond with the Workspace areas and describe them in more detail.

3.2.1 Workspace Toolbar

The Workspace Toolbar has icons that open different parts of Landonline. Your privileges determine which icons display in your Workspace.

Table 3-1 lists these icons and describes when you would use them.

Icon	Action
Create Survey	Use this icon to create a new *e-survey*. Click to display the Manage Survey Transaction screen.
Searches	Use this icon to search for information in Landonline, (eg titles and survey plans). Click to display Searches.
Find Work / Request	Use this icon to find an *e-survey* or request in your Workspace. Click to display the Find Work/Request screen.
Create Request	Use this icon to create and send specific survey related requests to LINZ to action. Click to display the Create Request screen. For more information, refer to the **Requests User Guide**.
Notices	Use this icon to access Notices to search for notices sent to your firm or to view or update any notice delivery method details for you or your firm. For more information, refer to the **Notices User Guide**.
My Details	This is where you update your contact details and preferences. Click to display the Maintain User screen.
System Maintenance	If you are a System Manager this is where you: • maintain firm contact details • allocate and delete user privileges. Click to display External System Administration. **Note**: This icon only displays in the Workspace Toolbar if you are a System Manager.
Change Password	This is where you change your password. Click to display the Change Password screen.
Help	This is where you can find out more information about using Landonline. Click to display Landonline Help.

Table 3-1 Workspace Toolbar icons for survey users

3.2.2 Workspace Tree

3.2.2.1 Workspace Tree folders

The Workspace Tree lists all work available in your firm. Work displays in four folders. These are explained in **Table 3-2**.

Folder	Description
My Work	Displays all work for which you are an enabled user. This work displays in two sub-folders (ie Work and ? Requests. To see the *e-surveys* and requests you are enabled to work on, expand the folders in the tree.
Supervised Work	Displays the names of all enabled users who are working on *e-surveys* that you are responsible for. To see an *e-survey* expand the tree for an enabled user.
All Work	Displays the names of all people in your firm who work with Landonline. To see the work a person is involved with, expand the tree.
? All Requests	Displays requests created by your firm. Landonline automatically removes Completed requests from this folder. If a completed request is linked to an *e-survey* still in Workspace, the completed request will remain in the Work sub-folder under the *e-survey* until you submit the *e-survey*.
or My Messages	When displays, new messages have been added to your My Messages folder. **Note**: This folder cannot be expanded further.

Table 3-2 Folders in the Workspace Tree

3.2.2.2 *e-survey* and request status

e-surveys change status as they progress through the Survey Process. Requests also change status as they are processed. You can easily tell the status of an *e-survey* and request by the icon that displays next to it. **Table 3-3** explains the status icons.

Icon	Description
	The **Draft** icon displays when a request has been created.
	This icon displays when an *e-survey* is: • initiated, ie a plan number has been generated for the *e-survey* • on requisition.
	This icon displays when an *e-survey*: • has been submitted • is pending submission as part of a batch • is subject to the exception process • is pending withdrawal. For a request, this icon indicates the request has been sent, but not yet completed.
	This icon displays when: • an *e-survey* has failed submission • LINZ has responded to an *e-survey* in the Exception Process.
	The **Completed** icon indicates the request has been completed by LINZ. This icon will only display in the folder for a linked *e-survey* that has yet to be finalised (eg Registered).

Table 3-3 Status icons used in the Workspace Tree

3.2.3 Workspace Detail panel

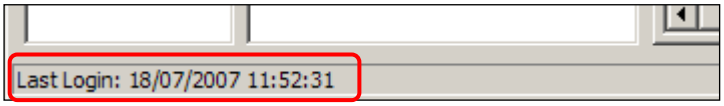
The Workspace Detail panel changes display depending on what is selected in the Workspace Tree. It displays tabs. You can select between the tabs to view different types of information. **Table 3-4** describes these tabs and explains when they display.

Tab name	When tab displays	Description
Summary Information tab	Displays when any of the following folders and sub folders are selected in the Workspace Tree: • My Work • Work • Requests • Supervised Work • All Work • All Requests.	Use this tab to display a summary of all *e-surveys* or requests listed in the folder.
Detail Information tab	Displays when an *e-survey* or request is selected from the My Work, Supervised Work, All Work or All Requests folders.	Use this tab to view details of the selected *e-survey* or request.
Messages tab	Displays when an *e-survey* is selected from the My Work, Supervised Work or All Work folders.	Use this tab to view online messages for the selected *e-survey*.
Messages Received tab	Displays when the My Messages folder is selected in the Workspace Tree.	Use this tab to view a list of all messages sent to you. You can also read the content of messages in this tab and view and save message attachments (eg a lodgement notice).

Table 3-4 Workspace Detail panel tabs

3.2.4 Login security check

When the Workspace screen first opens after you log in to Landonline, the date and time of your last log in displays underneath the Workspace Toolbar icons.



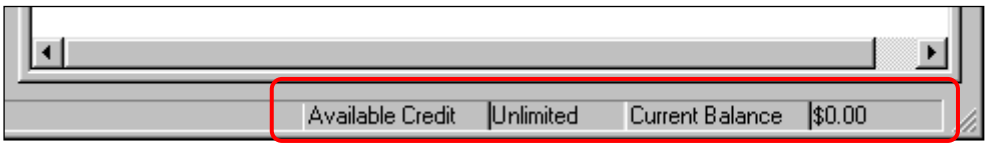
This message allows you to determine whether another person has used your username and password to access Landonline without your knowledge. As soon as you click elsewhere in the screen, Landonline replaces the message with microhelp for the selected item.

3.2.5 Firm's credit

Workspace also displays your firm's:

- Available Credit (ie Unlimited), and
- Current Balance (ie the total charges incurred during the current logged on session).

These are located underneath the Workspace Detail panel.



These balances change as you and others in your firm incur fees. For example, when you submit an *e-survey* the Current Balance will increase to reflect the costs of submission.

3.2.6 Workspace Toolkit

Table 3-5 lists other tools that describe Workspace.

Tool	Description
Landonline Help	Press F1 in Workspace to display information about using Workspace.
Quick Reference Cards	Section: Workspace Topic: Workspace navigation.

Table 3-5 Workspace Toolkit

3.3 View, save or print a transaction

The Workspace Detail panel provides a summary of *e-survey* and request information and *e-survey* messages. You can view, save or print details of *e-surveys* listed in the Workspace tree.

All requests created by a member of your firm display in Workspace. You can view and print details of a request, but you cannot save request details to a file.

Tasks

To view, save or print *e-survey* information you:

- Refresh Workspace to display the latest information and messages.
- View details of the *e-survey* or request in the Workspace Detail panel.
- Save information for the *e-survey* from the Workspace Detail panel to another location on your computer.
- Print information from the Workspace Detail panel.

The following headings correspond with these tasks and describe them in more detail.

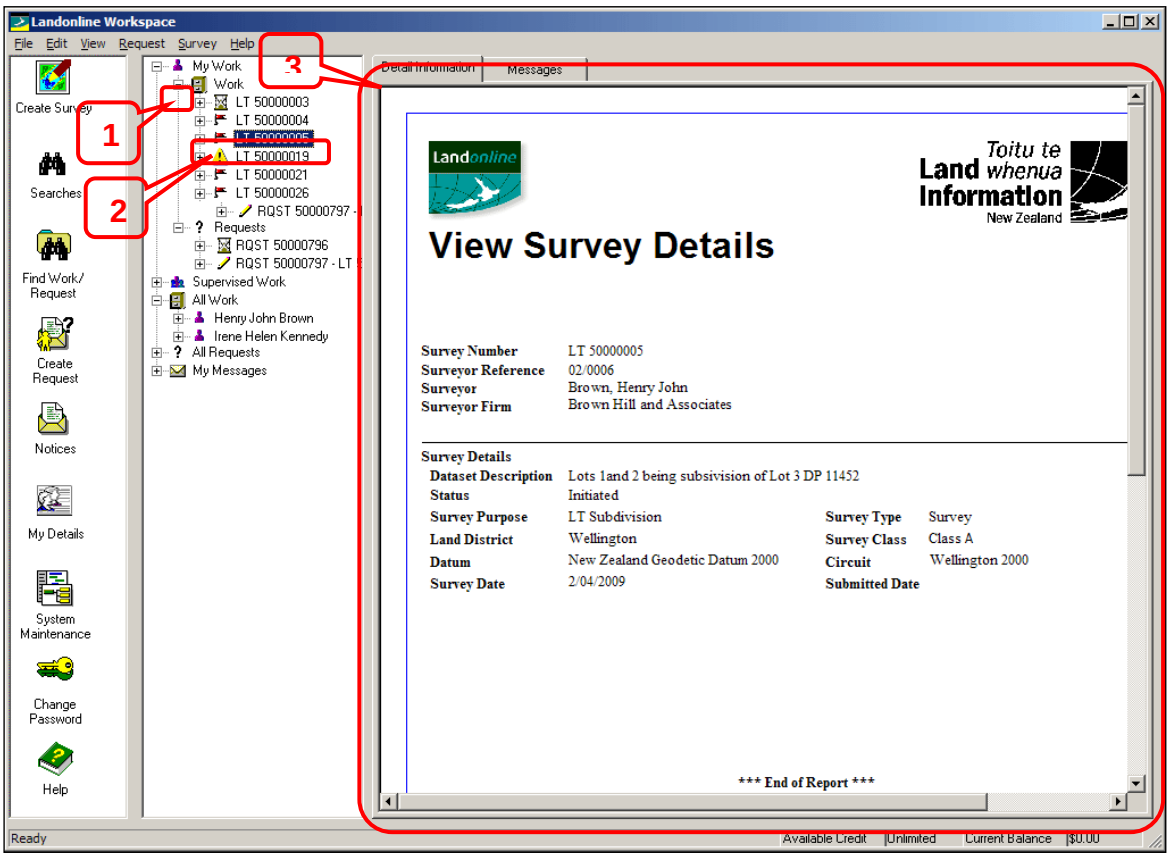
3.3.1 Refresh Workspace

Refresh Workspace whenever you need to display the latest information and messages.

To Refresh Workspace:

1. Select **View | Refresh**.

3.3.2 View details of a transaction



Henry Brown is a surveyor. He is working on six *e-surveys*. These *e*-surveys display in the Workspace Tree in the Work sub-folder under his My Work folder. The Workspace Detail panel currently shows the details for *e-survey* LT 50000005. Henry has also created two requests. These requests display in the Requests sub-folder under his My Work folder.

To view the details of a transaction:

1. Expand the Workspace Tree folder the transaction is in.
2. Select the *e-survey* or request.
   - If you select an *e-survey* with an image attached, Landonline generates the composite instrument image (unless it has already been generated) and displays it in the Image Viewer. For more information, refer to the ***e-search*** **User Guide** or **Requests User Guide**.
   - If you select a request with an image attached, it will generate each time you select it.
3. View the *e-survey* or request information in the Detail Information tab in the Workspace Detail panel. Scroll to view all details.

Note: You can also view *e-survey* information through the Manage Survey Transaction screen and other Survey screens. This locks the transaction preventing others from working on the *e-survey*. Multiple people can view *e-survey* details at the same time through Workspace without causing the transaction to be locked. For more information about editing *e-surveys* see chapter **5 Create an *e-survey***.

3.3.2.1 View Survey Details summary

When you view an *e-survey* the Detail Information tab displays the View Survey Details summary. **Table 3-6** describes the information in the View Survey Details summary.

Section	Description
Survey Number	Number assigned to the *e-survey* by Landonline.
Surveyor Reference	Surveyor's own reference for the *e-survey* (eg client name, file number).
Surveyor	The surveyor who will certify and submit the *e-survey*.
Survey Firm	Name of the firm responsible for lodging the *e-survey*.
Survey Details	Details about the *e-survey* including: status, land district, survey class, datum, circuit, survey date and lodged date.
Territorial Authorities	Lists the relevant territorial authorities applicable to the *e-survey*.
Supporting Documents	Lists all supporting document attached to the *e-survey*.

Table 3-6 View Survey details summary

3.3.2.2 View request summary information

When you view a request in the Detail Information tab in Workspace, the structured text view displays the information entered for the request. **Table 3-7** describes the summary information in the request structured text view.

Section	Description
Request Details	Details of the request, as appropriate (eg Request Type, Request Id, Request Status, Survey Number, Surveyors Reference (if recorded), Created Date, Last Modified By (user name) and Firm).
Attachment	File path and name of the attached image. Only displays if an image has been attached.
Entry Date	Date on which the attached file was saved. Only displays if an image has been attached.
Notes and Comments	Any notes or comments added to the request.

Table 3-7 View request summary information

3.3.3 Save *e-survey* information

You can save the information you see in Workspace for an *e-survey* to your computer. The details of the *e-survey* and any associated messages are on separate pages; therefore you must individually save each page (or Print Job) to a file.

To save *e-survey* information:

1. Select the *e-survey* in the Workspace Tree.
   - If the *e-survey* you select has an image attached, click (Print) in the Image Viewer. Go to step 3.
2. Select **File | Save As**.
   - If there are multiple pages, a message displays advising you to select each Print Job (or page) and save it individually to a file.
3. Click OK to continue to the UniPrint Preview screen (if this option is selected in your UniPrint settings).
   - The UniPrint Preview screen with a preview of the highlighted Print Job (or page).
4. Click Save to display the Save As screen.
   - If there are multiple jobs, a message displays to advise only the highlighted job will be saved. Click OK to display the Save As screen.
5. Select a location to save the file to (eg C:\My Documents).

6. Click Save to save the file.
7. Select another Print Job (or page) for the *e-survey*, if required, and repeat Steps 4 to 6 to save details.

Note:

- When you save *e-survey* information, Landonline saves only the detail information and messages for the *e-survey*.
- When you submit an *e-survey* it remains in Workspace as read only. Once the *e-survey* is Approved as to Survey it disappears from Workspace.
- When saving an *e-survey* you can set your computer to preview items using UniPrint or Acrobat Reader. The steps in this guide are for UniPrint. To save from Acrobat Reader, select **File | Save A Copy…** For more information, go to the *e-search* area of the Landonline website and select Printing, using the spatial window and viewing images FAQs and tips.

3.3.4 Print *e-survey* or request information

You can print the information that displays in Workspace for an *e-survey* or request.

To print an *e-survey* or request:

1. Select the transaction in the Workspace Tree.
   - If the transaction you select has an image attached, click (Print) in the Image Viewer. Go to step 4.
2. Select **File | Print...** to continue to the UniPrint Preview screen (if this option is selected in your UniPrint settings).
   - The UniPrint Preview screen displays with a preview of the highlighted Print Job (or page).
3. Click Print to display the Print screen (if this option is selected in your UniPrint settings).
4. Select your printer options.
5. Click Print

Note:

- Landonline only prints detail information and messages for the *e-survey* or request from Workspace.
- When printing you can set your computer to preview items using UniPrint or Acrobat Reader. The steps in this guide are for UniPrint. To print from Acrobat Reader, select **File | Print…** For more information, go to the *e-search* area of the Landonline website and select Printing, using the spatial window and viewing images FAQs and tips.

3.3.5 View, save or print an *e-survey* Toolkit

Table 3-8 lists other tools that assist with viewing, saving and printing *e-surveys*.

Tool	Description
Landonline Help	Press F1 in Workspace to display information about using Workspace.

Table 3-8 Workspace View, Save and Print Toolkit

3.4 Find an *e-survey* or request

Workspace displays all *e-surveys* your firm is involved with and all requests created by your firm. If you are involved with many *e-surveys* or requests you can use the Find Work/Request screen to locate a specific *e-survey* or request.

Steps:

The high level steps required to find an *e-survey* or request in the Workspace tree are:

1. Display the Find Work/Request screen.
2. Search for the *e-survey*.
3. Search for the request.
4. Search for the request manual copy.

The following headings correspond with these steps and describe them in more detail.

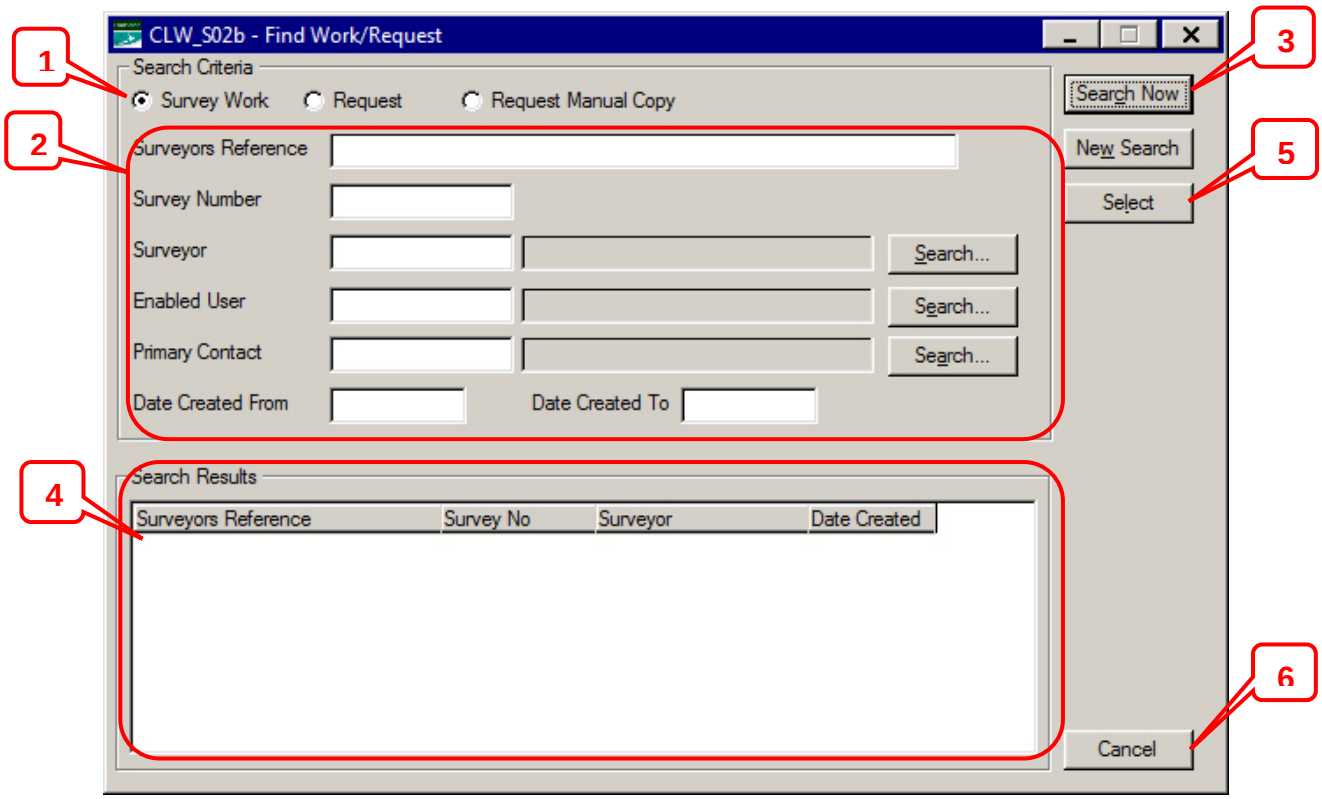
3.4.1 Display the Find Work/Request screen

You use the Find Work/Request screen to search for *e-surveys* in Workspace. You can search using many different combinations of search criteria.

To display the Find Work/Request screen, in Workspace:

1. Click (Find Work/Request) in the Workspace Toolbar.

3.4.2 Search for the *e-survey*



Henry Brown is searching for an *e-survey* in Workspace using the Enabled User search criteria.

To search for an *e-survey* in Workspace:

1. Select the Survey Work option.
2. Type your search criteria in one or more fields (eg Survey Number).
   For more information about search criteria see **Table 3-9**.

3. Click Search Now to display the results of your search in the Search Results area.
4. Click the *e-survey* in the Search Results area that you want to find in Workspace.
5. Click Select to highlight the *e-survey* in the Workspace Tree. The Find Work/Request screen minimises.
   Landonline searches the folders in the Workspace Tree in the following order: My Work, Supervised Work and All Work.
6. Click Cancel to close the Find Work/Request screen when you have completed your search.

Note:

- The Find Work/Request screen minimises and remains open to enable you to select another *e-survey* from the Search Results area, or conduct another search. Click CLW... (Find Work/Request minimised) in the toolbar of your computer to display the Find Work/Request screen again. You must click Cancel to close the screen.
- Wildcards can be used in the Survey Reference field, see **4.3.1Wildcards**.
- If your search returns a single search result you can press Enter to highlight the item in the Workspace Tree.

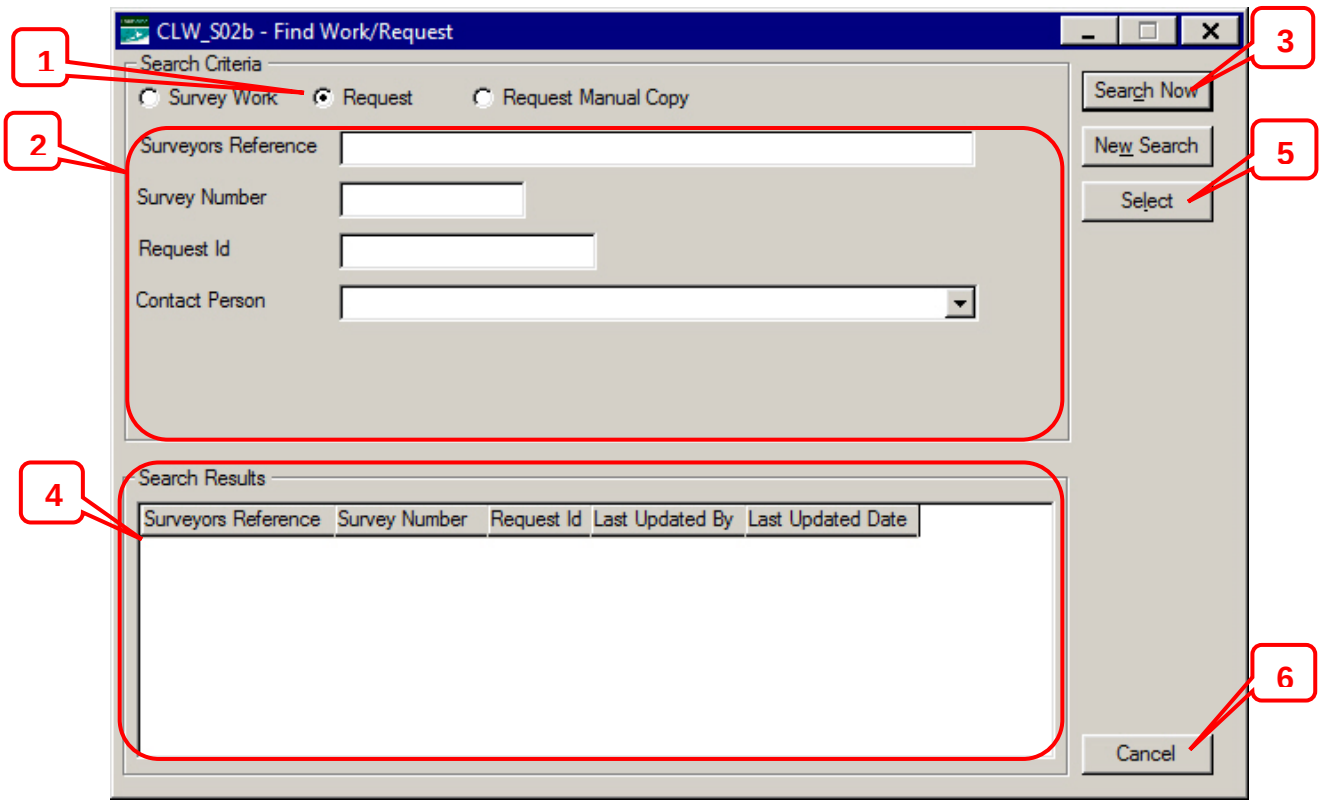
Table 3-9 describes the fields and buttons in the Find Work/Request screen.

Field or Button	Action
Survey Work	Select to search for *e-surveys* in Workspace.
Request	Select to search for requests in Workspace.
Request Manual Copy	Select to search a request manual copy in Workspace.
Search Criteria fields and buttons	
Surveyors Reference	Type the file reference for the *e-survey* or request.
Survey Number	Type the number of the *e-survey* (eg LT 312345). You can search on this criteria alone to return only the *e-survey* you want in the Search Results field. For a request, enter the number of the *e-survey* linked to the request.
Request Id	Enter the number of the request. If you type this number you don't need to enter any other criteria. Only displays for the Request option.
Surveyor	Type the user Id of the surveyor in your firm responsible for the *e-survey*. If you don't know the User Id, click **Search...** and select a name. Only displays for the Survey Work option.
Enabled User	Type the user Id of an Enabled User in your firm for the *e-survey*. If you don't know the user Id, click **Search...** and select a name. Only displays for the Survey Work option.
Primary Contact	Type the user Id of the Primary Contact in your firm for the *e-survey*. If you don't know the user Id, click **Search...** and select a name. Only displays for the Survey Work option.
Contact Person	Select the name of the contact person for the request from the drop down list. Only displays for the Request option.
Date Created From	Type a date the *e-survey* may have been created on. This narrows the search to only search for *e-surveys* created from this date forward. Only displays for the Survey Work option.
Date Created To	Type a date the *e-survey* is unlikely to have been created after. This narrows the search to only search for *e-surveys* created before and on this date. Only displays for the Survey Work option.
Search…	Click to display the External Search screen to search for a user.
Client Reference	Enter the client reference for a request manual copy. If you have recorded two references for a request manual copy, only type one of those client references in this field. Only displays for the Request Manual Copy option.
Record Number	Enter the record number of the request manual copy. Only displays for the Request Manual Copy option.
Record Type	Select the record type for the request manual copy from the drop down list. Only displays for the Request Manual Copy option.
Created By	Select the name of the person who created the Request Manual Copy from the drop down list. The list is alphabetically ordered and only displays the names of all the users associated to the firm. Only displays for the Request Manual Copy option.
Other fields and buttons	
Search Results	Landonline displays a summary of all *e-surveys* or requests that match your search criteria.
Search Now	Click to search for *e-surveys* or requests based on your search criteria.
New Search	Click to clear the screen to enter new search criteria.
Select	Click to display the selected *e-survey* or request in the Workspace tree.
Cancel	

Table 3-9 Find Work/Request screen fields and buttons

Note: For more information about conducting searches see chapter **4 Searching for a User or Firm**.

3.4.3 Search for the request



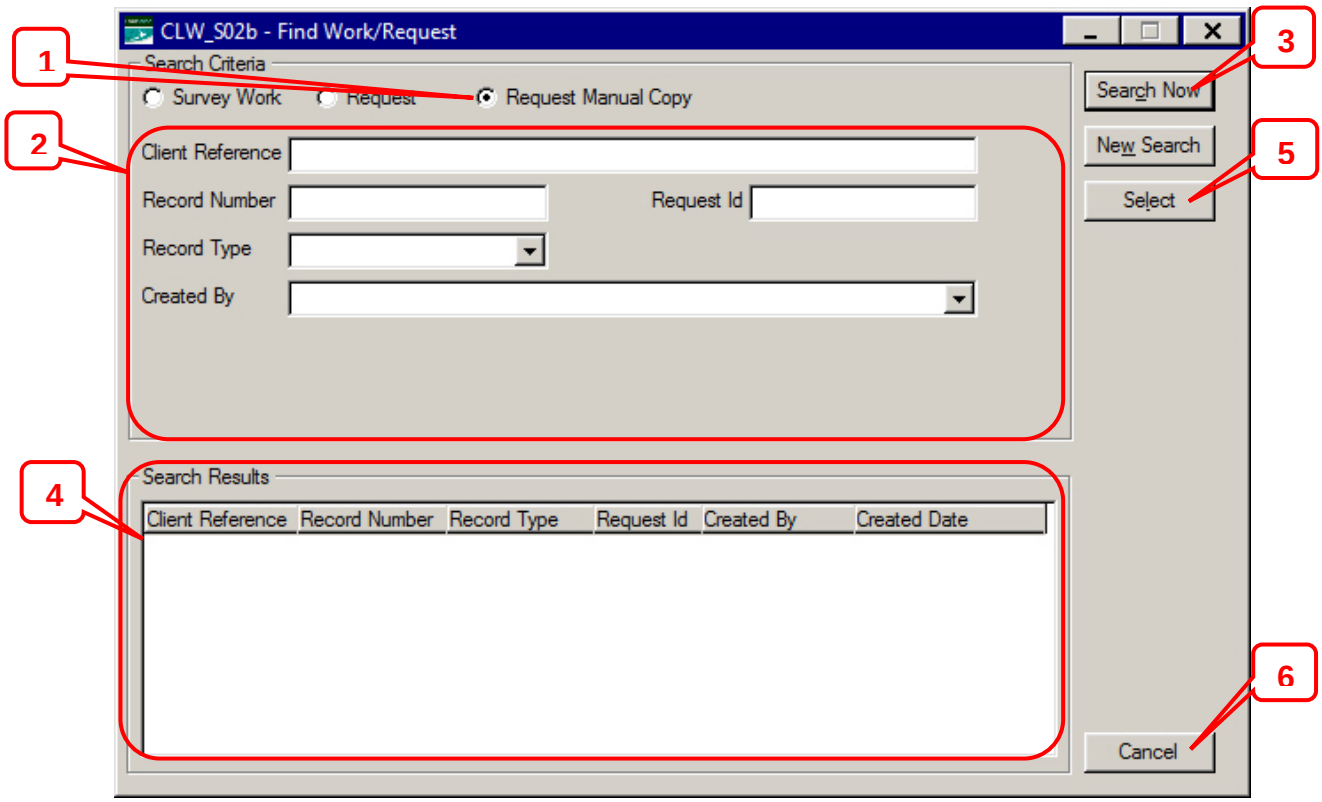
Henry Brown is searching for a request in Workspace.

To search for a request in Workspace:

1. Select the Request option.
2. Type your search criteria in one or more fields (eg Surveyors Reference, Survey Number). For more information about search criteria, see **Table 3-9.**
3. Click Search Now to display the results of your search in the Search Results area.
4. Select a request from Search Results.
5. Click Select to select the request in the Workspace Tree.
6. Click Cancel to close the Find Work/Request screen when you have completed your search.

Note: The Find Work/Request screen minimises and remains open to enable you to select another request from the Search Results area, or conduct another search. Click CLW... (Find Work/Request minimised) in the toolbar of your computer to display the Find Work/Request screen again. You must click Cancel to close the screen.

3.4.4 Search for a request manual copy



Henry Brown is searching for a request manual copy in Workspace.

To search for a request manual copy in Workspace:

1. Select the Request Manual Copy option.
2. Type your search criteria in one or more fields (eg Client Reference, Record Number). For more information about search criteria, see **Table 3-9.**
3. Click Search Now to display the results of your search in the Search Results area.
4. Select a request manual copy from Search Results.
5. Click Select to select the request manual copy in the Workspace Tree.
6. Click Cancel to close the Find Work/Request screen when you have completed your search.

Note: The Find Work/Request screen minimises and remains open to enable you to select another request from the Search Results area, or conduct another search. Click CLW... (Find Work/Request minimised) in the toolbar of your computer to display the Find Work/Request screen again. You must click Cancel to close the screen.

3.4.5 Find an *e-survey* Toolkit

Table 3-10 lists other tools that assist with Finding an *e-survey*.

Tool	Description
Landonline Help	Press F1 in the Find Work/Request screen for more information about finding *e-surveys* or requests in Workspace.

Table 3-10 Find an *e-survey* Toolkit

3.5 Types of messages

Workspace displays messages about *e-surveys* in the Workspace Detail panel. There are two types of messages. These are:

- User generated messages
- System generated messages.

There are two places where you can view messages in Workspace:

- Messages tab: use to view messages specific to an *e-survey*.
- My Messages folder: use to view messages sent specifically to you and messages about the Landonline environment.

3.5.1 User generated messages

User generated messages are created and viewed in the Messages tab for a selected *e-survey*. Anyone with access to the *e-survey* through their Workspace can view these messages. User Generated messages are restricted to a maximum size of 1500 characters per entry and cannot have attachments. For more information about user generated messages, see topic **3.6.1.2 Add comments about an *e-survey***.

3.5.2 System generated messages

System generated messages are automatically generated by Landonline. When they relate to a specific *e-survey* they are viewed through the Messages tab.

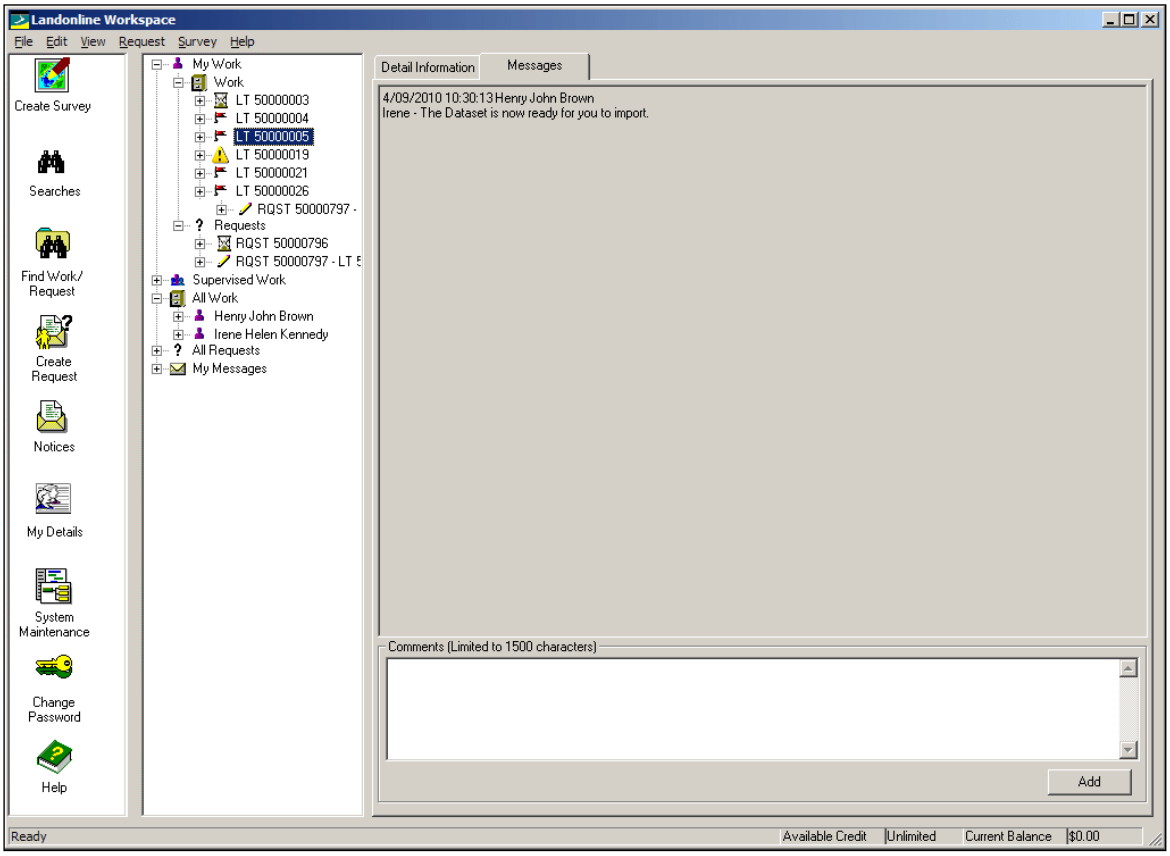
System generated messages can also be sent to specific recipients where they are viewed through the My Messages folder. Messages that relate to the Landonline environment are also viewed here. These messages can contain attachments. For more information about system generated messages with attachments, see topic **3.7.1.2 View and save attachments in My Messages**.

3.6 Messages tab

The Messages tab displays in the Workspace Detail panel when you select an *e-survey* in the Workspace Tree. Messages are specific to the selected *e-survey* and are both system generated and user generated.

You can:

- View and print all messages for a specific *e-survey*.
- Add your own comments about the *e-survey* for all others involved with it to see.



Henry Brown has displayed the Messages tab for *e-survey* LT 50000005. This has one User Generated message that he has left for Irene Kennedy, an Enabled User for this *e-survey*.

3.6.1 Using the Messages tab

You can view, add comments and print the messages for any *e-survey* displayed in your My Work, Supervised Work or All Work folder.

Tasks

You use the Messages tab to:

- View messages for a specific *e-survey*.
- Add comments about an *e-survey*.
- Print *e-survey* messages.

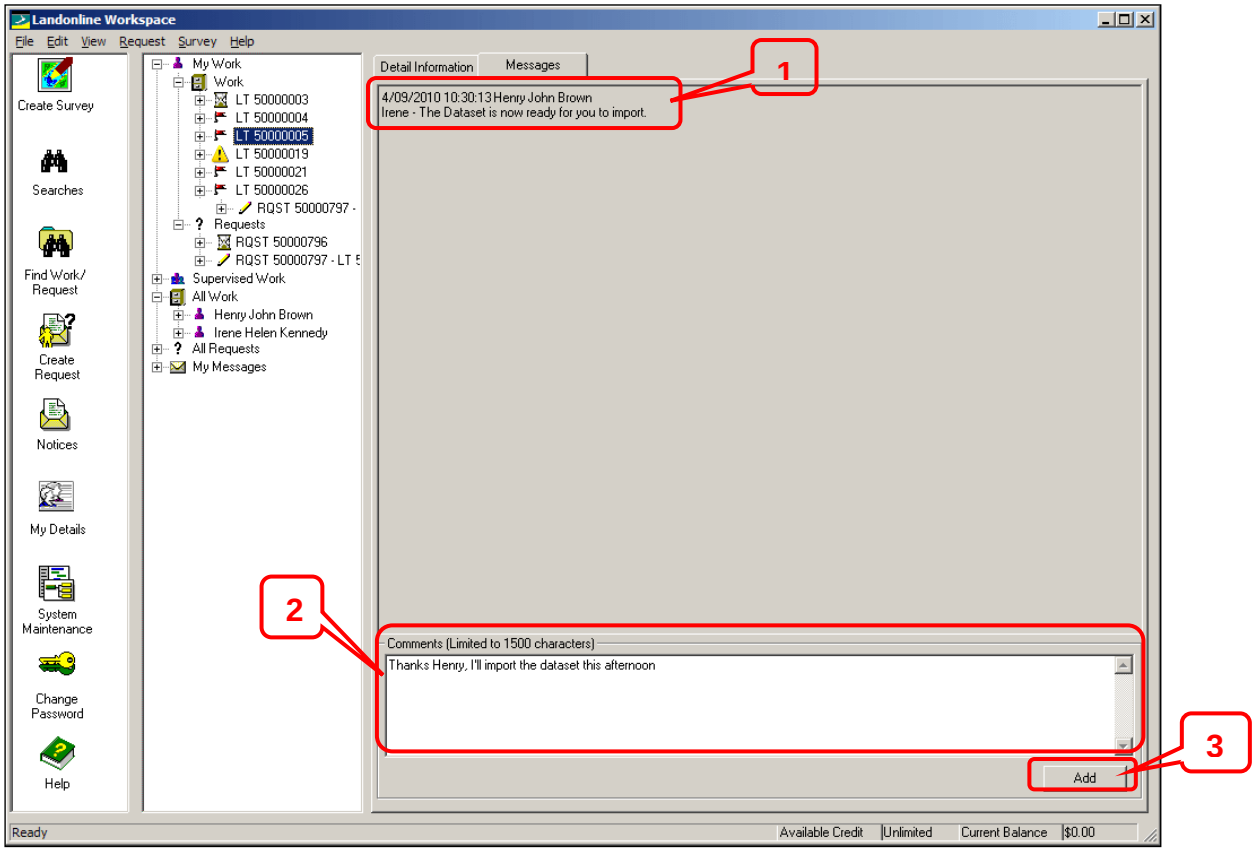
The following headings correspond with these tasks and describe them in more detail.

3.6.1.1 View messages for an *e-survey*

1. Refresh Workspace to display the latest messages. See topic **3.3.1 Refresh Workspace**.
2. Select the *e-survey* in the Workspace Tree. This may be selected from any folder in which the *e-survey* is displayed.
3. Select the Messages tab to display all messages for the selected *e-survey*. The date, time and user are automatically added.

3.6.1.2 Add comments about an *e-survey*

You can add your own comments to the Messages tab for a selected *e-survey*.



Irene Kennedy has typed a comment to Henry Brown. When she clicks ADD the comment will be added to the messages for this *e-survey*.

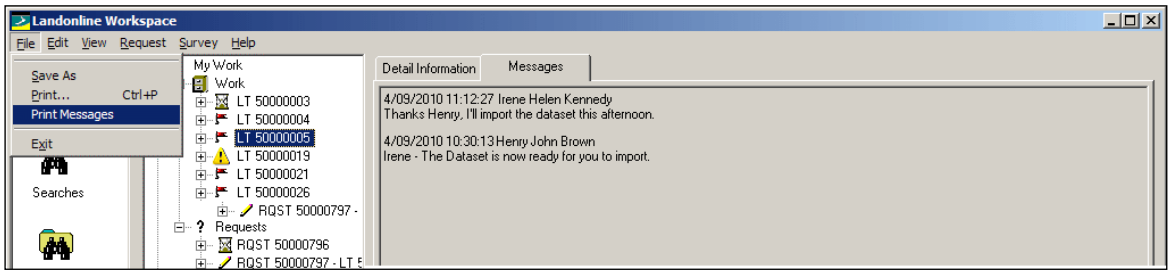
To add a comment about an *e-survey*:

1. Display the Messages tab for the *e-survey*.
2. Type your comment (maximum of 1500 characters) in the Comments field.
3. Click Add to display your comment in the list of messages. The date, time and user are automatically added.

Caution: Once you have added a comment to the messages tab it cannot be edited or deleted and can be viewed by anyone involved with the *e-survey*.

3.6.1.3 Print *e-survey* messages

You can print all messages displayed in the Messages tab for a selected *e-survey*.



To print all messages for an *e-survey*:

1. Select the *e-survey* in the Workspace Tree.
2. Select **File | Print Messages** to continue to the UniPrint Preview screen (if this option is selected in your UniPrint settings).

- The UniPrint Preview screen displays with a preview of the messages.

3. Click Print to display the Print screen (if this option is selected in your UniPrint settings).
4. Select your printer options and click Print

3.6.2 Using the Messages tab Toolkit

Table 3-11 lists other tools that assist with viewing, adding comments to and printing messages for *e-surveys*.

Tool	Description
Landonline Help	Press F1 in Workspace to find display information about using Workspace.
Quick Reference Cards	Section: Workspace Topic: Messages

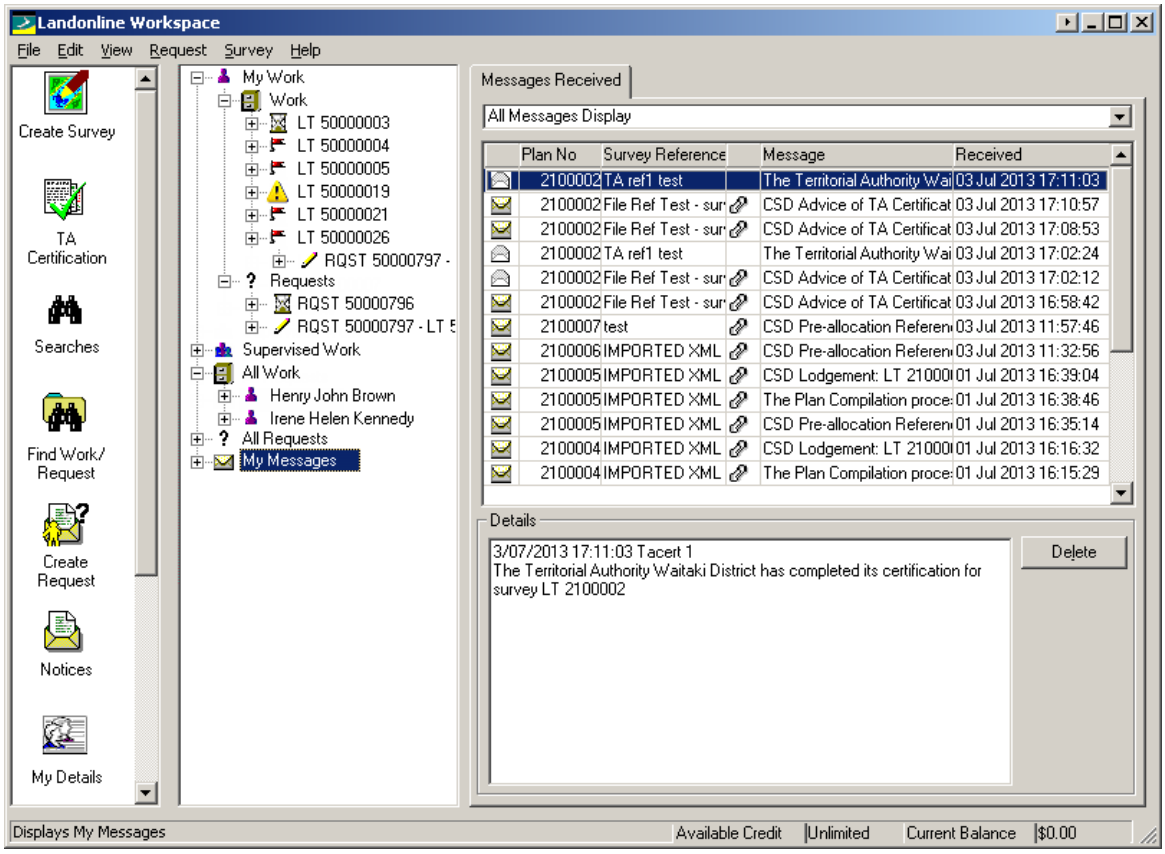
Table 3-11 Using the Messages Tab Toolkit

3.7 My Messages

When you select the **My Messages** folder in the Workspace Tree, Landonline displays the **Messages Received** tab in the Workspace Detail panel. This lists system generated messages you are identified as a specific recipient for. These messages may have attachments (eg copies of CSD plans, notices).

In the Messages Received tab you can:

- view a list of all messages sent specifically to you
- select a message from the list and read it
- view and save message attachments.



This is Henry Brown's My Messages folder.

Note: The field at the top of the Messages Received tab does not apply to Survey users. It is for Conveyancing users only.

3.7.1 Using the My Messages folder

Messages sent specifically to you are stored in your My Messages folder. They are all System Generated messages and cannot be added to or edited.

> Tasks
>
> You use the My Message folder in Workspace to:
>
> - View messages sent to you.
> - View and save message attachments.
> - Print a selected message sent to you.
> - Delete a selected message sent to you.

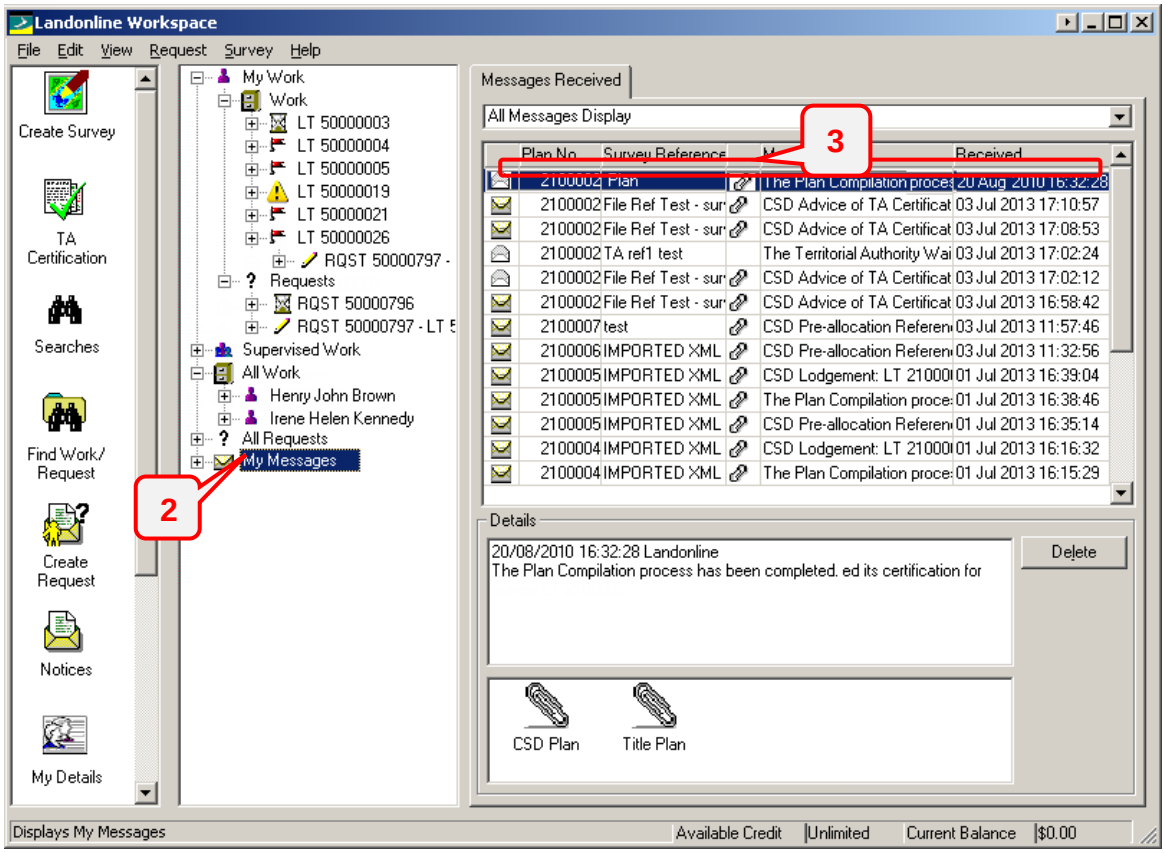
The following headings correspond with these tasks and describe them in more detail.

3.7.1.1 View My Messages

Messages display for the My Messages folder in the Messages Received tab of the Workspace Detail panel.

The Messages Received tab has two areas:

- The top area of the Messages Received tab lists all messages.
- The Details area displays the contents of a selected message and the associated attachments.



This message in Henry Brown's My Messages folder contains an attachment.

To view messages in My Messages:

1. Refresh Workspace to display the latest messages. See topic **3.3.1 Refresh Workspace**.
2. Select the My Messages folder in the Workspace Tree.
3. Select a specific message from the messages received list to view the details. The details of the message display in the Details field.

3.7.1.2 View and save attachments in My Messages

When a message has an attachment, a (paperclip) displays with the message in the Messages Received list. There are two types of attachments:

- Notification as an image file.
- Data extract as a XML file.

When the attachment is a notice, the name of the attachment will display. This can be:

- The transaction name and Id of the attached image (eg Notice 50002659, DP 10036 – Imperial Plan, WNA1/441 – Title Plan), or
- Attachment1, Attachment2, etc (ie when the file was attached to the notice from a local drive).

You can view attachments in Workspace and save them to your computer.

To view an attachment:

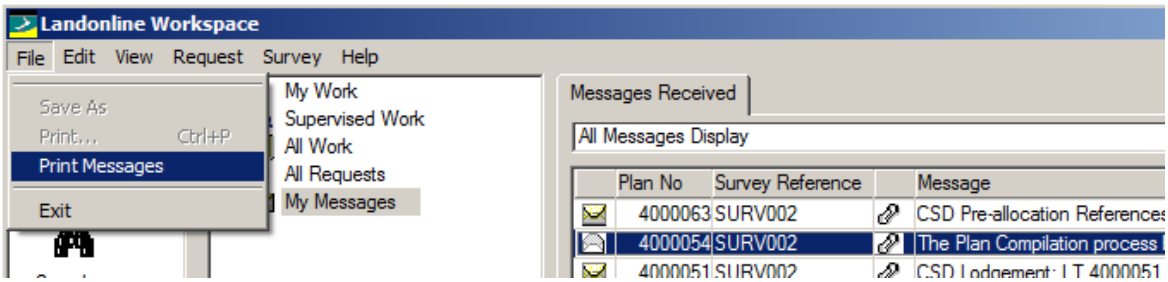
1. Select the Message from the messages received list.
2. Click View... to display details in the View Message Attachment screen.
   Expand the screen if required, or use the icons to view or print details of the attachment. For more information about Image Viewer icons, refer to the ***e-search* User Guide** or **Requests User Guide**.
3. Click ✕ to close the screen when you have finished viewing it.

To save an attachment:

1. Select the Message from the messages received list.
2. Click Save As... to display the Save As screen.
3. Specify a location on your computer to save the attachment to.
4. Click Save

3.7.2 Print a message from My Messages

You can print a selected message in My Messages.



To print a message in My Messages:

1. Select the message from the messages received list.
2. Select **File | Print Messages** to continue to the UniPrint Preview screen (if this option is selected in your UniPrint settings).
   - The UniPrint Preview screen displays with a preview of the messages.
3. Click Print to display the Print screen (if this option is selected in your UniPrint settings).
4. Select your printer options.
5. Click Print

Note: Only the message prints. Attachments are not printed. To print an attachment you must save it to a file and print from there, see **3.7.1.2 View and save attachments in My Messages**.

When printing you can set your computer to preview items using UniPrint or Acrobat Reader. The steps in this guide are for UniPrint. To print from Acrobat Reader, select **File | Print…** For more information, go to the *e-search* area of the Landonline website and select Printing, using the spatial window and viewing images FAQs and tips.

3.7.3 Delete a message from My Messages

To delete a message from My Messages:

1. Select one or more messages to be deleted from the messages received list.
2. Click Delete in the Messages Received tab.

Note: Messages specific to an *e-survey* are retained in the messages tab for the *e-survey* after they are deleted from the My Messages folder.

3.7.4 Using My Messages Toolkit

Table 3-12 lists other tools that assist with viewing and printing messages in your My Messages folder, and viewing and saving message attachments.

Tool	Description
Landonline Help	Press F1 in Workspace to display information about using Workspace.
Quick Reference Cards	Section: Workspace Topic: • Messages. • Save details. • Print details.

Table 3-12 Using My Messages Toolkit

3.8 Change your details or password

You can use the Workspace Toolbar to open other parts of Landonline where you can:

- change your details, eg your contact details and Landonline preferences.
- change your Landonline password.

3.8.1 Change your details

You change your details in the Maintain User screen. The Maintain User screen records your Contact Details and Landonline Preferences. For example, your telephone number, postal address and your address for notices.

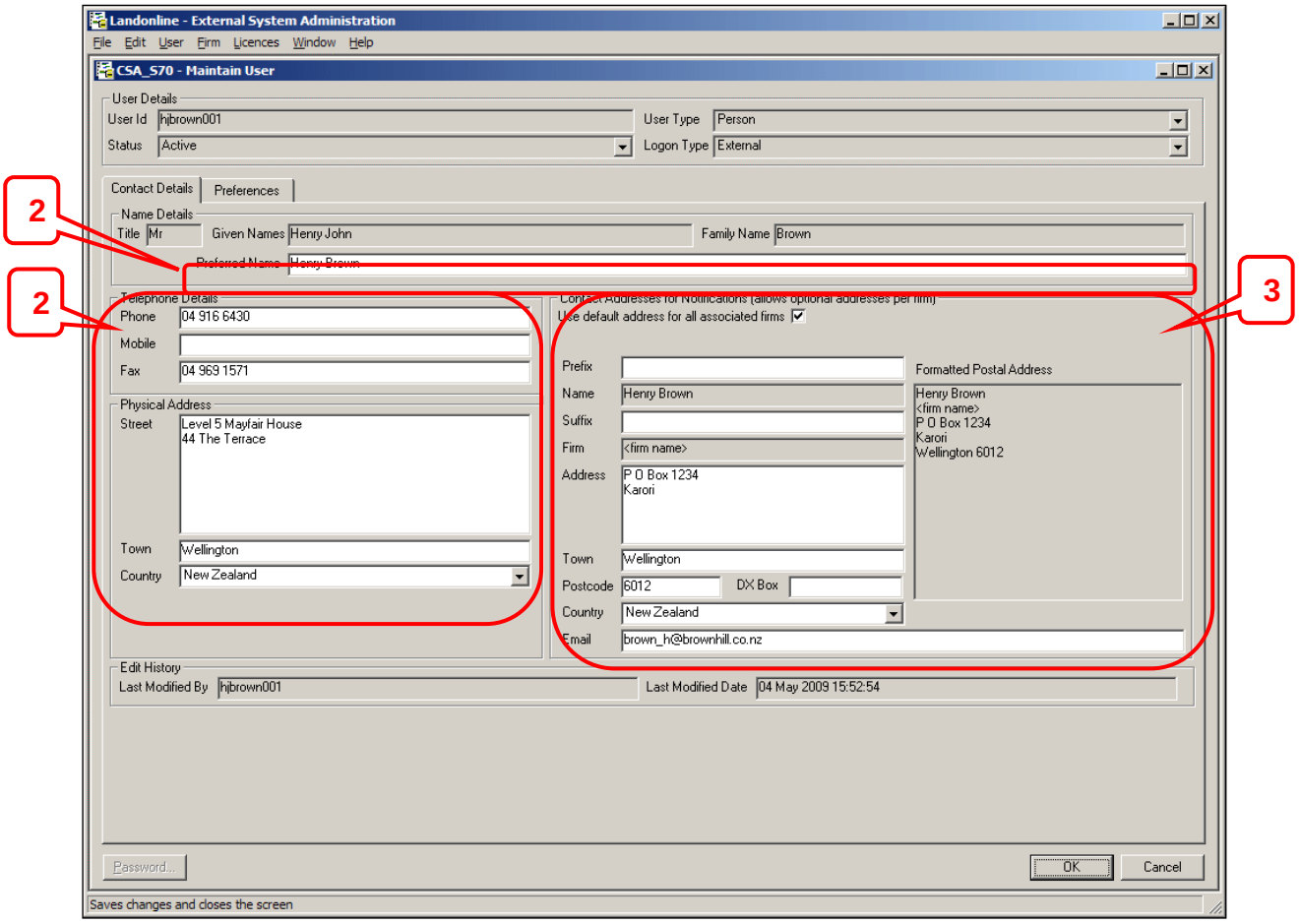
The Contact Details tab defaults the address for notices to you Default address, regardless of the firm(s) you are associated with. You can change this option at any time to have your notices sent to a separate address for each firm instead of your default address, if required.

If you work for more than one firm you will need to set your preferences in the Preferences tab for each firm the first time you log on to Landonline through that firm. After making your initial settings you can change them at any time.

> Tasks
>
> You use the Maintain User screen to:
>
> - Change your Contact Details
> - Change the address for notices for an associated firm.
> - Confirm the email address (if entered or changed).
> - Change your Preferences.

The following headings correspond with these tasks and explain them in more detail.

3.8.1.1 Change your Contact details



This is the Maintain User screen. Henry Brown's contact details and his address for notices display in the Contact Details tab. All notices sent to Henry will go to his default address.

To change your contact details:

1. Click  (My Details) in the Workspace Toolbar to display the Maintain User screen.
2. Change your Preferred Name, Telephone Details and Physical Address as required in the Contact Details tab.

3. If the Use default address for all associated firms checkbox is checked (in the Contact Addresses for Notifications area) make any edits to your address displayed for notices.
   - If this checkbox is unchecked, see **3.8.1.2 Change the address for notices for an associated firm**.
4. If you enter or change your email address, see **3.8.1.3 Confirm the email address**.
5. Select File| Save to save changes and remain in the screen, otherwise click OK to save and close the screen.

Note:

- Do not use an apostrophe (‘), double quotation (“) or vertical bar (pipe) (|) in any of the fields in the Contact Details tab.
- Your Default address must contain details in the Address and Email fields. For more information about fields in the Contact Details tab (eg Prefix, Suffix) see **Table 3-13**.

Table 3-13 provides a full description of the fields and buttons in the Contact Details tab.

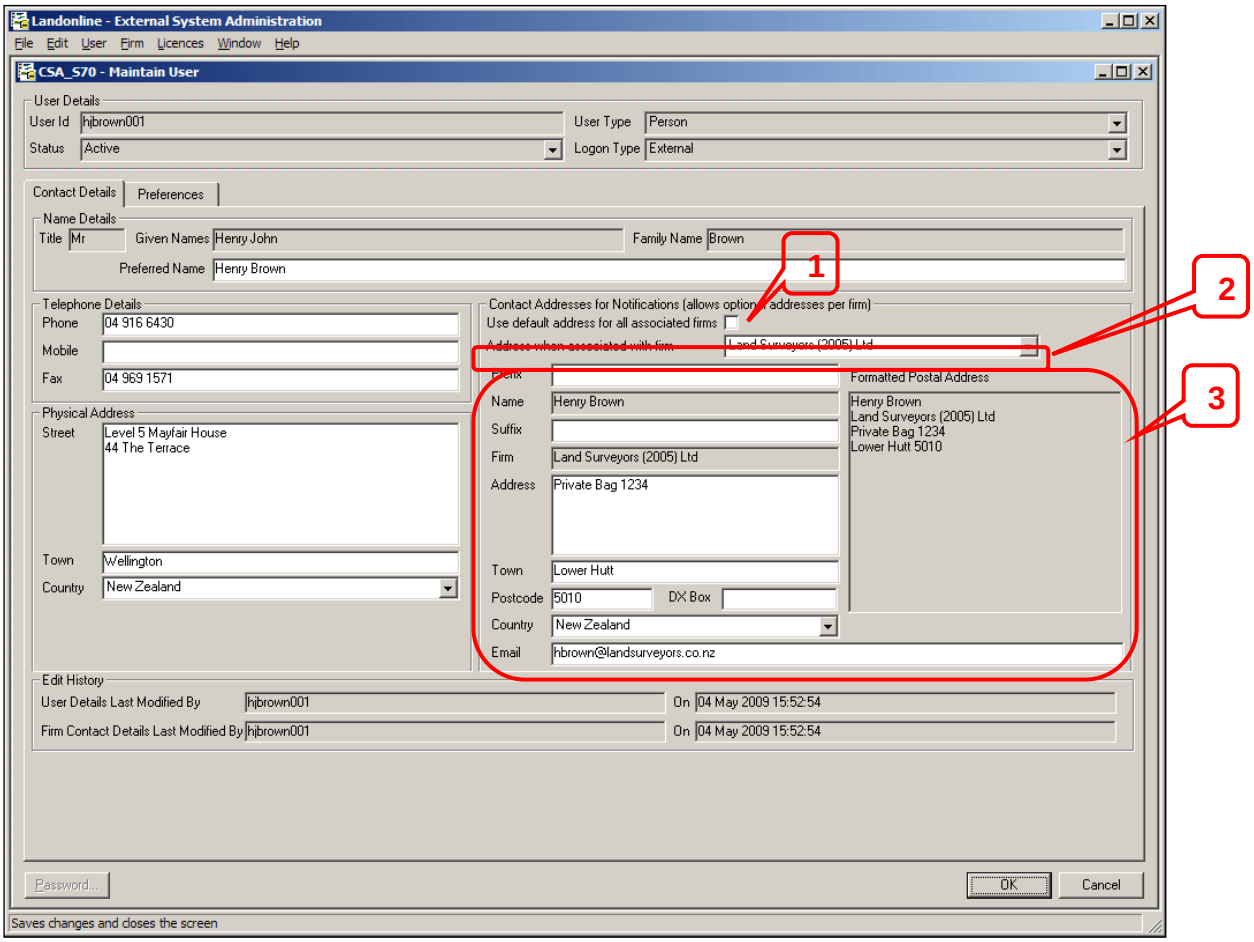
Field, Button or Area	Description
Name Details	Landonline displays the Title, Given Names and Family Name for the user. You cannot change these details.
Preferred Name	Enter your preferred name for addressed notices if different from any details entered in the Title, Given Names and Family Name fields. This is the way your name will display on notices sent to you.
Telephone Details	Enter your contact telephone number, Mobile number and Fax number. Include an area code (eg 04 for Wellington) and extension number (if applicable).
Physical Address	Enter your physical address details in the Street, Town and Country fields. Include the building name (if applicable). The physical address is optional.
Use default address for all associated firms	Check to indicate the contact address displayed below is the default address for all notices regardless of which firm you represent. Uncheck if the address for notices differs for each firm you are associated with. The Address when associated with firm field displays below this field.
Address when associated with firm	This field only displays when you uncheck the Use default address for all associated firms checkbox. It lists all firms you are associated with as well as a Default option. Select the firm from the drop down list to maintain the contact address for notices sent to the selected firm. You can enter a different address for each firm (if required). The Default option contains details of your default address. This is the address Landonline uses when you check the Use default address for all associated firm checkbox.
Prefix	Enter any prefix for the address (eg FreePost or other reference) if applicable.
Name	Landonline displays your name.
Suffix	Enter additional postal address information (eg your job position, department, building name) if required.
Firm	Landonline displays the name of your firm. This depends on whether you checked the Use default address for all associated firms checkbox: • If checked <firm name> displays in this field as a placeholder. When a notice is created, Landonline automatically inserts the name of the appropriate firm on the notice where <firm name> displays. • If unchecked, Landonline displays the name of the firm you selected in the Address when associated with firm field.
Address	Enter your postal address for notices. Press the Enter key to begin a new line. If you have a PO Box number or Private Box number, type this in full (eg PO Box 123). Leave this field blank if you enter a DX Box. This is a mandatory field for your default address.
Town	Enter the town postal address for notices.
Postcode	Enter the postcode for the postal address. Leave this field blank if you enter a DX Box.
DX Box	Enter the DX Post box reference for notices (if applicable). Do not enter the characters DX in this field. Landonline will automatically add this prefix to the reference you enter. Use upper case characters A-Z and numbers 0-9 in this field.
Country	Select the country postal address from the drop down list.
Email	Enter your email address and press tab (or click elsewhere in the screen) to display the Verify Email Address screen to re-enter your password for confirmation. This is a mandatory field for your default address.
Formatted Postal Address	Landonline displays a preview of your currently entered address details. This is how they will display on notices generated from Landonline.
Edit History	Landonline displays the name of the person who last modified the user contact details and the date. When you select an associated firm, Landonline displays the person who last modified the firm contact details and the date. You cannot change these details.

Table 3-13 Maintain user screen: Contact Details tab

3.8.1.2 Change the address for notices for an associated firm

You can select to have notices sent to you at each individual firm you are associated with instead of to your default address. Each firm's address can all be different and you don't have to be logged in to a firm to change their notice address details.

When you select this option, you must ensure the address details for each firm are current and correct.



Henry Brown has unchecked the Use Default address for all associated firms checkbox in the Contact Details tab. He has selected to send notices for clients from Land Surveyors (2005) Ltd to a different address from his default address. Henry will then select each firm he is associated with to check the address for each is current and correct.

To change an address for notices for a firm you are associated with, in the Contact Details tab of the Maintain User screen:

1. Uncheck the Use default address for all associated firms checkbox (in the Contact Addresses for Notifications area).
   - A message displays to warn you that any addresses defined here for other firms will now be used for notices instead of your default address.
   - Click OK to the message.
2. Select the name of the firm in the Address when associated with firm field drop down list to display address details for that firm. (This field displays all firms you are associated with and will default to the firm with which you are currently logged in to.)
   - Select the Default option in the drop down list to view or update details of your default address.
3. Enter or change address details for notices for the selected firm, as required.
   - If you enter or change your email address, see **3.8.1.3 Confirm the email address**.
   - Select File | Save to save changes entered for this firm.
4. Repeat step 2 and 3 for another firm you are associated with, if required.
5. To have all notices sent to your default Contact Address (regardless of the firm you represent):
   - Check the Use default address for all associated firms checkbox.

- A message displays to advise you that individual addresses for firms you are associated with will not be used (ie your default address will now be used).
- Click OK to the message.

6. Select File| Save to save changes and remain in the screen, otherwise click OK to save and close the screen.

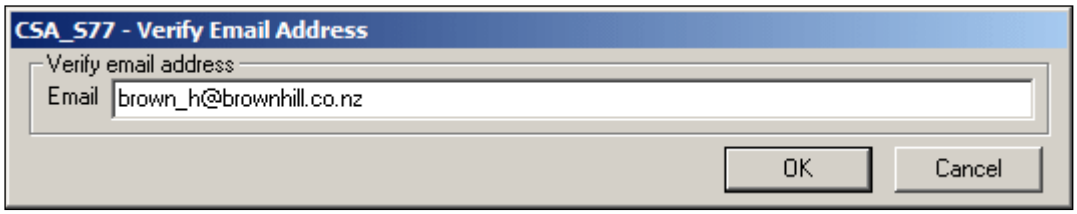
Note:

- Your Default address must contain details in the Address and Email fields. For more information about fields in the Contact Details tab (eg Prefix, Suffix) see **Table 3-13**.
- Do not use an apostrophe (‘), double quotation (“) or vertical bar (pipe) (|) in any of the fields in the Contact Details tab.

When you save notice address details for a selected firm, the Edit History area displays the person who last modified the User Details and the date as well as the person us last modified the Firm Contact Details and the date.

3.8.1.3 Confirm the email address

When you enter or change an email address in the Contact Details tab you must verify this address by re-entering the email address. You use the Verify Email Address screen to re-enter and confirm your email address. After entering or changing an email address, this screen displays when you press tab or when you click elsewhere in the Contact Details tab.



To confirm a new email address, in the Verify Email Address screen:

1. Re-enter your email address in the Email field. This must be the same address you entered in the Contact Details tab. (Refer to **Table 3-14** for details of the Verify Email Address screen, if required.)
2. Click OK to close the screen and return to the Contact Details.

- If the address does not match the email address you entered in the Contact Details tab, an error message displays. Repeat these steps.
- Alternatively, click Cancel and return to the Contact Details tab to enter the correct email address and repeat these steps.

Note: You must enter the email address into the Verify Email Address screen. You cannot copy and paste the address from the Contact Details tab.

Field, Button or Area	Description
Email	Enter the same email address you entered in the Contact Details tab. You must enter the email address again. You cannot copy and paste the address into this field.
OK	Click to verify the address is the same as that entered in the previous screen. If confirmed, Landonline closes the screen and returns you to the Contact Details tab.
Cancel	Click to cancel re-entering your email address and close the screen and return to the previous screen.

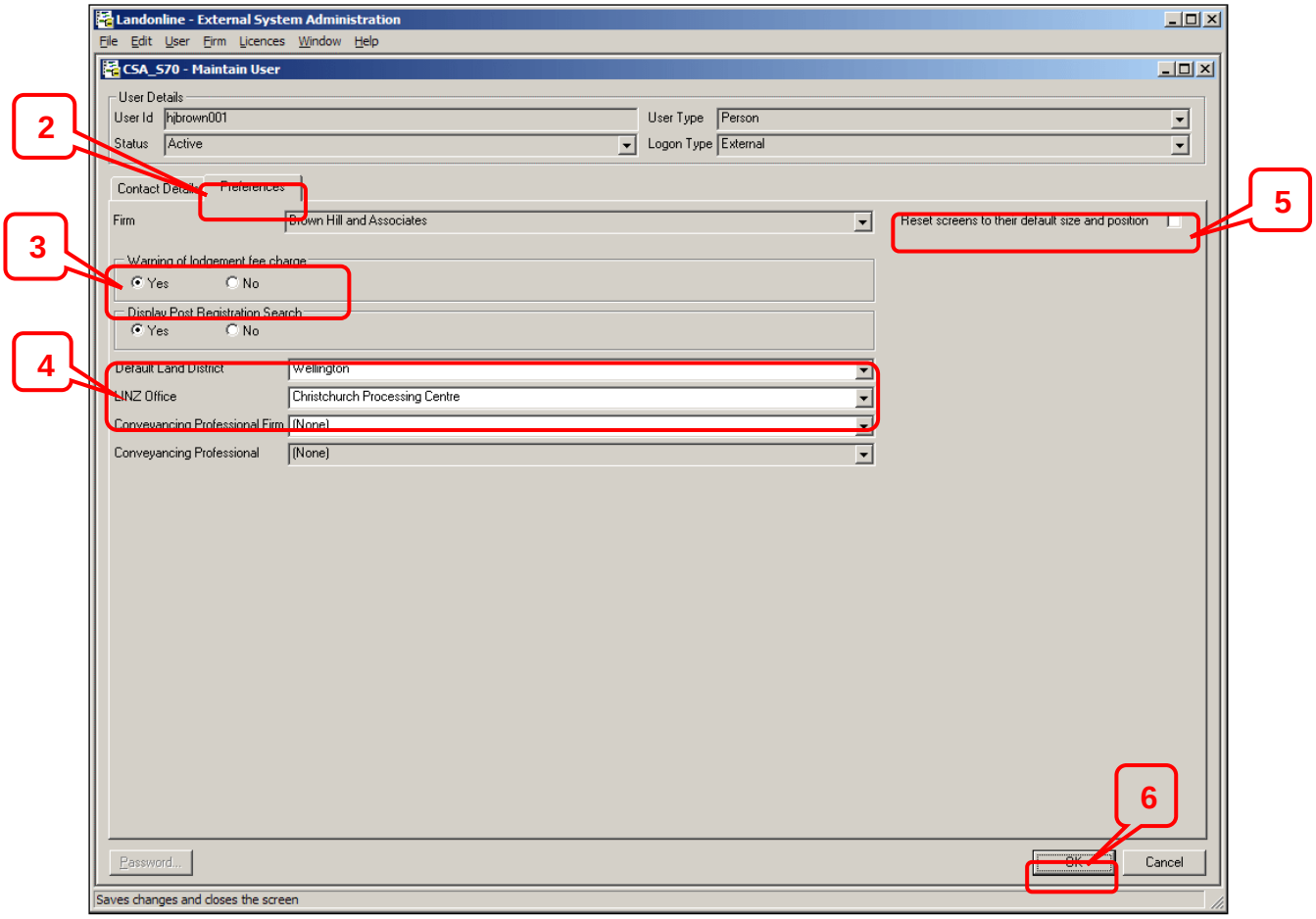
Table 3-14 Verify Email Address screen fields and buttons

3.8.1.4 Change your preferences

You can set your preferences to:

- a default Land District and LINZ office
- reset screens to their default size and position (if required).

You will need to set your preferences for each firm the first time you log on to Landonline through that firm. After making your initial settings you can change them at any time.



Henry Brown has selected the Preferences tab in the Maintain User screen.

To change your preferences:

1. Click  (My Details) in the Workspace Toolbar to display the Maintain User screen.
2. Select the Preferences tab.
3. Select Yes or No in the Warning of Lodgement Fee Charge area.
4. Select your default Land District and LINZ office.
5. Check the Reset screens to their default size and position checkbox (if required) to reset your Landonline screens to display at their default size and position or to correct any corrupt values in your CRSUser.ini file.
6. Click OK to save your changes and close the Maintain User screen.

- If you checked the Reset screens to their default size and position checkbox, you must log out of Landonline and log back in for the settings to be reset.

Note: The Conveyancing Professional Firm and Conveyancing Professional fields only apply to Conveyancing Users. Surveyors do not need to complete these fields. See **Table 3-15** for a full description of the fields in the Preferences tab.

Field / Area	Description
Warning of lodgement fee charge	Select: • Yes if you want the Confirm Fee Charges screen to display with a list of lodgement fees incurred for an *e-survey* at the time it is submitted. If you want to view a fees estimate begin the submission process and cancel submission from the Confirm Fees screen. • No if you don't want the Confirm Fee Charges screen to display at the time an *e-survey* is submitted.
Display Post Registration Search	Survey users do not complete this area as it only applies to Conveyancing users.
Default Land District	Select your default land district from the drop down list. The land district you select defaults on Searches screens in Landonline, but can be changed.
Default LINZ Office	Select your relevant LINZ office from the drop down list.
Conveyancing Professional Firm	Survey users do not complete this field as it only applies to Conveyancing users.
Conveyancing Professional	Survey users do not complete this field as it only applies to Conveyancing users.
Reset screens to their default size and position	Check to reset your Landonline settings. Use this if your CRSUser.ini file has corrupt values or to reset your Landonline screens to display in the default position and at the default size (eg you may have dragged a screen off the computer display in error). This deletes the existing CRSUser.ini file, creates a new .ini file and stores it in the default directory.

Table 3-15 Maintain User screen: Preferences tab

3.8.2 Change password

Periodically Landonline prompts you to change your password; however, you can change your password at anytime. You cannot use the same password more than once.

3.8.2.1 Display the Change Password screen

To display the Change Password screen, in Workspace:

1. Click  (Change Password) from the Workspace Toolbar to open the Change Password screen.

3.8.2.2 Change your password

1. Display the Change Password screen. See topic **3.8.2.1 Display the Change Password screen**.
2. Type your old password in the Old Password field.
3. Type your new password in the New Password field. **Table 3-16** outlines the parameters you must work within to create your password.
4. Type you new password again in the Re-enter New Password field.
5. Click OK to save your password and close the screen.

Parameter	Description
Length of password	Eight to 20 alpha-numeric characters.
Password content	Should contain at least one number, one lower case character and one upper case character.
Valid password characters	• a-z, A-Z, 0-9 • Hash (#), dollar ($), percent (%), ampersand (&), underscore (_), hyphen (-), full-stop (.), comma (,), less than symbol (<), greater than symbol (>) and space.

Table 3-16 Password parameters

4 SEARCHING FOR A USER OR FIRM

4.1 Overview

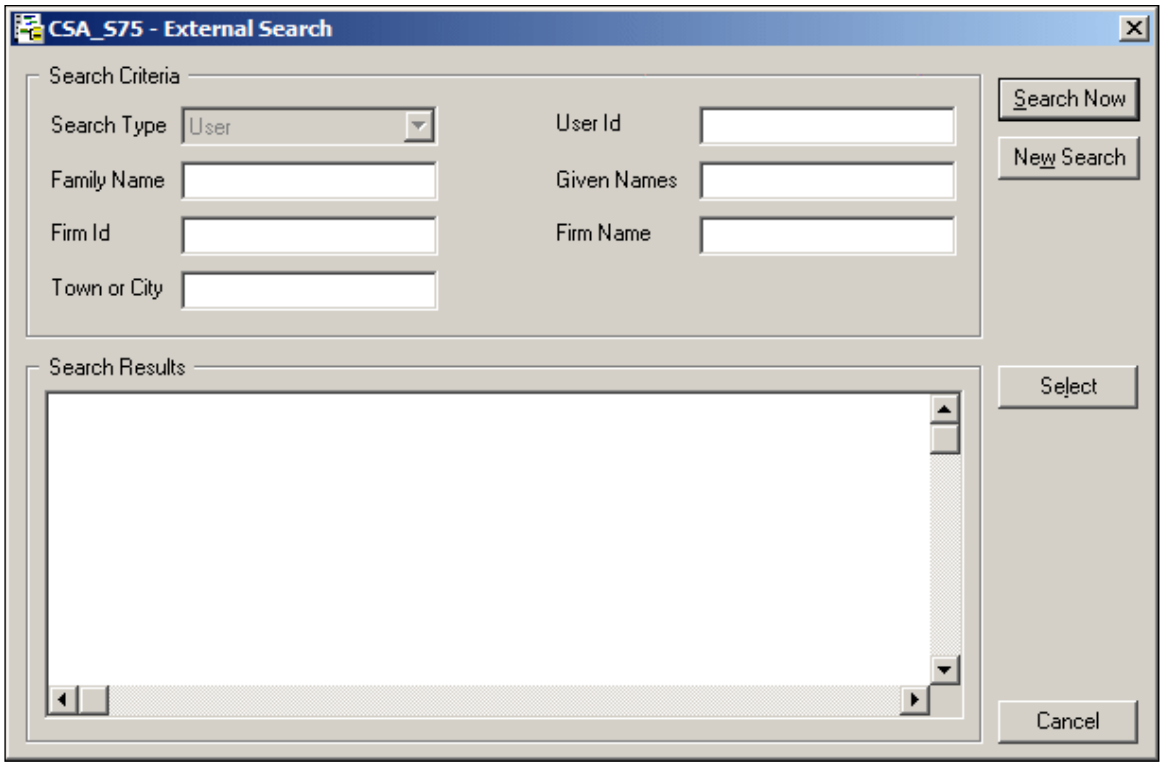
You can search within Landonline to find:

- Users and Firms using the External Search screen; and
- Titles, Surveys and Survey data using the Searches screen.

This chapter introduces the External Search screen. It explains how to use the External Search screen to find a user's or a firm's name and Id. It does not explain how to use the Searches screen as this is fully explained in the ***e-search* User Guide**.

4.2 Search for a user or firm

You use the External Search screen to search for a user's or firm's name or Id.



Tasks

To search for a user or firm you must:

- Display the External Search screen
- Search for a user or firm and add the details to the current screen.

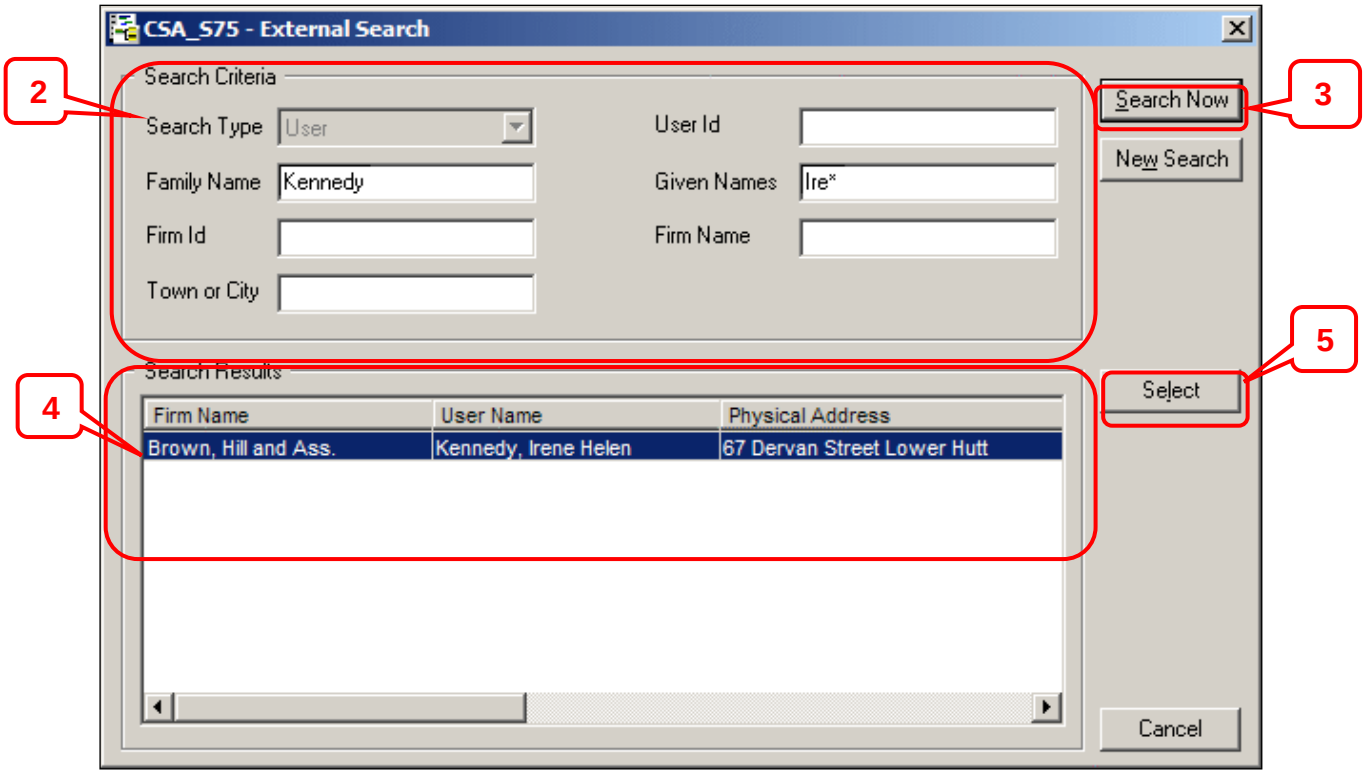
The following headings correspond with these tasks and describe them in more detail.

4.2.1 Display the External Search screen

The External Search screen displays when you click Search... linked to a user or firm field, or Add to add a user or firm. These buttons display in many screens in Landonline, eg Manage Survey Transaction screen and Enabled Users screen.

Note: If you type a user's or firm's details into a field incorrectly, or a user is associated with more than one firm, the External Search screen automatically displays. This enables you to search for the correct user or firm.

4.2.2 Search for a user or firm and add the details to the current screen



Henry Brown has searched for Irene Kennedy using her Family Name and the first part of her given name.

To search for a user or firm, in the External Search screen:

1. Type your search criteria in the appropriate fields. See **Table 4-1** for a description of the search criteria fields.
   You only need to complete one of the search criteria fields, other than the Search Type field, to conduct a search.
2. Click Search Now to display the results of your search in the Search Results area.
3. Click the user or firm that you require from the Search Results.
4. Click Select to add the user or firm to the appropriate field in the current screen. The External Search screen closes when you have selected your result.

Note: The Search Type field is not active in some instances.

Table 4-1 describes how to use the fields and buttons in the External Search screen.

Field or Button	Action
Search Criteria fields	
Search Type	Select the type of search to perform (ie search for a user or search for a firm). This field will automatically default and sometimes cannot be altered depending on the type of search you are performing.
User Id	Type the User Id for the user.
Family Name	Type the family name for the user.
Given Names	Type the given name, or names if they have more than one, for the user.
Firm Id	Type the Firm Id.
Firm Name	Type the name of the firm.
Town or City	Type the town or city in which the user of firm is located.
Other fields and buttons	
Search Now	Click to search for users or firms based on the search criteria you have entered.
New Search	Click to clear the search criteria so you can perform another search.
Search Results	Landonline displays the results of your search in this area.
Select	Click to return the selected user or firm to the previous screen.

Table 4-1 Fields and buttons in the External Search screen

4.3 Searching tips

This topic describes some tips to help you search more effectively.

4.3.1 Wildcards

In many of the Search Criteria fields you can use a wildcard to help you search.

A wildcard is a symbol you type as part of your search criteria entry. You use wildcards when you don't know the exact details to search on. For example, you know a user's family name is Johnson or Johnston, but you are uncertain which spelling is correct. In this instance you might type Johns*.

There are two wildcard symbols you can use in Landonline:

- (asterisk) – this completes a search entry
- **?** (question mark) – this is used as any single character in a search entry.

These symbols may be used together or separately. **Table 4-2** demonstrates how wildcards may by used.

Type this….	Sample search results
John*	John, Johns, Johnson, Johnston, Johnstone, etc
Sm?th	Smith, Smyth
Br?a*	Breaden, Brian, Bryan, Broad, Broadmore, etc

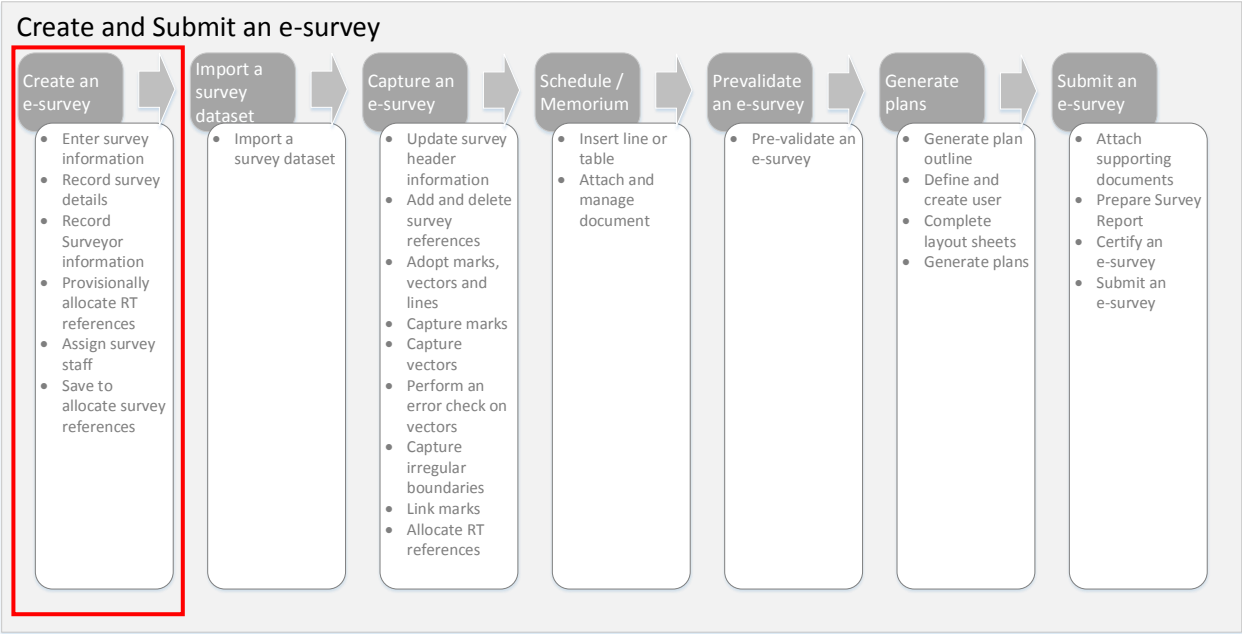
Table 4-2 Examples of wildcard use in search criteria

Note:

- You must prefix the first wildcard symbol used in a field with at least two letters or numbers.
- Broad use of wildcards can take some time to return results. Refine your search as much as possible.

5 CREATE AN *e-survey*

5.1 Overview



When you create an *e-survey*, you record a summary of all details about the survey and Landonline allocates the *e-survey* a Survey Number. A summary of your *e-survey* displays in Workspace.

This chapter explains how to create an *e-survey*. Specifically it describes how to:

- enter survey information using the Manage Survey Transaction screen
- assign survey staff to an *e-survey*
- import a survey dataset

Surveyors can also create certain types of survey related requests in Landonline. These can be linked to an *e-survey*. For more information, refer to the **Requests User Guide.**

5.2 Enter survey information

Steps:

The steps required to enter survey information are:

1. Display the Manage Survey Transaction screen.
2. Complete the Survey Information tab.

The following headings correspond with these steps and describe them in more detail.

Note: You can only have one *e-survey* open at a time. If an *e-survey* is being worked on, other users will have read only access.

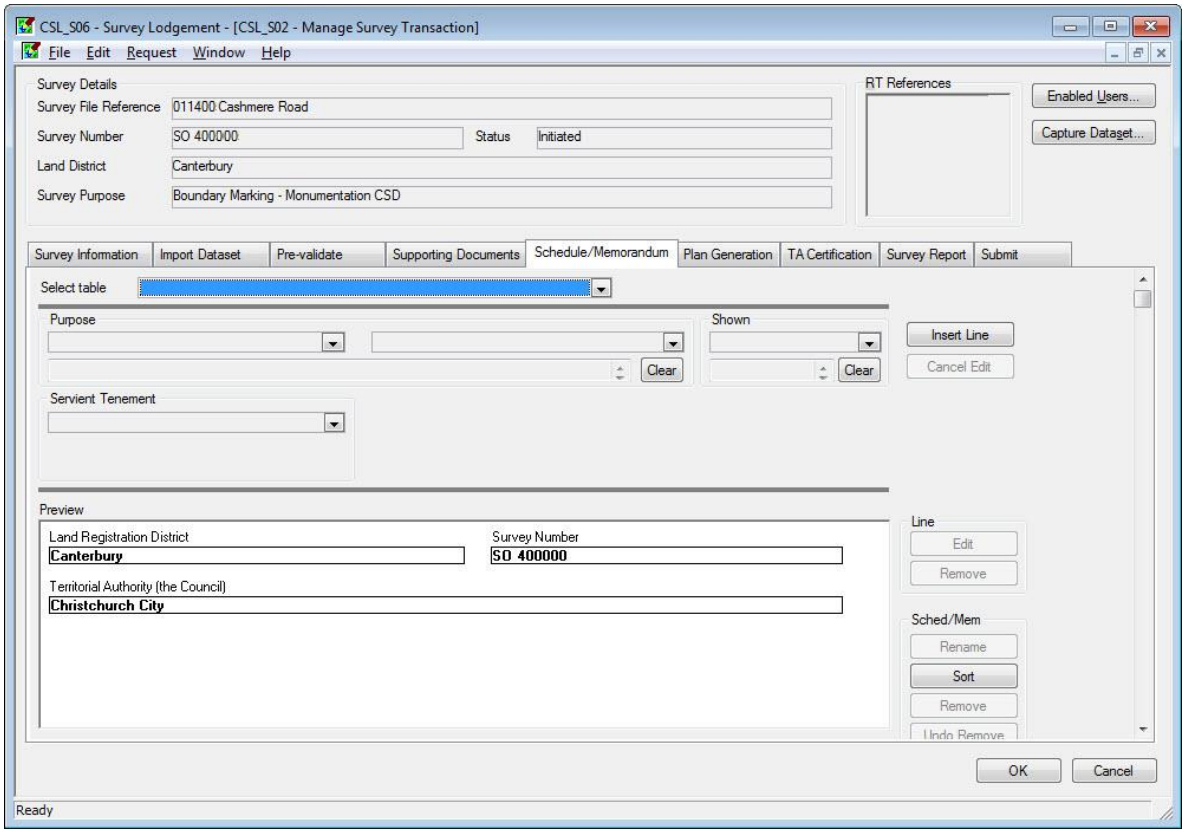
5.2.1 Display the Manage Survey Transaction screen

The purpose of the Manage Survey Transaction screen is to record, manage and submit an *e-survey*.

There are eight tabs on this screen:

- Survey Information:
  Use to record information about an *e-survey*.
- Import Dataset:
  Use to import a XML file of survey data.
- Pre-validate:
  Use to pre-validate an *e-survey* before submitting.
- Supporting Documents:
  Use to attach, edit and view supporting documents for an *e-survey*.
- Plan Generation:
  Use to access Plan Generation and to request layout sheet preparation by batch.
- TA Certification:
  Use to prepare certification packages and to notify a TA an *e-survey* requires certification.
- Survey Report
  Use to prepare the Survey Report
- Submit:
  Use to select submit options, submit an *e-survey* by batch and submit an *e-survey* dataset to LINZ.

Note: Landonline shares information entered in the Manage Survey Transaction screen with the Survey Header screen. If you edit a field in the Survey Header screen common to both screens, the change is reflected in the Manage Survey Transaction screen when it is saved.



The *e-survey* will display in Workspace.

To display the Manage Survey Transaction screen, in Workspace:

1. Click  (Create Survey).

5.2.2 Complete the Survey Information tab

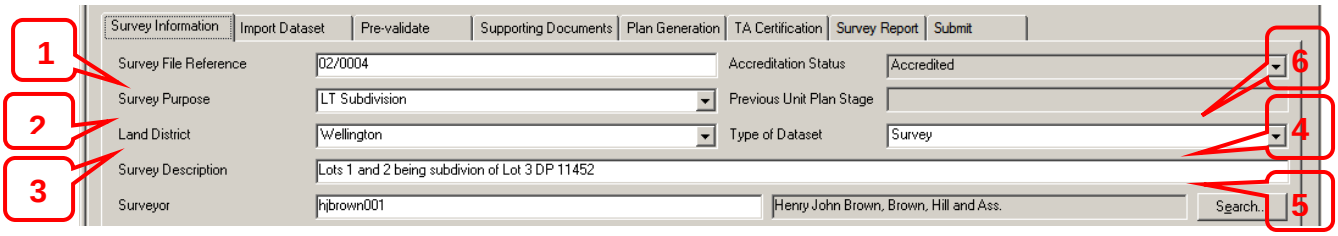
When you create your *e-survey*, you record summary information. Later, while capturing your dataset you can add and edit this information.

> Tasks:
>
> The tasks required to enter survey information are:
>
> - Record survey details.
> - Record surveyor information.
> - Provisionally allocate RT references.

The following headings correspond with these tasks and describe them in more detail.

5.2.2.1 Record survey details

Survey details are completed when corresponding data is entered into the Survey Information tab.



To enter survey details in the Survey Information tab:

1. Enter a suitable reference in the Survey File Reference field (eg to your office file or job number).
   - The Accreditation Status defaults to Accredited.
2. Select the Survey Purpose. For more information, refer to **Appendix L: Survey Purpose**. When you select a type of Unit Plan and save, the only change you can make in this field is the alternative Survey Sheet option (ie with or without) for the same Unit Plan.
3. Enter the Land District.
4. Select the Type of Dataset (ie Survey or Parcels without Survey Information).
5. Enter a Survey Description.
6. Enter the plan number in the Previous Unit Plan Stage field if this is a Staged Unit Development Plan that already has stages lodged. Don't include the unit plan suffix.

Note: If you later change the **Survey Purpose**, **Land District** or **Type of Dataset** you should pre-validate the *e-survey* before submitting it to ensure it is compliant.

Caution: You can electronically submit a unit plan stage if all previous stages were also electronically submitted.

5.2.2.2 Record surveyor information

When you create an *e-survey*, it displays in the surveyor's My Work folder and All Work folder in Workspace. The Primary Contact will view the *e-survey* in the Supervised Work folder.

The surveyor recorded in the Surveyor field is the signing and submitting surveyor and will receive formal notifications for the *e-survey*.

To enter surveyor information, in the Survey Information tab:

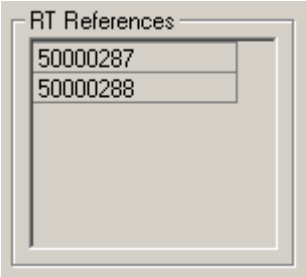
1. Enter the surveyor's Id in the Surveyor field. Click Search... and search for the surveyor if you don't know the surveyor's Id.
   For more information about searching for a user, see chapter **4 Searching for a User or Firm**.
2. Enter the surveyor's firm if this is not already displayed.
3. Enter the Legal Firm/Agent if known. You can complete this field later.
4. Enter the Primary Contact if this is someone other than the surveyor.

Note:

- If you enter a surveyor who does not have a Current Cadastral Survey Licence recorded in Landonline, a message displays. Click OK to continue. If you continue to create the *e-survey* it will be rejected by LINZ unless they receive advice from the Cadastral Surveyor Licensing Board that a current licence exists for the surveyor.
- If you want other staff members to have access to the *e-survey*, you can record their name as enabled users for the *e-survey*. See topic **5.3 Assign survey staff to the *e-survey***.

5.2.2.3 Provisionally allocate RT references

If the *e-survey* requires RT references, you can provisionally allocate these so parcels can be referenced when capturing data.



To provisionally allocate RT references to the *e-survey*, in the Survey Information tab:

1. Enter the number of RT references you require in the Additional No. of RT References field.
   - RT references are automatically allocated when you save the Manage Survey Transaction screen.
2. Select **File | Save** to provisionally allocate the RT References.

To add additional RT references to the *e-survey*:

1. Enter the number of RT references you require in the Additional No. of RT References field.
2. Click Allocate CTs. The title reference numbers display in the RT References area.

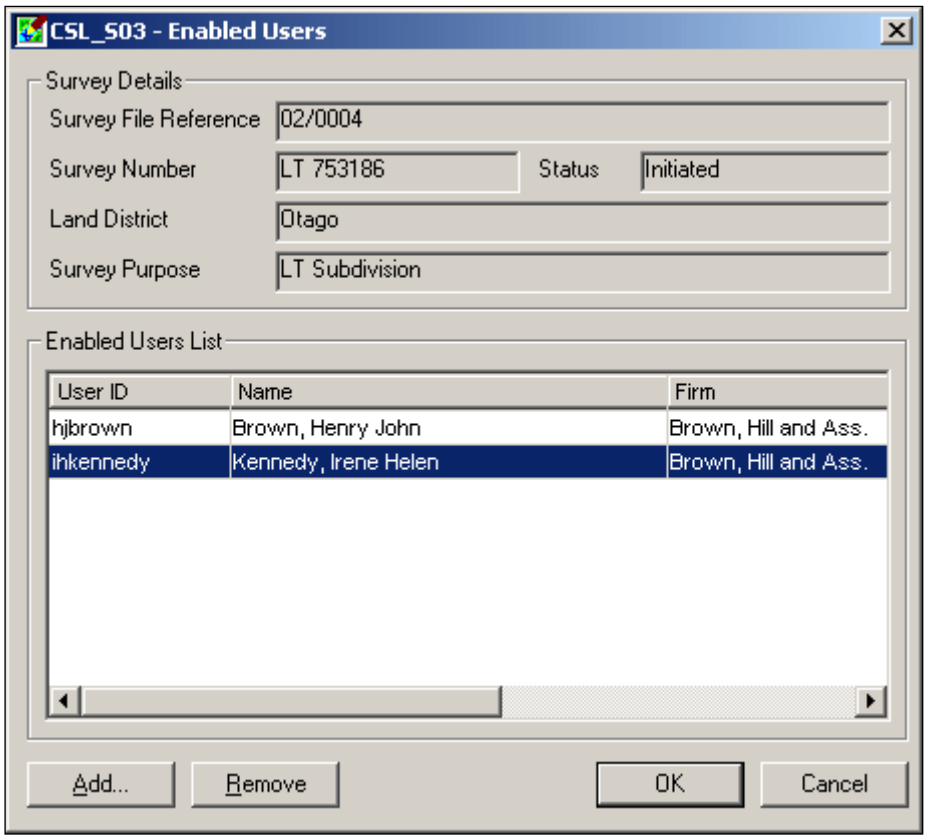
Note:

- The maximum number of RT references that can be allocated at one time is 99. If you require more, repeat the steps for adding additional RT references.
- When you save an *e-survey* with allocated RT references, or when you add additional RT references, Landonline sends you a Pre-allocation Notice listing the pre-allocated titles for the *e-survey*.
- Landonline also records a future date in the Inactive Survey Notification Date field. If an *e-survey* remains in Workspace after this time without being edited, Landonline sends a reminder notice to advise you to action or delete the *e-survey*. See **Appendix J: *e-survey* notifications**.

- Provisional RT References allocated, but not used, do not need to be deleted.

5.3 Assign survey staff to the *e-survey*

To enable people in the firm, including yourself, to work on the *e-survey* you must add them as enabled users. Once added, the *e-survey* will display in their My Work folder in Workspace. The level of access to an *e-survey* for each enabled user is determined by their user privileges.



Henry Brown has added Irene Kennedy, a technician in his firm, as an enabled user for this *e-survey*.

To assign survey staff to the Enabled Users List, in the Manage Survey Transaction screen:

1. Select File | Save to save if a survey number has not been allocated.
2. Click [Enabled Users...] to display the Enabled Users screen.
3. Click [Add...] to display the External Search screen.
   - Search for and select the user you require to return to the Enabled Users screen. The selected user has been added to the Enabled Users List.
   - Repeat this step to add another user to the list if required.
4. Click [OK] to save and return to the Manage Survey Transaction screen.

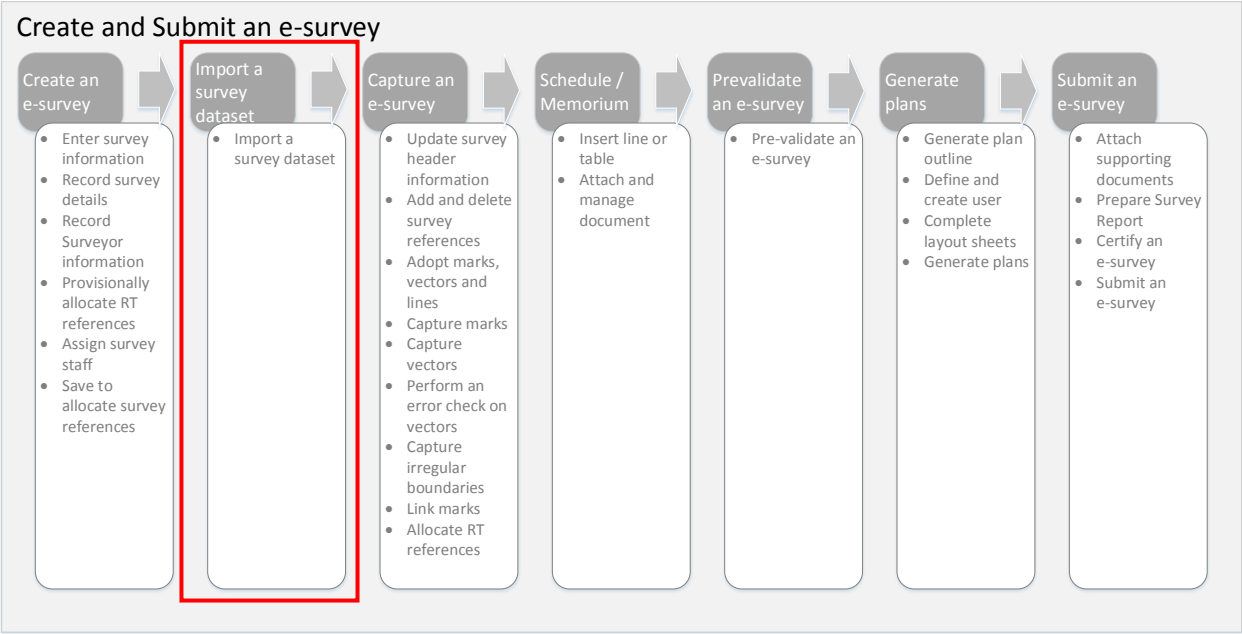
To remove survey staff from the enabled users list:

1. Select the name and click [Remove]
   This user cannot access the *e-survey*, however, they can still view the survey information details in Workspace.

Note: If you change the name of the surveyor, you must record the name of the new surveyor as an enabled user, and if required, delete the previous surveyor's name. You can maintain enabled users at any time until you submit the *e-survey*.

6 IMPORT A SURVEY DATASET

6.1 Overview



You can import survey information from survey software packages into Landonline. This information must be in a XML file and must comply with the LandXML schema.

LandXML is based on the XML (Extensible Markup Language) specifications. XML is an open format used to transfer information between survey and engineering applications.

Before importing your XML file into Landonline from a survey software package you must:

- Create the *e-survey* in Landonline.
- Complete fields in the Survey Information tab of the Manage Survey Transaction screen. See chapter **5 Create an *e-survey***.

Information held in Landonline for your *e-survey* is overwritten when you import new data. If you add imported data to your existing *e-survey* you will lose information already captured.

Landonline does not support the import of partial files. You should only import an XML file of a complete survey.

While importing an XML file Landonline displays details of the file in the Import Progress field allowing you to track its progress. Fields in all appropriate Landonline screens are populated automatically without the need to open each screen.

Once completed, Landonline stores the file in the Survey Capture staging area and links it to the *e-survey*. You should then pre-validate the *e-survey* as this helps you to identify data that could not be imported from your survey software package.

The imported XML file overwrites some fields in the Survey Information tab of the Manage Survey Transaction screen if the information was included in the XML file. These fields are:

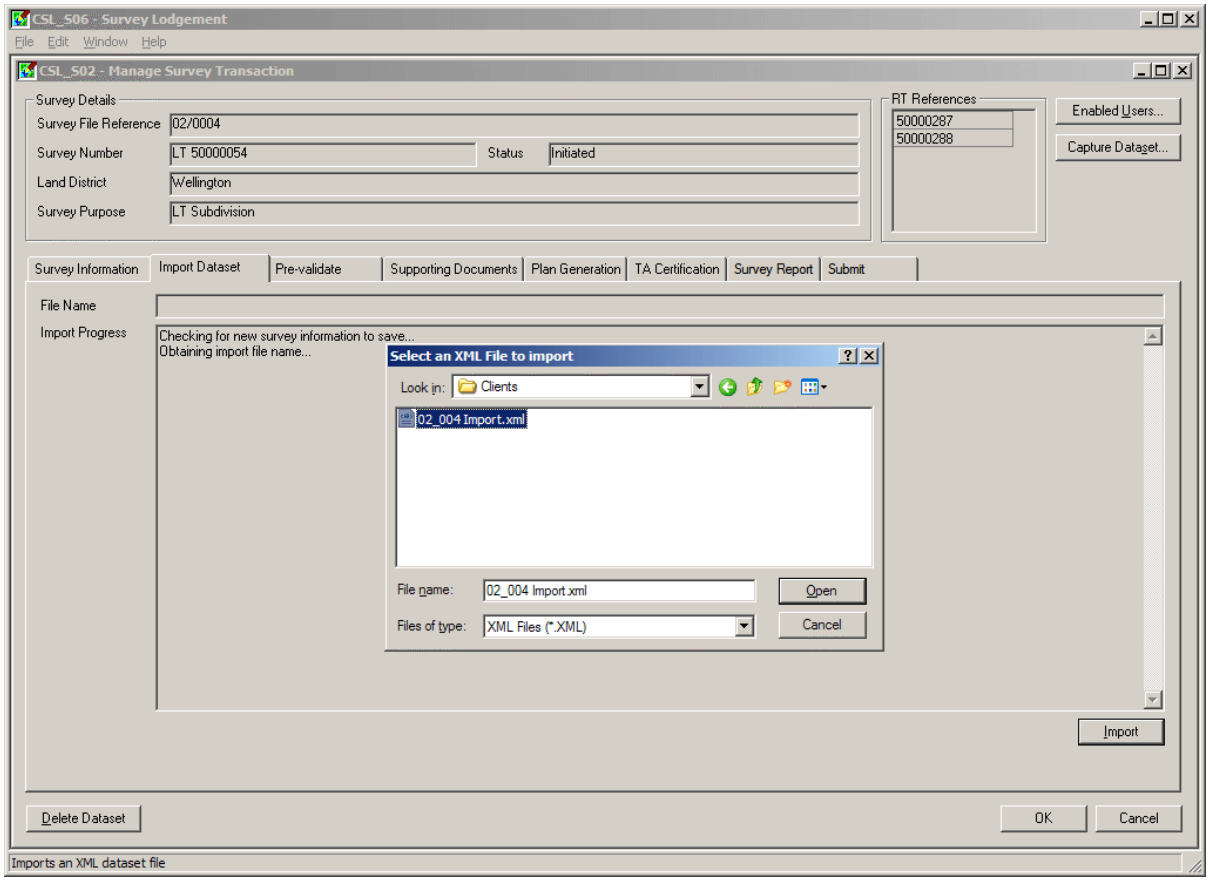
- Survey File Reference
- Accreditation Status
- Survey Description

Before you start to prepare survey plans you will need to perform some edits to data. The amount of editing required is:

- determined by the survey software used to create the XML file
- dependent on the survey purpose and the mapping applicable to the survey
- dependent on the pre-validation report failures.

For more information about importing an XML file into Landonline, refer to the Landonline website (www.landonline.govt.nz).

6.2 Import a XML file into your *e-survey*



1. Display the Manage Survey transaction screen. See topic **5.2.1 Display the Manage Survey Transaction screen**.
2. Select the Import Dataset tab.
3. Click [Import]
4. Enter or select the path and file name to import.
5. Click [Open] Details of the file display in the Import Progress field as it is imported.
   - When completed, a message displays to advise the estimated time to pre-validate the *e-survey*.
6. Click [Yes] to perform the pre-validation. This will identify any data which could not be imported from your survey software package. See Section ***8 Schedule/Memorandum***

Caution: Information held in Landonline for your *e-survey* is overwritten when you import new data. If you add imported data to your existing *e-survey* you will lose information already captured.

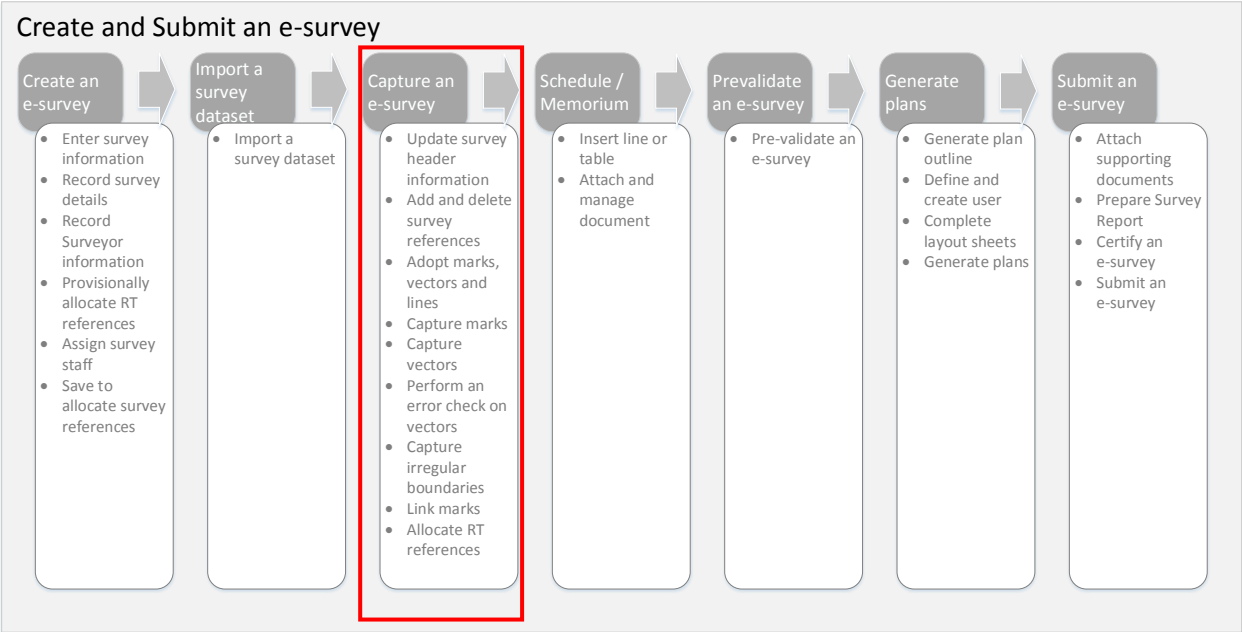
Note:

- Importing a file does not affect any attached supporting document or the survey or title plan images.

- The time it takes to import a file depends on the size of the file and your Internet connection speed.
- Refer to the Landonline website (www.landonline.govt.nz) for additional information about importing a XML file into Landonline.

7 CAPTURE AN *e-survey*

7.1 Overview



When you capture survey data you enter data gathered from a survey into an *e-survey* in Landonline. This includes new data captured for your *e-survey* and data that already exists in Landonline.

In Survey Capture you:

- adopt vectors and marks from Landonline into your *e-survey*
- capture vectors and marks into your *e-survey*
- capture irregular boundary lines
- link marks from your *e-survey* with existing data in Landonline
- capture parcel details.

This chapter explains the capturing process. Specifically it explains how to:

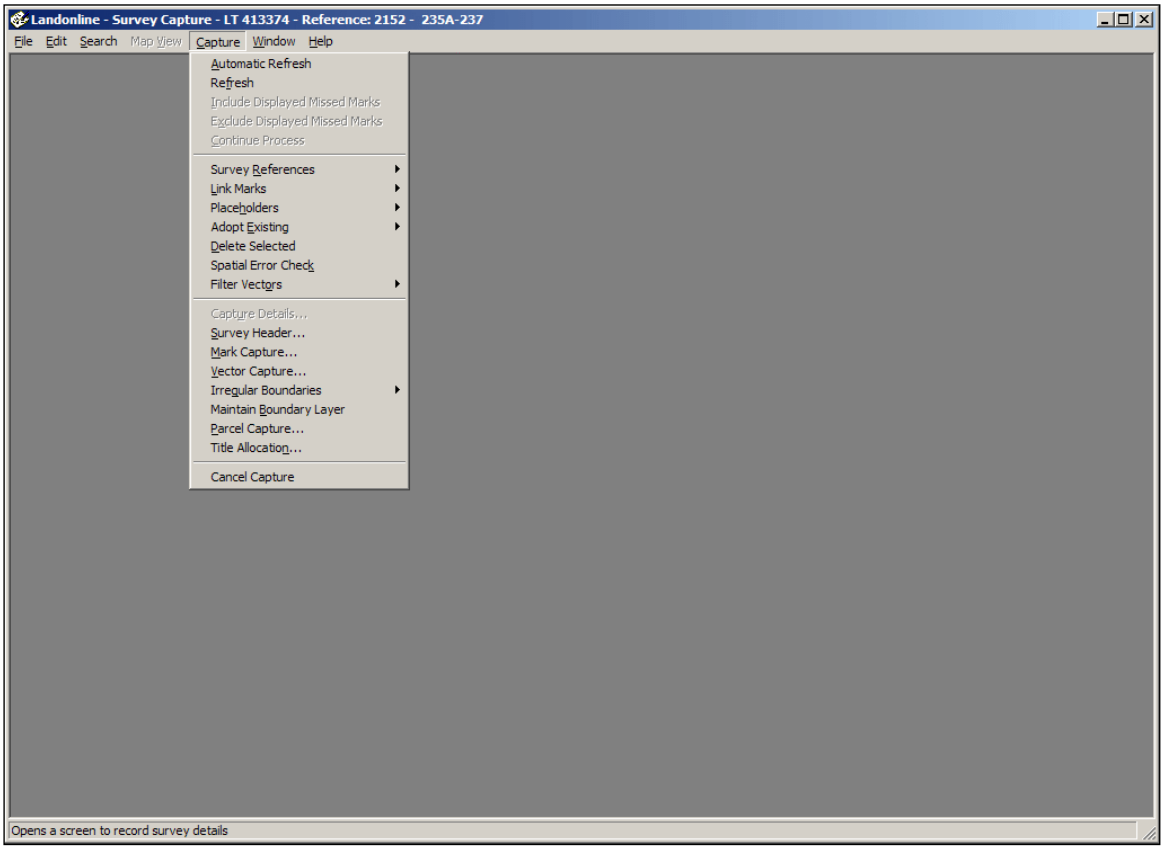
- Set the refresh option in Survey Capture
- Interrupt the capture process
- Display the Spatial Display
- Complete additional survey information
- Add survey references
- Adopt existing marks, vectors and lines
- Capture marks
- Capture vectors
- Edit captured marks
- Error check vectors
- Capture irregular boundaries
- Maintain a boundary layer
- Link marks
- Capture parcels
- Link RT references.

Before we describe how to complete the Survey Capture tasks it is important to explain more about Survey Capture.

Note: Survey Capture saves data as you enter it in each field.

7.1.1 About Survey Capture

Survey Capture is the part of Landonline you use to capture your *e-survey* and link it with data that already exists in Landonline.



7.1.1.1 Display Survey Capture

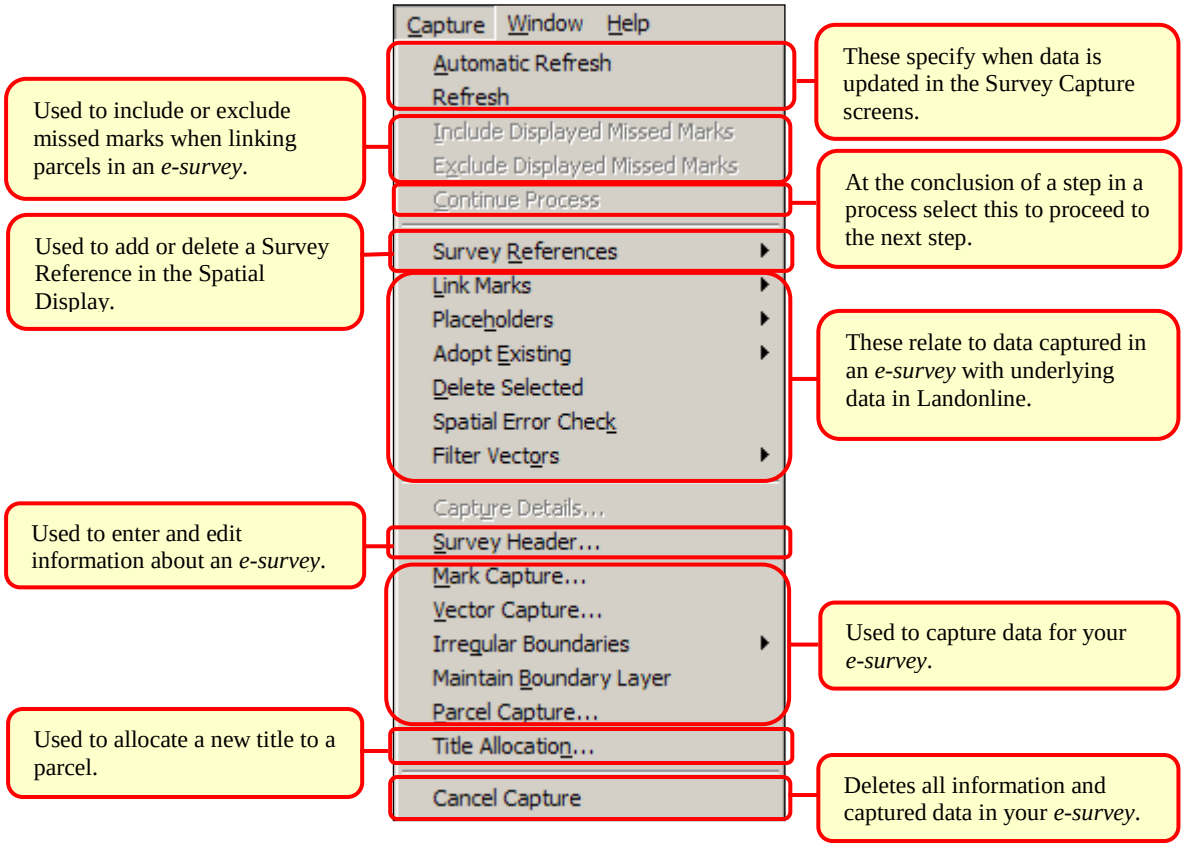
To display Survey Capture from the Manage Transaction screen:

1. Click Capture Dataset...

7.1.1.2 Capture menu

The Capture menu is where you find the tools to:

- enter and edit additional survey information
- capture new and existing survey data
- work with captured data
- refresh data.



7.1.1.3 Search menu

The Search menu is used to display the Spatial Display and Spatial Searches screen. For more information about the Spatial Window and Spatial Searching screen, refer to the ***e-search* User Guide**.

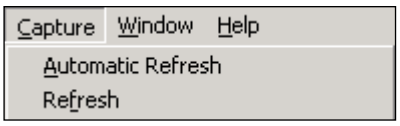
7.1.1.4 Map View menu

The Map View menu provides a set of tools used to navigate in the Spatial Display. These tools also display as icons in the Spatial Display. For more information about the Map View tools, refer to the ***e-search* User Guide**.

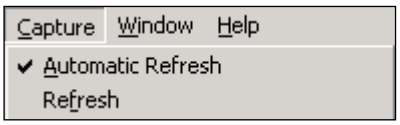
7.2 Set the refresh option

When you Refresh, Landonline updates the information in the current screen and all other screens in Survey Capture.

In the Capture menu you can set Refresh to run on request, or automatically each time you make a change. You can also Refresh from within other screens in Survey Capture.



7.2.1.1 Set Refresh to automatic



1. Select **Capture | Automatic Refresh**.
   This is a toggle and when active, Landonline inserts a tick (✓) in the menu.

Caution: When set to **Automatic Refresh**, the Capture process will slow down as every screen you have open will refresh each time you make an edit.

7.2.1.2 Set automatic Refresh to off

1. Select **Capture | Automatic Refresh** to remove the tick (✓).
   - When the Automatic Refresh is turned off, select **Capture | Refresh** each time you want to refresh, or click [Refresh] in the current screen.
   - Using manual Refresh improves processing times. You should use manual Refresh as your preference.

7.3 Interrupt the capture process

To interrupt the Survey Capture process at any time:

1. Click [OK] to close each screen.
   You can complete this at another time.

7.4 Resume the capture process

If you log off Landonline after you have begun work on your *e-survey* you can reopen the *e-survey* and continue working on it.

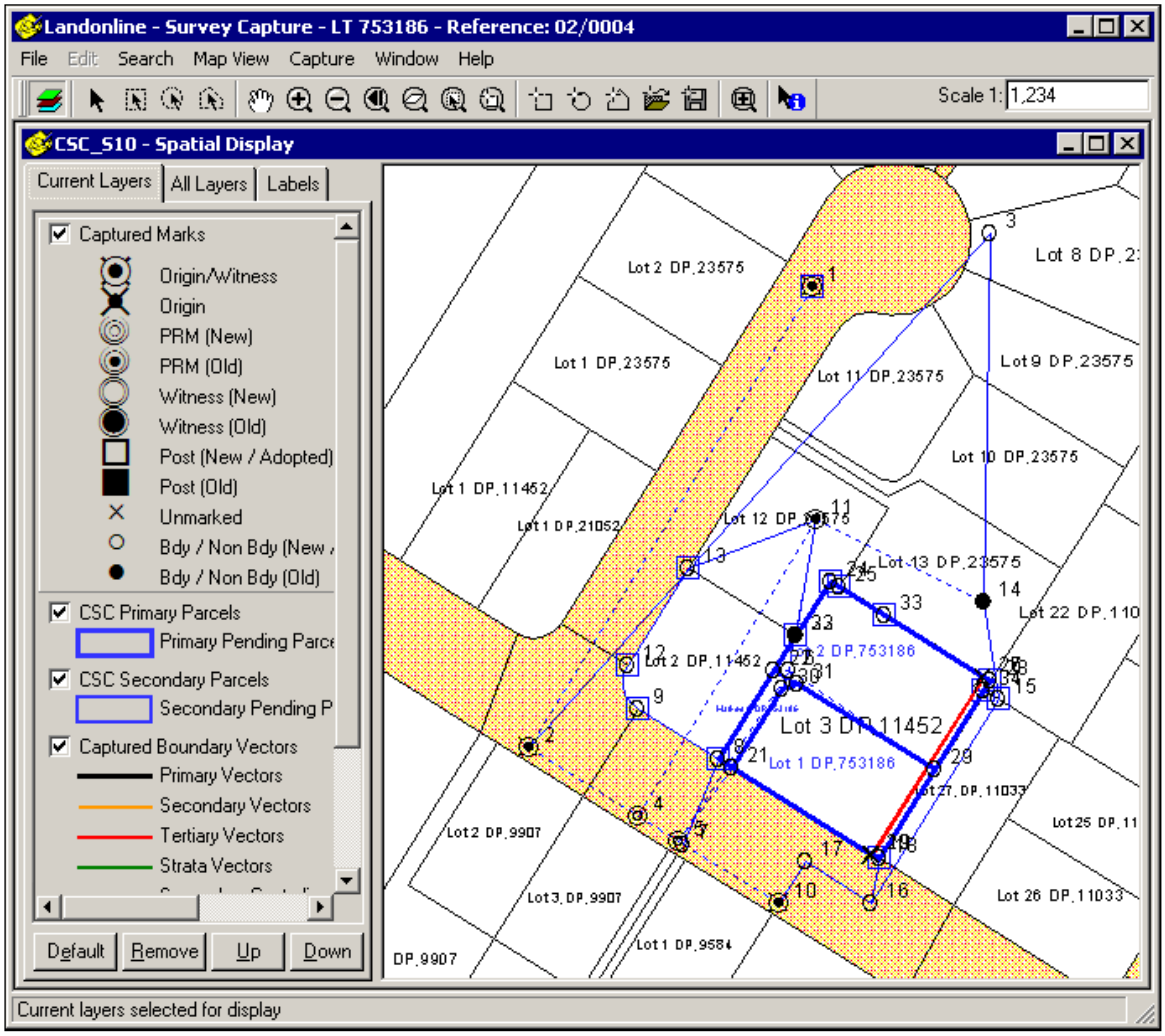
In Workspace,

1. Locate the *e-survey* in the Workspace Tree and double click it.
   The Manage Survey Transaction screen opens with the Survey Information displayed for the *e-survey*.
2. Click [Capture Dataset...] to display Survey Capture.
3. Use the Survey Capture menus to display the screens you require and continue working on your *e-survey*.

7.5 Display the Spatial Display

In Survey Capture, you use the Spatial Display in conjunction with text screens to:

- capture and create your survey dataset (eg capturing marks and vectors)
- add existing Landonline data to your *e-survey*
- add and delete plan references, and
- link marks and parcels.



This is a two lot subdivision captured in the Spatial Display. It shows marks, vectors and boundary lines for this *e-survey*.

Note:

- Landonline loads a default set of spatial layers in the Spatial Display. For details about the layers in the Spatial Display, see **Appendix A: Survey Capture layers**.
- Layer defaults can be changed. For more information refer to the ***e-search* User Guide**.

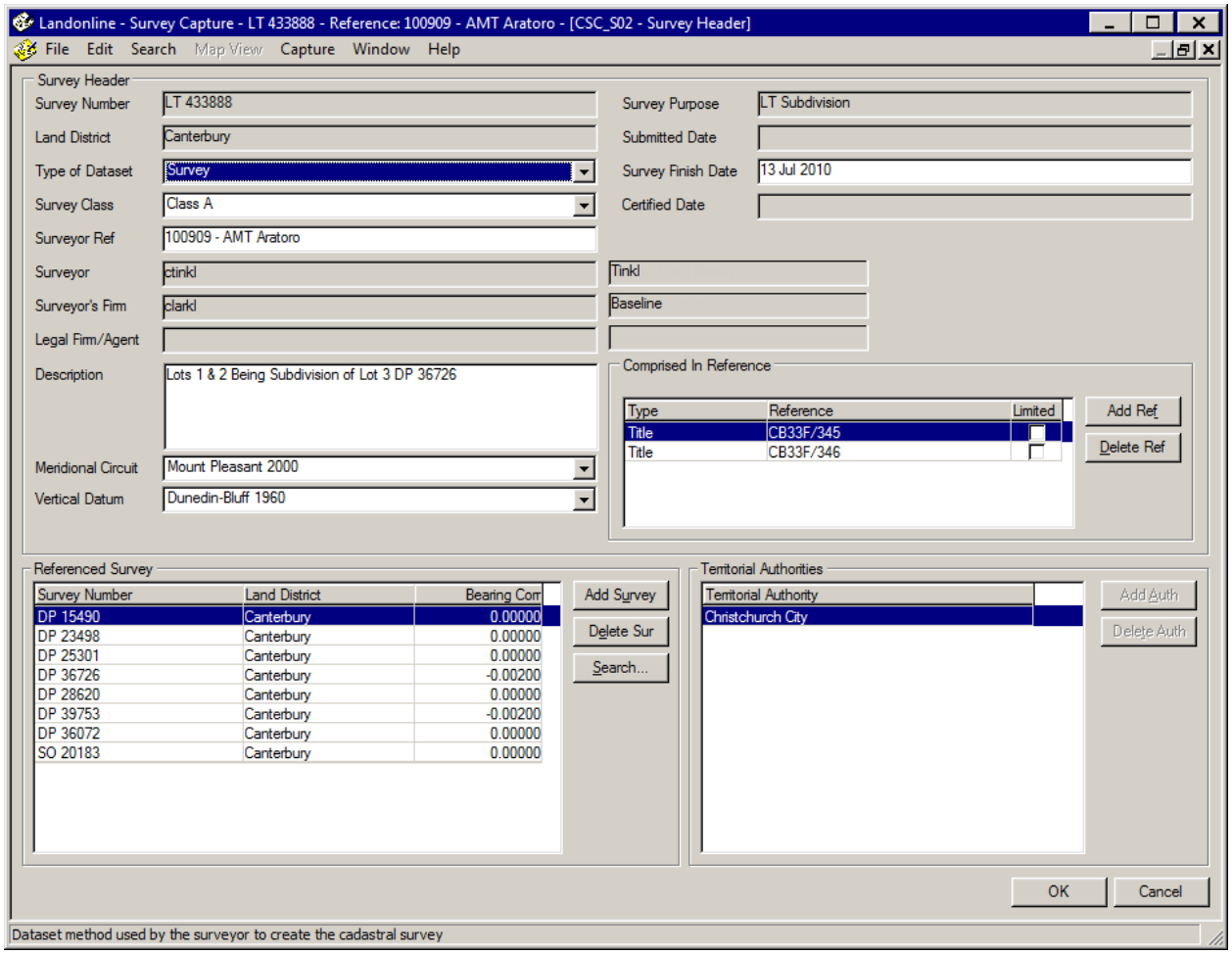
To display the Spatial Display in Survey Capture:

1. Select **Search | Spatial View...**

7.6 Complete additional survey information

You may need to enter additional survey information about the *e-survey* dataset you import or capture. This information is entered in the Survey Header screen.

You should complete the survey header information before capturing your *e-survey*. This establishes the coordinate system and other parameters important for your *e-survey*. You can edit the information in the Survey header screen at any time.



Henry Brown is completing additional information for his *e-survey*. He has specified the Survey Class, Coordinate System and Survey Finish date. He has also specified one survey he will reference when capturing the data for this *e-survey* and a comprised in reference for affected parcels.

Note:

- Landonline shares information entered in the Survey Header screen with the Manage Survey Transaction screen. If you edit a field in the Survey header screen common to both screens, the change is reflected in the Manage Survey Transaction screen when it is saved.
- The Territorial Authority in which your *e-survey* is located must be entered in the TA Certification tab in the Manage Survey Transaction screen before it will display in the Survey Header screen. See **11.4.2 Add a Territorial Authority**.
- If you later change the **Survey Purpose**, **Land District** or **Type of Dataset** you should pre-validate the *e-survey* before submitting it to ensure it is compliant.

Steps:

The steps to complete additional survey information are:

1. Display the Survey Header screen.
2. Complete survey header details.

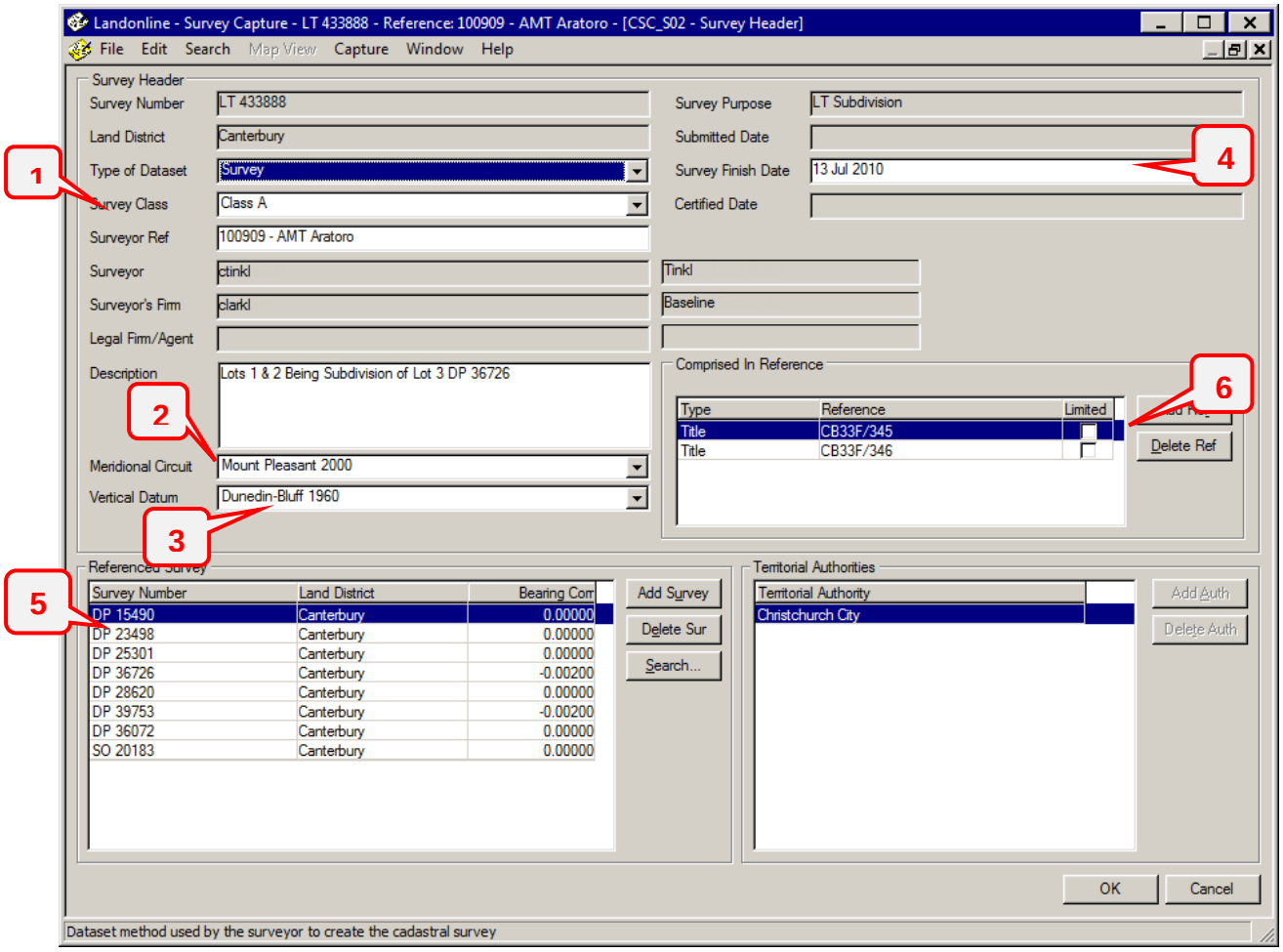
The following headings correspond with these steps and describe them in more detail.

7.6.1 Display the Survey Header screen

To display the Survey Header screen, in Survey Capture:

1. Select **Capture | Survey Header…**

7.6.2 Complete survey header details



Henry Brown has completed the Survey Header information for this subdivision.

1. Select the class for the survey dataset in the Survey Class field.
   - If the *e-survey* contains more than one survey class, select the most accurate class for the *e-survey*.
   - If the *e-survey* comprises entirely of Non Boundary vectors, select No Class as the Survey Class.
2. Select the Meridional Circuit that the bearings of the *CSD* are in terms of.
3. Select the Vertical Datum for the CSD.
4. Enter the date on which the field survey was completed in the Survey Finish Date.
5. Add referenced surveys used in your *e-survey* in the Referenced Survey area:
   - Click Add Survey to insert a row in the Referenced Survey area.
   - Enter the number of the survey you have referenced and select the Land District for the survey. If you don't know the survey number, click Search... to display the Search Survey screen. For more information about searching for a survey, refer to the ***e-search* User Guide**.
     Enter all survey references you will use to adopt data from.
   - Enter the applied correction in the Bear Corr. Field if you have applied a bearing correction to vectors from a referenced survey. For example, to enter -0° 01' 30", type -0.0130.
6. Add Comprised In References for all affected parcels (eg OT13B/278).
   - Click Add Ref to insert a row in the Comprised In Reference area.

- Select the Type of document, ie Title or Gazette.
  For a Deeds Index document, select Title as the Type of document.
- Enter the Reference number of the title or document.
- Check Limited if the reference is a limited title.

Note:

- If a comprised in title reference is Limited, Landonline displays LTD after the title reference in the Comprised In area of the Title Plan and CSD Plan headers for the generated plan.
- To add the Territorial Authority in which your *e-survey* is located, see **11.4.2 Add a Territorial Authority**.

7.6.3 Complete survey header information Toolkit

Table 7-1 lists other tools that assist with capturing survey information.

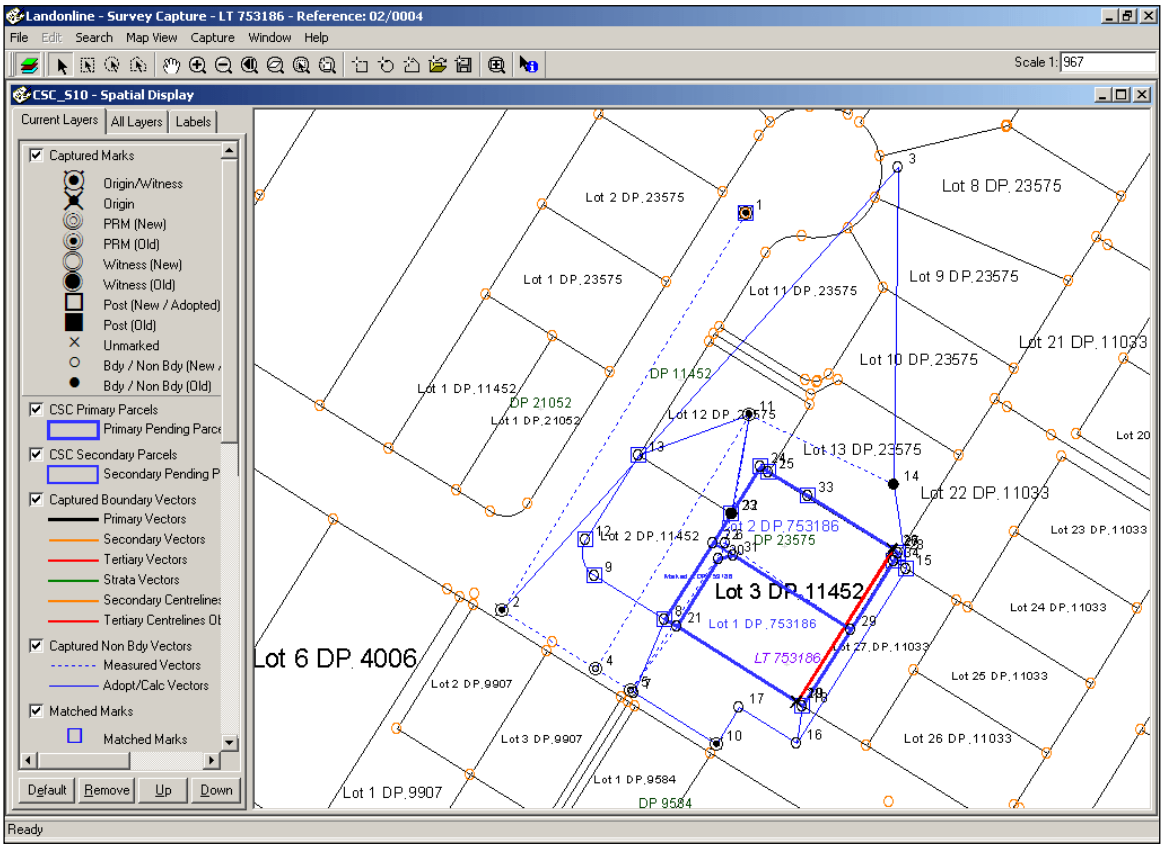
Tool	Description
Landonline Help	Press F1 in the Survey Header screen to display more information about adding additional survey information to your *e-survey*.
Quick Reference Cards	Section: *e-survey* Topic: Create Survey Header Information.

Table 7-1 Complete survey header information Toolkit

7.7 Add and delete survey references

For every *e-survey*, one or more survey references must be placed in the Spatial Display. You should add a survey reference when you create a new *e-survey*. This assists other users to identify the presence of provisional *e-surveys*.

You can add a new survey reference label, or place a survey reference in more than one location to show the extent of your *e-survey*. Survey references can be captured before you capture any marks or vectors and can be added at any time prior to submission.



To add survey references:

1. Display the Spatial Display. See topic **7.5 Display the Spatial Display**.
2. Display the Provisional Survey Plan Refs layer so you can see the reference you add. If this layer is not displayed, select it from the All Layers tab.
3. Navigate to the area you require and ensure labels are displayed.
4. Select **Capture | Survey References | Add Survey Reference**.
5. Click the point where you want to place the label, avoiding previous labels. Landonline inserts the survey reference label.
6. Repeat Steps 3 to 5 until all labels are positioned.

Note: When placed, survey references are immediately available to other users to view from Searches. An *e-survey* plan must have at least one survey reference recorded before you can submit it. You can add a maximum of 20 survey references to an *e-survey*.

To delete a survey reference label relating to your provisional *e-survey*, in the Spatial Display:

1. Select the Provisional Survey Reference layer in the Current Layers tab.
2. Click  and select the label you wish to remove.
3. Select **Capture | Survey References | Delete Survey Reference**. Landonline removes the label.

Note: To move a reference you must delete it and add another in the new location.

7.7.1 Add and delete survey references Toolkit

Table 7-2 lists other tools that assist with adding and deleting survey references.

Tool	Description
Landonline Help	Press F1 to display Landonline Help.
Quick Reference Cards	Section: *e-surveys* Topic: Add a Survey Reference.

Table 7-2 Add and delete survey references Toolkit

7.8 Adopt existing marks, vectors and lines

Marks, vectors and lines that exist in Landonline can be incorporated by adoption into your *e-survey* without re-entering data from existing paper plans or digital plans.

Vectors are the dimensions for vectors, which are directly measured, calculated or adopted from previous surveys. They are commonly expressed as a bearing, a distance or both. Types of vectors include boundary dimensions, non boundary lines, GPS vectors, pegging ties, natural boundary fixes etc.

Lines that exist in Landonline are boundaries without vectors. They can be imported into your *e-survey* if you:

- have dispensation to define a parcel without dimensioning it (eg parcel diagrams)
- need to define a parcel balance (where there are no vectors)
- want to adopt an irregular boundary line.

You can adopt existing Landonline marks and vectors for an *e-survey* using the Spatial Display.

When you adopt vectors from Landonline, the From and To marks are also adopted. Additional mark information may need to be captured from the existing paper plan.

Caution: If you adopt vectors already captured in your *e-survey*, you create duplicate vectors. You must delete the vectors you do not require before you submit your *e-survey*.

Note: If there are no marks captured and you adopt marks, they are numbered from 1000. If you have captured new marks and you adopt existing marks, they are numbered sequentially from the largest number.

Tasks:

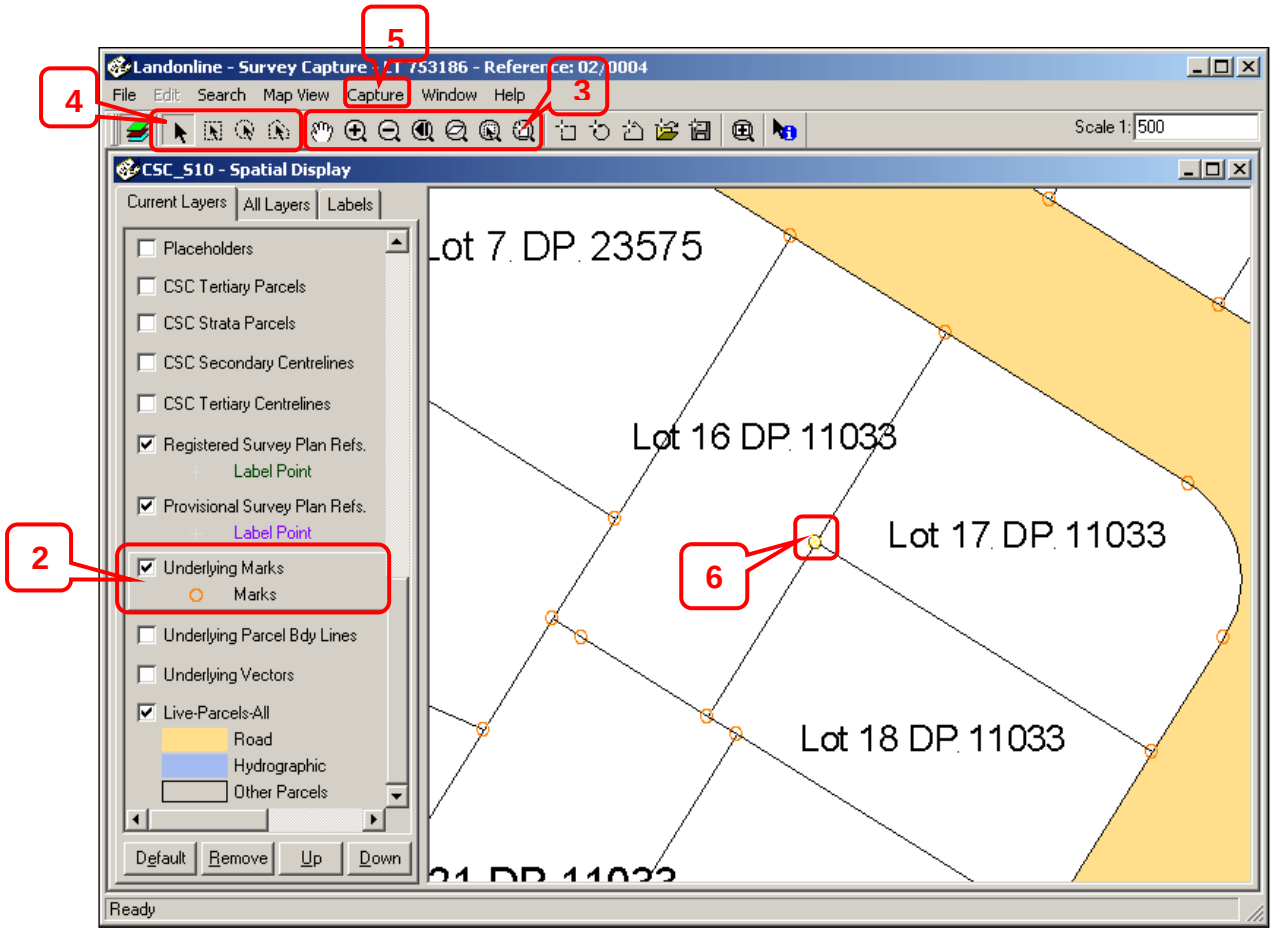
To adopt existing Landonline data you can:

- Select existing marks spatially.
- Select existing vectors spatially.
- Adopt existing boundary definitions.
- Select existing boundary lines.

The following headings correspond with these tasks and describe them in more detail.

7.8.1 Select existing marks spatially

You can select existing Landonline marks from the Spatial Display and add them to your *e-survey*.



Henry Brown has spatially selected an underlying mark and adopted it into his *e-survey*.

To add existing marks selected from the Spatial Display:

1. Select **Search | Spatial View…** to display the Spatial Display.
2. Make the Underlying Marks layer active.
3. Navigate to the area you require.
4. Select the existing marks you require using the selection tools.
5. Select **Capture | Adopt Existing | Adopt Marks/Vectors**.
   - Landonline adds all marks you selected to the Mark List screen with a status of Adopted. The marks also display as adopted in the Spatial Display.
6. View the adopted marks in the Mark List screen:
   - Select the Mark List screen (if open) and click Refresh to view the adopted marks, or
   - Select **Capture | Mark Capture...** to display the adopted marks in the Mark List screen.

Note:

- When you adopt a mark you may need to modify or add information for the mark in the Mark Detail screen. For example, if you adopt a mark you found when in the field, you need to change the Mark State from Adopted to Old.
- If you adopt a mark that is linked to a geodetic mark, the adopted mark is overridden with details of the geodetic mark. You cannot edit the name of the mark (ie Mark Type Abbrev, Mark No, Mark Plan Ref fields) or the Mark Type field, but you can change other fields if required. If you change the Mark State to Adopted, the Condition field will automatically default to Not Specified, but remains an editable field.

- To report any edits for geodetic marks you have linked in the *e-survey*, see **9.5 Pre-validation report information**.

7.8.2 Select existing vectors spatially

You can select existing Landonline vectors from the Spatial Display and add them to your *e-survey*. When you capture existing vectors, the From and To marks for each vector are included if they are not already captured in your *e-survey*. You may need to capture additional mark information from the existing paper plan.

If required, you can filter vectors in the Spatial Display to select an alternative vector between the same two marks. If you don't apply a filter, the selected vector is the most current vector between each pair of marks (ie the vectors associated with the most recently approved survey).

To select existing vectors, in the Spatial Display:

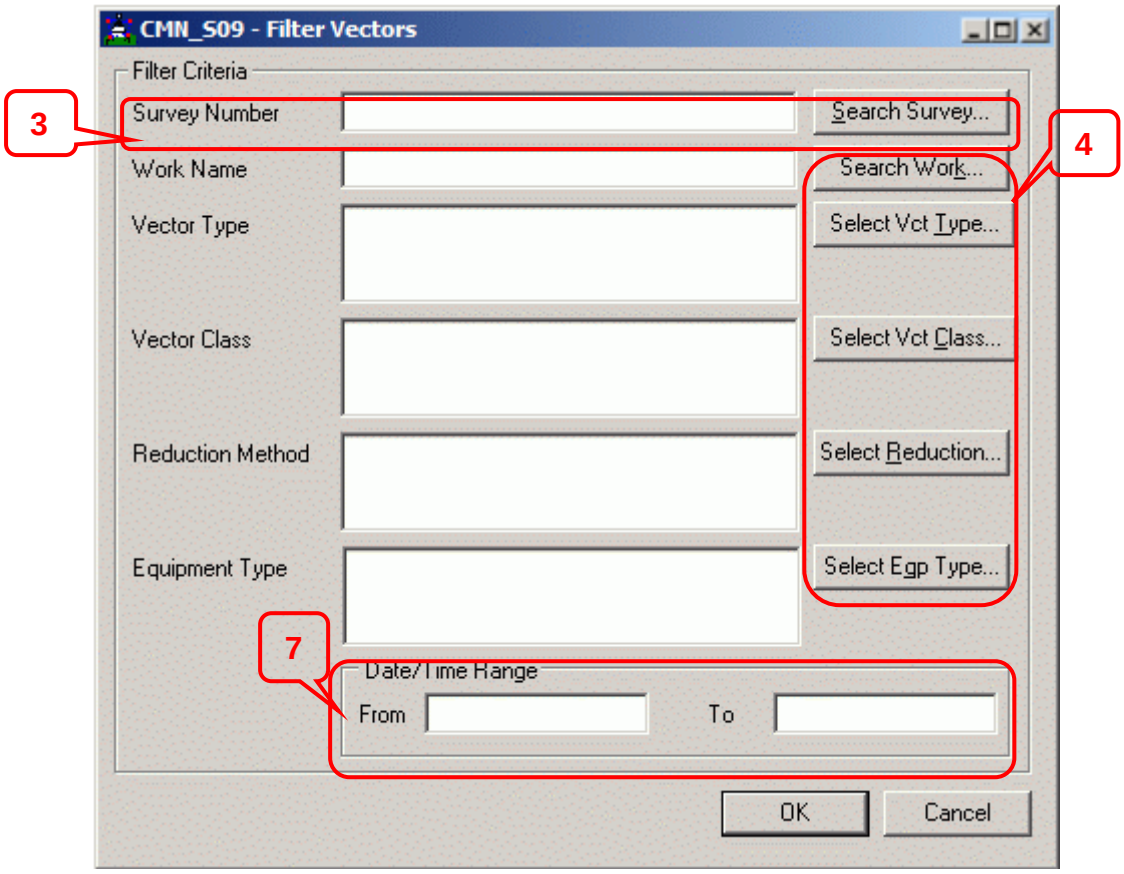
1. Make the Underlying Vectors layer active.
2. Navigate to the area you require.
3. Filter your vectors to specify your alternative, if required. For more information see topic **7.8.2.1 Filter vectors**.
4. Select the existing vectors you require using the selection tools.
5. Select **Capture | Adopt Existing | Adopt Marks/Vectors**.
   - Landonline adds all selected vectors to the Vector Capture screen and marks to the Mark List screen.
6. View the adopted marks:
   - Select the Vector Capture screen (if open) and click Refresh to view the captured vectors, or
   - Select **Capture | Vector Capture...** to display the Vector Capture screen.

Note:

- When you adopt a vector you may need to modify the mark and vector details in the Vector Capture screen. This includes applying the bearing correction to each vector.
- If the vectors you wish to adopt are existing parcel boundaries, see topic **7.8.3 Adopt existing boundary definitions**.

7.8.2.1 Filter vectors

You filter vectors to limit the vectors that you view in the Spatial Display using the Filter Vectors screen. Your filter can be based on one, or a combination of fields on this screen.



To filter vectors, in the Spatial Display:

1. Make the appropriate vector layer active.
2. Select **Capture | Filter Vectors | Apply Filter...** to display the Filter Vectors screen.
3. Enter the number of the survey in the Survey Number field if you want to filter vectors for this survey only. Alternatively, click [Search Survey...] to search for the survey. For more information about searching for Surveys, refer to the ***e-search* User Guide**.
4. Click one of these buttons to display the Select Items screen to refine your filter criteria if required. The criteria that displays will depend on the button you select.
   - Click [Select Vct Type...] to display Vector Type options.
   - Click [Select Vct Class...] to display Vector Class options.
   - Click [Select Egp Type...] to display Equipment Type options.
5. Select the items you require from the Select Items screen:
   - Select one or more items in the Items available for selection list.
   - Click [Add ->] to add them to the Selected Items list.
   - To remove an item from the Selected Items list, select it and click [<- Remove]
   - Click [OK] to return to the Filter Vectors screen.
6. Repeat Steps 4 and 5 if required.
7. Enter dates in the Date/Time Range fields if required. Each vector has a date of survey recorded with it.
8. Click [OK] to display the filtered information in the Spatial Display.

Note:

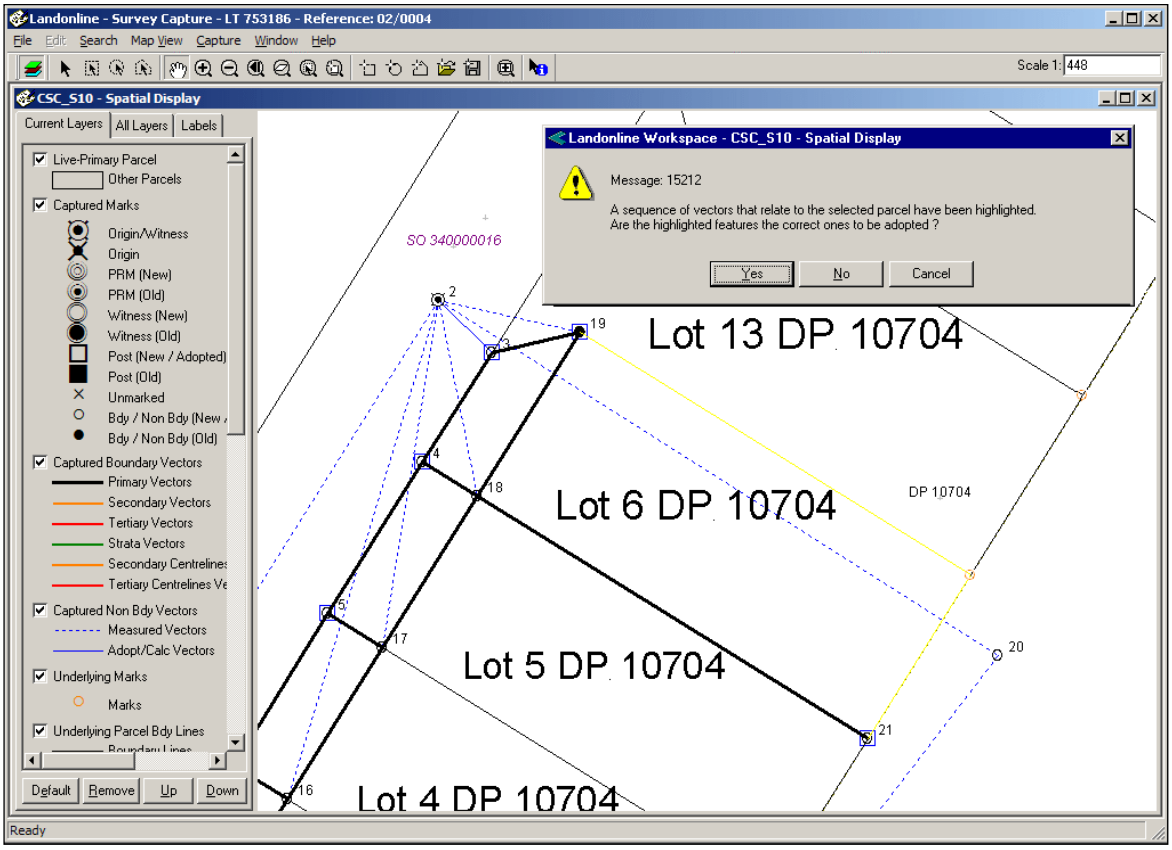
- If you have already filtered vectors you must remove the filter criteria before performing a new filter.
- Vectors that meet the search criteria will display. The Work Name field and the Reduction Method field are for LINZ internal use for Geodetic surveys.

To remove the vector filter, in the Spatial Display:

1. Select **Capture | Filter Vectors | Remove Filter**.

7.8.3 Adopt existing boundary definitions

This process allows you to adopt a sequence of vectors. This is used to create new parcels in your *e-survey* without providing additional survey definition. For more information about adopting boundaries with no vectors recorded in Landonline, see topic **7.8.4 Select existing boundary lines**.



Henry Brown has spatially adopted a sequence of vectors to create new parcels for this *e-survey*. He has chosen this option as an alternative and faster method to entering these vectors through the Vector Capture screen.

To adopt part of an existing parcel boundary definition, in the Spatial Display:

1. Navigate to the parcel you require.
2. Display the Underlying Marks layer and the Underlying Vectors layer.
3. Make the Underlying Marks layer active.
4. Select the marks which define the end points of the sequence of the boundary vectors. You must have already linked the start and end marks you select otherwise Landonline will duplicate the marks.
5. Select **Capture | Adopt Existing | Adopt Vector Sequence**.
   - A message displays asking you to select the parcel to which the adopted vectors apply.

- Click OK

6. Make the Live-Primary Parcel layer active.
7. Click (Select Individual) and select the parcel. Landonline colours the parcel yellow. Make sure this is the parcel you wish to adopt from.
8. Click (Continue). A message displays asking you to select the sequence of boundary vectors to be incorporated into the *e-survey*.
   - Landonline displays the string of vectors clockwise between the selected marks in yellow and displays a message asking whether you wish to adopt the string selected.
9. Select one of the two possible paths between the selected marks:
   - Select Yes if the highlighted lines define the balance.
   - Select No to automatically select the alternative path.
   - Select Cancel if it doesn't meet your requirements.
10. When you select a path, Landonline adds the boundary vector sequence to the *e-survey*.
11. Repeat Steps 4 to 9 for each part of the existing parcel boundaries you wish to adopt.

Note: Where existing boundary topology must be changed for the purposes of your *e-survey*, you will need to maintain the topology layer for the adopted boundary sequence, (eg when the adopted boundary will also be an easement boundary). For more information, see topic **7.14 Change a boundary layer**.

7.8.4 Select existing boundary lines

This process allows you to select lines for the portion of a parcel that is intended to remain after part has been removed by the survey and does not need to be dimensioned. For example, a road parcel, fixed marginal strip, bed of a lake. Vectors will not display in the Vector Capture screen for these lines as Landonline has no record.

To import part of an existing parcel boundary, in the Spatial Display:

1. Navigate to the parcel you require.
2. Turn on the Underlying Marks layer and the Underlying Parcel Bdy Lines layer.
3. Make the Underlying Marks layer active.
4. Select the marks which define the end points of the sequence of the boundary lines. You must have already linked the start and end marks you select otherwise Landonline will create new marks.
5. Select **Capture | Adopt Existing | Process Balance Parcel Boundary**.
   - A message displays asking you to select the parcel to be processed.
   - Click OK
6. Make the Live-Primary Parcel layer active.
7. Click (Select Individual) and select the parcel. Landonline colours the parcel yellow. Make sure this is the parcel you wish to select from.
8. Click (Continue). A message displays asking you to select the sequence of boundary lines to be incorporated into the *e-survey*.
   - Landonline displays the string of lines clockwise between the selected marks in yellow and displays a message asking whether you wish to select the string selected.
9. Select one of the two possible paths between the selected marks:
   - Select Yes if the highlighted lines define the balance.
   - Select No to automatically select the alternative path.
   - Select Cancel if it doesn’t meet your requirements.
10. When you select a path, Landonline adds the boundary line sequence to the *e-survey*.
11. Repeat Steps 4 to 10 for each part of the existing parcel boundaries you wish to select.

Note:

- Where existing boundary topology must be changed for the purposes of your *e-survey*, you will need to maintain the topology layer for the imported boundary line sequence. For example, when the adopted boundary will also be an easement boundary. See topic **7.14 Change a boundary layer**.
- The section of the boundary adopted can include an irregular line.

7.8.5 Adopt existing marks, vectors and lines Toolkit

Table 7-3 lists other tools that assist with adopting existing Landonline data.

Tool	Description
Landonline Help	Press F1 at any stage of adopting existing marks, vectors and lines to display more information about this process.
Quick Reference Cards	Section: *e-survey* Topic: Adopt Marks And Vectors Spatially.

Table 7-3 Adopt existing marks, vectors and lines Toolkit

7.9 Capture marks

A summary of captured marks displays in the Mark List screen. Mark details are captured and edited in either the:

- Mark Detail screen, or
- Vector Capture screen when vectors are captured. See topic 7.10 Capture vectors.

When you capture a new mark it doesn't display in the Spatial Display until it is associated with a coordinate. You generate a coordinate for the mark when you include it in a vector with another mark that has a coordinate. If the mark already exists in Landonline, you must link the mark to an existing Landonline mark.

Tasks:

You can:

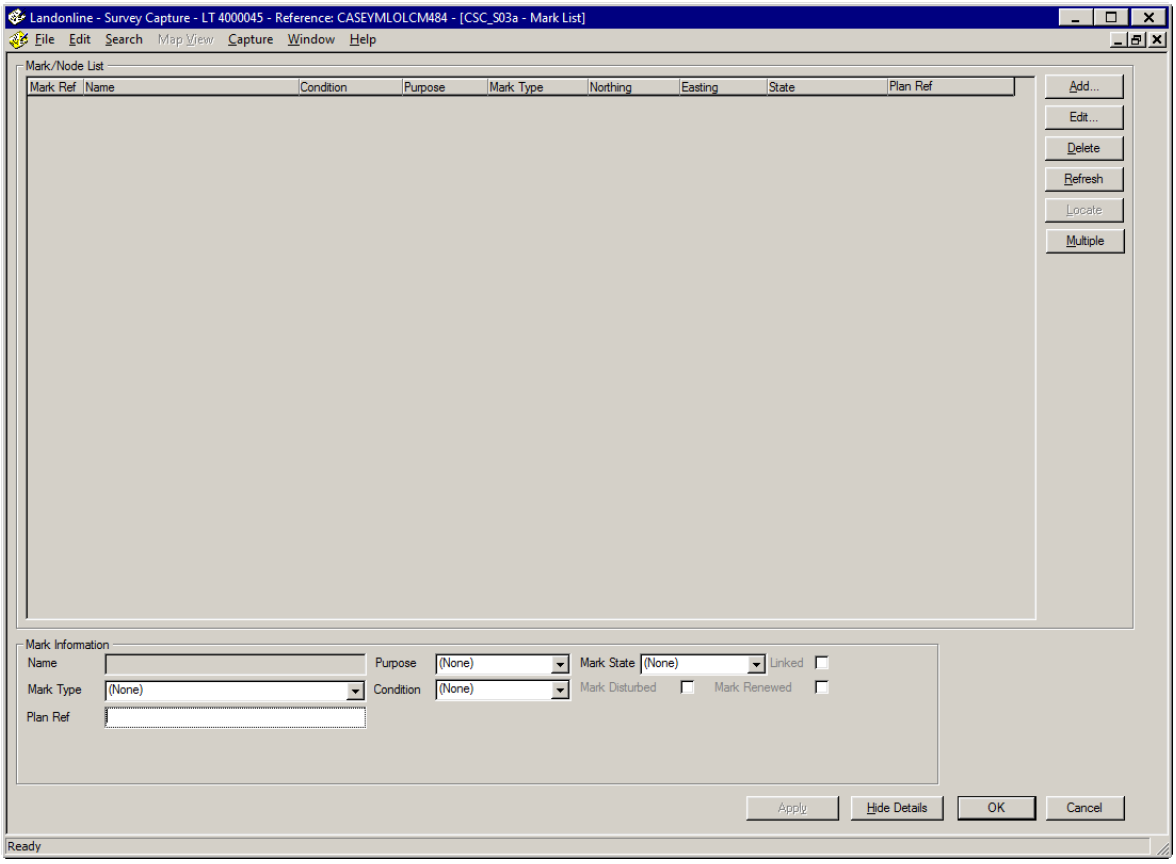
- Display the Mark List screen.
- Display the Mark Details screen.
- Add a new mark (through the Mark detail screen).
- Display a mark in the Spatial Display screen.
- Record details of a disturbed or renewed mark.

The following headings correspond with these tasks and describe them in more detail.

7.9.1 Display the Mark List screen

The Mark List screen lists all marks in your *e-survey*. You use it to:

open the Mark Detail screen where you can add new marks and edit single marks already captured
open the Mark Detail screen for multiple marks to make common changes to more than one mark at a time
delete marks from your *e-survey*.



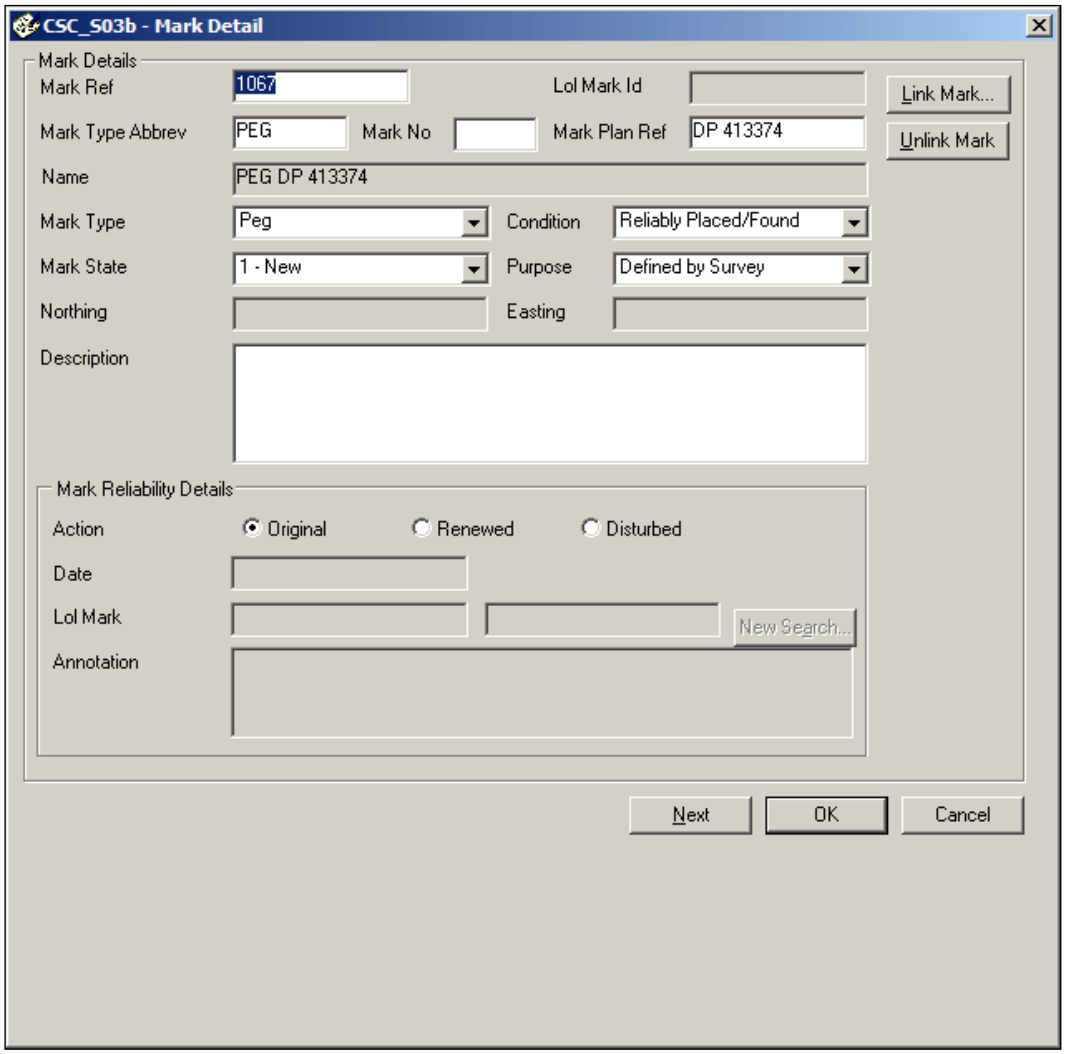
This is the Mark List screen before any Marks have been captured for the *e-survey*. Henry Brown will add the first mark for this *e-survey* by clicking Add to open the Mark Detail screen.

To display the Mark List screen:

1. Select **Capture | Mark Capture…**

7.9.2 Display the Mark Detail screen

Marks can be captured using the Mark Detail screen by directly entering mark information.



Henry Brown has opened the Mark Detail screen to add the first mark for his *e-survey*. Default values already display in some fields.

Note: If you import data from an XML file, and there are New marks in the file without a plan reference, Landonline will automatically populate the Mark Plan Ref field with the new plan number.

Tasks:

You can:

- Display the Mark Detail screen from the Mark List screen.
- Display the Mark Detail screen from the Vector Capture screen.

The following headings correspond with these tasks and describe them in more detail.

7.9.2.1 Display the Mark Detail screen from the Mark List screen

To display the Mark Detail screen to enter a new mark:

1. Click [Add...]

To display the Mark Detail screen for a mark already captured:

1. Select the mark in the Mark list.
2. Click [Edit...]

7.9.2.2 Display the Mark Detail screen from the Vector Capture screen

To display the Mark Details screen for a mark:

1. Click [Mark Details ...] from the Mark information area.

7.9.3 Add a new mark

You can also enter marks as you capture vectors. See topic **7.10 Capture vectors**.

To add a new mark:

1. Display the Mark Detail screen. See topic **7.9.2 Display the Mark Detail screen**.
   The Mark Ref field displays the next available mark number.
2. Change the Mark Ref to a different unallocated mark number if you are using a different numbering sequence.
3. Create the mark Name by entering details in the fields:
   - Mark Type Abbrev. Use standard abbreviations that correspond with the Mark Type field. For a mark not of the standard form, enter it in the Mark Type Abbrev field (eg MT Kaukau).
   - Mark No (eg 1Vb, 46, 46b)
   - Mark Plan Ref. This defaults to the current *e-survey* number for new marks. If the mark exists enter the appropriate survey number.

   Caution: You must not type spaces at the end of the Mark Type Abbrev and Mark No fields. You must include a space between the survey type and its number in the Mark Plan Ref field.
4. Review the Mark Type field default. If incorrect select the Mark Type.
5. Review the Condition field default. If incorrect select the Condition.
   - Use Reliably Placed/Found for marks in the correct position or adopted marks not looked for.
   - Use Damaged, Destroyed or Moved for marks that have been disturbed.
   - Use Not Found for marks the surveyor looked for and couldn't find.
     Note: The condition for geodetic marks cannot be edited in Workspace.
6. Record the state of the mark in the Mark State field.
7. Select the purpose for the mark from the Purpose field.
8. Enter a description for the mark in the Description field if required.
9. Enter the Mark Reliability details if required.
   - If a mark is disturbed or renewed, and exists in Landonline, see topic **7.9.5 Record details of a disturbed or renewed mark**.
10. Click [Next] to enter another mark. Landonline saves the current mark and clears the screen ready for you to enter details of the next new mark.
11. Click [OK] to return to the Mark List screen when you have recorded all marks.

Note:

- If you find a disturbed mark, or renew a mark that doesn't exist in Landonline, add a comment to the Description field but do not record the mark as disturbed or renewed.
- To edit a mark, see topic **7.11 Edit captured marks**.

7.9.4 Display a Mark in the Spatial Display screen

You can locate a mark in the Spatial Display screen from the CSC_S03a – Mark List screen with a selected mark highlighted.

1. Ensure the Spatial Display screen is open.
2. Select the mark.
3. Click Locate

- The Spatial Display screen is focused on, with the selected mark highlighted.

Note: The Locate button is only available to be selected when the Spatial Display screen is open.

7.9.5 Record details of a disturbed or renewed mark

You record details of a disturbed or renewed mark that already exists in Landonline, in the Mark Detail screen.

Tasks:

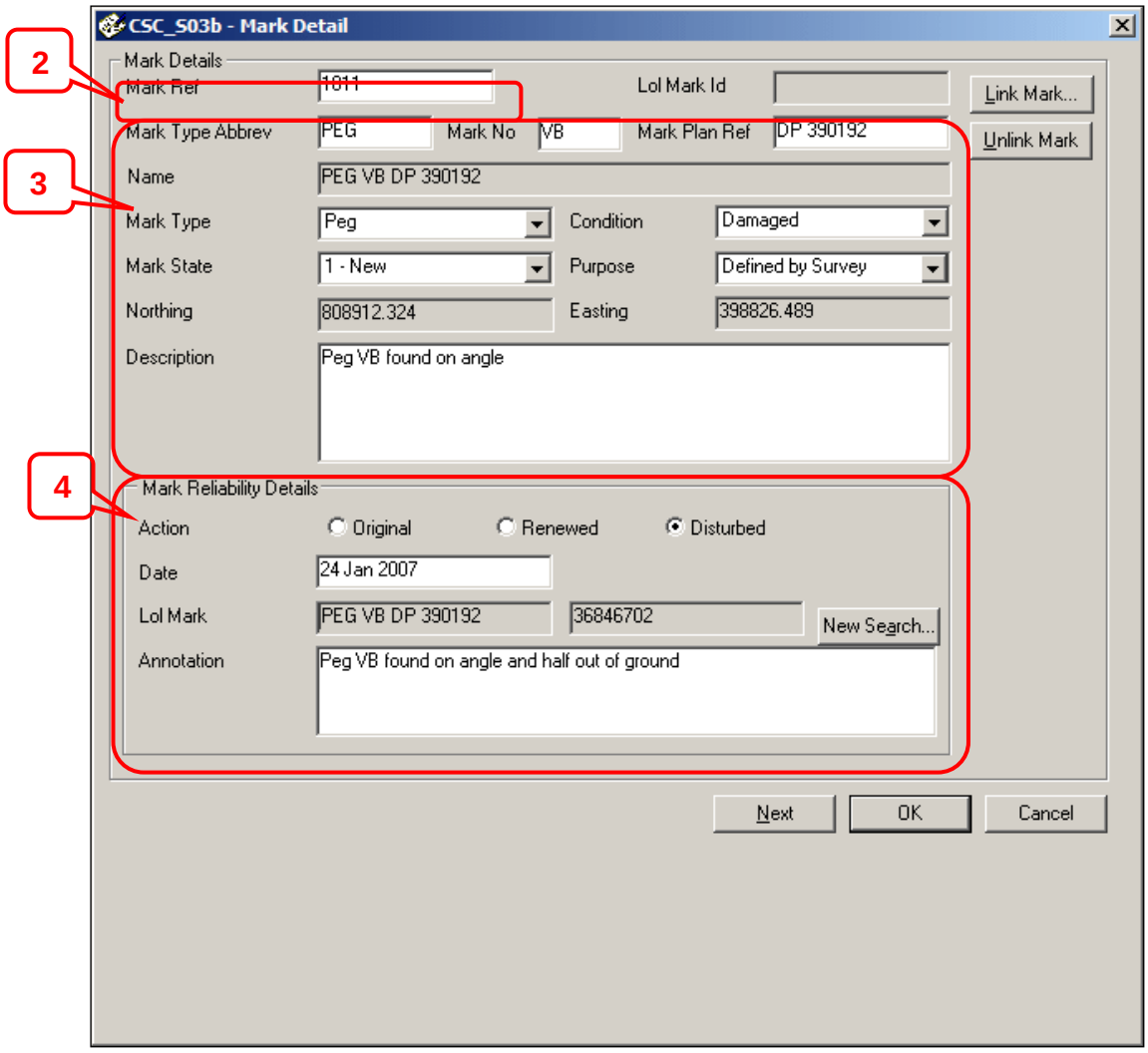
You can:

- Record a mark as disturbed.
- Record a mark that has been renewed.

The following headings correspond with these tasks and describe them in more detail.

7.9.5.1 Record a mark as disturbed

A disturbed mark is previously recorded in Landonline as reliable but, when found as part of the survey, is not found in its original position. Note that disturbed does not include a change of position due to deep-seated movement (refer rule 2 Rules for Cadastral Survey 2010).



Henry Brown found Peg Vb leaning when he performed the field work for his *e-survey*. The mark already exists in Landonline so Henry has identified it as disturbed and linked it to the original Landonline mark.

To record a mark as disturbed:

1. Display the Mark Detail screen for the mark. See topic **7.9.2 Display the Mark Detail screen**.
2. Review the Mark Ref field to make sure this mark has a new mark reference. You may have already created the Mark Reference in the Vector Capture screen.
3. Complete the remaining Mark Details fields. See topic **7.9.3 Add a new mark**.
   - Select Non Boundary as the Purpose for the disturbed mark.
4. Complete the Mark Reliability details:
   - Click Disturbed.
   - Enter the Date the mark was found disturbed if the default date is not correct.
   - Click New Search to search Landonline for and select the original mark. It displays it in the Lol Mark field
   - Enter details of the mark in the Annotation field.

7.9.5.2 Record a mark that has been renewed

A renewed mark is one that was previously recorded in Landonline and you renewed it during your *e-survey* or you reinstated it.

To record a mark that has been renewed:

1. Complete all steps as for a disturbed mark but at Step 4, click Renewed in the Mark Reliability area. See topic **7.9.5.1 Record a mark as disturbed**.

7.9.6 Capture marks Toolkit

Table 7-4 lists other tools that assist with capturing marks.

Tool	Description
Landonline Help	Press F1 in the Mark List screen to display information about entering marks.
Quick Reference Cards	Section: *e-survey* Topics: • Capture Marks. • Capture Disturbed or Renewed Marks.

Table 7-4 Capture marks Toolkit

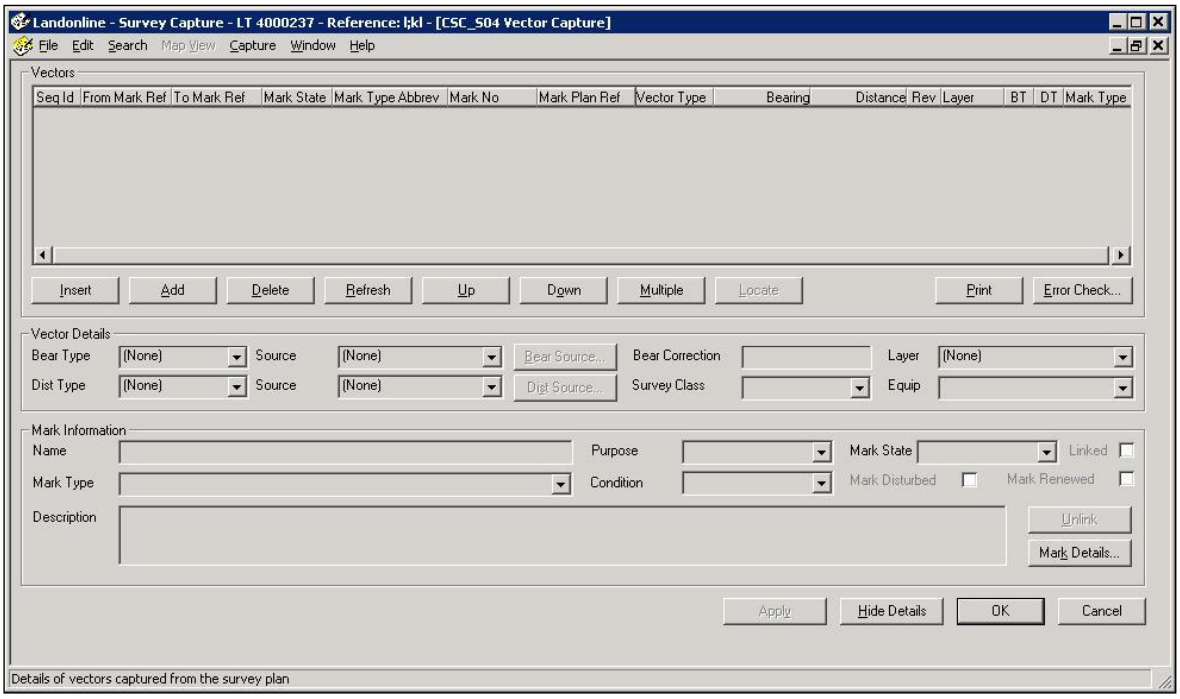
7.10 Capture vectors

You can capture new and adopted non boundary vectors, boundary vectors and marks using the Vector Capture screen. You must have captured at least one mark before you can use this screen. This will be the first From Mark.

7.10.1 Vector Capture screen

The Vector Capture screen has three areas:

- Vectors list
- Vector Details area
- Mark Information area.



Henry Brown has not captured any vectors for his *e-survey* yet. When he clicks Add to capture the first vector the From Mark Ref will display for all marks he has captured in the Mark List screen. Note: The Survey Class field already displays Class A Cadastral Survey. This was the survey class Henry specified in the Survey Header screen.

7.10.1.1 Vectors list

You enter vectors and their corresponding marks in the Vectors list.

The buttons below this list enable you to add new vectors, edit and delete vectors already entered, exclude any non boundary vectors from displaying in plan generation, and reorder and perform error checks on vectors. The **Vector Capture screen** table in **Appendix N: Survey Capture screen information** describes the buttons in this screen.

7.10.1.2 Vector Details area

Once a vector is entered in the Vectors list you add details for it in the Vector Details area if the default entries are not correct.

Some information in these fields default depending on what you have entered in the Vectors list.

7.10.1.3 Mark Information area

This is where you enter additional information for the To mark entered in the Vectors list. Marks entered in this screen have their details automatically entered in corresponding fields in the Mark Detail screen.

7.10.2 Display the Vector Capture screen

To display the Vector Capture screen in Survey Capture:

1. Select **Capture | Vector Capture...**

7.10.3 Tasks in the Vector Capture screen

Tasks:

The tasks you can perform to in the Vector Capture screen are:

- Add new vector rows.
- Enter a right line vector.
- Enter an arc.
- Enter information for a mark.
- Change the vectors view.
- Apply one value to multiple vectors.
- Reorder vectors.
- Apply a bearing correction on a new *e-survey*.
- Display a vector in the Spatial Display screen.
- Print a list of vectors.
- Delete selected vectors.

The following headings correspond with these tasks and describe them in more detail.

7.10.4 Add new vector rows

You can either add or insert a new vector row.

7.10.4.1 Add a new vector row

To add a new vector to the end of the Vectors list in the Vector Capture screen:

1. Click Add
   Landonline inserts a new row with default values already displayed.

Alternatively:

1. Click in the Layer field of the last row.
2. Press the Enter or Tab key.
   Landonline inserts a new line with default values already displayed.

7.10.4.2 Insert a new vector row

To insert a new vector row between other vectors within the Vectors list in the Vector Capture screen:

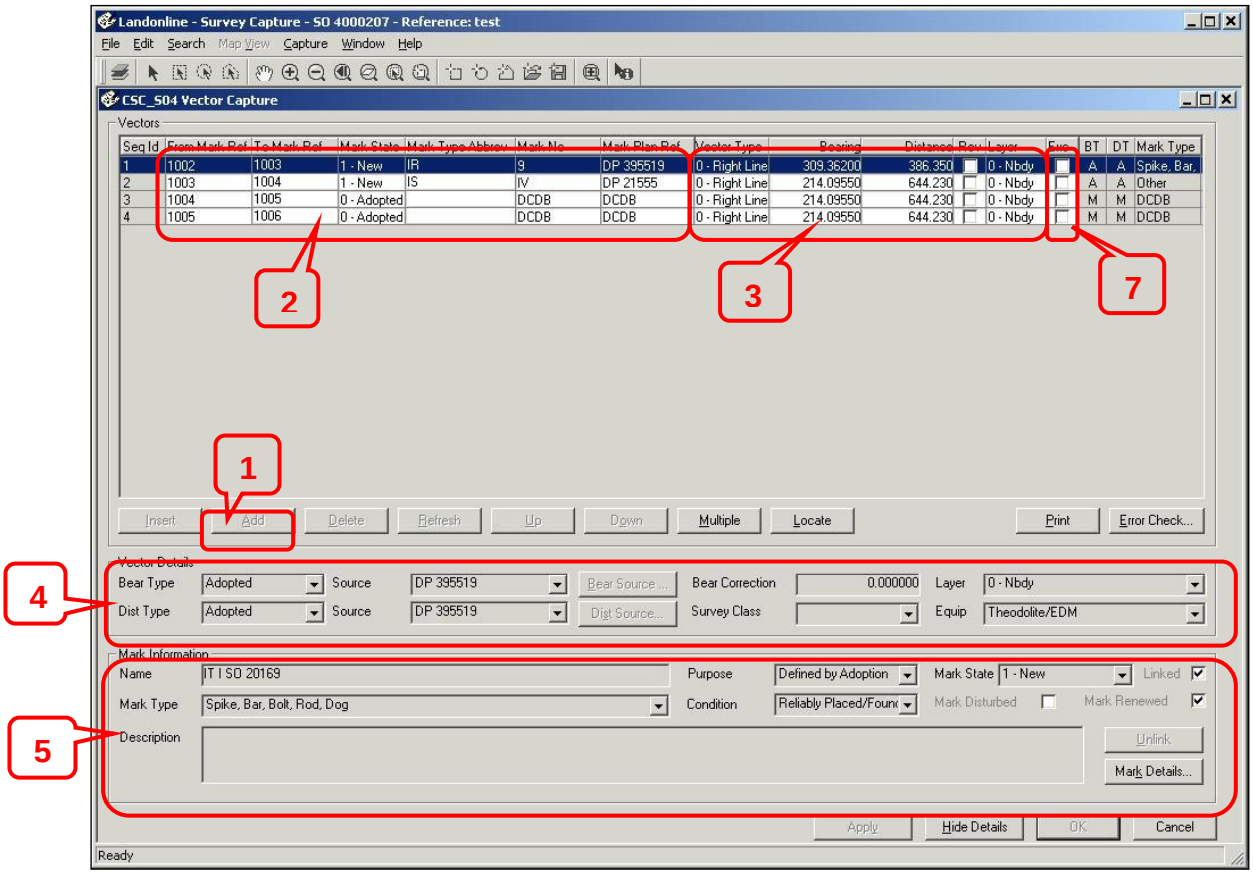
1. Select the row below the insertion point.
2. Click Insert
   Landonline inserts a new line with default values already displayed.

7.10.5 Enter a right line vector

There are two types of vector:

right line arc.

You can enter vectors using the Vector Capture screen. Right line vectors can also be entered as bearing only vectors or distance only vectors.



To enter a right line vector, in the Vector Capture screen:

1. Click Add to add a new row to the Vectors list:
   - The From Mark Ref and To Mark Ref field default to display sequential numbers (eg 1000 and 1001). Other fields also display default values.
2. Enter information to complete the To Mark fields in the Vectors list. Change the default entries as required.
   - Your selection in the Mark State field is also entered in the Mark State field in the Mark Information area.
   - The Mark Type Abrev, Mark No and Mark Plan Ref fields comprise the mark name entered in the Name field in the Mark Information area.
3. Enter information to complete the vector fields in the Vectors list. Change the default entries as required.
   - Select Right Line in the Vector Type field.
   - Enter a Bearing and Distance (eg to enter a bearing of 23° 56’30” type 23.5630).
   - Check the Rev checkbox if you need to reverse the bearing vector captured between two marks. This changes the order of the From and To Marks.
   - Select the topology layer to assign to the vector. For more information, see **Appendix C: Vector layer definitions** and **Landonline Help**. Your selection in this field is also entered in the Layer field in the Vector Details area.
4. Complete the Vector Details area. Change the default entries as required:
   - Select the Bearing Type and Distance Type.

- Select the Bearing Source and Distance Source for an adopted vector. Referenced Surveys entered in the Survey Header screen are available for you to select from the Source fields. Alternatively you can click [Bear Source ...] or [Dist Source ...] to search for the Referenced Survey. For more information about searching for surveys refer to the ***e-search* User Guide**.

  Note: You enter all Survey References in the Survey Header screen.
- Accept the Bearing Correction as it defaults in the Bear Correction field.
- Select the Survey Class for the vector from the Survey Class field. This can be different than the survey class for the *e-survey* in a multi class survey.
- Confirm the default in the Layer field is correct. If you change this the layer also changes in the Layer field in the Vectors list.
- Select the type of equipment used to calculate the vector's accuracy from the Equipment field. Select Unknown if the vector is calculated, adopted and you don't know how the measurement was derived.

5. Complete the Mark Information area. Change the default entries as required.
   - Select the Mark Type to match the Mark Type Abbrev entered in the Vectors list (eg Iron Tube to match IT.)
   - Select the Purpose and Condition of the mark.
   - Confirm the default in the Mark State field is correct. If you change this the Mark State also changes in the Vectors list.
   - Type a Description for the mark if required.
6. Repeat steps 1 to 5 for each new Right Line vector.
7. Check the Exc checkbox (if applicable) for each non boundary vector you want to exclude from the generated plan for this survey. You can only exclude non boundary vectors from the 0-Nbdy type of topology layer.

Note:

- You can use both the Tab and Enter keys to move between fields in this screen. If you press Enter when you have a button selected the button activates. In other Landonline screens you can only use the Tab key to move between fields.
- The maximum Bearing value you can enter is three significant digits and five decimal digits (eg 260.14000).
- When you select a vector which is in the 0-Nbdy (ie Non Boundary) layer, the Survey Class field in the Vector Details area will be disabled and display no value. If you made an error and need to enter a Survey Class, edit the Layer field in the Vectors area.

7.10.5.1 Enter Bearing and Distance only vectors

Right line vectors can also be entered as Bearing only vectors (eg a vector to a trig) or Distance only vectors.

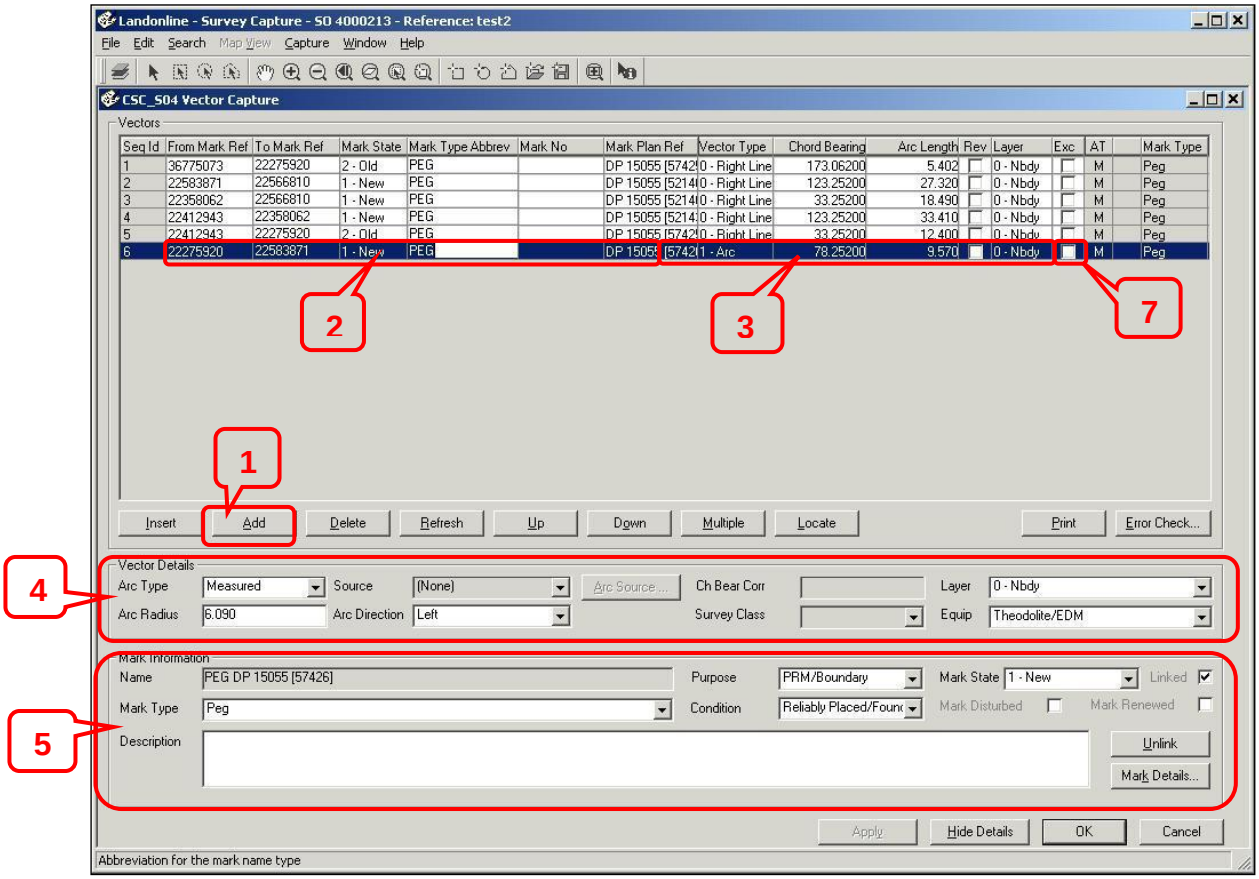
To enter a Bearing or Distance only vector:

1. Complete the steps for entering a Right Line vector, however, leave the Distance or Bearing field in the Vectors list blank.

Note: You must make sure the To Mark is a coordinated mark in terms of your *e-survey* before you can enter a Bearing or Distance only vector.

7.10.6 Enter an arc

The steps required to enter an arc are similar to those for entering a right line vector.



Henry Brown is capturing an Arc for his *e-survey*. Notice the fields have changed names to reflect the entries required for an Arc in both the Vectors list and the Vector Details area.

To enter an arc:

1. Click Add to add a new row to the Vectors list:
   - The From Mark Ref and To Mark Ref fields default to display sequential numbers (eg 1000 and 1001). Other fields also display default values.
2. Enter information to complete the To Mark fields in the Vectors list. Change the default entries as required.
   - Your selection in the Mark State field is also entered in the Mark State field in the Mark Information area.
   - The Mark Type Abrev, Mark No and Mark Plan Ref fields comprise the mark name entered in the Name field in the Mark Information area.
3. Enter information to complete the fields in the Vectors area. Change the default entries as required.
   - Select Arc in the Vector Type field.
   - Enter a Chord Bearing and Arc Length.
   - Check the Rev checkbox if you need to reverse the bearing vector captured between two marks.
   - Select the topology layer to assign to the vector. For more information, see **Appendix C: Vector layer definitions** and **Landonline Help**. Your selection in this field is also entered in the Layer field in the Vector Details area.
4. Complete the Vector Details area. Change the default entries as required:
   - Select the Arc Type. Arcs can only be adopted or calculated.

- Select the Arc Source for an adopted vector. Referenced Surveys entered in the Survey Header screen are available for you to select from the Source fields. If required click [Arc Source ...] to Search for the Referenced Survey. For more information about searching for surveys, refer to the ***e-search* User Guide**.
- Enter the Arc Radius.
- Select the Arc Direction.
  Arcs are recorded as either Left or Right. A left arc proceeds in a clockwise direction from the From Mark to the To Mark, ie ⊄. A right arc proceeds in an anti-clockwise direction from the From Mark to the To Mark, ie <⊅.
- Accept the chord bearing correction as it defaults in the Chord Bearing Correction field.
- Confirm the default in the Layer field is correct. If you change this the layer also changes in the Layer field in the Vectors list.
- Select Unknown as the Equipment type. You cannot measure arcs.

5. Complete the Mark Information area. Change the default entries as required.
   - Select the Mark Type to match the Mark Type Abbrev entered in the Vectors list (eg Iron Tube to match IT.)
   - Select the Purpose and Condition of the mark.
   - Confirm the default in the Mark State field is correct. If you change this the Mark State also changes in the Vectors list.
   - Type a Description for the mark if required.
6. Complete steps 1 to 5 for each new Arc.
7. Check the Exc checkbox (if applicable) for each non boundary vector you want to exclude from the generated plan for this survey. You can only exclude non boundary vectors from the 0-Nbdy type of topology layer.

Note: When you select a vector which is in the 0-Nbdy (ie Non Boundary) layer, the Survey Class field in the Vector Details area will be disabled and display no value. If you made an error and need to enter a Survey Class, edit the Layer field in the Vectors area.

7.10.7 Enter information for a mark

Tasks:

The tasks you can perform when recording mark information are:

- Enter a disturbed or renewed mark.
- Unlink an underlying mark.

The following headings correspond with these tasks and describe them in more detail.

7.10.7.1 Enter a disturbed or renewed mark

You would only enter details for a disturbed or renewed mark if the mark already exists in Landonline.

To enter a disturbed mark as part of a vector, in the Vector Capture screen:

1. Enter the vector. For more information about entering vectors, see topics **7.10.5 Enter a right line** and **7.10.6 Enter an arc**.
2. Click [Mark Details ...] to display the Mark Details screen.
3. Enter the mark as disturbed in the Mark Details screen. See topic **7.9.5 Record details of a disturbed or renewed mark**.

7.10.7.2 Unlink an underlying mark

For more information about linking and unlinking marks, see topic **7.15 Link marks**.

To remove a link to an underlying Landonline mark, in the Vector Capture screen:

1. Select the To Mark Ref in the Vectors area.
2. Click [Unlink Mark]

7.10.8 Change the vectors view

You can hide information in the Vector Capture screen to:

view only a list of vectors reduce the size of the screen to enable you to view the Spatial Display at the same time.

To view the Vectors list only, in the Vector Capture screen:

1. Click [Hide Details]. Landonline hides the Vector Details and Mark Information areas.

To view the Vector Details and Mark Information areas again:

1. Click [Show Details]

7.10.9 Apply one value to multiple vectors

You can apply the same value to more than one vector in the Vectors list in the Vector Capture screen. You must select only one type of vector (ie right line or arc).

To apply one value to multiple vectors, in the Vectors list:

1. Click [Multiple] to:
   - clear all values in the Vector Details and Mark Information areas, and
   - enable selection of multiple vectors in the Vectors list.
2. Hold the Ctrl key and select the vectors you require in the Vectors list.
3. Enter the value(s) you require to be the same for all selected vectors in one or more of the cleared fields in the Vector Details and/or Mark Information areas. Leave the remaining fields blank.
4. Click [Apply] to apply the same value for the changed field(s) to all selected vectors. The fields left blank retain the original values.
5. Click [Single] to return to single row editing.

Note:

- When the multiple select option is active you cannot edit details in the Vectors area.
- If you select 0-Nbdy as the Layer, the Survey Class field will be cleared and disabled. This will apply to all selected vectors.
- If you change the layer for selected vectors from 0-Nbdy to another layer, the Survey Class field will be enabled.
- Any pseudo vectors selected when applying values to multiple vectors will not change.

7.10.10 Reorder vectors

To change the order of vectors, in the Vector Capture screen:

1. Select the vector to move in the Vectors list.
2. Click [Up] or [Down] to move the vector to where you require.

7.10.11 Apply a bearing correction to a new *e-survey*

You can apply an adjustment to bearings on an old survey to bring it into terms with the new *e-survey*, but you must edit the bearings on the new *e-survey* to apply the new bearing correction.

To edit the bearing correction for an adopted bearing, in the Vectors list:

1. Select the vector.
2. Edit the bearing to apply a bearing correction:
   - For a right line, edit the value in the Bearing field.
   - For an arc, edit the value in the Chord Bearing field.
3. Repeat Steps 1 and 2 to apply a bearing correction to other vectors as required.

For example, you referenced survey DP 1234 in the Survey Header screen for survey DP 380011, recording a bearing correction of plus 0°00'40":

The bearing correction applied to adoptions from DP 1234 on new survey DP 380011, should be plus 0°00'40". (Because you entered the referenced survey DP 1234 in the Survey Header screen, this defaults in the Vector Details area of the Vector Capture screen as the Bearing Correction for a right line and Chord Bearing Correction for an arc.) If you have spatially adopted bearings from DP 1234 on the new survey DP 380011, you need to edit these bearings in the Vector Capture screen to reflect the bearing correction.

7.10.12 Display a vector in the Spatial Display screen

You can locate a vector in the Spatial Display screen from the CSC_S04 Vector Capture screen with a selected vector highlighted.

1. Ensure the Spatial Display screen is open.
2. Select the vector.
3. Click [Locate]
   - The Spatial Display screen is focused on with the selected vector highlighted.

Note: The [Locate] button is only available to be selected when the Spatial Display screen is open and Single button is selected.

7.10.13 Print a list of vectors

To print a list of vectors, in the Vector Capture screen:

1. Click [Print]
   - Landonline prints the full Vectors list showing right line vectors and arcs separately.

7.10.14 Delete selected vectors

Caution: If you delete a vector that links parts of the *e-survey* to existing marks, Landonline cannot generate new coordinates for the disconnected parts. Next time you refresh the Spatial Display they do not display. Lines associated with the vector are also deleted.

In Survey Capture, you can delete vectors from the Vector Capture screen and the Spatial Display.

7.10.14.1 Delete vectors in the Vector Capture screen

1. Select the vector in the Vectors list.
2. Click [Delete]
3. Click [Refresh] to update vectors and marks.

7.10.14.2 Delete vectors in the Spatial Display

1. Make the Capture Vectors layer active.
2. Select the vector(s) you want to delete.
3. Select **Capture | Delete Selected**.
4. Select **Capture | Refresh** to view your changes.

Note: Marks from deleted vectors remain listed in the Mark List screen but have no coordinates. To coordinate them, you must enter a vector from the mark to a linked mark, existing Landonline mark or a mark connected by vectors to an existing Landonline mark. All other vectors remain in the Vector Capture screen.

7.10.15 Capture vectors Toolkit

Table 7-5 lists other tools that assist with capturing marks.

Tool	Description
Landonline Help	Press F1 in the Spatial Display or Vector Capture screens to display information about these screens.
Quick Reference Cards	Section: *e-survey* Topics: • Capture Right Line Vectors. • Capture Arcs.

Table 7-5 Capture vectors Toolkit

7.11 Edit captured marks

You can edit a mark by selecting it in the Spatial Display, or selecting it in the Mark List screen. When your edits are complete, you can refresh to incorporate your changes in other Spatial Capture screens.

Tasks:

The tasks you can perform to edit captured marks are:

- Edit a mark in the Spatial Display.
- Edit a mark in the Mark List screen.
- Unlink a mark.
- Delete a mark.

The following headings correspond with these tasks and describe them in more detail.

7.11.1 Edit a mark in the Spatial Display

1. Make the Capture Marks layer active.
2. Select (Select Individual) and select the mark to edit.
3. Right click and select Edit to display the Mark Detail screen.
4. Make your changes. See topic **7.9.3 Add a new mark**.
   - If the mark is linked to a geodetic mark, the captured mark is automatically overridden with details of the geodetic mark. You cannot edit the mark Name and Mark Type fields, but you can change other fields if required.
   - If you change the Mark State to Adopted, the Condition field will automatically default to Not Specified, but remains an editable field.
5. Click OK to return to the Spatial Display.

6. Select **Capture | Refresh** to update the changes in the Spatial Display and other Survey Capture screens.

Note: To report any edits for geodetic marks you have linked in the *e-survey*, see **9.5 Pre-validation report information**.

7.11.2 Edit a mark in the Mark List screen

1. Select **Capture | Mark Capture** to display the Mark List screen.
   Landonline displays marks previously captured.
2. Select a mark and click [Edit...] to display the Mark Detail screen.
3. Make your changes. See topic **7.9.3 Add a new mark**.
   - If the mark is linked to a geodetic mark, the captured mark is automatically overridden with details of the geodetic mark. You cannot edit the mark Name and Mark Type fields, but you can change other fields if required.
   - If you change the Mark State to Adopted, the Condition field will automatically default to Not Specified, but remains an editable field.
4. Click [OK] to return to the Mark List screen.
5. Click [Refresh] to update the changes in the Survey Capture screens.

Note: To report any edits for geodetic marks you have linked in the *e-survey*, see **9.5 Pre-validation report information**.

7.11.3 Delete a mark

1. Select **Capture | Mark Capture** to display the Mark List screen.
2. Select the mark to delete.
3. Click [Delete]

Note: If there are any captured vectors associated with this mark you cannot delete the mark until you have deleted the associated vectors.

7.12 Error check vectors

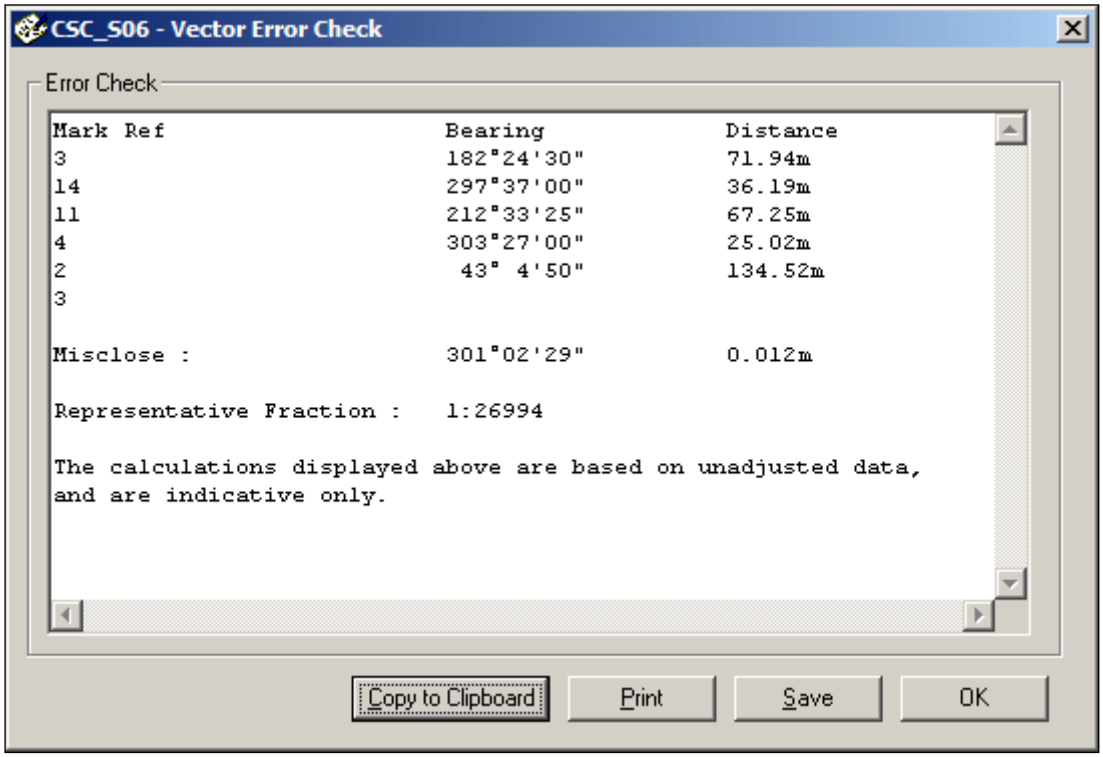
During Survey Capture you can perform a check on selected vectors.

The Vector Error check screen allows you to determine any gross errors in the vector capture using unadjusted coordinates. It calculates and displays the following values for a selected set of vectors:

- Bearing of misclose
- Distance of misclose
- Misclose RF (representative fraction).

There are two methods for performing error checks on vectors.

- Textual error check
- Spatial error check.



Henry Brown has performed an error check on a traverse in his *e-survey*. The results display in the Vector Error Check screen.

Tasks:

You can:

- Error check vectors using the Vector Capture screen.
- Error check vectors spatially
- Print, copy or save a Vector Error Report.

The following headings correspond with these tasks and describe them in more detail.

7.12.1 Error check vectors using the Vector Capture screen

During Survey Capture you can perform an error check on selected vectors textually using the Vector Capture screen. You can select the vectors in any order and in any layer.

Vectors do not need to be listed sequentially in the Vectors list, but they must be contiguous vectors in the *e-survey*.

To textually error check vectors:

1. Display the Vector Capture screen.
2. Click Multiple
3. Hold the Ctrl key and select all vectors forming the circuit in the Vectors list.
4. Click Error Check to validate the selected vectors.
   - When the circuit validates successfully, Landonline calculates the misclose and displays the Vector Error Check screen.
5. Print, copy or save if required. For more information see topic **7.12.3 Print, copy or save a Vector Error Report**.
6. Click OK to close the Vector Error Check screen.
7. Repeat Steps 3 and 4 for another error check.

8. Click Single when you have finished error checking to return to single row editing in the Vector Capture screen. You can perform an error check on single vectors in single row editing.

Note: Performing a new error check overwrites the previous error check report.

7.12.2 Error check vectors spatially

During Survey Capture you can perform an error check on vectors selected spatially.

For a closed traverse, you can select vectors in the traverse in any order.

For a traverse between two previously coordinated marks, the first line you select must be from one of the coordinated marks.

To spatially error check vectors, in the Spatial Display:

1. Navigate to the area of the traverse.
2. Make the appropriate vector layer active.
   You can only select vectors to check from one layer at a time.
3. Click
4. Hold the Ctrl key, select the starting line and select all vectors forming the circuit. You can select them in any order. As you select each vector it changes to yellow.
5. Select **Capture | Spatial Error Check** to validate the selected vectors.
   - When the circuit validates successfully, Landonline calculates the error check and displays the Vector Error Check screen.
6. Print, copy or save the report. For more information see **7.12.3 Print, copy or save a Vector Error Report**.
7. Click OK to close the Vector Error Check screen.
8. If you have another circuit to check, repeat Steps 1 to 7.

7.12.3 Print, copy or save a Vector Error Report

Tasks:

You can:

- Print the Vector Error Report.
- Copy the Vector Error Report.
- Save the Vector Error Report.

The following headings correspond with these tasks and describe them in more detail.

7.12.3.1 Print the Vector Error Report

To print a Vector Error Report, in the Vector Error Check screen:

1. Click Print
2. Select the printer and your print options.
3. Click OK to print and return to the Vector Error Check screen.

7.12.3.2 Copy the Vector Error Report

You can copy a Vector Error Report and paste it into another text editor (eg Microsoft Word).

To copy a Vector Error Report, in the Vector Error Check screen:

1. Click Copy to Clipboard
2. Open the text editor you require.
3. Paste to the text editor.

7.12.3.3 Save the Vector Error Report

You can save a Vector Error Report to a location on your computer.

To save a Vector Error Report, in the Vector Error Check screen:

1. Click Save
2. Specify the path and file name.
3. Click OK

7.12.4 Error check vectors Toolkit

Table 7-6 lists other tools that assist with error checking vectors.

Tool	Description
Landonline Help	Press F1 in the Vector Error Check Report to display information about the report.
Quick Reference Cards	Section: *e-survey* Topic: Error Check Vectors.

Table 7-6 Error check vectors Toolkit

7.13 Capture irregular boundaries

An irregular boundary is represented on a plan by an irregular line drawn between two surveyed positions. This can be a definition provided by a surveyor or you can select and adopt an irregular line that already exists in Landonline.

To capture an irregular boundary, you must have previously captured a start and end position as part of your *e-survey*. For irregular boundaries, you must also capture Class, Legal Description, and Physical Description.

Irregular boundaries can be captured:

- by adopting existing information from Landonline
- from a previously approved survey
- from new survey work.

Tasks:

The tasks you can perform to capture irregular boundaries are:

- Import an irregular boundary.
- Load an irregular boundary image.
- Digitise a new irregular boundary.
- Adopt an existing irregular boundary.
- Delete a captured irregular boundary.
- Merge irregular boundaries.

The following headings correspond with these tasks and describe them in more detail.

7.13.1 Import an irregular boundary

You can import an irregular boundary as part of a XML file. For more information on importing XML files see **6.2 Import a XML file into your *e-survey***.

Caution: When you import a XML file all data captured for your *e-survey* is replaced by the data in the XML file.

7.13.2 Load an irregular boundary image

You can load an image file saved to your computer and display the image in the Spatial Display. The image file can be a plan image (eg an approved plan from Landonline) or a new definition (drawn by hand or computer) that has been scanned.

The image loaded is added at the top of the Current Layers list and is only available during the current session. For information about layers in Survey Capture, see **Appendix A: Survey Capture layers**.

The image file must be a black and white .tif file using the standard CCITT G4 compression with a suggested resolution range between 150 and 300 DPI.

7.13.2.1 Load an irregular boundary image

In the Spatial Display:

1. Select **Capture | Irregular Boundaries | Load Irregular Boundary Image** to display the Select File screen.
2. Select the location and file name of the image.
3. Click Open
   Landonline displays the image in the Spatial Display as a temporary layer, called User Image 1, at the top of the Current Layers tab. Subsequent images are numbered incrementally.
4. Capture the irregular boundary. See topic **7.13.3 Digitise a new irregular boundary**.

7.13.2.2 Remove the temporary layer

To remove a temporary layer in the Current Layers tab, in the Spatial Display:

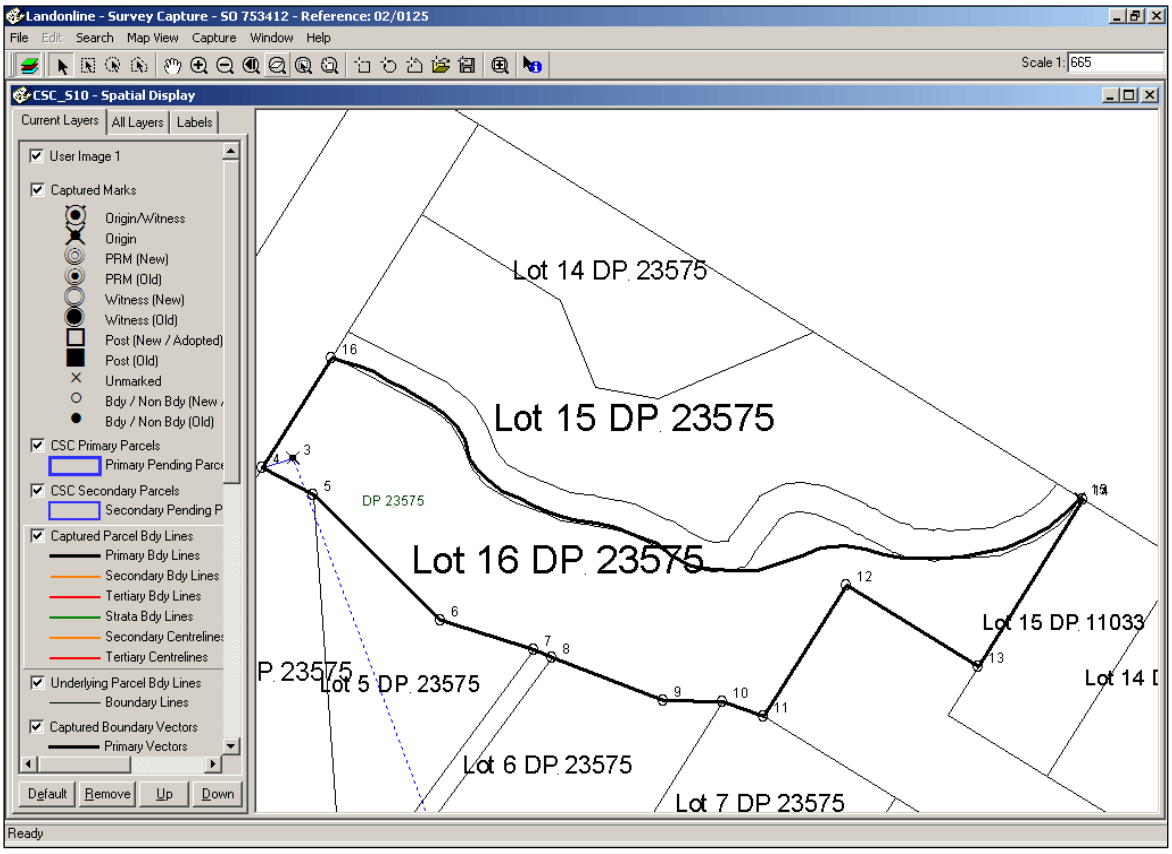
1. Select the temporary layer.
2. Click Remove

7.13.3 Digitise a new irregular boundary

You can digitise a new irregular boundary by digitising from an image displayed on screen or, where no image has been included, from captured vectors and existing underlying data.

To capture an irregular boundary that displays over two or more images, make sure the start and end marks for each irregular boundary image are survey defined positions (eg a mark or an unmarked position fixed by dimensions). An irregular boundary cannot start and end at the same position, eg a lake or island.

Irregular boundary segments are captured individually between defined surveyed positions. If you are selecting an existing irregular line, see topic **7.13.4 Adopt an existing irregular boundary**.



Henry Brown has captured the northern boundary of Lot 16 DP 23575. This is an irregular boundary. The newly captured irregular boundary shows a variation from the irregular boundary in Landonline.

To digitise a new irregular boundary, in the Spatial Display:

1. Load the irregular boundary. See topic **7.13.2 Load an irregular boundary image**.
2. Select the Captured Marks layer and make it active.
3. Click (Zoom Layer) to zoom to the extent of the captured marks.
4. Select **Capture | Irregular Boundaries | Capture Irregular Boundary**.
   - Landonline prompts you to select the mark from which the boundary line starts.
   - Click OK
5. Click (Select Individual) and select the start mark.
   - The colour of the mark changes to yellow.
6. Click (Continue).
   - Landonline prompts you to select the mark where the irregular boundary line will end.
   - Click OK
7. Select the end mark for this segment of the irregular boundary.

- The colour of the mark changes to yellow.

8. Click (Continue).
   - Landonline prompts you to adjust the display to make the image of the irregular boundary line to be digitise visible.
   - Click OK
9. Select the temporary image layer (eg User Image 1).
10. Click (Zoom Layer) to display the image.
    - Adjust the display if required to show the segment of the irregular boundary to be digitised.
11. Click (Continue).
    - Landonline prompts you to digitise the irregular boundary.
    - Click OK to begin digitising.
12. Beginning with the start mark, click to digitise the irregular boundary. Each position you click displays as an orange circle.
    - If required, (Pan) or (Zoom) to the image view, then click (Continue) to continue digitising.
    - If you mark a position in error, press the Delete key to remove the marked position. Repeat Delete to remove previous positions.
    - To cancel digitising the irregular boundary before completion, press the Esc key.
13. Double click the end mark to complete digitising.
14. Select the Capture Marks layer and click (Zoom Layer) to return to your *e-survey*.
15. Repeat Steps 1 to 14 to digitise additional irregular boundary segments.

Note: Once irregular boundaries are digitised the layer defaults to Primary. To modify the layers, see topic **7.14 Change a boundary layer**.

7.13.4 Adopt an existing irregular boundary

You can adopt an irregular boundary already saved in Landonline into your *e-survey*.

It is important to display the correct layers during this process.

To select an existing irregular boundary, in the Spatial Display:

1. Make the Underlying Parcel Bdy Lines layer active to display the irregular line you wish to select.
2. Click (Select Individual) and select the irregular boundary line.
3. Select **Capture | Irregular Boundaries | Select Existing Irregular Boundary**.
   The selected irregular boundary is captured into your *e-survey*.

7.13.5 Delete a captured irregular boundary

You can only delete an irregular boundary captured in your *e-survey*. You cannot delete an existing irregular boundary from Landonline.

To delete a captured irregular boundary, in the Spatial Display:

1. Make the Captured Parcel Bdy Lines layer active.
2. Click (Select Individual) and select the irregular boundary line to delete.
3. Select **Capture | Irregular Boundaries | Delete Irregular Boundary**. Landonline removes the irregular boundary from your *e-survey*.

7.13.6 Merge irregular boundaries

Landonline displays the latest parcel topology based on new irregular boundaries captured in your *e-survey* and the adoption of existing irregular boundaries.

Examples of when you can choose to include new irregular boundaries in your *e-survey* are when:

- areas of accretion and erosion change the irregular boundary
- a new definition of an irregular boundary captured for your *e-survey* is considered to be a better definition and will replace an existing irregular boundary definition.

In these instances the existing irregular boundaries may intersect with the new irregular boundary lines. This creates parcels and boundary line segments that are not required as part of the final *e-survey* parcel definitions.

The differences between existing and new irregular boundary lines are managed by Merge Irregular Boundaries. This process merges the required segments from the existing and new boundary lines to form the new irregular boundary. Non-required line segments from the existing irregular boundary are deleted.

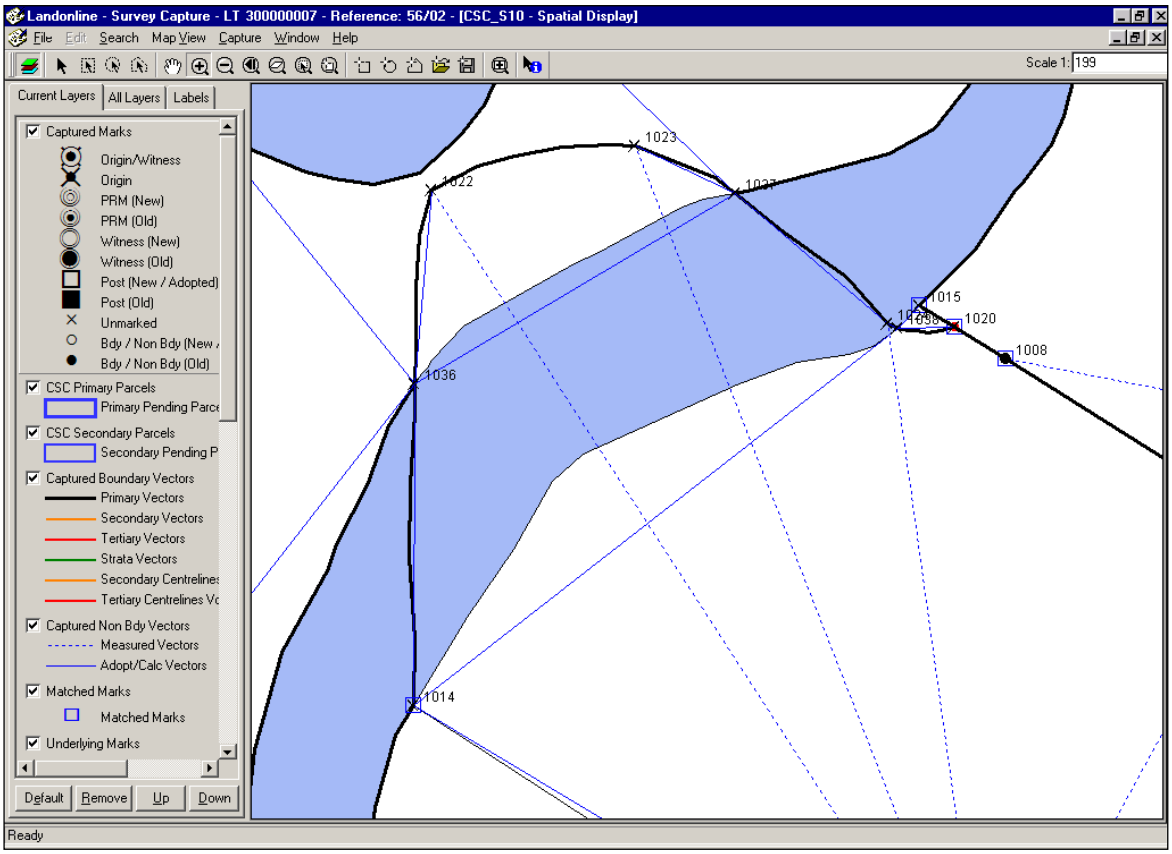
7.13.6.1 Pseudo vectors

Pseudo vectors are system calculated vectors between a system added mark and the nearest surveyed or Landonline mark. They hold the positions of intersected irregular boundary lines until the new positions are authorised. Pseudo vectors only show in the Spatial Display and are not included in the final CSD plans for the *e-survey*. The surveyor is not responsible for the accuracy of the Pseudo vectors. They are not authoritative and cannot be adopted by other surveyors.

You should not delete Pseudo vectors unless you need to delete the system added mark. In this instance you are better to replace the original irregular boundary.

System added pseudo vectors are automatically created with the O-Nbdy layer; therefore they will have no Survey Class.

7.13.6.2 Merge new and existing irregular boundaries



A new irregular boundary has been merged with an existing irregular boundary. The deleted lines of the existing irregular boundary display in a lighter line weight. You can see these between marks 1036 and 1037, and marks 1014 and 1015. Pseudo vectors and system added marks are also displayed.

To merge the line segments, in the Spatial Display:

1. Make the Captured Parcel Bdy Lines layer active to enable you to select the boundaries to merge.
2. Click (Select Individual).
3. Select the new irregular boundary line segment.
4. Hold the Ctrl key and select the existing irregular boundary line segment.
5. Select **Capture | Irregular Boundaries | Merge Irregular Boundary** to merge the lines.
   - Landonline creates intersections where the two boundaries cross. These are system added marks and show as Unmarked in the Mark List screen. Pseudo vectors are calculated from these marks to the nearest surveyed or Landonline mark.
6. Repeat Steps 3 to 5 for each line segment to be merged.
7. Delete the redundant lines. See topic **7.13.5 Delete a captured irregular boundary**.

Note: Once irregular boundaries are merged, the layer defaults to the previous layer.

7.13.7 Capture irregular boundaries Toolkit

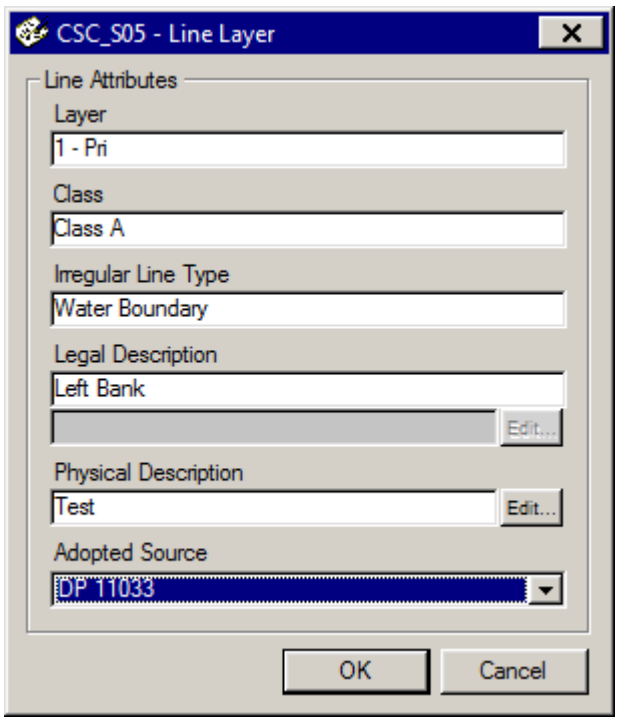
Table 7-7 lists other tools that assist with error checking vectors.

Tool	Description
Landonline Help	Press F1 to display Landonline Help.
Quick Reference Cards	Section: *e-survey* Topic: Capture Irregular Boundaries.

Table 7-7 Capture irregular boundaries Toolkit

7.14 Change a boundary layer

Where you have captured a new irregular boundary or adopted boundaries for a balance parcel, you may need to change the layer. You do this in the Line Layer screen.



To change a boundary line layer, in the Spatial Display:

1. Make the Captured Parcel Bdy Lines layer active.
2. Click (Select Individual) and select the line to edit.
   You can only edit one line at a time.
3. Select **Capture | Maintain Boundary Layer** to display the Line Layer screen.
4. Select the line layer you require. For more information about line layers, refer to **Vector Layer Definitions** in **Landonline Help**.
5. You will be required to select a Type for Irregular Lines (Water Boundary or Irregular Boundary).
6. Click OK

7.15 Link marks

Captured marks in your *e-survey*, already represented in Landonline, must be associated with the existing Landonline marks where they are proven to be reliable. This association is called linking. Links are required for old marks found during your *e-survey* and mark adoptions used in your definition.

Marks can be linked:

- manually, or
- automatically.

You should use manual linking initially to generally align your *e-survey* with the underlying information and then undertake automatic linking to complete the linking process.

All *e-surveys* must be linked to at least two existing Landonline marks to align the *e-survey* with Landonline data. Some *e-surveys* may not include existing Landonline marks (eg Monumentation CSD). In these instances add adoptions or calculations to at least two geodetic control or boundary marks to provide the links to existing marks.

You can only link marks to existing marks authorised in Landonline Marks for unapproved surveys are not visible in the Spatial Display and you will be unable to link to them.

Tasks:

The tasks you can perform when linking marks are:

- Link marks manually
- Link marks automatically
- Unlink marks
- Add and delete placeholders

The following headings correspond with these tasks and describe them in more detail.

7.15.1 Link marks manually

When linking marks manually you can:

- link marks in the Spatial Display
- link marks using the Mark Detail screen.

7.15.1.1 Link marks in the Spatial Display

1. Make the Underlying Marks layer active to Landonline display the marks.
2. Select **Capture | Link Marks | Manual** to make the Captured Marks layer active.
3. Select the captured mark.
4. Double click the corresponding underlying existing mark.
   Landonline links the captured mark to the selected existing mark.
   - If the automatic refresh option is active, Landonline recalculates the coordinates and geometry and refreshes the Spatial Display. This displays the new *e-survey* relative to the position of the existing Landonline mark. The link displays as a blue square symbol around the linked marks.
   - If the Automatic Refresh option is not active, the square symbol displays around the captured mark to indicate it has been linked. To refresh the Spatial Display, select **Capture | Refresh**.
5. Repeat Steps 2 to 4 to link all captured marks where corresponding Landonline marks exist, or link them automatically. See topic **7.15.2 Link marks automatically**.

Note:

- If you link a captured mark to a geodetic mark, the captured mark is overridden with details of the geodetic mark. You cannot edit the name of the mark (ie Mark Type Abbrev, Mark No, Mark Plan Ref fields) or the Mark Type field, but you can change other fields if required. If you change the Mark State to Adopted, the Condition field will automatically default to Not Specified, but remains an editable field.
- To report any edits for geodetic marks you have linked in the *e-survey*, see **9.5 Pre-validation report information**.

7.15.1.2 Link marks using the Mark Detail screen

Use this method when linking to a mark in Landonline that has a unique name.

1. Display the Mark Details screen with details of the mark to link. See topic **7.11.2 Edit a mark in the Mark List screen**.
2. Click Link Mark... to search for and select the existing Landonline mark. For more information about searching for marks, refer to the ***e-search* User Guide**.
   - Landonline links the selected marks and displays its identifier in the Lol Mark Id field.
3. Repeat step 2 for other marks you want to manually link.

Note:

- If you link a captured mark to a geodetic mark, the captured mark is overridden with details of the geodetic mark. You cannot edit the name of the mark (ie Mark Type Abbrev, Mark No, Mark Plan Ref fields) or the Mark Type field, but you can change other fields if required. If you change the Mark State to Adopted, the Condition field will automatically default to Not Specified, but remains an editable field.
- To report any edits for geodetic marks you have linked in the *e-survey*, see **9.5 Pre-validation report information**.

7.15.2 Link marks automatically

You can automatically link captured marks to existing Landonline marks. The automatic linking process attempts to link all captured marks not yet linked, by searching the space surrounding the captured mark. The extent of the search made is dictated by a spatial tolerance.

You should:

- manually link two or more marks to generally align the *e-survey* to existing Landonline information before using automatic linking; and
- choose the smallest appropriate tolerance to begin automatic linking and progressively increase the tolerance level to ensure correct mark links are achieved.

There is a range of six proximity tolerances to choose from before you can begin to automatically link marks. The proximity tolerance options in Landonline are:

- 0.03m
- 0.10m
- 0.30m
- 1.00m
- 3.00m
- 10.00m

While the risk of linking to an incorrect mark cannot be removed, linking is restricted to the official coordinate system and where the mark is commissioned. System added marks are not included in the automatic link process.

Previously linked marks are not affected when you link automatically.

7.15.2.1 Link automatically

To link marks automatically, in the Spatial Display:

1. Select **Capture | Link Marks | Automatic |** and the proximity tolerance you require. Landonline automatically links all captured marks (where there is one mark within the tolerance chosen) not previously linked.
   - Landonline links a maximum of 50 marks at one time. If necessary, repeat this process to link additional marks in your *e-survey*.

When more than one existing mark is found within the proximity tolerance surrounding a captured mark, a link is not made. Repeat automatic linking using a different proximity tolerance for the unlinked marks, or manually link these marks. See topic **7.15.1 Link marks manually**.

Once automatic linking completes Landonline displays a message advising the:

- tolerance value you specified
- number of captured marks in the survey
- number of captured marks linked before automatic linking
- number of captured marks linked after automatic linking.

Note:

- When you automatically link there may be instances where you link to the wrong mark. In these instances, unlink the mark and manually link it to the correct mark.
- If you link a captured mark to a geodetic mark, the captured mark is overridden with details of the geodetic mark. You cannot edit the name of the mark (ie Mark Type Abbrev, Mark No, Mark Plan Ref fields) or the Mark Type field, but you can change other fields if required. If you change the Mark State to Adopted, the Condition field will automatically default to Not Specified, but remains an editable field.
- To report any edits for geodetic marks you have linked in the *e-survey*, see **9.5 Pre-validation report information**.

7.15.3 Unlink marks

You can unlink marks in three ways by using the:

- Mark Detail screen
- Vector Capture screen, or
- Spatial Display.

7.15.3.1 Unlink a mark from the Mark Detail screen:

1. Display the Mark Detail screen with details of the mark to unlink.
2. Click [Unlink Mark]
3. Click [OK]
4. Repeat these steps to unlink other marks if required.

7.15.3.2 Unlink a mark from the Vector Capture screen:

1. Select the vector for the To Mark to be unlinked. Details of the mark display in the Mark Information area.
2. Click [Unlink]
3. Repeat these steps to unlink other marks if required.

7.15.3.3 Unlink a mark from the Spatial Display:

1. Navigate to the area you require.

2. Make the Captured Marks layer active.
3. Click (Select Individual) and select the mark.
4. Right click and select Unlink.

7.15.4 Add and delete placeholders

In the Spatial Display you can create a placeholder to force the spatial location of a captured mark to a location relative to the existing Landonline data. This creates a visible mark that acts like an underlying mark you can link to.

The placeholder does not create a mark in the existing Landonline data. It is used to:

- make sure a new captured mark, intended to be on an underlying boundary, lies on the boundary
- make sure relative coordinate positions are maintained when existing Landonline data is inconsistent with your new definition
- maintain topology.

Placeholders can be located:

- on an existing boundary
- away from an existing boundary to correct the relationship of new non boundary marks and existing boundaries.

Placeholders can be added or deleted at any time while capturing an *e-survey*.

7.15.4.1 Add a placeholder

To add a placeholder on an existing boundary, in the Spatial Display:

1. Navigate to the place required on the boundary.
2. Make the Underlying Parcel Bdy Line layer active.
3. Select the boundary line.
4. Select **Capture | Placeholders | Add Placeholder**.
5. Click (Select Individual) and click the position in the Spatial Display for the placeholder.
   The placeholder displays as a solid red circle.
   - If you click on a straight line or arc the placeholder is added on the line at the point you clicked.
   - If you click on an irregular line the placeholder is added at the nearest point where the line changes direction.
   - If you click away from any line, the placeholder is added to the boundary line nearest to where you clicked.

To add a placeholder not on an existing boundary, in the Spatial Display:

1. Navigate to the area you require.
2. Select **Capture | Placeholders | Add Placeholder**.
3. Click (Select Individual) and click the position in the Spatial Display for the placeholder.
   The placeholder displays as a solid red circle.

Caution: When you add a placeholder to an existing line which is in close proximity to another line, make sure you put the placeholder on the correct line.

7.15.4.2 Delete a placeholder

In the Spatial Display:

1. Make the Placeholder layer active.
2. Click (Select Individual) and select the placeholder. Landonline inserts a yellow square on the red circle of the placeholder.
3. Select Capture | Placeholders | Delete Placeholder.

7.15.5 Link marks Toolkit

Table 7-8 lists other tools that assist with linking marks.

Tool	Description
Landonline Help	Press F1 to display Landonline Help.
Quick Reference Cards	Section: *e-survey*. Topic: Link Marks.

Table 7-8 Link marks Toolkit

7.16 Process balance parcels

During survey capture this process is used to deal with the balance of a parcel that does not need to be dimensioned but must be created in order to keep the database topology correct (ie vectors don't need to be captured).

For example:
A road legalisation stops part of a road. At survey capture the whole road parcel is extinguished in the survey. New sections will be created to stop part of the road. The remainder of the existing road parcel must be dealt with as a balance parcel and called Road to keep the cadastral database up to date.

You can process a balance parcel automatically or manually.

7.16.1 Automatically process balance parcels

Automatic processing is ideal for large balance parcels as the system selects the lines for you. There are two automatic methods:

- Selecting existing boundary lines, see topic 7.8.4 Select existing boundary lines, or
- Adopting existing boundary definitions, see topic 7.8.3 Adopt existing boundary definitions.

7.16.2 Manually process balance parcels

Manual processing is ideal for creating small balance parcels. LINZ recommends that you use an automatic process for larger balance parcels.

Methods:

The methods you can use to manually process a balance parcel are:

- Processing balance parcel using underlying parcel boundary lines, or
- Processing balance parcel using underlying vectors.

The following headings correspond with these methods and describe them in more detail.

7.16.2.1 Processing balance parcel using underlying parcel boundary lines

Use this method to manually process balance parcels using the Underlying Parcel Bdy Lines layer in the Spatial Display. This is ideal for creating a small balance parcel.

To automatically process a balance parcel, see topic **7.16.1 Automatically process balance parcels**.

To manually capture a balance parcel using the Underlying Parcel Bdy Lines layer, in the Spatial Display:

1. Navigate to the parcel you require.
2. Turn on the Underlying Marks layer and the Underlying Parcel Bdy Lines layer.
3. Ensure that all your captured marks are linked to existing Landonline marks, especially at the Start and End positions of where the balance parcel will be created.
4. Make the Underlying Parcel Bdy Lines layer active.
5. Hold the Shift key down and select each of the Underlying Parcel Bdy Lines that make up the balance parcel between the Start and End linked captured marks.
6. Once you have selected all the Underlying Parcel Bdy Lines, right click and select Adopt.
7. Add a balance parcel in the Parcel List screen and link it to this newly created balance parcel in the Spatial Display. See topic **7.17 Capture parcels**.

7.16.2.2 Processing balance parcel using underlying vectors

Use this method to manually process balance parcels using the Underlying Vectors layer in the Spatial Display. This is ideal for creating a small balance parcel.

To automatically process a balance parcel, see topic **7.16.1 Automatically process balance parcels**.

To manually capture a balance parcel using the Underlying Vectors layer, in the Spatial Display:

1. Navigate to the parcel you require.
2. Turn on the Underlying Marks layer and the Underlying Vectors layer.
3. Ensure that all your captured marks are linked to existing Landonline marks, especially at the Start and End positions of where the balance parcel will be created.
4. Make the Underlying Vectors layer active.
5. Hold the Shift key down and select each of the Underlying Vectors that make up the balance parcel between the Start and End linked captured marks.
6. Once you have selected all the Underlying Vectors, right click and select Adopt.
7. Add a balance parcel in the Parcel List screen and link it to this newly created balance parcel in the Spatial Display. See topic **7.17 Capture parcels**.

Note: Not all adopted underlying vectors will adopt through to the correct layer. Ensure you check these adopted vectors and where necessary, change the layer to the correct one for your survey.

7.17 Capture parcels

e-surveys must identify all parcels to be created, extinguished, referenced, proposed, encroached or affected. See **Appendix E: Parcel action definitions**.

Parcels are of two types:

- Parcels with boundary dimensions and lines (ie they have a surveyed definition).
  These are recorded spatially and textually. They can be viewed in the Spatial Display.
- Parcels without boundary dimensions and lines.
  These are only recorded textually. They are represented in Landonline in titles and plan images (eg flats, units and some diagrams on transfer).

When capturing new parcels (ie created or proposed) you capture them in two stages:

1. Capture the textual parcel details, including the parcel appellation, in the Parcel Details screen. For parcels with no surveyed definition this is all that is required.
2. Link the textual parcel details to the surveyed definition of the parcel in the Spatial Display. This step is only required for parcels that have a surveyed definition.

Any CSC Parcels created during capture will not display in diagrams in Plan Generation layout sheets. When you submit the *e-survey*, the CSD Plan header and Title Plan header will only list the Parcel Intent for CSC Parcels.

When capturing existing parcels (ie extinguished, referenced, encroached or affected) there are two methods you can use:

- Capture spatially.
  This method can only be used for parcels with a surveyed definition.
- Capture by searching for the appellation.
  This is the only method for capturing existing parcels that are without a surveyed definition but can be used for both types of parcels.

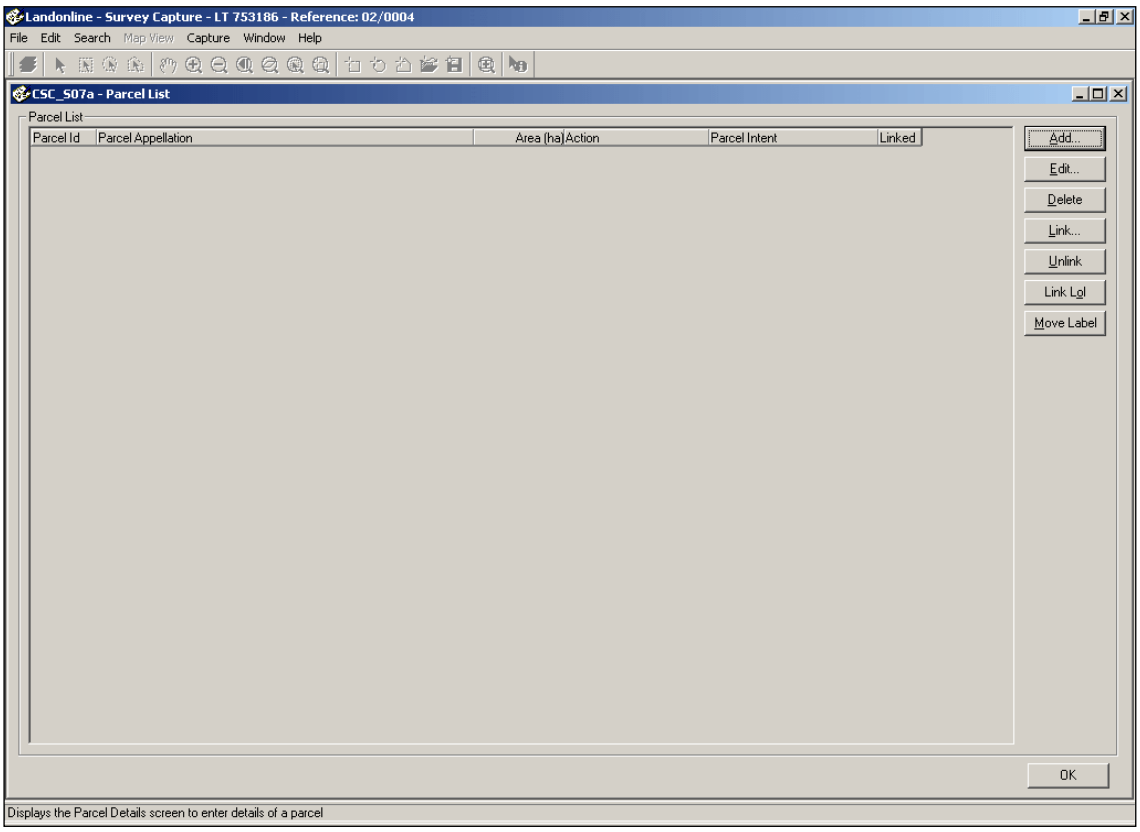
Tasks:

The tasks you perform to capture parcels are:

- Display the Parcel List screen.
- Capture a new parcel using Parcel Detail screen.
- Capture new parcels for Unit and Cross Lease Developments.
- Capture existing parcels spatially.
- Capture existing parcels by searching for the appellation.
- Link new parcels.
- Include Missed marks.
- Edit parcels.

The following headings correspond with these tasks and describe them in more detail.

7.17.1 Display the Parcel List screen



The Parcel List screen displays a summary of all parcels included in the *e-survey*. You use this screen to:

- open the Parcel Detail screen
- link textual parcels to parcels with a surveyed definition in the Spatial Display.

To display and use the Parcel List screen:

1. Select **Capture | Parcel Capture…**

7.17.2 Capture a new parcel using the Parcel Detail screen

The first stage of capturing new parcels is to enter the textual information.

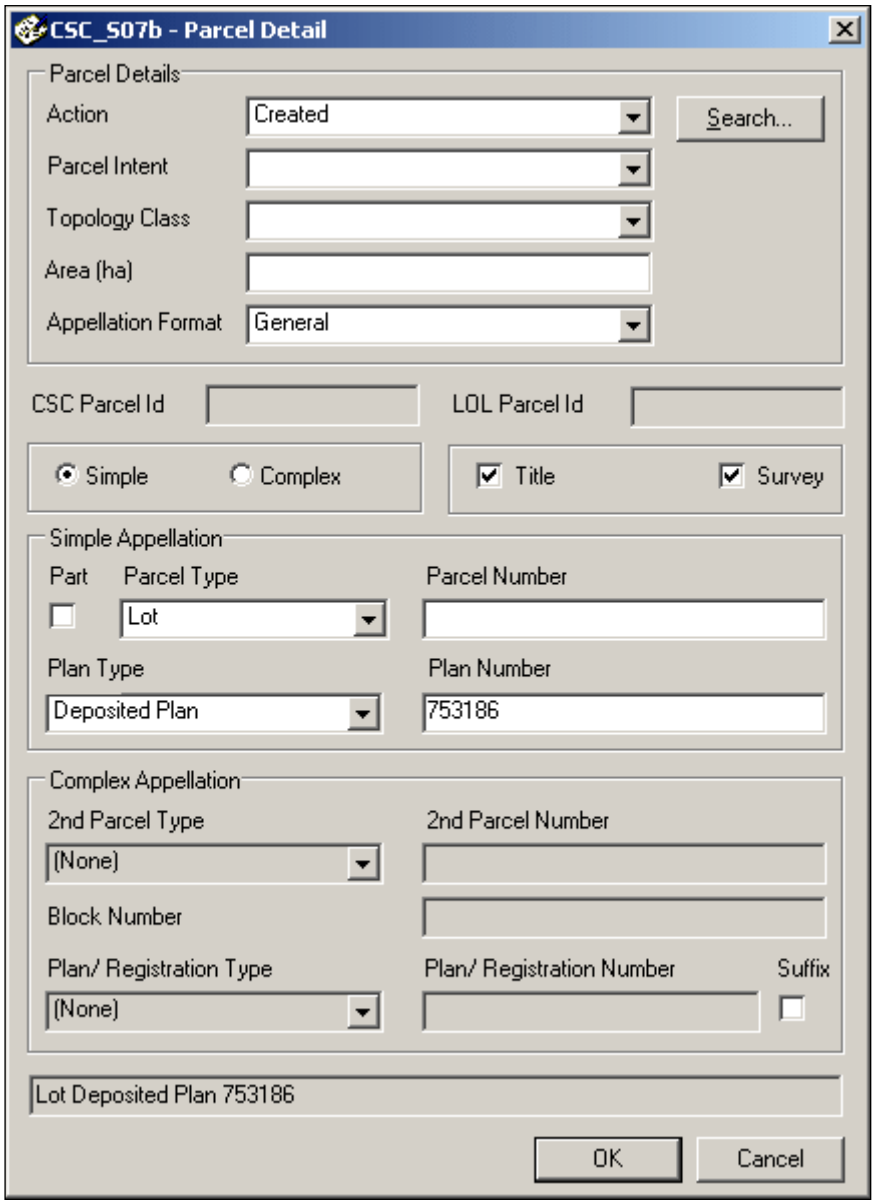
Tasks:

To capture parcels in the Parcel Detail screen you:

- Display the Parcel detail screen.
- Add new parcel information.
- Complete a General appellation.
- Complete a Maori appellation.
- Complete an Other appellation.

The following headings correspond with these tasks and describe them in more detail.

7.17.2.1 Display the Parcel Detail screen



To display the Parcel Detail screen to add a new parcel, in the Parcel List screen:

1. Click Add...

To display the Parcel Detail screen to edit an existing textual parcel, in the Parcel List screen:

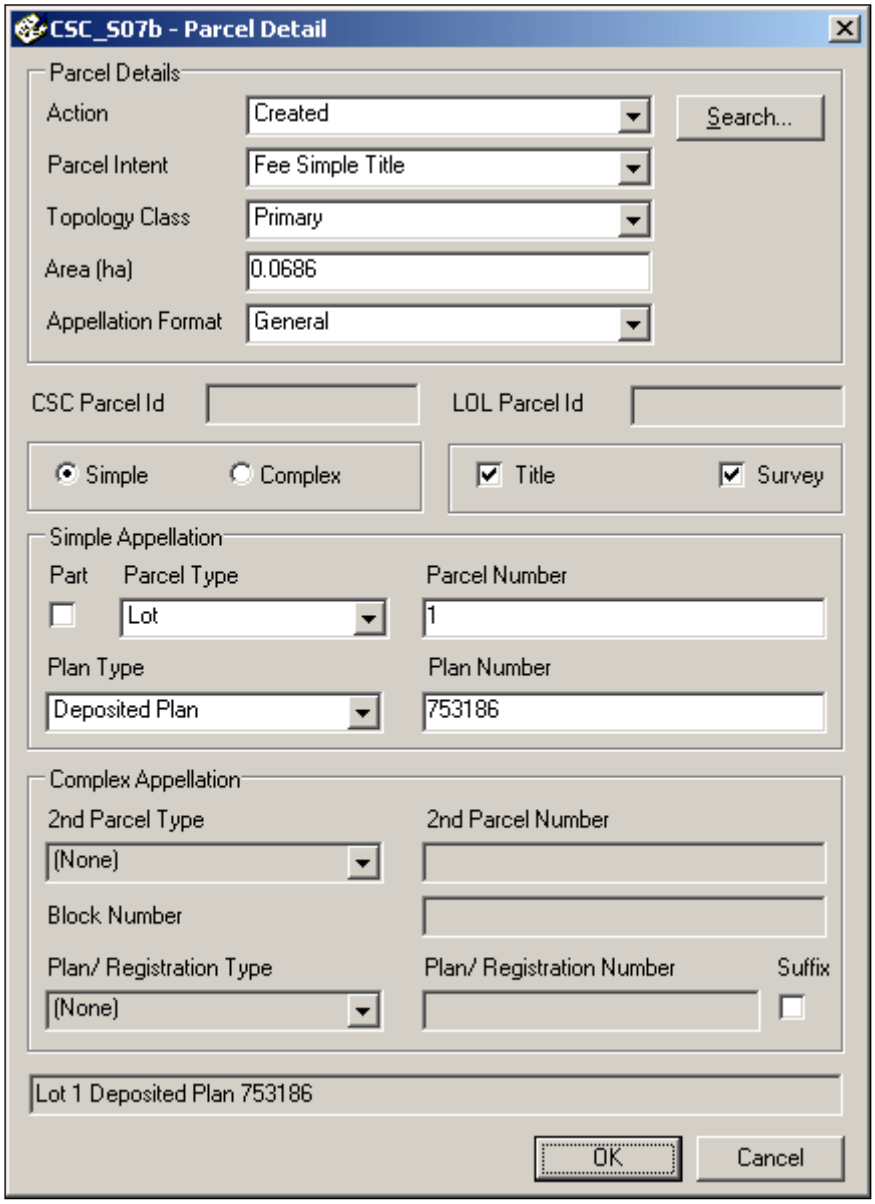
1. Select the parcel to be edited from the Parcel list.
2. Click Edit...

7.17.2.2 Add new parcel information

This applies to all appellation formats.

Before you can create parcels you must have the following information:

- Parcel intent
- Topology Class
- Area (if applicable)
- Proposed Appellation.


CSC_S07b - Parcel Detail
Parcel Details
Action
Created
Search...
Parcel Intent
Fee Simple Title
Topology Class
Primary
Area (ha)
0.0686
Appellation Format
General
CSC Parcel Id
LOL Parcel Id
Simple
Complex
Title
Survey
Simple Appellation
Part
Parcel Type
Lot
Parcel Number
1
Plan Type
Deposited Plan
Plan Number
753186
Complex Appellation
2nd Parcel Type
(None)
2nd Parcel Number
Block Number
Plan/ Registration Type
(None)
Plan/ Registration Number
Suffix
Lot 1 Deposited Plan 753186
OK
Cancel

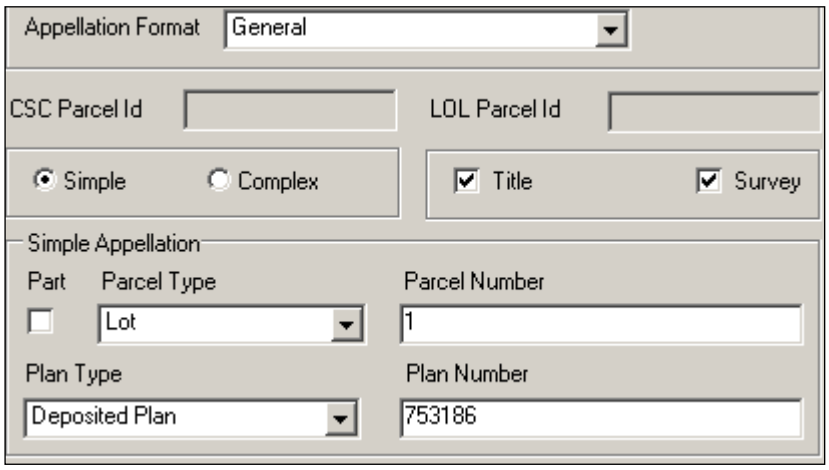
To enter details of a new parcel, in the Parcel Details screen:

1. Select Created as the type of Action for the parcel. See **Appendix E: Parcel action definitions**.
2. Select the Parcel Intent, eg Fee Simple, Title, Easement, Hydro, Principal Unit. For more information, refer to **Landonline Help**.
3. Select the Topology Class. The items in this list changes depending on the Parcel Intent you select. See **Appendix D: Topology layer definitions**.
4. Enter the Area of the parcel in hectares, if required (eg enter 0.0648 for 648 square metres).
5. Select the Appellation Format.
   If you select Maori or Other as the appellation format, the appellation fields in the screen change.
6. Enter the appellation for the parcel.
7. Click OK to return to the Parcel List screen. The parcel displays in the Parcel List.

7.17.2.3 Complete a General appellation

A General appellation can have a Simple or Complex format.

Simple format



All new parcel appellations must be in a Simple format, except balance parcels.

To enter a General appellation with a simple format, in the Parcel detail screen:

1. Complete the Parcel Details area. See topic **7.17.2.2 Add new parcel information**. Make sure General is selected as the Appellation Format.
2. Make sure Simple is selected for named parcels. This activates the Simple Format appellation fields and defaults the Title and Survey checkboxes to checked.
   - For a new parcel the appellation is both a Title appellation (legal description) and a Survey appellation (parcel appellation).
3. Complete the Simple Appellation fields for a named parcel.
   - Leave Part unchecked for a whole appellation. Check Part if the appellation is part of a block, section or lot.
   - Select the Parcel Type.
   - Enter the number for the parcel in the Parcel Number field.
   - Select the type of plan on which the appellation is recorded in the Plan Type field (eg Deposited Plan).
   - Enter the number of the plan in the Plan Number field.
4. Click OK

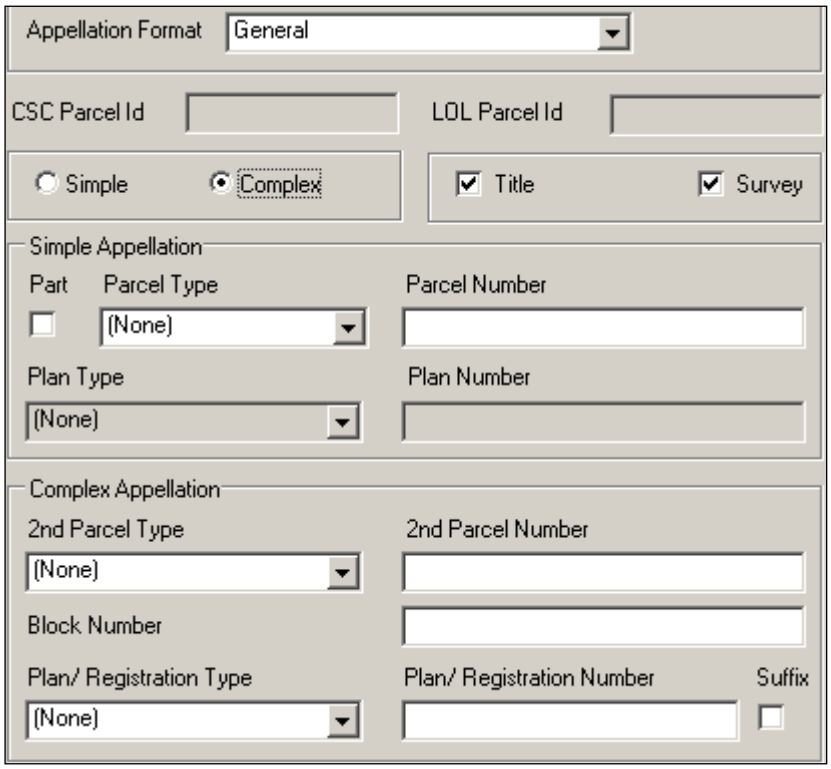
- If this is an un-named parcel, a message displays advising the Title and Survey checkboxes are not checked and appellation details will not be saved. Click Yes to continue and save.

Note:

- As you enter information in the appellation fields, the appellation displays in the bottom of the screen.
- The options in the Parcel Type and Plan Type fields are listed in the order they are most frequently used. They are not listed in alphabetical order.

Complex format

Only use a Complex format for retaining balance parcel appellations.



To enter a General appellation with a Complex format, in the Parcel detail screen:

1. Complete the Parcel Details area. See topic **7.17.2.2 Add new parcel information**. Make sure General is selected as the Appellation Format.
2. Select Complex for named parcels. This activates the Complex Appellation fields and the Part, Parcel Type and Parcel Number fields. The Title and Survey checkboxes also default to checked.
3. Complete the Complex Appellation fields for a named parcel. You must complete the Plan/Registration Number.

- Leave Part unchecked for a whole appellation. Check Part if the appellation is part of a block, section or lot.
- Select the primary Parcel Type in the Simple Appellation area.
- Enter the first number for the parcel in the Parcel Number field.
- Select the second type for the parcel in the 2nd Parcel Type field.
- Enter the second number for the parcel in the 2nd Parcel Number field. Only complete this field if you have entered a second parcel type.
- Enter the Block Number for the appellation.

- Select the type of plan, or registration district on which the appellation is recorded, in the Plan/Registration Type field.
- Enter the number of the plan or the name of the registration district, in the Plan/Registration Number field.
- Check Suffix if the registration type and registration name are reversed on the plan (eg Town of Kaiteriteri to Kaiteriteri Town of).

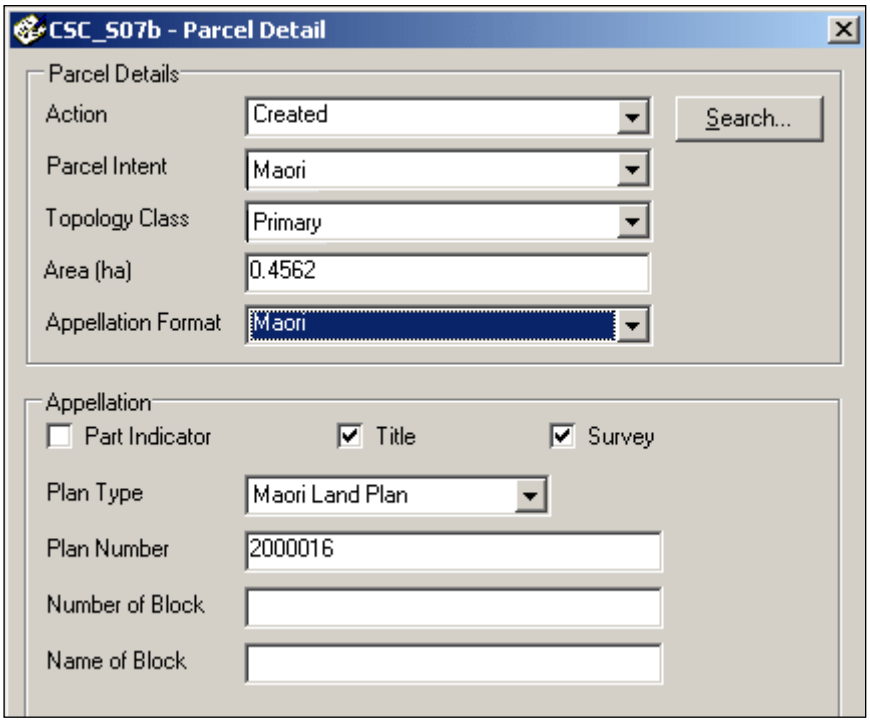
4. Click OK

Note:

- As you enter information in the Complex Appellation fields, the appellation displays in the bottom of the screen.
- The first five options in the Plan/Registration Type field are listed in the order they are most frequently used. All other options are listed alphabetically.

7.17.2.4 Complete a Maori appellation

You must enter the appellation for the created Maori parcel.

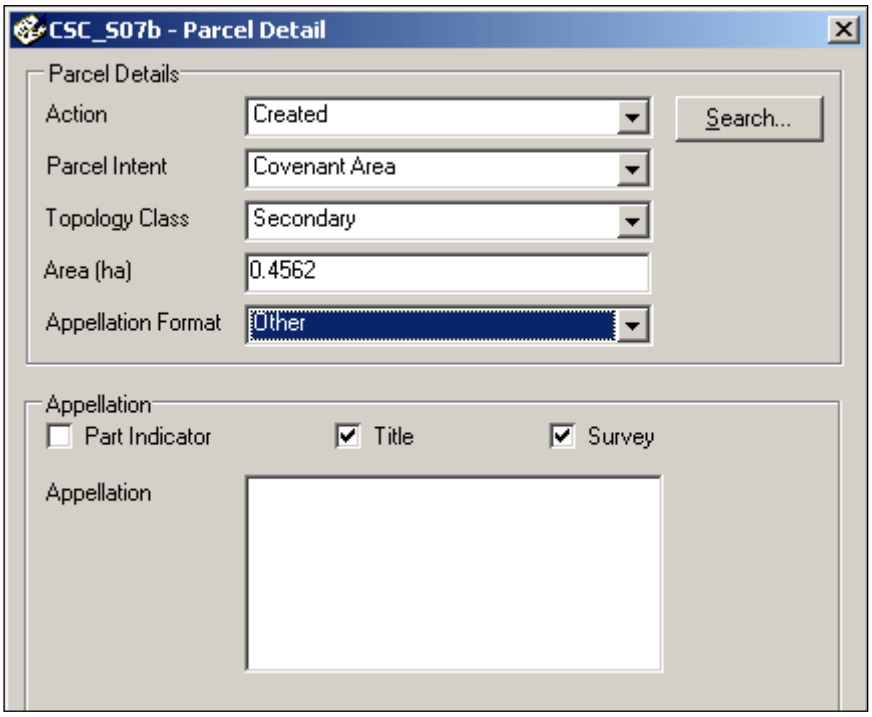


1. Complete the Parcel Details area. See topic **7.17.2.2 Add new parcel information**. Select Maori as the Appellation Format
2. Complete the Maori Appellation fields:

- Check Part Indicator if the appellation is part of a block.
- Leave the Title and Survey checkboxes checked. For a new parcel, the appellation is both a Title appellation (legal description) and a Survey appellation (parcel appellation).
- Make sure the Plan Type is correct. When the Parcel Intent is Maori this field will default to Maori Land Plan.
- Enter the Plan Number. You must enter the plan number for a Maori Land Plan.
- Enter the parcel number for the appellation in the Number of Block field (eg 3C2A).
- Enter the name of the Maori block for the appellation in the Name of Block field (eg Puketapu).

3. Click OK

7.17.2.5 Complete an Other appellation



1. Complete the Parcel Details area. See topic **7.17.2.2 Add new parcel information**. Select Other as the Appellation Format.
2. Complete the Other Appellation fields:
   - Check Part Indicator if the appellation is part of a block.
   - Leave the Title and Survey checkboxes checked. For a new parcel, the appellation is both a Title appellation (legal description) and a Survey appellation (parcel appellation).
   - Enter text for the appellation in the Appellation field.
   - If the parcel is un-named uncheck the Title and Survey checkboxes and do not enter data in the Appellation field. When you save a message displays advising the Title and Survey checkboxes are not checked and appellation details will not be saved. Click Yes to continue and save.
3. Click OK

Caution: Type appellation details in a format that will enable them to be searched on. Be particularly careful of spaces and capital letters. For more information about appellation formats, refer to the ***e-search* User Guide**.

7.17.3 Capture new parcels for Unit and Cross Lease Developments

Unit or Flat parcel and Cross Lease Developments do not have a spatial definition in the Spatial Display. The definition for these types of developments is depicted on a graphic page which you attach to the *e-survey* as a Plan Graphic type supporting document. The supporting document is included as a page in the CSD Plan and Title plan. See **Appendix K: *e-survey* supporting document types**.

The textual information for the parcels in these developments must be captured as part of your *e-survey*.

The following table outlines a summary of actions required for flat plans and cross-lease plans.

Purpose	Landonline Survey Purpose	Type of Dataset	Spatial Capture	Current Parcel Action	New Parcel Action	Place Plan Label	Other actions to perform
LT Standard Flat Plan/Cross-lease	Flat plan / Cross-lease	Survey	None	Referenced	Create	Yes	None
LT Flat Plan/Cross-lease with Survey Sheet	Flat plan / Cross-lease with survey sheet	Survey	Survey Inform-ation only	Referenced	Create	Yes	LINZ Internal staff will execute and authorise an adjustment of captured survey data to adjust the network.
LT Flat Plan/Cross-lease with survey sheet requiring Approval for Record Purposes	(a) Flat plan / Cross-lease with survey sheet	Survey	None	Referenced	Create	Yes	Survey information is not captured spatially. Scan the survey plan as the survey sheet.
	or (b) LT Flat plan / Cross-lease	Survey	None	Referenced	Create	Yes	Attach the survey sheet as a **Field Note** type of supporting document.
	or (c) LT Flat plan Cross-lease	Survey	None	Referenced	Create	Yes	Submit SO Record Purposes as a separate survey.
SO Record Purposes lodged as a separate survey	SO Record Purposes	Survey	None	None	None	Yes	None

Tasks:

The tasks you can perform to capture parcels for Units and Cross Lease Developments are:

- Capture parcels for a Unit or Cross Lease Development.
- Capture parcels for a Proposed Unit Development plan.
- Capture parcels for a Staged Unit plan.
- Capture parcels for Unit and Cross Lease Plans with a survey sheet.

The following headings correspond with these tasks and describe them in more detail.

7.17.3.1 Capture parcels for a Unit or Cross Lease Development

You must capture all parcels for:

- a single stage Unit Development; or
- a Cross Lease Development.

To capture parcels for a Unit or Cross Lease Development, in the Parcel Detail screen:

1. Select Created as the type of Action for the parcel.
2. Select the Parcel Intent. You must select either:
   - Principal Unit or Accessory Unit for a Unit Development; or
   - Cross Lease Building for a Cross Lease Development. For more information about parcel intents refer to **Landonline Help**.
3. Select No Topology in the Topology Class field.

4. Leave the Area field blank.
5. Select the Appellation Format and complete the details. See topic **7.17.2.3 Complete a General appellation**.
6. Click OK to save and return to the Parcel List screen.

Note:

- Capture the parcel the unit or flat is over and edit the parcel to change the action to Referenced. You will find it easier to use the spatial selection method to capture the parcel to avoid linking to the wrong parcel. See **7.17.4 Capture existing parcels spatially**.
- Do not spatially capture Covenant areas on a flats plan/cross lease survey as they are not lease areas registered under Sec 224 Land Transfer Act 2017 and are not generally defined by a structure.

7.17.3.2 Capture parcels for a Proposed Unit Development plan

You must capture all proposed parcels for a Proposed Unit Development (PUD).

To capture parcels for a Proposed Unit Development plan:

1. Select Proposed as the type of Action for the parcel.
2. Select the Parcel Intent. You must select either Principal Unit or Accessory Unit in the Parcel Intent field. For more information about parcel intents refer to **Landonline Help**.
3. Select No Topology in the Topology Class field.
4. Leave the Area field blank.
5. Select the Appellation Format and complete the details. See topic **7.17.2.3 Complete a General appellation**.
6. Click OK to save and return to the Parcel List screen.

Note: Process Substituted Proposed Unit Developments using the same method.

7.17.3.3 Capture parcels for a Staged Unit plan

Before you enter details of a Staged Unit plan a Proposed Unit Development (PUD) plan must be submitted to LINZ as an *e-survey*.

When you enter a parcel for a Staged Unit plan you must link it to the corresponding parcel in Landonline proposed by the PUD and change its status from Proposed to Created. Only parcels to be created on this stage of the staged unit plan must be linked. The remaining proposed parcels depicted on the PUD must not be linked.

To capture parcels for a Staged Unit plan:

1. Display the Parcel Detail screen.
2. Click Search... to display the Search Appellation screen.
3. Search and select the corresponding parcel from the PUD recorded in Landonline to link to this new parcel. For more information about searching for a parcel using the Search Appellation screen, refer to the ***e-search* User Guide**.

- Landonline adds details of the selected parcel to the Parcel Detail screen.

4. Select Created as the type of Action for the parcel.
5. Click OK to save and return to the Parcel List screen.

Note: A Staged Unit plan has the same survey number as previous stages but each earlier stage has a different suffix. The last submitted stage will not have a suffix.

7.17.3.4 Capture parcels for Unit and Cross Lease Plans with a survey sheet

Some unit and cross lease developments include a survey sheet showing the redefinition of the existing parcel the development is over, or the definition of easements. The survey information

for the redefinition or spatial definition of the easement is submitted as a digital component of your *e-survey*.

When you capture the parcels the Parcel List screen displays:

- non spatially defined parcels (units or flats).
- spatially defined parcels (easements). For more information see topics 7.17.2.2 Add new parcel information and 7.17.2.3 Complete a General appellation.
- the existing parcel.

Once you have captured the parcel attributes in the Parcel List screen, you must link its spatial definition to the underlying data in Landonline.

Note: The existing parcel the development is over is added to the Parcel List screen as a Referenced parcel. See **7.17.4 Capture existing parcels spatially** and **7.17.7.1 Edit parcels in the Parcel List screen**. The redefinition and inclusion of easements do not change this.

7.17.4 Capture existing parcels spatially

To capture an existing parcel and add it to the Parcel List screen, in the Spatial Display:

1. Make the appropriate underlying parcel layer active (eg list the primary, secondary and tertiary line parcel layers).
2. Click (Select Individual) and select one or more existing parcels to be included in your *e-survey*.
3. Display the Parcel List screen. See topic **7.17.1 Display the Parcel List screen**.
4. Click Link LoI. Landonline adds the selected parcel to the list and defaults the Action to Extinguished.
   - If Extinguished is not appropriate for the type of dataset, change the Action to Referenced, Encroached or Affected. See **Appendix E: Parcel action definitions**.
5. Click OK to save and return to the Parcel List screen.

7.17.5 Capture existing parcels using the Search Appellation screen

You can capture extinguished, referenced, encroached or affected existing parcels using the Search Appellation screen.

To capture an existing parcel, in the Parcel List screen:

1. Click Add... to display the Parcel Detail screen.
2. Change the Action field to Extinguished, Referenced or Affected as appropriate. See **Appendix E: Parcel action definitions**.
3. Click Search... to display the Search Appellation screen.
   - Search and select the existing parcel recorded in Landonline. Refer to the ***e-search* User Guide** for more information about searching for parcels.
   - Details of the selected parcel display.
4. Click OK to save and return to the Parcel List screen.

Caution: Appellation searches can return multiple results for a single appellation. In this instance you must use the spatial selection method to avoid linking to the wrong parcel. See topic **7.17.4 Capture existing parcels spatially**.

7.17.6 Link new parcels

7.17.6.1 About linking and missed marks

When you link parcels spatially you must assess when to include missed marks in your *e-survey*. Missed marks are existing Landonline marks positioned on either external or internal boundaries that you have not included in your *e-survey*. For example, where an abutting boundary intersects a boundary of your *e-survey* and you have not included dimensions to this position in your *e-survey*. Including these marks avoids creating gaps or overlaps in primary parcel topology (sliver parcels). When missed marks are excluded, existing boundary lines are retained in Landonline and the new boundary line is also included. This may create gaps or overlaps in primary parcel topology (sliver parcels). Sliver parcels can be avoided by including them in your *e-survey* with boundary dimensions. This is more reliable and ensures your *e-survey* matches underlying data.

There are two types of missed marks:

- **Mandatory** - when there are three or more lines radiating from the mark.
- **Optional** - when there are only two lines radiating from the mark. Where an optional missed mark has a marked position (is official) it should be included in your *e-survey*, otherwise you should exclude it.

  Optional missed marks exist due to two reasons:
- official marks previously placed on a boundary as a line mark, or official marks located on an intersection and the intersection is removed by a newer survey.
- unofficial boundary positions created during the original capture of Landonline spatial data.

When you link parcels you are prompted to include missed marks when they occur. You should only include these when you have captured all vectors in the *e-survey*.

For *e-surveys* involving the capture of more than one parcel you can choose to include marks:

- after all parcels in the *e-survey* are defined. This is recommended.
- after defining each individual parcel in the *e-survey*. This is not recommended

When you choose to complete the capture of all parcel vectors in your *e-survey* and then link, you should included missed marks when prompted. You will not have another opportunity to include missed marks unless you alter boundary vectors.

If you choose to link each parcel individually you are prompted to include missed marks every time you link. You should not include missed marks until you link the parcel that incorporates the final captured vector for the *e-survey*.

If you modify any boundary information after parcel linking, you must repeat the parcel linking and missed mark inclusion process.

Missed marks included in your *e-survey* are added to the Mark List screen as System Added marks.

Tasks:

You can:

- Link new parcels in your *e-survey*.
- Remove missed marks.
- Unlink mandatory missed marks.

The following headings correspond with these tasks and describe them in more detail

7.17.6.2 Link new parcels in your *e-survey*

Parcels must be included in the Parcel List screen before linking. This includes parcels to be extinguished. As you view captured parcels in the Spatial Display while linking, you must have captured the vectors for the defined parcels and, where appropriate, existing underlying lines for balance parcels.

1. Display the Spatial Display.
2. Display the Parcel List screen.
3. Select the parcel to link from the Parcel list.
4. Click Link... . If there are mandatory missed marks a message displays to advise you of this. Click OK
5. Incorporate mandatory missed marks into your *e-survey*:
   - Select **Window | Spatial Display** to view the Spatial Display.
   - The Potentially Missed Marks layer is active and mandatory missed marks display as solid blue circles.
   - Click (Yes) if you want to include the mandatory missed marks. Click (No) if you don't want to include them at this stage.
   - If there are any optional missed marks another message displays to advise you of this.
   - Click OK
6. Incorporate optional missed marks into your *e-survey*:
   - Click (Select Individual) and select the optional missed marks. Hold the Ctrl key to select more than one missed mark.
7. Click (Continue) All primary parcel boundaries are identified in red.
8. Select the parcel definition to be linked by clicking within its boundaries.
   When you select a parcel the entire parcel is coloured yellow.
9. Click (Continue). The parcel appellation displays within the boundaries of the linked parcel.
10. Return to the Parcel List screen and repeat Steps 3 to 9 for each additional parcel you want to link.

Note: To cancel parcel linking, click (Continue) before selecting a parcel.

7.17.6.3 Remove optional missed marks

1. Select the mark in the Spatial Display.
2. Press the Delete key to delete optional missed marks from your *e-survey*.

7.17.6.4 Unlink mandatory missed marks included for a parcel

1. In the Parcel List screen, select the parcel and click Unlink
2. Repeat the parcel linking process for the selected parcel.
3. Click (No) to exclude the mandatory missed marks from this parcel.

Note: Linked parcels display in the Parcel List screen with a tick in the Linked checkbox.

7.17.7 Edit parcels

Tasks:

You can:

- Edit parcels in the Parcel List screen.
- Move the appellation label for a parcel.

The following headings correspond with these tasks and describe them in more detail.

7.17.7.1 Edit parcels in the Parcel List screen

Use the [Edit...] button on the Parcel List screen to change details of parcels listed. For existing Landonline parcels, you can only edit the Action field. For an explanation of options for this field, see **Appendix E: Parcel action definitions**.

To edit a parcel in the Parcel List screen:

1. Display the Parcel List screen.
2. Select the Parcel Appellation to edit.
3. Click [Edit...] to display the Parcel Detail screen.
4. Make your edits.
5. Click [OK] to save and return to the Parcel List screen.

7.17.7.2 Move the appellation label for a parcel

When you link a parcel the appellation label displays in the centre of the parcel in the Spatial Display. Sometimes this obscures other data. You can move individual labels using the Parcel List screen.

To move the appellation label for a parcel in the Spatial Display:

1. Display the Spatial Display.
2. Display the Parcel List screen.
3. Select the parcel in the Parcel List.
4. Click [Move Label].
5. Select **Window | Spatial Display** to view the Spatial Display.
6. Click the position where you want the label to move to.

Note: If you move a label outside the graphical parcel boundary Landonline returns it to the centre of the parcel at the time of submission.

7.17.8 Capture parcels Toolkit

Table 7-9 lists other tools that assist with capturing parcels.

Tool	Description
Landonline Help	Press F1 in the parcel List screen to display information about this screen.
Quick Reference Cards	Section: *e-survey*. Topic: Creating a New Parcel.

Table 7-9 Capture parcels Toolkit

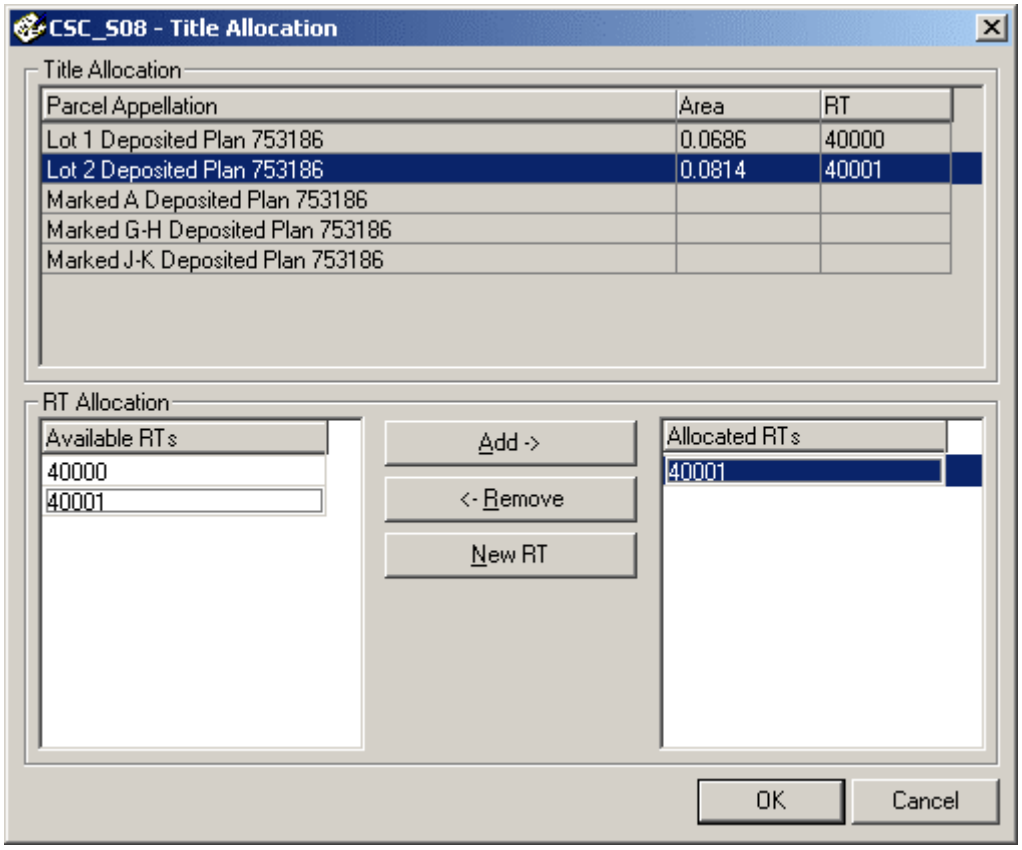
7.18 Link RT references

Once you have captured parcels, you can allocate the provisional RT references.

The Title Allocation screen lists all parcel appellations created, and the provisional RT references. These RT references are references you allocated in the Survey Information tab of the Manage Survey Transaction screen. You can also create new RT references in the Title Allocations screen.

Note: You should allocate RT references in the same sequential number order as the parcel appellations of the *e-survey* (ie lowest allocated RT reference should be assigned to the lowest created parcel appellation). For example, allocate RT 40000 to Lot 1, RT 40001 to Lot 2, RT 40002 to Lot 3, etc).

7.18.1.1 Allocate a RT reference to a parcel



Henry Brown has allocated the RT 40000 to Lot 1 Deposited Plan 753186, and RT 40001 to Lot 2 Deposited Plan 753186.

In Survey Capture:

1. Select **Capture | Title Allocation…** to display the Title Allocation screen. Landonline displays a list of parcel appellations created, and a list of provisional RT references in the Available RTs list.
2. Select a Parcel Appellation in the list.
3. Select a RT reference in the Available RTs list.
4. Click [Add ->] to add the RT reference to the Allocated RTs list for the selected parcel.
5. Repeat steps 2 to 4 to allocate RT references to other parcels.

Note:

- When a parcel has more than one RT reference allocated to it, the RT field displays Multiple instead of a RT reference number. Multiple RT references can be allocated to parcels with a leasehold title or to titles with shares in a parcel. You can have several parcels with the same RT Reference (eg amalgamations).
- If there is a Supplementary Record Sheet (SRS), add an extra RT reference. Do not link this RT reference to a parcel.

7.18.1.2 Remove a RT Reference from a parcel

To remove a RT reference from the Allocated RTs list, in the Title Allocation screen:

1. Select the RT reference in the Allocated RTs list.
2. Click <- Remove

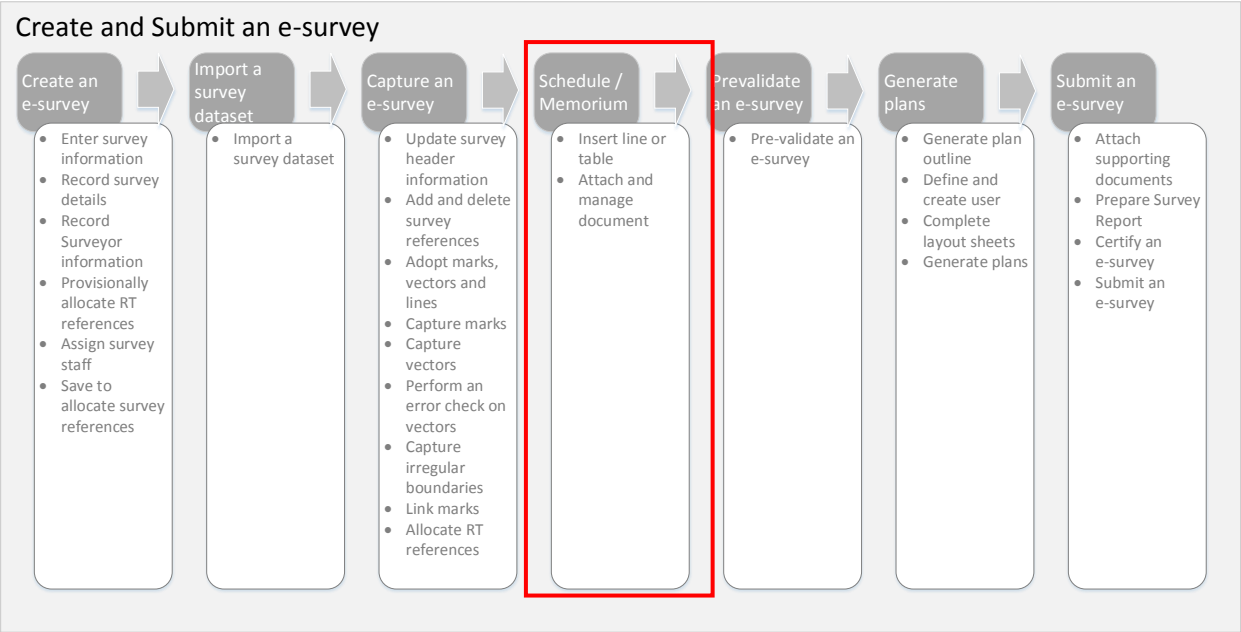
7.18.1.3 Create a new RT Reference

To create a new RT reference for a parcel, in the Title Allocation screen:

1. Select a Parcel Appellation in the list.
2. Click New RT. Landonline adds a RT reference to the Available RTs list and to the selected parcel.

8 SCHEDULE/MEMORANDUM

8.1 Overview



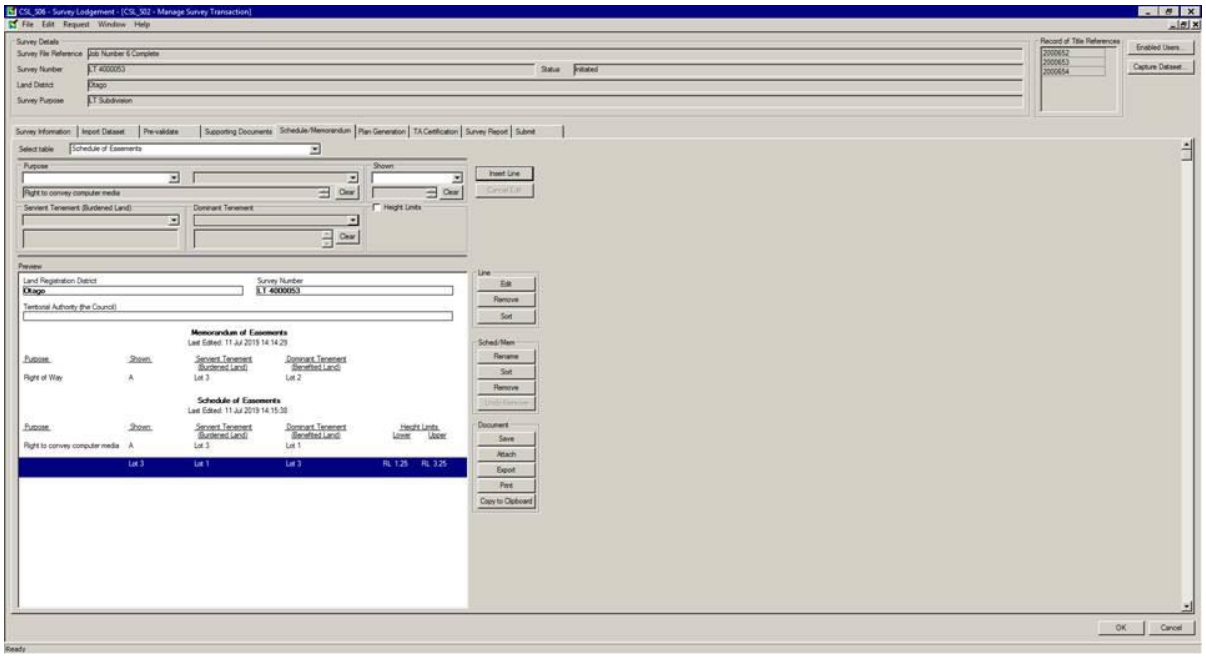
Landonline provides the facility to define the details, tables and lines of a Schedule/Memorandum document by using the Schedule/Memorandum tab. The data provided in this tab is automatically populated based on the captured data of your survey and the survey type, so no manual entry of captured data is required. See topic **7 Capture an e-survey** for more details on capturing survey data.

This chapter will explain how to utilise the functions found in the tab to create a Schedule/Memorandum supporting document:

- Display the Schedule/Memorandum tab
- Insert a line
- Edit a line
- Remove a line or table
- Sort tables
- Document Management
    - Save Schedule/Memorandum
    - Attach document
    - Export to a TIFF file
    - Print the Schedule/Memorandum
    - Copy to clipboard

Alternatively you can attach a Schedule/Memorandum document via the supporting document tab if you have a separate Schedule/Memorandum document already. See topic **11.2 Attach supporting documents.**

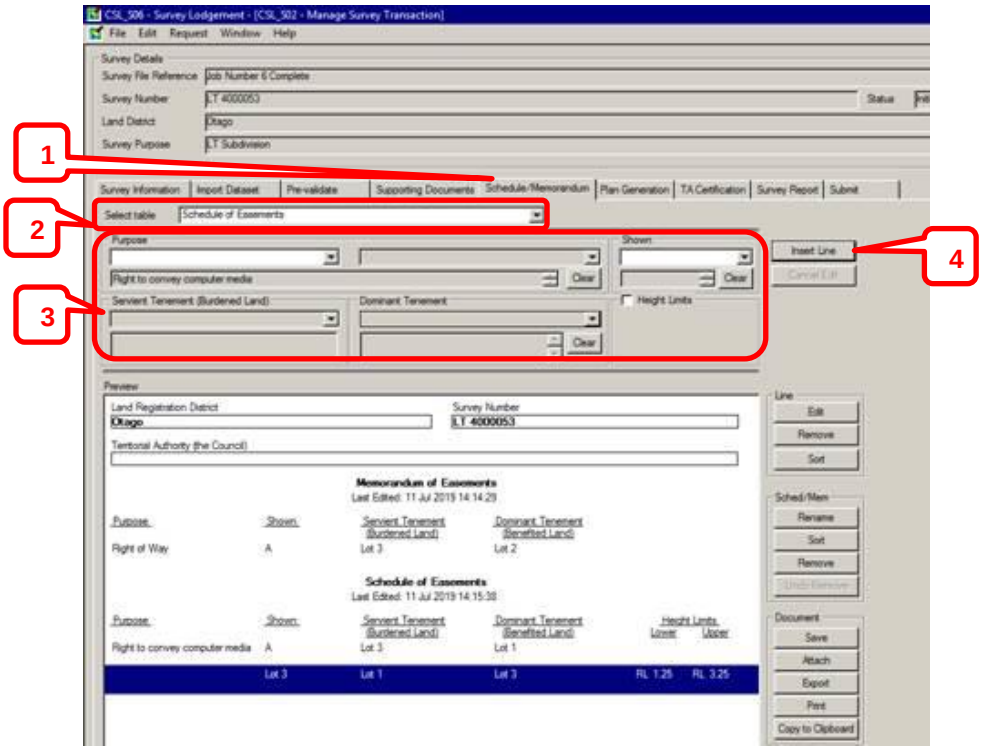
8.2 Display the Schedule/Memorandum tab



To display the Schedule/Memorandum tab in the Manage Survey Transaction screen:

1. Display the Manage Survey Transaction screen. See topic **5.2.1 Display the Manage Survey Transaction screen**.
2. Select the Schedule/Memorandum tab.

8.3 Insert a line or table



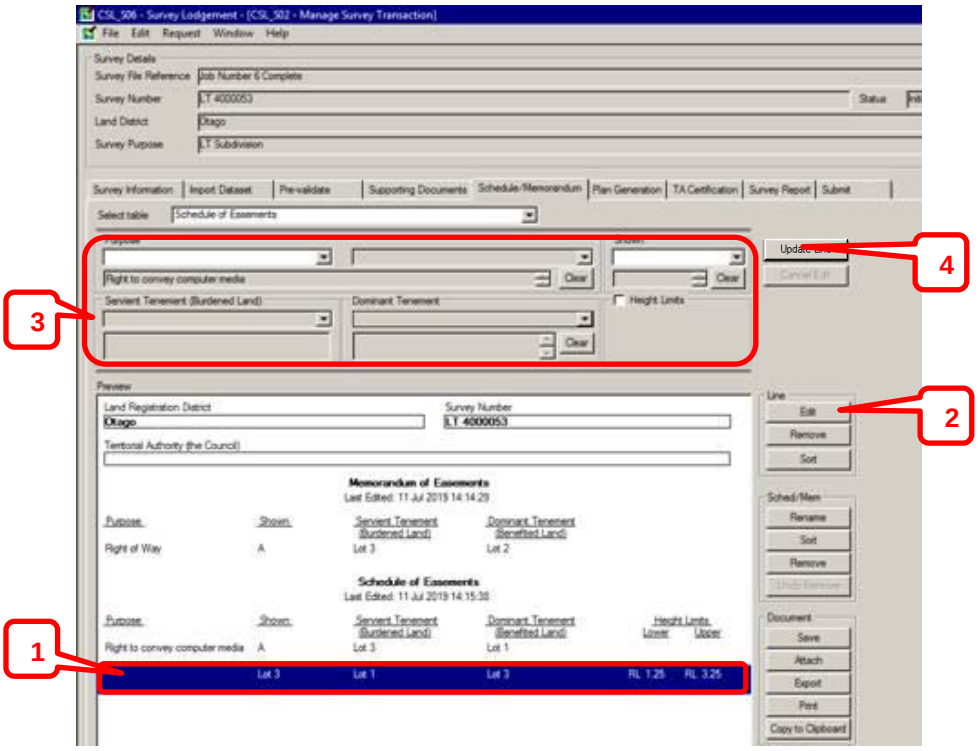
To insert a line, in the Schedule/Memorandum tab:

1. Display the Schedule/Memorandum tab.
2. Select a table from the dropdown. The values of the table will depend on the survey type and the captured data. Fields display after a table is selected in the panel and will depend on the table it is associated with.

   For Example:

   - If the selected table is neither Amalgamation nor Notes, the following fields will be visible: Purpose, Shown, Servient (Burden Land), Dominant (Benefited Land)/Grantee/Creating Doc Ref.
   - If the selected table is either Amalgamation or Notes, the condition/notes free text field will become visible.
3. Enter the required details into the fields displayed for the table.
4. Click Insert Line to insert the line into the table. The values will be inserted into the table and shown under the Preview panel.

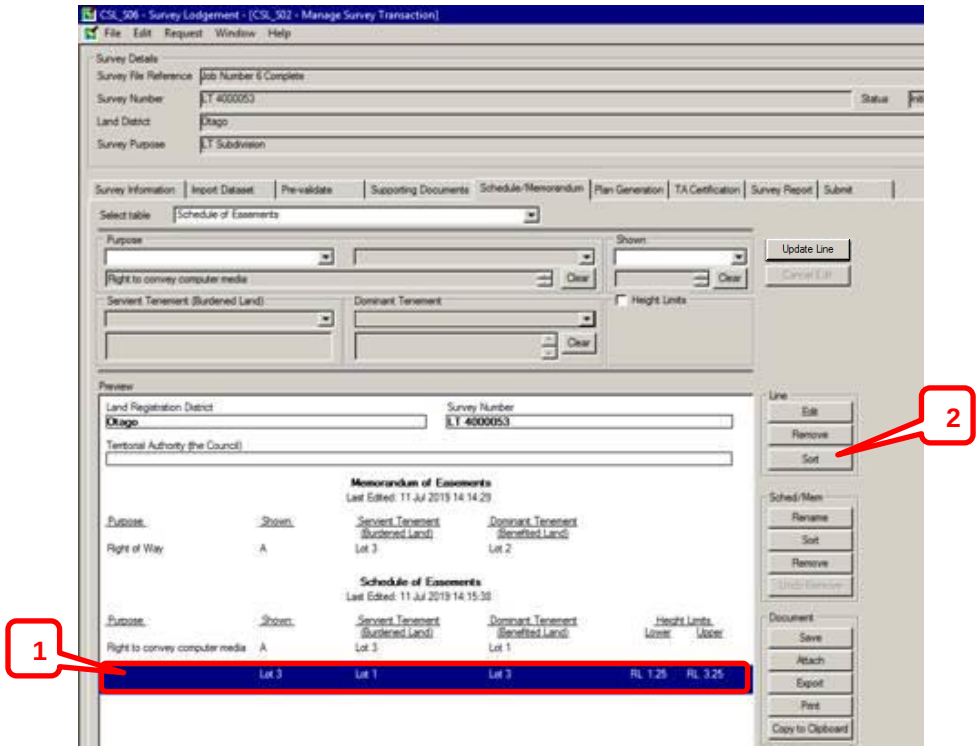
8.3.1 Edit a line



To edit a line, in the Schedule/Memorandum tab:

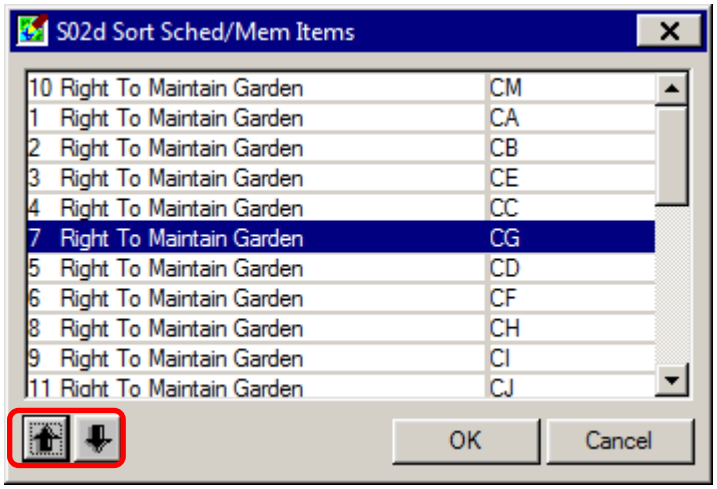
1. Select a line from the Preview panel.
2. Click the Edit button. This will bring up the details into the table panel.
3. Enter the required updates to the line on the fields provided in the table panel.
4. Click Update Line to save your updates to the line. The updates will be reflected to the line on the Preview panel.
5. To cancel your updates to a line, click Cancel Edit instead. No changes will be applied into the Schedule/Memorandum.

8.3.2 Sort a line



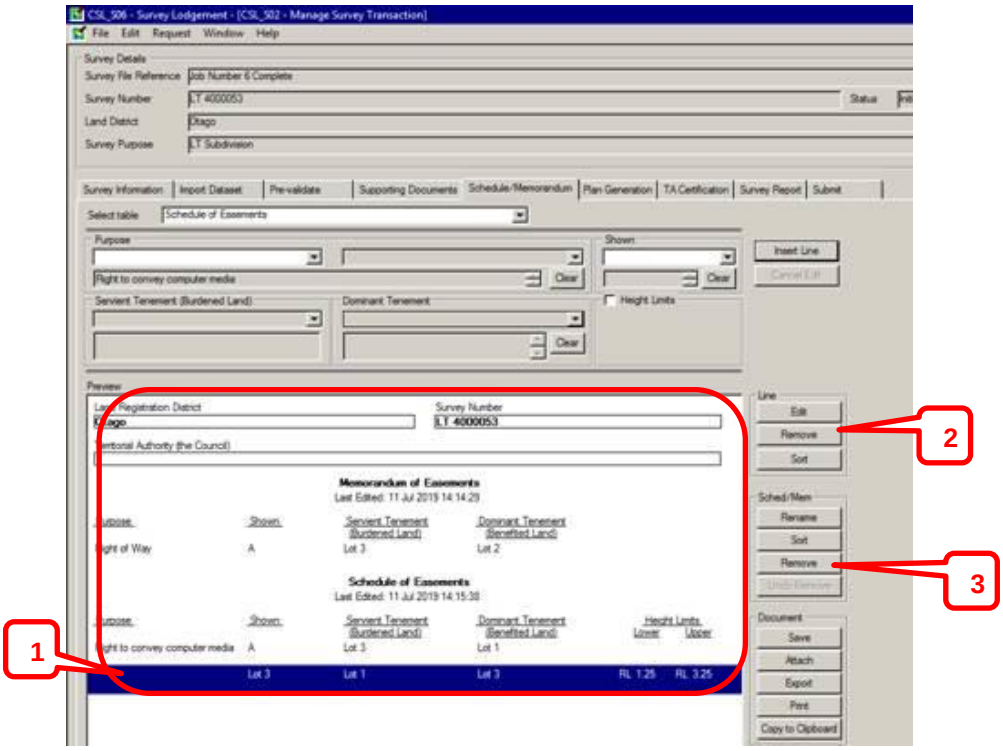
To change the order (sort) a line, in the Schedule/Memorandum tab:

1. Select a line from the Preview panel.
2. Click the Sort button. This will bring up the Sort Sched/Mem items window



3. Use the up and down arrows to Sort items.
4. Click OK to save your changes and return to the Schedule / Memorandum tab.
5. To cancel your sorting, click Cancel instead. No changes will be applied into the Schedule/Memorandum.

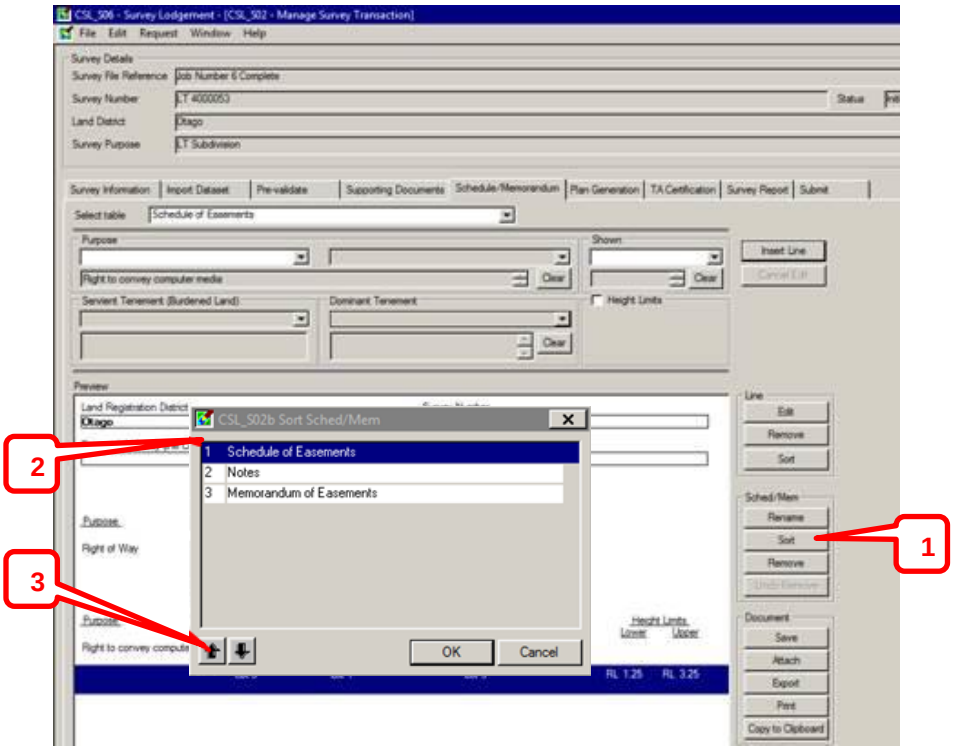
8.3.3 Remove a line or table



To remove a line or table, in the Schedule/Memorandum tab:

1. Select a line from the Preview panel.
2. Click the Remove button under the Line section. This will remove the line once clicked.
3. To remove a table instead, click the Remove under the Sched/Mem section. This will remove the selected table, along the lines under it once clicked.
4. To undo the removal of a table, you can click the Undo Remove button to retrieve the table and the lines under it. This will retrieve the last deleted table only.

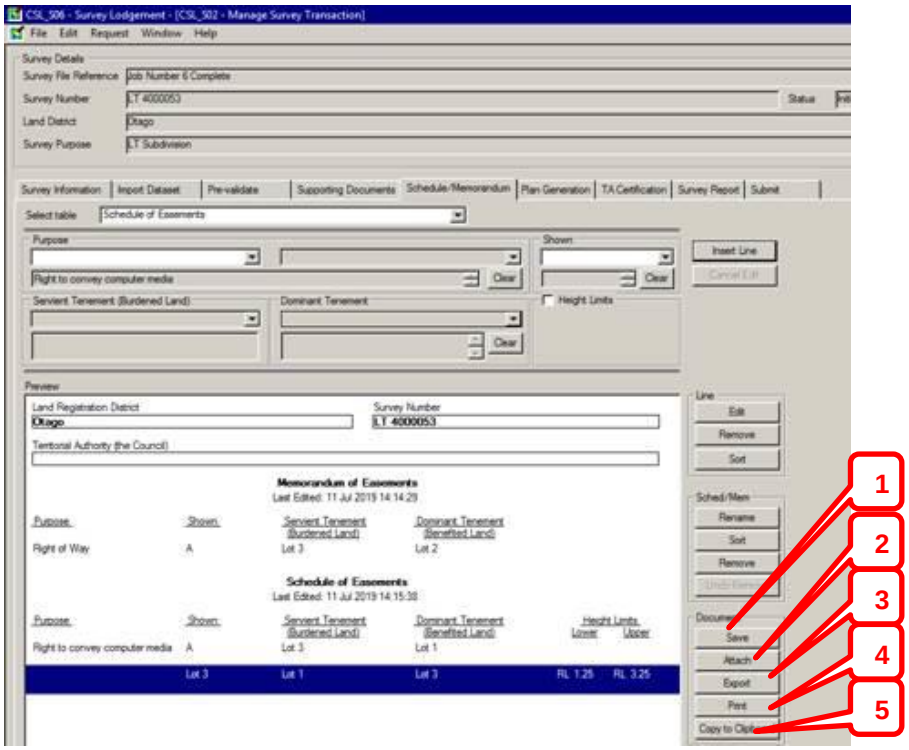
8.3.4 Sort tables



To sort the order of the tables displayed in the Schedule/Memorandum tab:

1. Click the Sort button. A pop up window of Sort Sched/Mem will display and show the tables inserted in the Schedule/Memorandum.
2. Select a table from the Sort Sched/Mem window.
3. Use the arrow keys to arrange the order of the tables.
4. Click OK in the Sort Sched/Mem window to confirm your changes and the sorting will be saved and close the window.
5. Click Cancel to close the window or cancel any changes made to sort.

8.4 Attach and Manage Document

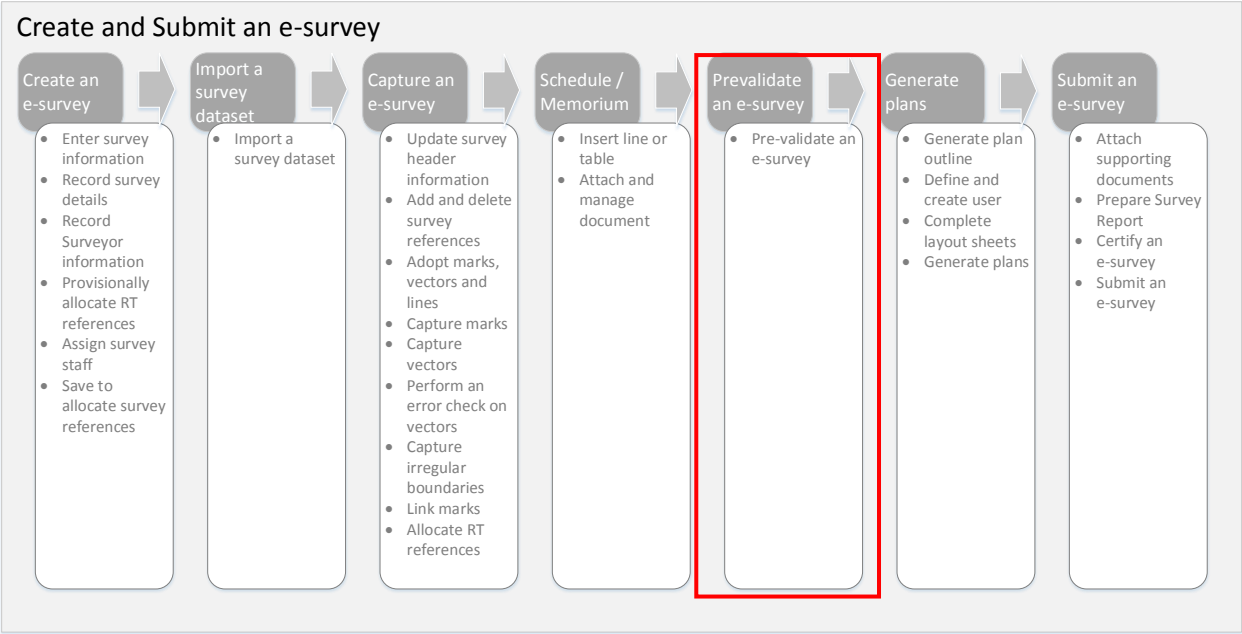


To attach and manage the Schedule/Memorandum document, a number of key features are listed under the document section to allow this:

1. Click Save to save all your details in the Schedule/Memorandum document.
2. Click Attach to attach the Schedule/Memorandum as a supporting document to the survey. You will be prompted to save your details before attaching it. Your attached document can be found under the Supporting Documents tab. See topic **11.2.2 Display the Record Supporting Documents tab** for more details.
3. Click Export to save your Schedule/Memorandum document as a TIFF file locally.
4. Click Print to print the whole Schedule/Memorandum document as shown in the Preview panel.
5. Click Copy to Clipboard to copy your details into a clipboard to allow you to paste all the Schedule/Memorandum details to another source (e.g. word document or note pad).

9 PRE-VALIDATE AN *e-survey*

9.1 Overview



You can pre-validate your *e-survey* against a set of predefined automated LINZ business rules. The pre-validation report outlines any potential inconsistencies in your *e-survey* so you can make corrections or document conflicts with Landonline before submission.

If you perform a new pre-validation, Landonline replaces the current report with the new pre-validation results.

There are two options for pre-validating an *e-survey*:

- online pre-validation
- batch pre-validation.

In either instance you are unable to work on the *e-survey* until pre-validation is complete.

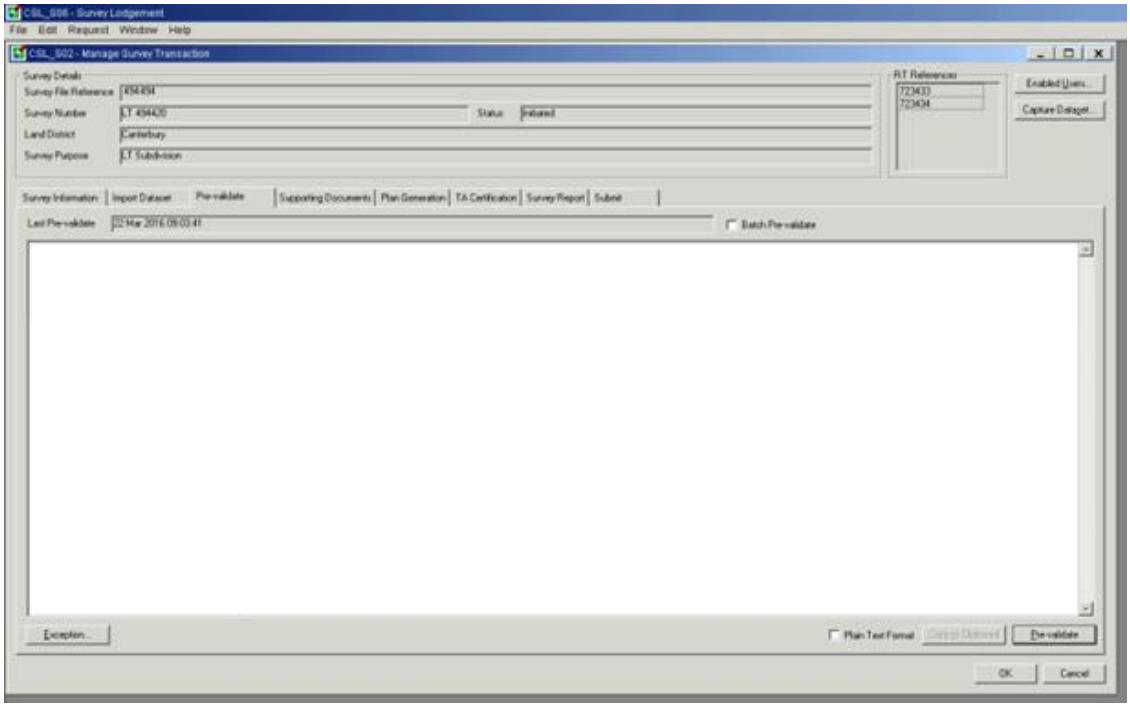
Online pre-validation occurs while you wait. You cannot use Landonline during online pre-validation. The Pre-validation Report displays as soon as the process completes. For large datasets online pre-validation can take some time. In such instances you may choose batch pre-validation.

Batch pre-validation incorporates your *e-survey* into a batch for pre-validation bulk processing with other *e-surveys*. Batch pre-validation is performed regularly throughout the day. You can continue to work on other *e-surveys* in Landonline while your *e-survey* is being batch pre-validated. To initiate the batch pre-validate process the *e-survey* must not be open in Landonline.

This chapter explains how to pre-validate an *e-survey*. Specifically it describes how to:

- display the pre-validate tab
- pre-validate online
- pre-validate by batch process
- interpret pre-validation report information.

9.2 Display the Pre-validate tab

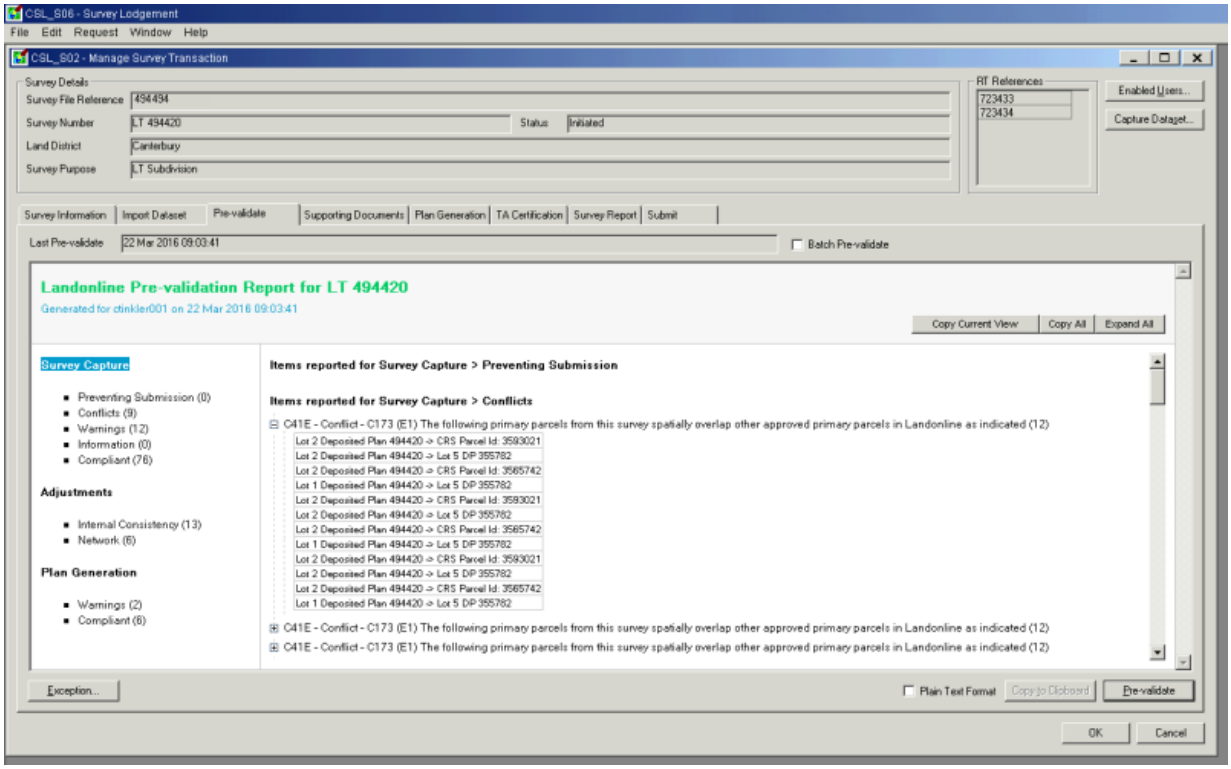


To display the Pre-validate tab in the Manage Survey Transaction screen:

1. Display the Manage Survey Transaction screen. See topic **5.2.1 Display the Manage Survey Transaction screen**.
2. Select the Pre-validate tab.

9.3 Pre-validate online

Online pre-validation runs immediately once you click Pre-validate. You cannot use Landonline during online pre-validation and must wait until it is complete. The Pre-validation Report lists the results of pre-validation against a set of LINZ business rules. See topic **9.5 Pre-validation report information**.



Survey File Reference: 494494
Survey Number: LT 494420
Status: Initiated
Land District: Canterbury
Survey Purpose: LT Subdivision
RT References: 723433, 723434
Last Pre-validate: 22 Mar 2016 09:03:41

Landonline Pre-validation Report for LT 494420
Generated for ctinkler001 on 22 Mar 2016 09:03:41

Survey Capture

- Preventing Submission (0)
- Conflicts (9)
- Warnings (12)
- Information (0)
- Compliant (76)

Adjustments

- Internal Consistency (13)
- Network (6)

Plan Generation

- Warnings (2)
- Compliant (6)

Items reported for Survey Capture > Preventing Submission

Items reported for Survey Capture > Conflicts

⊟ C41E - Conflict - C173 (E1) The following primary parcels from this survey spatially overlap other approved primary parcels in Landonline as indicated (12)

Lot 2 Deposited Plan 494420 -> CRS Parcel Id: 3593021
Lot 2 Deposited Plan 494420 -> Lot 5 DP 355782
Lot 2 Deposited Plan 494420 -> CRS Parcel Id: 3565742
Lot 1 Deposited Plan 494420 -> Lot 5 DP 355782
Lot 2 Deposited Plan 494420 -> CRS Parcel Id: 3593021
Lot 2 Deposited Plan 494420 -> Lot 5 DP 355782
Lot 2 Deposited Plan 494420 -> CRS Parcel Id: 3565742
Lot 1 Deposited Plan 494420 -> Lot 5 DP 355782
Lot 2 Deposited Plan 494420 -> CRS Parcel Id: 3593021
Lot 2 Deposited Plan 494420 -> Lot 5 DP 355782
Lot 2 Deposited Plan 494420 -> CRS Parcel Id: 3565742
Lot 1 Deposited Plan 494420 -> Lot 5 DP 355782

⊞ C41E - Conflict - C173 (E1) The following primary parcels from this survey spatially overlap other approved primary parcels in Landonline as indicated (12)

⊞ C41E - Conflict - C173 (E1) The following primary parcels from this survey spatially overlap other approved primary parcels in Landonline as indicated (12)

The user has pre-validated an *e-survey*. The *e-survey* failed pre-validation. The reasons for the failure display in the pre-validation report.

To pre-validate an *e-survey*, in the Manage Transaction screen:

1. Display the Pre-validate tab.
2. Click Pre-validate
   Landonline displays a message estimating the time until pre-validation completes.
3. Click OK. By default, Landonline displays the results in an interactive format. This process performs immediately and you must wait until it is complete. A plain text version of the report can be viewed by checking the **Plain Text Format** checkbox.
4. If required, copy the content of the report to paste the results of the pre-validation into a text editing tool (eg Microsoft Word). This can be done a number of ways:

   - Click **Copy Current View**. This will copy the currently-selected section of the report.
   - Click **Copy All**. This will copy the text of the entire report.
   - Use the keyboard shortcut **[CTRL] + [C]**. This will copy only text currently selected/highlighted.
   - Click **Copy to Clipboard**. This option is only available when the Plain Text Format checkbox has been selected, and will copy the entire text of the report.

5. Correct any errors outlined in the pre-validation report.

- If the underlying data is in error and you would like LINZ to inspect the data, click [Exception...]. For more information, see **11.6 Exception processing**.

Note: The estimated time to pre-validate displays at the bottom of the Pre-validate tab in the Manage Survey Transaction screen. This is based on the immediate past pre-validation processed and is indicative only.

9.4 Pre-validate by batch process

Steps:

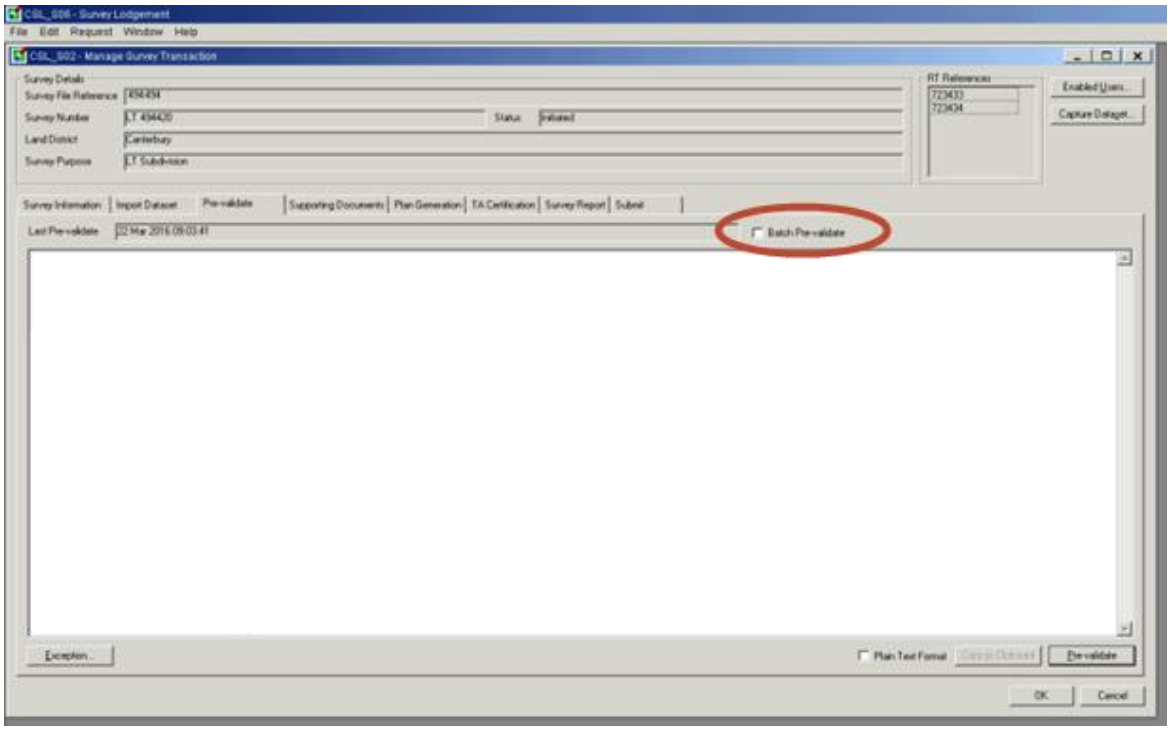
The steps required to pre-validate an *e-survey* by batch process are:

1. Pre-validate by batch process.
2. View pre-validation notification.

The following headings correspond with these steps and describe them in more detail.

9.4.1 Pre-validate by batch process

When you pre-validate by batch process you receive notification by your preferred method when the pre-validation has been completed. See topic **9.4.2 View pre-validation notification**. While you should not work on the *e-survey* being processed, you can continue to use Landonline during batch pre-validation to work on other *e-surveys*. Landonline will not initiate the batch process until the *e-survey* to be pre-validated is closed in Landonline.



To pre-validate an *e-survey* using the batch process:

1. Display the Pre-validate tab. See topic **9.2 Display the Pre-validate tab**.
2. Check the Batch Pre-validate checkbox.
3. Click [Pre-validate]
4. Close the Manage Survey Transaction screen to initiate batch processing.

9.4.2 View pre-validation notification

If you pre-validate your *e-survey* using a batch process, Landonline notifies you (by your preferred method) when it completes.

To view the results of a pre-validation preformed by batch:

1. Display the Manage Survey Transaction screen. See topic **5.2.1 Display the Manage Survey Transaction screen**.
2. Select the Pre-validate tab.
   By default, Landonline displays the results in an interactive format. This process performs immediately and you must wait until it is complete. A plain text version of the report can be viewed by checking the **Plain Text Format** checkbox.
3. If required, copy the content of the report to paste the results of the pre-validation into a text editing tool (eg Microsoft Word). This can be done a number of ways:

   - Click **Copy Current View**. This will copy the currently-selected section of the report.
   - Click **Copy All**. This will copy the text of the entire report.
   - Use the keyboard shortcut **[CTRL] + [C]**. This will copy only text currently selected/highlighted.
   - Click **Copy to Clipboard**. This option is only available when the Plain Text Format checkbox has been selected, and will copy the entire text of the report.

4. Correct any errors in your *e-survey* outlined in the pre-validation report.
5. Pre-validate the *e-survey* again, as required.

- If the underlying data is in error and you would like LINZ to inspect the data, click Exception... . For more information, see **11.6 Exception processing**.

9.5 Pre-validation report information

The pre-validation results of your *e-survey* display in the Pre-validate tab of the Manage Survey Transaction screen. The information contained in this report includes:

- Pre-validation heading.
- User, date and time the pre-validation was executed.
- Survey Capture information, including Automated Rule Severity Category type errors that are Preventing Submission, Conflicts, Warnings, Information or Compliant (passed) rules. The number of these errors is shown in brackets
- Adjustment reports which identify compliance (or non-compliance) with cadastral survey accuracy standards (SG Rules 26 and 28).
- Plan Generation warning and conflict information.

Landonline lists each rule failure only once and identifies the rule number, its severity and the rule message.

If any Geodetic Marks have been linked in the *e-survey*, these are listed in the Pre-validation Report. Only LINZ staff can make edits to geodetic marks, therefore you must report any proposed edits to LINZ using the form on the LINZ website.

To locate the form to report edits to geodetic marks, in the LINZ Home page:

1. Select Geodetic System.
2. Select the **Report damage or disturbances to survey marks** link (located on the right of the screen under Most Popular section in the Find out more... box).
3. Complete the form and submit it to LINZ.

Manual rule failures are not listed in the Pre-validation report. For a list of all manual business rules, refer to **Landonline Help**.

Table 9-1 lists the automated rule severity categories. These are different to the Critical, Significant and Minor categories assigned to requisition and audit items.

Category	Description
Preventing Submission	This is an error or data deficiency so serious that Landonline cannot record the survey data in the database. This can be due to an error in the e-survey or can, in some cases, be due to a serious conflict with erroneous data in Landonline. If the report displays a fatal error preventing submission other errors preventing submission may not be reported.
Conflict	This is a conflict within the *e-survey* or with data in Landonline that will need to be resolved before the *e-survey* can be approved. It may be that the *e-survey* is correct and Landonline is wrong or vice-versa.
Warning	This is a message drawing attention to a potential conflict that may or may not have to be corrected.
Information	This is a warning that Landonline was not able to fully check a data item. The item may be correct, however remains unchecked by the system.

Table 9-1 Automated Rule Severity Categories

Note: If the report displays a fatal error, other fatal errors may not be reported. For a full list of validation rules, refer to **Landonline Help**.

9.5.1 Pre-validate an *e-survey* Toolkit

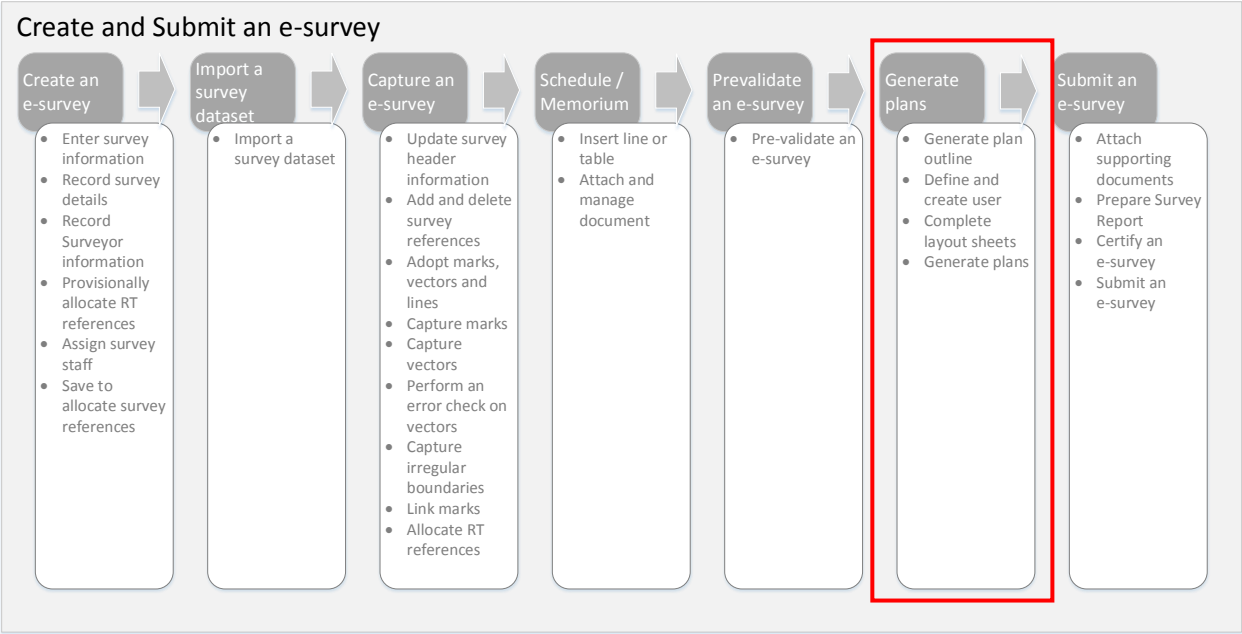
Table 9-2 lists other tools that assist with pre-validating an *e-survey*.

Tool	Description
Landonline Help	Press F1 in the Pre-validate tab of the Manage Survey Transaction screen to display information about Pre-validation.
Quick Reference Cards	Section: *e-survey*. Topic: Pre-validate an *e-survey*.

Table 9-2 Pre-validate an *e-survey* Toolkit

10 GENERATE PLANS

10.1 Overview



Landonline provides surveyors with the facility to generate plans for an *e-survey*.

Plan Generation creates a Cadastral Survey Dataset Plan (CSD Plan) from which a Title Plan and a Title Diagram are automatically generated. For more information, see topic **Appendix G: Details of generated plans**.

Electronic plans replace the paper survey plan, title plan and title diagram previously provided by the surveyor. You can include a scanned plan image as a supporting document (eg a Unit Plan or Cross Lease Plan) in your CSD Plan. For more information, see **Appendix K: *e-survey* supporting document types**.

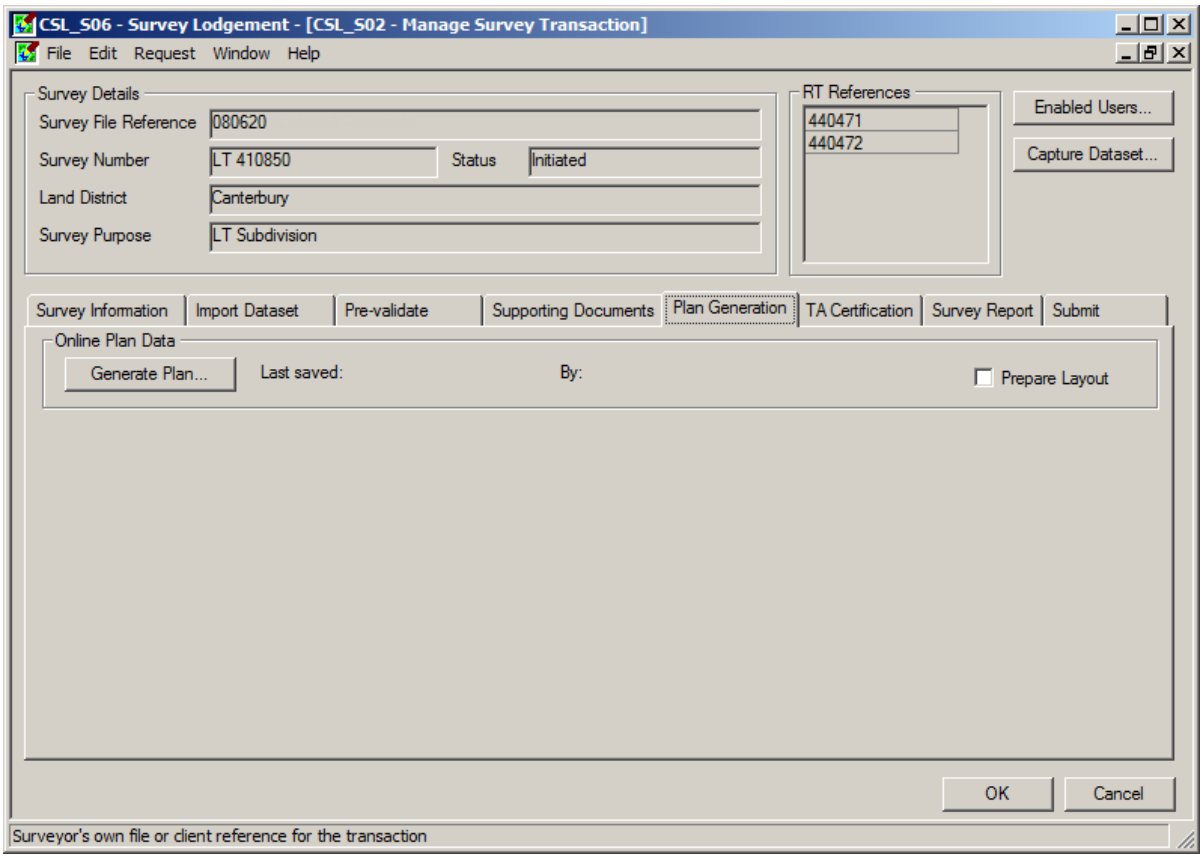
Tasks:

To generate plans you can:

- Display the Plan Generation tab.
- Generate plans.

The following headings correspond with these high level tasks and describe them in more detail.

10.2 Display the Plan Generation tab



To display the Plan Generation tab:

1. Display the Manage Survey Transaction screen.
2. Select the Plan Generation tab.

10.3 Generate plans

You generate plans in the Plan Generation area of Landonline.

In Plan Generation you can:

- display layers of existing spatial data to give context to the *e-survey*
- automatically define system generated title and survey related diagram images
- define areas to create more detailed diagram images for title and survey related data
- draw new lines to indicate RT boundaries
- include underlying data (eg appellations and road names)
- include abuttal boundaries
- draw new lines to indicate abuttals
- label diagrams
- add text (annotations) and lines to a diagram
- edit diagrams, labels, coordinates and lines
- define diagrams within diagrams.

You should make sure your *e-survey* is completely captured and all new parcels are linked before performing Plan Generation. An exception is when you are confident the Title Sheet will not change and you need to generate a plan for TA Certification.

Landonline defines diagrams as the basis for plans. These are:

- the survey diagram (known as the System Generated Survey diagram)
- the title diagram (known as the System Generated Primary diagram)
- the title non-primary parcel diagram (easements etc) known as the System Generated Non Primary diagram
- user defined detail survey and title diagrams. You can add additional layout sheets for these diagrams, if required.

The system generated diagrams form pages in the layout sheets to which you can add user defined diagrams and generate the following plans from the layout sheets:

- CSD Plan
- Title Plan
- Title Diagram.

Steps:

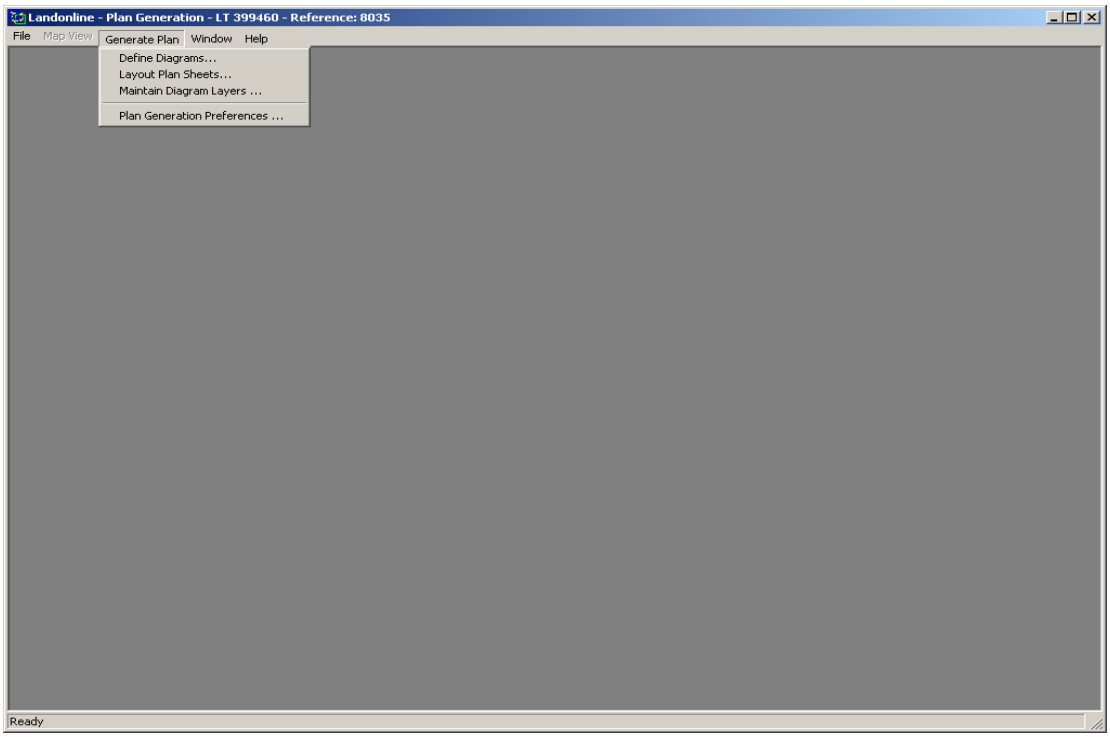
To generate the plans you:

1. Display Plan Generation.
2. Define and label diagrams.
3. Request layout sheet preparation by batch (if required).
4. Work with layout sheets.
5. Complete layout sheets.
6. Generate final plans.

The following headings correspond with these steps and describe them in more detail.

10.3.1 Display Plan Generation

You access the Plan Generation system from the Plan Generation tab in the Manage Survey Transaction screen.



The Generate Plan menu contains the tools you use to generate plans.

To display Plan Generation, in the Plan Generation tab:

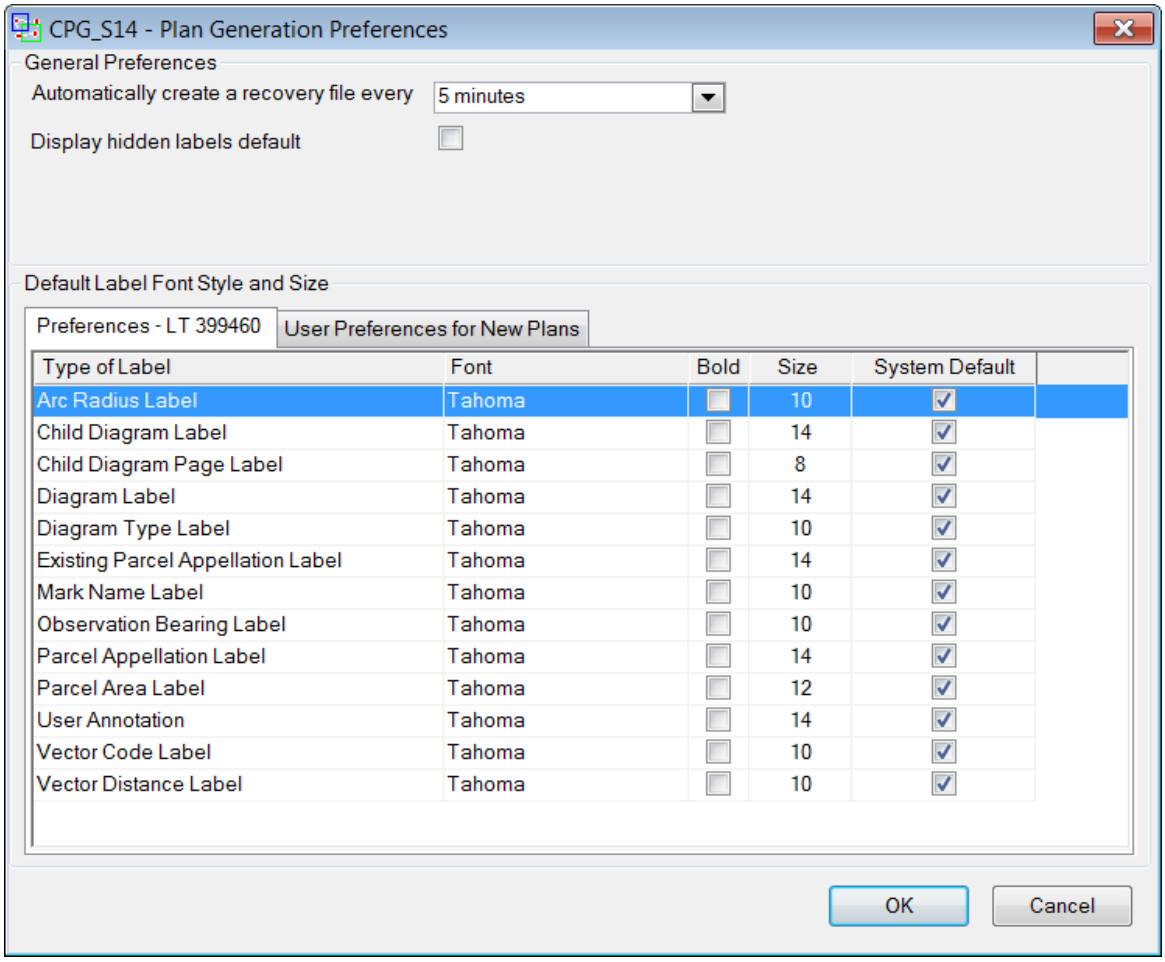
1. Click Generate Plan...

Note: You are prevented from opening Plan Generation (and a warning displays) if you have not:

- captured at least one vector or boundary line between two marks
- recorded a purpose for all marks and specified at least one mark as an existing Landonline mark
- made all marks either a To or From mark for a vector or boundary line
- defined all boundary lines included in your *e-survey* as part of a parcel definition
- linked all parcel attributes to spatial definitions.

10.3.1.1 Plan Generation Preferences

To display the Plan Generation Preferences screen, select Generate Plan | Plan Generation Preferences ...



Note that if the opened plan is in view only mode (i.e. editing of the plan will not be possible), none of the four preference options described below will be available.

10.3.1.1.1 Automatically create a recovery file every…

To define layout plan sheets recovery file settings, select from the drop-down options as follows:

- Select Disabled to turn off recovery file processing. No recovery file will be created while plans are being edited. If the plan crashes before a save is performed, all changes before the last successful save will be lost.
- Enable recovery file processing by selecting a frequency from the drop-down options (e.g. 4 minutes).
- Change the save frequency by selecting from the drop-down list (e.g. 3 minutes).
- For further information about recovery file processing, see **10.3.4.3 Recovery of layout plan sheets.**

10.3.1.1.2 Display hidden labels default

To set display hidden labels as a default, check the tick-box. Also see **10.3.5.5.1 Show and hide objects in a diagram.**

10.3.1.1.3 Default Label Font Style and Size – preferences for the opened plan

To define default label formats for the plan that is to be worked on, select the Preferences tab for the relevant plan (e.g. Preferences – LT 387900):

- Changes to the font, bold state and size per type of label will be automatically translated to the relevant labels for those label types in the plan next time that plan is opened in the Layout Plan Sheets screen.
- If the specified plan is already open in the Layout Plan Sheets window, the ability to make changes will be deactivated for that plan until the window is closed.
- A tick in the System Default column will indicate that the formats shown are the system defaults. If any of the formats are changed to personal preferences, the tick will be automatically removed.
- If an un-ticked box in the System Default column is subsequently ticked, the formats on that line will be automatically reset back to the system defaults.

10.3.1.1.4 Default Label Font Style and Size – preferences for new plans

To define default label formats for all new plans, select the User Preferences for New Plans tab:

- Changes to the font, bold state and size per type of label will be automatically translated to the relevant labels for those label types in new plans when these are first opened in the Layout Plan Sheets screen.
- A tick in the System Default column will indicate that the formats shown are the system defaults. If any of the formats are changed to personal preferences, the tick will be automatically removed.
- If an un-ticked box in the System Default column is subsequently ticked, the formats on that line will be automatically reset back to the system defaults.

10.3.2 Define and label diagrams

Landonline automatically defines diagrams for both the survey and title layout sheets. You can create additional user defined survey and title diagrams where needed to provide further clarity.

When you open the Spatial Window you will see the extent of the *e-survey* and the outline of each system generated master diagram. These will display in the Layout Plan Sheets screen.

The system generated diagrams are:

- System Generated Survey diagram. This displays to the extent of the captured marks and is outlined by a blue dashed line.
- System Generated Primary diagram. This displays to the extent of the defined parcels and is outlines by a green dashed line.
- System Generated Non Primary diagram. This displays to the extent of the defined parcels with the exception of extended hydro or road parcels and is outlined by an orange dashed line.

Steps:

The steps required to define and create detail diagrams are:

1. Display the Plan Generation Spatial Window.
1. Define user diagrams.
2. Edit diagrams.
3. Label diagrams.
4. Maintain diagram layers.

The following headings correspond with these steps and describe them in more detail.

10.3.2.1 Display the Plan Generation Spatial Window

To display the Plan Generation Spatial Window:

1. Select Generate Plan | Define Diagrams…
   The Spatial Window displays the extent of the *e-survey*.

Note: The Plan Generation Spatial Window only displays labels for Road Name centreline layers. To display additional layers and labels in your Layout Plan Sheets, see **10.3.2.5 Maintain diagram layers**.

10.3.2.2 Define user diagrams

You can define additional survey and title diagrams to provide more detail on your plans.

Survey diagrams display all parcel boundaries, marks and vectors.

Title diagrams display:

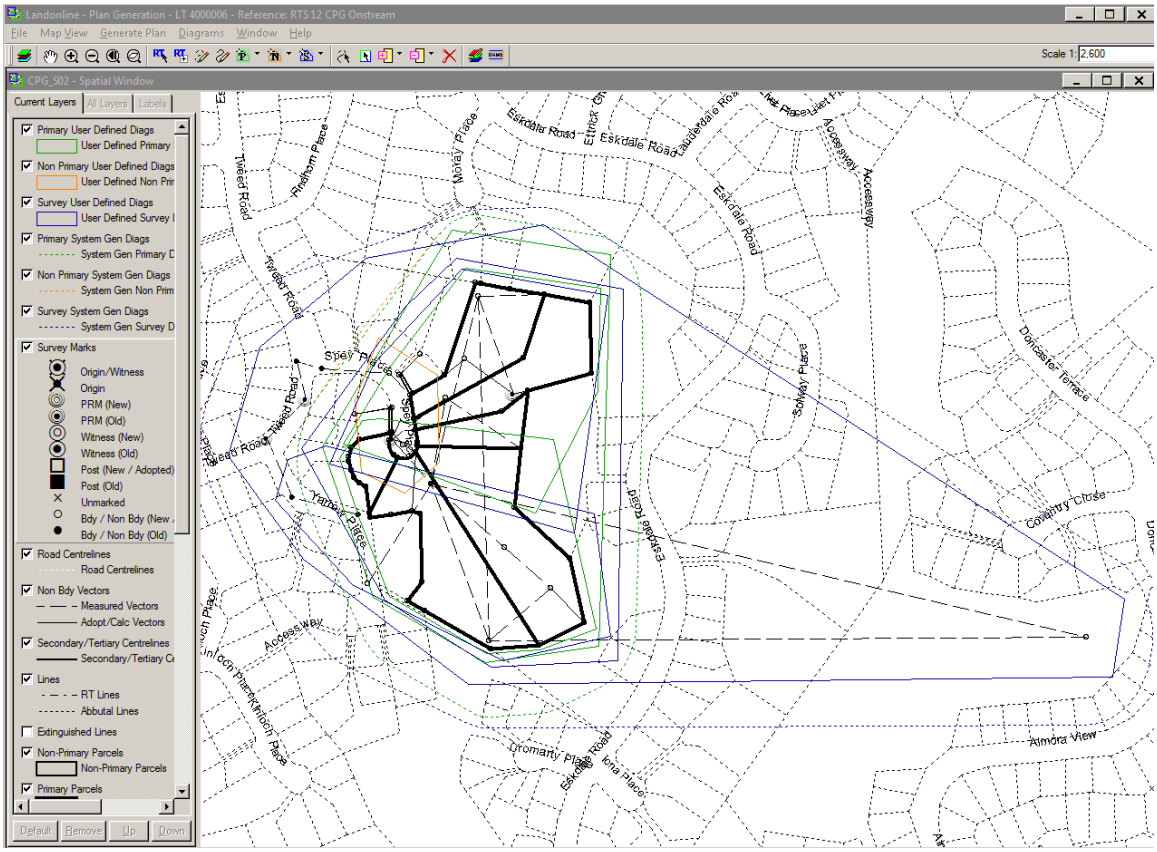
- all parcel boundaries including bearings and distances when shown in the CSD Plan
- parcels and their boundary distances when shown in the Title Plan and Title Diagram.

When you define survey and title diagrams you can define additional details with nested diagrams.

A nested diagram is a diagram wholly contained within another diagram. It becomes a child of the larger parent diagram. The parent/child relationship can only occur between diagrams with the same type of data (ie survey data only or title data only). Landonline recognises the parent/child relationship when generating diagrams. You can define multi-level nested diagrams to improve diagram clarity and remove clutter on high level diagrams.

Note:

- If RT boundary lines and abutting lines are not correctly represented you can edit to correct these for the diagrams. See topic **10.3.2.3 Edit diagram**.
- If a vector label is too large to represent on a line, it is replaced by a vector code. The vector code is a unique pointer to a full list of vectors included in the Marks and Vectors list of the CSD Plan.
- You can define a user defined diagram which is larger then a system generated diagram. This would only be necessary if the system generated diagram did not contain information such as an irregular boundary, the other side of the river or the other side of the road.



Henry Brown has defined two additional diagrams for this *e-survey*. The Survey diagram has a blue border and the Non Primary diagram has an orange border. Primary diagrams have a green border.

Note: There is a limit of 47 points (including the start and end points) for a polygon and manually added lines (ie RT Boundary and Abuttal lines) defined in the Plan Generation Spatial Window.

Tasks:

You can:

- Define a Survey diagram.
- Define a Primary diagram.
- Define a Non Primary diagram.
- Delete a defined diagram.

The following headings correspond with these tasks and describe them in more detail.

10.3.2.2.1 Define a Survey diagram

To define Survey diagrams, in the Spatial Window:

1. Zoom to the area you require. This is the scale at which the diagram will be represented.
2. Click (Add Survey Diagram) and select the icon that represents how you want to define the diagram:
   - click (Define Survey by Rectangle),
   - click (Define Survey by Circle), or
   - click (Define Survey by Polygon).
3. Define the area.
   For example, to define by Rectangle, click in the top left corner and drag over the area you want to define. The diagram area is outlined in blue.

4. Repeat these steps for other Survey diagrams as required.

10.3.2.2.2 Define a Primary diagram

To define Primary diagrams, in the Spatial Window:

1. Zoom to the area you require. This is the scale at which the diagram will be represented.
2. Click (Add Primary Diagram) and select the icon that represents how you want to define the diagram:
   - click (Define Primary by Rectangle),
   - click (Define Primary by Circle), or
   - click (Define Primary by Polygon).
3. Define the area.
   For example, to define by Circle, click where you want the centre of the circle and drag outwards. The diagram area is outlined in green.
4. Repeat these steps for other Primary diagrams as required.

10.3.2.2.3 Define a Non Primary diagram

To define Non Primary diagrams, in the Spatial Window:

1. Zoom to the area you require. This is the scale at which the diagram will be represented.
2. Click (Add Non Primary Diagram) and select the icon that represents how you want to define the diagram:
   - click (Define Non Primary by Rectangle),
   - click (Define Non Primary by Circle), or
   - click (Define Non Primary by Polygon).
3. Define the area.
   For example, to define by Polygon, click the start point and click each point of the polygon. Double click the start point to close the polygon. The diagram area is outlined in orange.
4. Repeat these steps for other Non Primary diagrams as required.

10.3.2.2.4 Delete a user defined diagram

To delete a survey or title diagram you have defined:

1. Click (Select Diagram).
2. Select the diagram. To select more than one diagram, hold Ctrl and select each diagram.
3. Click (Delete Selected).
4. A message displays a list of the selected diagrams(s) and requests you to confirm the deletion.
5. Click Yes to delete the diagram(s).

Note:

- You cannot delete master diagrams. However, if the area defined by a master diagram is not appropriate, you can define a user diagram to replace it.
- If you have already labelled your diagrams, Landonline re-labels the remaining diagrams.

10.3.2.3 Edit diagrams

Once you have defined survey and title diagrams, you can edit RT boundaries and abutting lines to make sure they are represented correctly. You can also modify diagram extents.

You can:

- Select boundary lines that will be extinguished to represent them as existing RT boundaries.
- Draw RT parcel boundaries and abutting parcel boundaries where these are not included or accurately represented in existing data.
- Enlarge the extent of the diagram boundaries.
- Reduce the extent of the diagram boundaries.

Note: Select Generate Plan | Show Existing parcels to toggle the existing parcel boundary layer off or on.

10.3.2.3.1 Add RT boundary lines for boundaries you propose to extinguish

To add RT boundary lines for boundaries you propose to extinguish:

1. Click (Select Existing Line) to make the existing RT parcel boundary lines layer active.
2. Select the line you require that forms the RT boundary. To select more than one line, hold Ctrl and select each line.
3. Click (Add Selected as RT Bdy) to add the selected line(s) to your diagram. RT boundary lines display as dashed dot lines.

10.3.2.3.2 Manually draw a RT boundary line

Where the existing line work does not accurately represent the real situation you can choose to manually draw RT boundary lines.

To manually draw a RT boundary line:

1. Click (Draw Line: RT Bdy). A message displays to explain how to add your line.
2. Click OK
3. Click the start point for the line.
4. Click each vertex.
5. Double click the end point.

Note: A manually added RT Boundary line can have up to 47 points, including the start and end points.

10.3.2.3.3 Manually draw an abutting definition

Where the existing line work does not accurately represent the real abutting situation you can choose to manually draw an abutting definition.

To manually draw an abutting definition:

1. Click (Draw Line: Abuttal). A message displays to explain how to draw your line.
2. Click OK
3. Click the start point for the line
4. Click each point along the line.
5. Double click the end point. Landonline draws this line with an abutting parcel symbol.

Note: An abuttal line can have up to 47 points, including the start and end points.

10.3.2.3.4 Delete a RT boundary line or Abuttal line you have added

1. Click (Select Added Line).
2. Click the line to be removed. To select more than one line, hold Ctrl and select each line.
3. Click (Delete Selected). Landonline asks you to confirm the deletion.
4. Click Yes to delete the line.

10.3.2.3.5 Enlarge user defined diagram extents

If the boundaries of a user defined diagram are required to be enlarged, you can modify these in the Spatial Window as follows:

1. Select **Generate Plan | Define Diagrams...** to display the Spatial Window.
2. Click (Select Diagram).
3. Select the user defined diagram to be modified
4. Click to enlarge the diagram by rectangle or choose from the drop down options to enlarge by polygon or circle .
5. Position the cursor on the diagram at a position from where the extension is to be drawn. Drag the cursor to enlarge as required for the rectangle and circle options. To enlarge by polygon, click the start point and click each point of the polygon. Double click the start point to close the polygon. The new shape must overlap part of the existing diagram and will be added to it.
6. When requested, click OK to save the enlargement or Cancel to cancel the changes.

10.3.2.3.6 Reduce user defined diagram extents

If the boundaries of a user defined diagram are required to be reduced, you can modify these in the Spatial Window as follows:

1. Select **Generate Plan | Define Diagrams...** to display the Spatial Window.
2. Click (Select Diagram).
3. Select the user defined diagram to be modified
4. Click to reduce the diagram by rectangle or choose from the drop down options to reduce by polygon or circle .
5. Position the cursor on the diagram at a position from where the reduction is to be drawn. Drag the cursor to reduce as required for the rectangle and circle options. To reduce by polygon, click the start point and click each point of the polygon. Double click the start point to close the polygon. The new shape must overlap part of the existing diagram and will be removed from it.
6. When requested, click OK to save the reduction or Cancel to cancel the changes.

10.3.2.4 Label diagrams

You should label user defined diagrams to assist with identification when maintaining layers and selecting diagrams to add to a layout page. This is particularly useful for nested diagrams and to show the relationship of parent and child diagrams.

To label diagrams in the Spatial Window:

1. Click (Label User Defined Diagrams).

The labels display in the Spatial Window.

10.3.2.4.1 How Landonline labels nested diagrams

When a system generated diagram is larger than other diagrams of its type, the following labels will show:

- In the System Generated diagram, Diag. A will show, but not Diag. AA or Diag. AAA.
- In Diag. A, Diag. AA will show, but not Diag. AAA.
- In Diag. AA, Diag. AAA will show.

You can define a user defined diagram which is larger than a system generated diagram. This can be because the system generated diagram does not contain information such as:

- the other side of the river
- the other side of the road
- an irregular boundary.

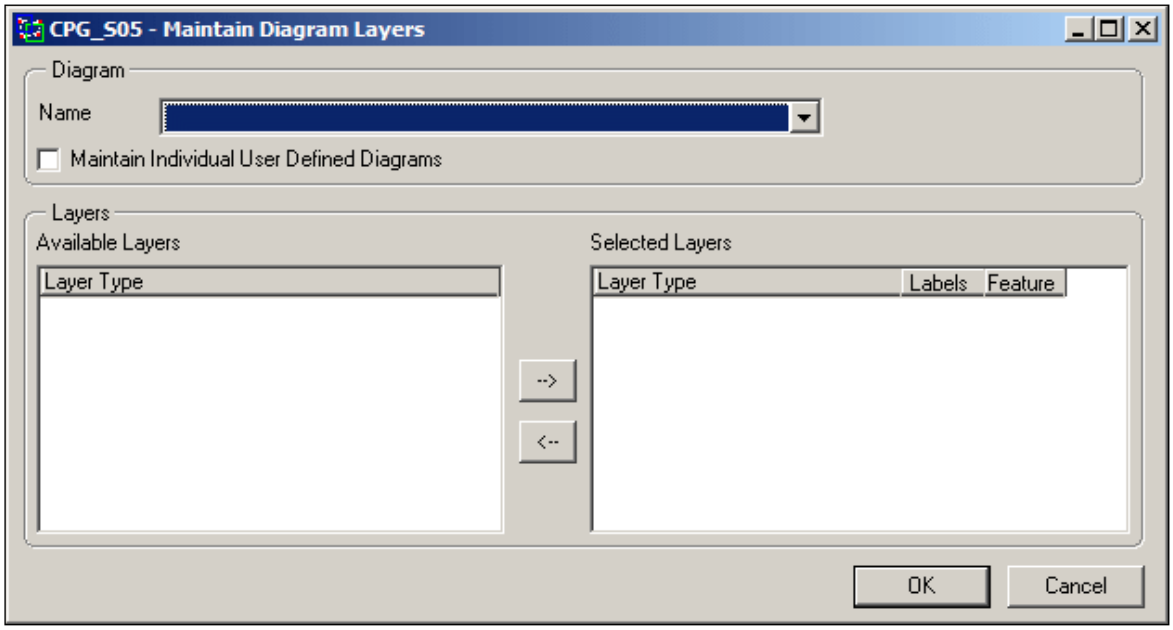
In this instance, the system generated diagram becomes a child of the user defined diagram. The system generated diagram label does not display in the parent diagram, therefore if you lay it out, you will have to add text to label it.

When Diag. A (ie the user defined diagram) is larger than the System Generated diagram, the following will show:

- In Diag. A, no labels will show (because the System Generated diagram does show them).
- In the System Generated diagram, Diag. AA will show, but not Diag. AAA.
- In Diag. AA, Diag. AAA will show.

10.3.2.5 Maintain diagram layers

You maintain layers of defined diagrams in the Maintain Diagram Layers screen.



Each diagram defined in the Spatial Window has mandatory layers. Mandatory layers display in the Selected Layers list of the Maintain Diagram Layers screen and cannot be removed. Selected layers do not display in the Spatial Window. You view them in diagrams in the Layout Plan Sheets screen.

The Maintain Diagram Layers screen also displays a list of optional layers in the Available Layers list. You can add optional layers to the Selected Layers list. To add any of the non primary layers, you must first select the Non Primary Boundary Marks layer.

In the Selected Layers list all labels default to display in the diagram(s). You can hide labels for a layer if required. You can also hide the boundaries for the Existing Parcels layer if required. When hidden, only the labels will display.

In the Maintain Diagram Layers screen you can apply the maintained layers to all diagrams of a type (eg User Defined Primary) or to an individual user defined diagram.

Note: For details of the information included in the diagrams, see **Appendix H: Spatial layers included in plan diagrams**.

Tasks:

You can:

- Display the Maintain Diagram Layers screen.
- Maintain layers for all user defined diagrams of one type.
- Maintain layers for an individual diagram.
- Maintain layers for a diagram using the right mouse.

The following headings correspond with these tasks and describe them in more detail.

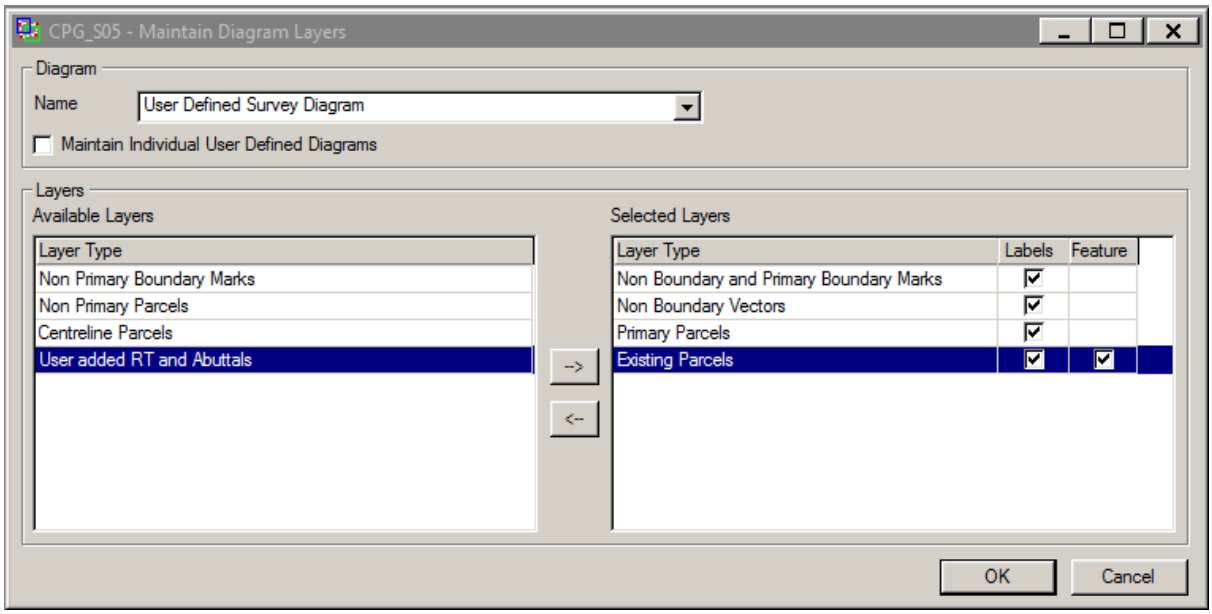
10.3.2.5.1 Display the Maintain Diagram Layers screen

There are two ways to display the Maintain Diagram Layers screen:

1. In the in Plan Generation, select Generate Plan | Maintain Diagram Layers…
2. In the Plan Generation Spatial Window, click (Maintain Diagram Layers).

Note: You do not have to open the Spatial Window to maintain diagram layers. If you maintain layers while the Layout Plan Sheets screen is open, you will have to close and reopen the Layout Plan Sheets screen to see the changes.

10.3.2.5.2 Maintain layers for all user defined diagrams of one type



This is the Maintain Diagram Layers screen. Henry Brown wants to display the same layers for all user defined Survey diagrams. He has added some of the optional layers to the Selected Layers list. Labels for each layer default to on. Henry could choose not

to display labels for some layers. He could also choose not to display the boundaries of the Existing Parcels layer by unchecking the Feature checkbox.

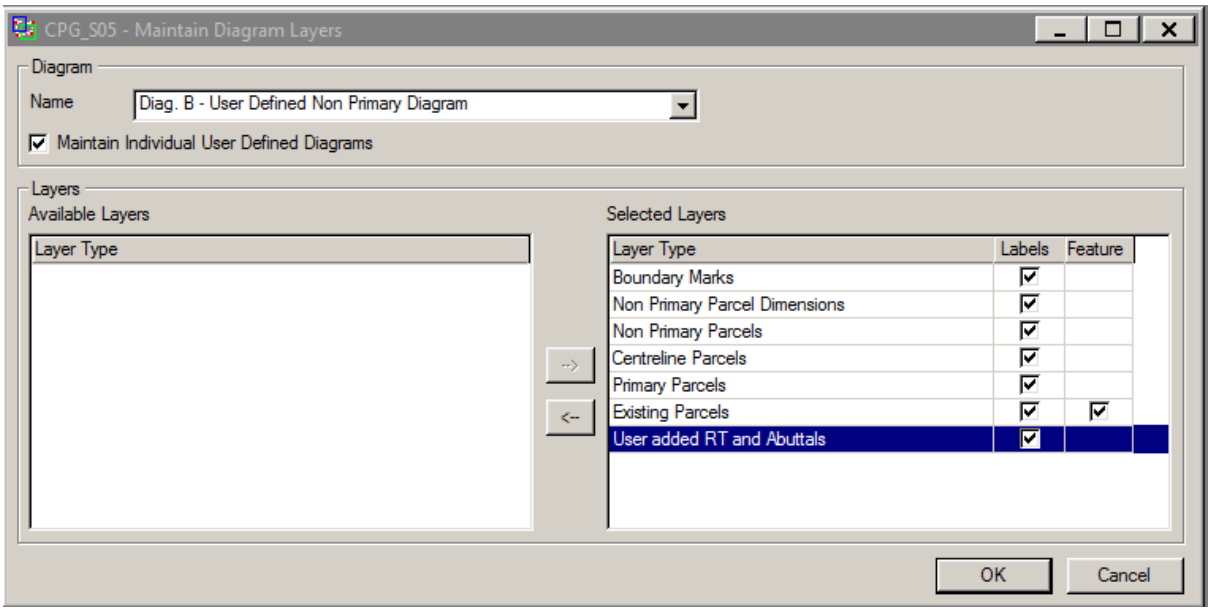
To maintain the layers of all user defined diagrams of one type:

1. Uncheck the Maintain Individual User Defined Diagrams checkbox.
2. Select the name of the diagram in the Name field (eg User Defined Survey Diagram).
3. Select an optional layer from the Available Layers list.
4. Click --> to add the optional layer to the Selected Layers list. When the Non Primary Boundary Marks layer displays to select, you must add this layer to the Selected Layers list before you can add Non Primary Parcel Dimensions, Non Primary Parcels or Centreline Parcels.
5. Repeat Step 3 and 4 to add another layer to the Selected Layers list.

- To remove an optional layer added in error, select the layer from the Selected Layer list and click <-- to return it to the Available Layers list.

6. Uncheck the Labels checkbox for any layer you want to hide labels for, if required. The labels for each layer default to on and display in all diagrams unless unchecked. You see these labels in diagrams when they are added to pages of a layout sheet in the Layout Plan Sheets screen.
7. Uncheck the Features checkbox for the Existing Parcels layer if you want to display only the labels (not the boundary lines) of these parcels. The Features checkbox defaults to on (ie ☑) for the Existing Parcels layer unless unchecked. You see the boundaries and/or labels in diagrams when they are added to pages of the layout sheet in the Layout Plan Sheet screen.
8. Click OK to save and close.

10.3.2.5.3 Maintain layers for an individual diagram



Henry Brown has maintained the layers of an individual user defined diagram ie Diag. A – User Defined Non Primary Diagram. He requires labels to display for all layers. Henry will see the layers when he adds the diagram to a page of the Title sheet in the Layout Plan Sheets screen.

To maintain the layers of an individual user defined diagram:

1. Check the Maintain Individual User Defined Diagrams checkbox.
2. Select the name of the individual user defined diagram in the Name field (eg Diag. A - User Defined Non Primary Diagram).
3. Select an optional layer from the Available Layers list.
4. Click --> to add the optional layer to the Selected Layers list.

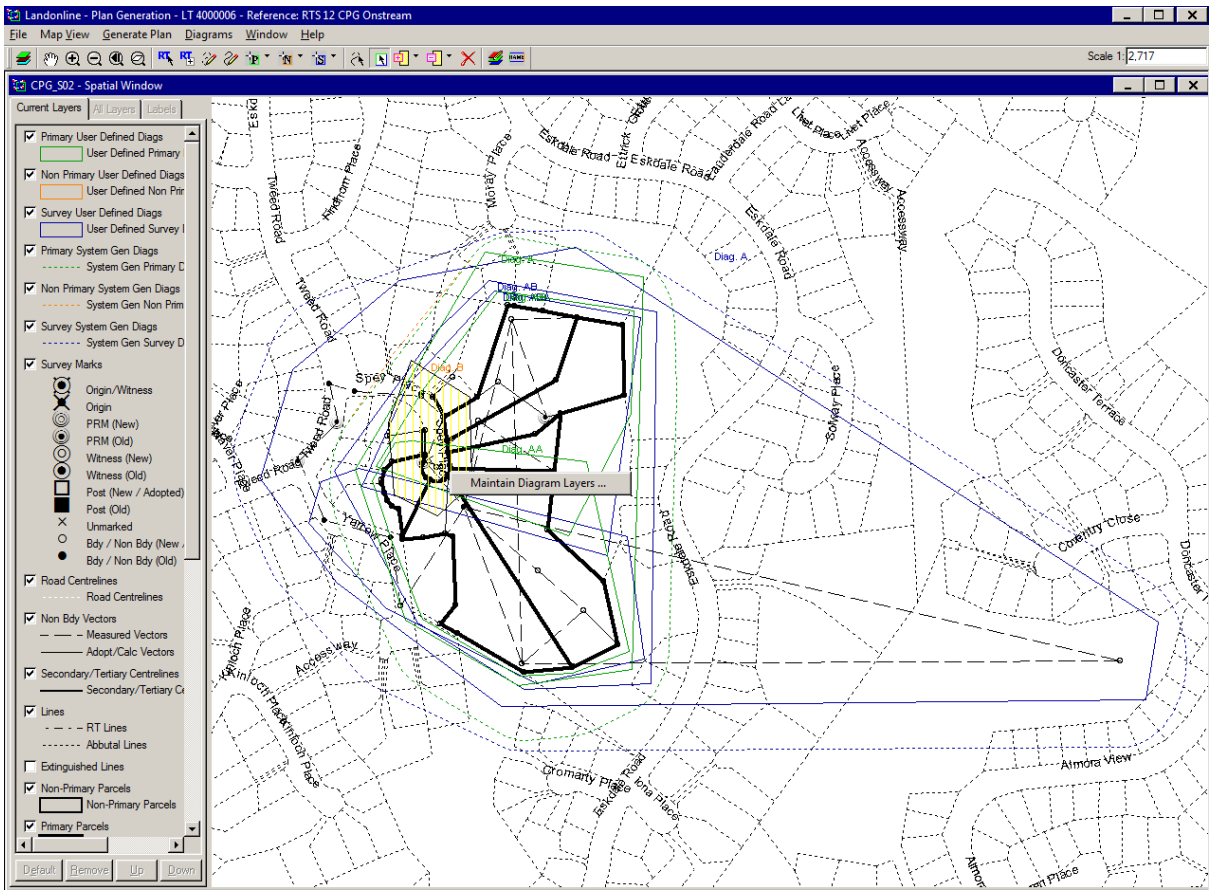
5. Repeat Step 3 and 4 to add another layer to the Selected Layers list.

- To remove an optional layer added in error, select the layer from the Selected Layer list and click <-- to return it to the Available Layers list.

6. Uncheck the Labels checkbox for any layer you want to hide labels for, if required. The labels for each layer default to on and display in all diagrams unless unchecked. You see these labels in diagrams when they are added to pages of a layout sheet in the Layout Plan Sheets screen.
7. Uncheck the Features checkbox for the Existing Parcels layer if you want to display only the labels (not the boundary lines) of these parcels. The Features checkbox defaults to on (ie ☑) for the Existing Parcels layer unless unchecked. You see the boundaries and/or labels in diagrams when they are added to pages of the layout sheet in the Layout Plan Sheet screen.
8. Click OK to save and close.

Note: If you maintain one or more user defined diagrams of one type individually, then uncheck the Maintain Individual User Defined Diagrams checkbox and maintain all user defined diagrams of the same type. These changes will overwrite any settings in the individual diagrams.

10.3.2.5.4 Maintain layers for a diagram using the right mouse



Henry Brown has selected to maintain layers in a User Defined Non Primary diagram in the Spatial Window. The selected diagram is coloured pale yellow and the name displayed in microhelp at the bottom of the screen. Henry has right clicked the mouse to display the menu option to open the Maintain Diagram Layers screen.

To maintain diagrams in the Spatial Window:

1. Click (Select Diagram).
2. Select the diagram to maintain. To select more than one diagram, hold Ctrl and select the diagrams. Landonline colours the diagram(s) pale yellow. As each diagram is selected, the diagram name is displayed in microhelp at the bottom of the screen.

- To deselect diagrams, click another icon in the toolbar.

3. Right mouse click on the diagram and select Maintain Diagram Layers… to display the Maintain Diagram Layers screen.
4. Select the name of the diagram in the Name field. Only the name(s) of the diagram(s) you selected will be listed.
5. Select one or more optional layers from the Available Layers list.
6. Click --> to add the optional layer(s) to the Selected Layers list.
   - To remove an optional layer added in error, select the layer from the Selected Layer list and click <-- to return it to the Available Layers list.
7. Uncheck the Labels checkbox for any layer you want to hide labels for, if required. The labels for each layer default to on (ie ☑) and display in all diagrams unless unchecked. You see these labels in diagrams when they are added to pages of a layout sheet in the Layout Plan Sheets screen.
8. Click OK to return to the Spatial Window.

10.3.2.6 Define and create diagrams Toolkit

Table 10-1 lists other tools that assist with defining and creating detail diagrams.

Tool	Description
Landonline Help	Press F1 in the Plan Generation Spatial Window to display information about the Spatial Window icons.
Quick Reference Cards	Section: *e-surveys*. Topic: Generate Plans – Define Plan Diagrams.

Table 10-1 Define and create diagrams Toolkit

10.3.3 Request layout sheet preparation by batch

After you define diagrams for a plan in the Spatial Window, you can request Landonline to prepare the layout sheet data for you by batch process using the Plan Generation tab in the Manage Survey Transaction screen.

Use this process:

- for a large or complex plan, or
- when your Landonline session will time out before the layout sheets have been generated.

The request to prepare your layout sheets is only initiated after you close the Manage Survey Transaction screen. Landonline locks your *e-survey* until this process has completed then sends you an online message and an email to advise the outcome.

When successfully prepared, the Layout Plan Sheets screen will then open without a long delay.

- You can repeat this process to prepare your layout sheet data if you:
- re-define an existing diagram or create new diagrams for the *e-survey*
- edit anything in the Maintain Diagram Layers screen
- edit survey capture and run pre-validation again.

Steps:

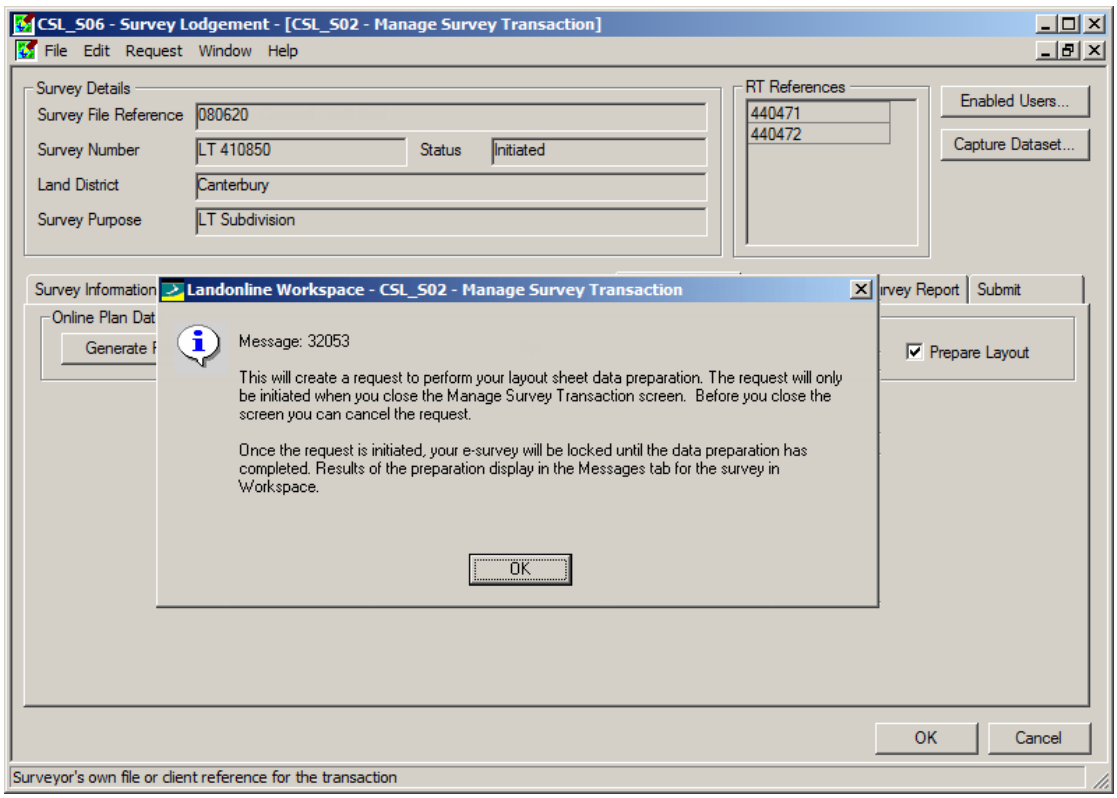
To request layout sheet preparation by batch process you:

1. Request layout sheet preparation.
2. View the batch preparation results.

The following headings correspond with these steps and describe them in more detail.

10.3.3.1 Request layout sheet preparation

You request preparation of layout sheet data by batch process using the Plan Generation tab in the Manage Survey Transaction screen.



To request layout sheet preparation by batch process, in the Plan Generation tab:

1. Check the Prepare Layout checkbox in the Plan Data area in the Plan Generation tab. A message displays advising the request will be initiated after you close the Manage Survey Transaction screen.
- Click OK to close the message.
2. Continue to perform work on this *e-survey* (if required).
3. To cancel the request to prepare layout sheets by batch process, uncheck the Prepare Layout checkbox. You must do this before closing the Manage Survey Transaction screen.
4. Click OK to close the Manage Survey Transaction screen.
- Landonline locks your *e-survey* and initiates the request.
5. To check whether the data preparation was successful, see **10.3.3.2 View the batch preparation results**.

Note: Should you get an unexpected error and Landonline closes before you close the Manage Survey Transaction screen, the request will not be processed. LINZ recommends that you initiate this layout preparation request again.

10.3.3.2 View the batch preparation results

Once the batch process to prepare your layout sheets has completed, Landonline unlocks your *e-survey* and sends an online message and an email to advise whether it was successful. (To check the email address recorded in your contact details, see **3.8.1 Change your details**).

When the message or email advises your layout sheets have been successfully prepared, you will be able to open the Layout Plan Sheets screen without a long delay.

To view the results in Workspace:

1. Select the *e-survey* you require in the Workspace tree. Details of the survey display in the Details Information tab.
2. Select the Messages tab.
3. View details of the online message about the layout sheet data preparation:

- If successful, you can proceed to Plan Generation and open the Layout Plan Sheets screen. See **10.3.5 Complete layout** sheets.
- If unsuccessful, Landonline advises whether you need to create the request again and/or amend the defined diagram data before creating a new request (ie repeat the steps in **10.3.3.1 Request layout sheet preparation**.

To view the results in an email:

1. Go to your email application.
2. View details of the email about the layout sheet data preparation (refer to Step 3 above).

Note: If the survey remains locked, contact LINZ Customer Service to have the lock removed.

10.3.4 Work with layout sheets

Layout sheets display in the Layout Plan Sheets screen.

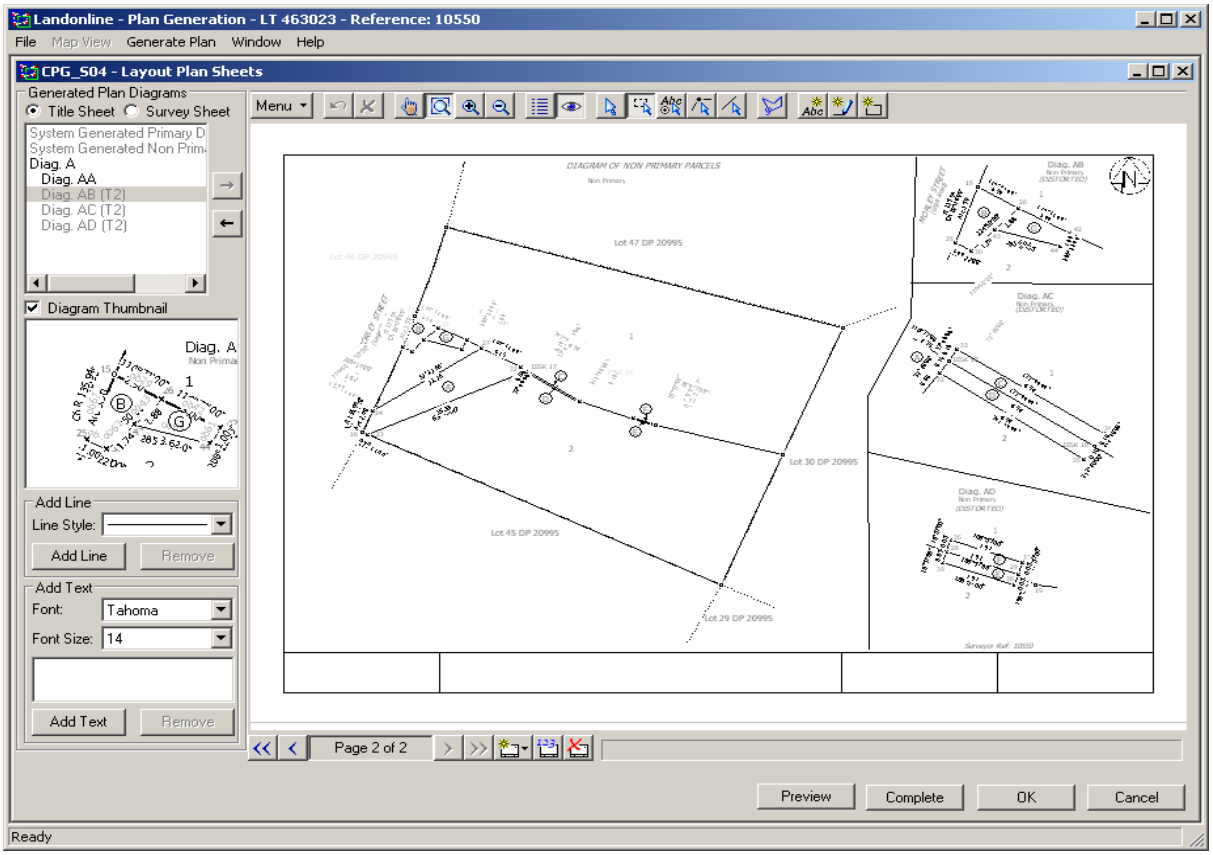
Landonline generates all system defined and user defined diagrams when you open the **Layout Plan Sheets** screen.

There are two layout sheets:

- Title Sheet - This page displays the System Generated Primary diagram.
- Survey Sheet - This page displays the System Generated Survey diagram.

The Layout Plan Sheet screen is where you:

- Add the Non Primary System Generated diagram to a page of the Title Sheet (if this forms part of your *e-survey*).
- Add user defined diagrams to clarify information contained in the master diagrams.
- Preview the Title Sheet and Survey Sheet diagrams.
- Generate the CSD Plans for the *e-survey*.



Henry Brown has started laying out the sheets for his CSD Plans. This is the Title Sheet. Henry has added Diagrams to the page.

You toggle between the Survey sheet and Title sheet to add user defined diagrams to them. The name of each diagram in the list changes from black to grey when it has been added to a layout sheet. It is not essential to add all user defined diagrams to layout sheets.

If required, you can append a new page to either layout sheet to add further user diagrams. Where a new page has no diagrams added, Landonline will not incorporate this page in the CSD Plan or Title Plan.

You can choose where to position user defined diagrams on layout sheets and add text to explain features in the layout. There is range of line styles, text fonts and sizes you can select.

Once all images have been laid out, Landonline generates graphic pages of the plans in a multi page .tif file format. These are available for you to view as an attachment to a message in your My Messages folder in Workspace.

The completed CSD Plans are created upon submission and include:

- header information
- consents
- supporting documents
- graphical pages.

Note:

- Primary or Non Primary parcel pages only display if parcels of these types are included in your *e-survey*. Survey pages will not display when your *e-survey* only has boundary information and you have not captured vectors.
- If a user defined diagram was not defined wholly within the system generated diagram, the label will not show in the system generated diagram when laid out. You can add a user added text label to the diagram for clarity.

10.3.4.1 Updating an *e-survey* captured in a previous version of Landonline

Version 2.3 of Landonline introduced new Plan Generation functionality. If you have captured an *e-survey* in an earlier version of Landonline, before you display the Plan Layers screen you will need to:

- maintain the layers in your diagrams to ensure the layers you require are selected.

For more information about maintaining layers, see **10.3.2.5 Maintain diagram layers**.

10.3.4.2 Layout Plan Sheets toolbar

Table 10-2 lists the icons and options for working with diagrams in the Layout Plan Sheets screen.

Menu, Icon or Field	Action
Menu	Select the function you require from the list of options. All icon functions can also be accessed from this menu. For more information, see **Layout Plan Sheets function menu options** in **Appendix O: Survey Plan Generation screen information.**
Undo	Click to reverse the last action. You can only undo one action. This functionality is also available via keyboard short cuts of Ctrl+z and Alt+Backspace.
Delete	Click to delete an object. This functionality is also available via the Delete key and keyboard short cut Ctrl+x.
Dragging Tool	Click and drag the visible area of the image to move it in any direction. This is also known as the Pan icon. This functionality is also available via the keyboard arrows and by clicking and holding the right mouse then dragging the screen to the required position.
Fit to window	Click to fit the complete image to the size of the window.
Zoom In	Click a location in the image to double the size of the image. The location you click is centred on the page. Each time you click a location in the image it doubles the image size. When in this mode, click anywhere on the image and drag to create a rectangle. When the mouse is released the area within the rectangle will be zoomed into. This functionality is also available via the mouse scroll wheel and the plus (+) keyboard key.
Zoom Out	Click a location in the image to halve the size of the image. The location you click is centred on the page. Each time you click a location in the image it halves the size of the image. This functionality is also available via the mouse scroll wheel and the minus (-) keyboard key.
View Labels	Click to select which labels are to be displayed.
View Hidden Objects	Click to display or not display Hidden Objects.
Generic select	Click and then select any label, coordinate or line you want.
Diagram Selection Tool	Click and then select the diagram you want.
Label Selection Tool	Click and then select the label you want.
Coordinate Selection Tool	Click and then select the coordinate you want.
Line Selection Tool	Click and then select the line you want.

Menu, Icon or Field	Action
Select by Polygon (Lasso)	Click to select a number of objects simultaneously by drawing a polygon around a number of objects. If the (Generic Selection Tool) is active instead of one the specific selection tools at the same time, a request will be made to choose which of coordinates, lines or labels are to be selected within the area of the polygon. If there is only one type of object within the area of the polygon, they will be automatically selected and the request to choose will not be made.
Add Text Tool	Click then select the location for the new text on the page to display a blank label. Enter the text into the label and click elsewhere on the page to save. The text you enter also displays in the Add Text area on the left of the screen. To edit added text, click then select the text, Make your changes directly on the page. Alternatively, after selecting this text, use the Add Text area on the left of the screen to edit your changes and click Set Text to save.
Add Line Tool	Click and then draw a line.
Add Rectangle Tool	Click and then draw a rectangle.
Zoom Previous	Click to display the previous view. This option is available to be added to the toolbar via toolbar customisation.
Fit To Window Zoom display size	Select one of the options from the list: • Fit To Window - fits the complete image to the size of the window. • Fit to Width - fits the width of the image to the size of the window. • Fit to Height - fits the height of the image to the size of the window. • 25%, 50%, 75%, 100%, 200% or 400% - immediately zooms in or out to the selected percentage. This option is available to be added to the toolbar via toolbar customisation.
Zoom In	Click to immediately zoom in to decrease the scale of the layout sheet by 50%. Click the icon again to zoom in a further 50%. This option is available to be added to the toolbar via toolbar customisation.
Zoom Out	Click to immediately zoom out to increase the scale of the layout sheet by 50%. Click the icon again to zoom out a further 50%. This option is available to be added to the toolbar via toolbar customisation.
Zoom to Selection	Click to immediately zoom to selected object. This option is available to be added to the toolbar via toolbar customisation.

Table 10-2 Layout Plan Sheets toolbar

Note: Toolbar Customisation is accessed by double clicking a clear area of the upper toolbar.

10.3.4.3 Recovery of layout plan sheets

Recovery file processing is available as a default for all new plans and can be altered for that plan via Plan Generation Preferences.

Alterations include setting the save frequency from a pre-set list and enabling or disabling recovery file processing.

If recovery file processing is enabled, changes to the plan will be saved as often as specified in the preferences.

If a plan is lost due to a system crash or automatic session closure after user inactivity, upon return to the plan, the user will be prompted to choose whether to recover from the last saved recovery file (date and time given) or to return to the plan as at the last successful save (date and time given).

10.3.5 Complete layout sheets

Tasks:

The tasks you perform when adding detail diagrams to layout sheets are:

- Display the Layout Plan Sheets screen.
- Add diagrams.
- Add text and lines to pages.
- Customise a diagram.
- Remove a diagram from a page.
- Preview layout sheets.

The following headings correspond with these tasks and describe them in more detail.

10.3.5.1 Display the Layout Plan Sheets screen

In Plan Generation:

1. Select Generate Plan | Layout Plan Sheets…

Note: Landonline generates all system defined and user defined diagrams when you open the Layout Plan Sheets screen. The length of time it takes to open this screen depends on the number of diagrams defined and their complexity.

10.3.5.2 Add diagrams

Tasks:

The tasks you perform when adding diagrams to layout sheets are:

- Add a user defined diagram.
- Add the Non Primary System Generated diagram.
- Add a new page.
- Preview a diagram image.
- Resize a diagram.

The following headings correspond with these tasks and describe them in more detail.

10.3.5.2.1 Add a user defined diagram

When you add a diagram to a layout sheet Landonline changes the name of the diagram in the Generated Plan Diagram list from black to grey.

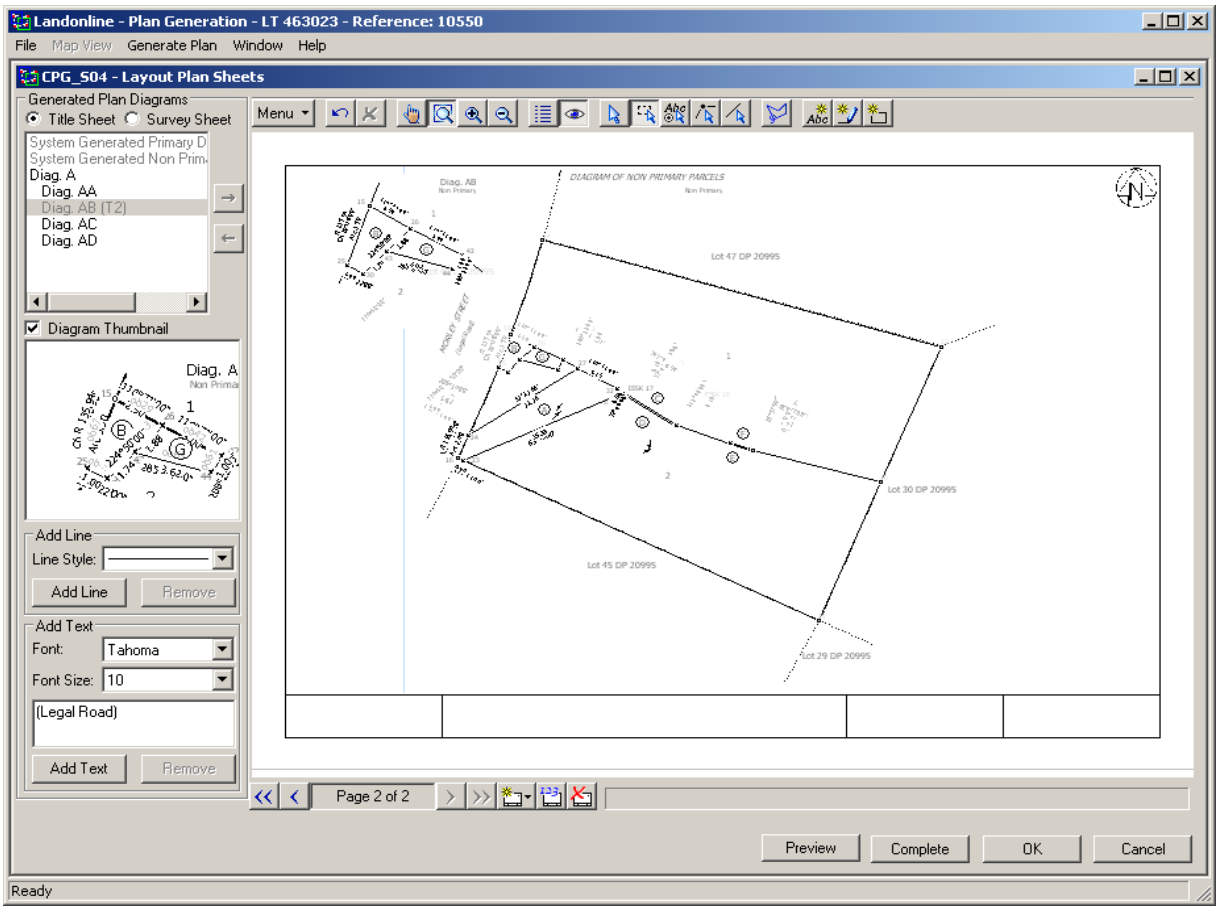
The name will also be appended with information showing the sheet type and page number (in brackets) once the diagram has been laid out on a page.

Any long vectors for the selected defined diagram will display as truncated in the Layout Plan Sheets.

Note:

- Only diagrams added to layout sheets will be form part of the CSD Plan.
- It is not necessary to add all user defined diagrams to layout sheets.

- You should only exclude a system generated diagram from a layout sheet if you decided it was not appropriate when defining diagrams in the Spatial Window. You must add the user defined diagram (you defined to replace the system generated diagram) to the layout sheet in its place.
- If you require additional layers to display in a diagram, exit from the Layout Plan Sheets screen and maintain layers for the diagram. See **10.3.2.5 Maintain diagram layers**.
- If your diagrams do not display the layers or labels you require, see **10.3.4.1 Updating an *e-survey* captured in a previous version of Landonline**.



Henry Brown has added Diagram AB to page 2 of the Title sheet. The diagram is automatically positioned in the top left corner. Henry will now drag Diagram AB to reposition in a more suitable location.

To add user defined diagrams to layout sheets:

1. Select the layout sheet you require (Title Sheet or Survey Sheet).
2. Display the layout sheet page you require.
3. Select the user defined diagram in the list.
4. Click --> (Add Diagram) to add the diagram to the page. Landonline adds it to the top left of the page.
5. Click (Diagram Selection Tool).
6. Click the diagram and drag it to the correct position on the page.
7. Repeat Steps 1 to 6 until all diagrams are added. If required add a new page, see **10.3.5.2.3 Add a new page**.
8. Click OK to save and close without generating final plans.

Note: To generate digital plans now see topic **10.3.6 Generate final plans**. The CSD Plan, Title Plan and Title Diagram are all compiled from the Title sheet and Survey sheet. You only need to

lay out the user defined diagrams once.

10.3.5.2.2 Add the Non Primary System Generated diagram

When a Non Primary System Generated diagram is automatically defined as part of your *e-survey*, Landonline does not automatically add it to the second page of the Title Sheet (unlike the System Generated Survey diagram and System Generated Primary diagram). You must add this diagram to a page of the Title Sheet.

To add the Non Primary System Generated diagram to a layout sheet:

1. Select the Title Sheet.
2. Display the layout sheet page you require. If required add a new page, see **10.3.5.2.3 Add a new page**.
3. Select the Non Primary System Generated diagram in the list.
4. Click --> (Add Diagram) to add the diagram to the page. Landonline adds it to the top left of the page.
5. Click (Diagram Selection Tool).
6. Click the diagram and drag it to the correct position on the page.
7. Click OK to save and close without generating final plans.

10.3.5.2.3 Add a new page

You add a new page to a layout sheet for adding the Non Primary System Generated diagram and additional user defined diagrams.

To add a new page to the selected layout sheet:

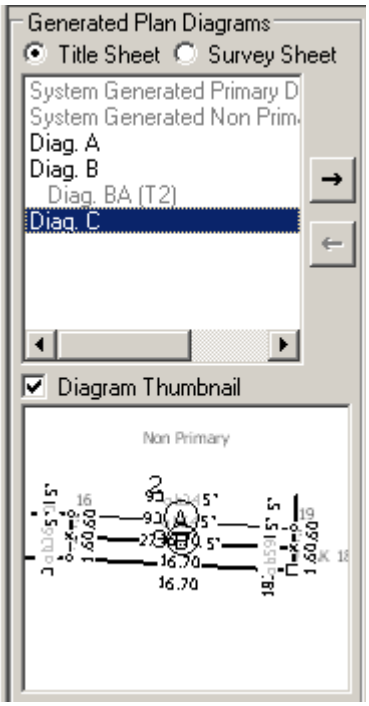
1. Click in the lower toolbar.
2. Choose from the drop-down options to add a new last page or add a new first page or add a new page after the current page.

Alternatively:

1. Select Menu | Layout Sheets.
2. Select either Add New First Page or Add New Page After This One or Add New Last Page.

10.3.5.2.4 Preview a user defined diagram

You can preview user defined diagrams before adding them to a layout sheet.



To preview a thumbnail of a diagram image:

1. Check the Diagram Thumbnail checkbox.
2. Select the image in the list to view it in the preview window.

10.3.5.2.5 Resize a diagram

To resize a diagram added to a layout sheet:

1. Click (Diagram Selection Tool).
2. Click the corner of the diagram, hold and drag to the required size.

Alternatively:

1. Right click in the selected diagram (or double click to display properties).
2. Select Properties to display the Diagram Properties screen.
3. Edit the Zoom scale to the desired scale.
4. Click OK

Resizing a diagram will not affect the size of labels displayed for the diagram, but any user added text and lines will need to be repositioned as follows:

1. Click the (Generic Selection Tool).
2. Right click somewhere in the area of the previously resized diagram and choose Select Text Affected By Last Diagram Shift or Select Lines Affected By Last Diagram Shift.
3. Hold down the Ctrl key and left click any selected items not required and any unselected items that are required.
4. Right click and select Apply Last Diagram Move/Resize.
5. The items will be repositioned on the resized diagram.

Note:

- The label point of user added text will be moved, but the font size will not change.

- The movement/resizing applied to user added linework will be proportional to the last diagram move/resize.
- The Apply Last Diagram Move/Resize option will be deactivated if other activity is performed (eg Undo, navigate to another page). It will reactivate after a subsequent diagram move/resize.
- It is recommended that user added text and linework are moved/resized before applying any adjustments to a newly shifted or resized diagram.

10.3.5.2.6 Move a diagram

To move a diagram to another page:

1. Click  (Diagram Selection Tool).
2. Right click on the diagram and select Move To Page.
3. From the options select where the diagram is to be moved to:
   - Existing page
   - New last page
   - New page after this one
   - New first page
4. Diagrams moved to a new page will appear in exactly the same location on the new page.
5. User added text and lines will not be moved with the diagram. These will need to be moved separately as described below.

To move user added text and lines:

1. Click the  (Generic Selection Tool).
2. Right click somewhere in the area of the previously moved diagram and choose Select Text Affected By Last Diagram Shift or Select Lines Affected By Last Diagram Shift.
3. Hold down the CTRL key and left click any selected items not required and any unselected items that are required.
4. Right click and select Move To Page to move the items to the diagram previously moved.
5. Items moved to a new page will appear in exactly the same location on the new page.

Alternative selection of user added text and lines to be moved:

1. Click the  (Generic Selection Tool).
2. Using  (Select by Polygon (Lasso) to surround the items to be selected.
3. If the selection includes a mix of user and system objects, when Move To Page has been chosen, system added objects will be deselected.

Note:

- If the selection included user added text or lines that belong to a different diagram, these will be moved also.
- User added text and lines will need to be moved separately.

10.3.5.3 Selecting and editing system generated objects

There are a number of options for selecting objects on a page and limited options for editing system generated objects. Some of these are detailed below. Also refer to **10.3.4.2 Layout Plan Sheets toolbar** and **Layout Plan Sheets function menu options** in **Appendix O: Survey Plan Generation screen information** for more details of selecting and editing options.

Where relevant, some of the functions discussed below are also available for user added text and user added lines.

10.3.5.3.1 Selecting objects

Objects can be selected via the following tools:

Diagram Selection Tool
Label Selection Tool
Line Selection Tool
Coordinate Selection Tool
Generic Selection Tool

When an object has been selected it will be highlighted blue and have scrolling dotted lines.

When a line is selected, if there are any associated labels, the labels will be highlighted green.

10.3.5.3.2 Generic select

The (Generic Selection Tool) allows for any line, label or co-ordinate to be selected regardless of type and without the need to first click the relevant object toolbar select button. It allows for quick access between label, line and co-ordinate selection without having to revisit the toolbar.

When the (Generic Select Tool) is used, any one of these three object types can be clicked and will then become highlighted blue with scrolling dotted lines.

If more than one object is required to be selected at the same time by use of holding down the Shift key and clicking each object, the (Generic Select Tool) will only allow selection of one type of objects (labels or lines or co-ordinates). The first one selected will determine the selection type from there on.

10.3.5.3.3 Select by polygon (lasso)

Multiple objects of the same type can be selected via (Select by Polygon (Lasso)):

1. Draw a polygon around the area in which the required objects reside.
2. The objects relevant to the active select tool will then be selected and highlighted.
3. If the (Generic Selection Tool) is active, choose Labels, Coordinates or Lines from the displayed selection box. If there is only one type of object within the area of the polygon, the request to choose will not be made.
4. The chosen objects will then be selected and highlighted.

10.3.5.3.4 Select by rectangle

Multiple objects of the same type can be selected by:

1. Click on the page and drag over the area you want to select within.
2. The objects relevant to the active select tool will then be selected and highlighted.
3. If the (Generic Selection Tool) is active, choose Labels, Coordinates or Lines from the displayed selection box. If there is only one type of object within the area of the rectangle, the request to choose will not be made.
4. The chosen objects will then be selected and highlighted.

10.3.5.3.5 Select labels associated with a line

To find all labels including bearings and distances associated with a line:

1. Click (Line Selection Tool) or (Generic Selection Tool).
2. Select the line you want to investigate.
3. Right click and choose Select.
4. While scrolling over the presented list of labels, the associated label(s) will be highlighted green.
5. Any label(s) can then be selected resulting in that label(s) being highlighted blue and becoming the current object(s) selected.

10.3.5.3.6 Select from a "pile" of labels

To determine and select from a "pile" of labels:

1. Click (Label Selection Tool) or (Generic Selection Tool).
2. Right click on the "pile" and choose Select.
3. While scrolling over the presented list of labels, the associated label will be highlighted blue.
4. Any label can then be selected resulting in that label becoming the current object selected.

10.3.5.3.7 Align label to line

To align a label to a selected line:

1. Click (Label Selection Tool) or (Generic Selection Tool).
2. Select the label you want to align.
3. Right click and select Align Label to Line.
4. Left click the line to which the label is to be aligned with.
5. The label will then turn to be aligned with the selected line.

Note:

- This option is available for any label including user added text.
- Any label and line on a page can be aligned. They do not have to be associated with each other.
- The label alignment will occur at the location of the label which will not be moved any closer to the line.
- Only one label and line can be selected at a time for alignment.

10.3.5.3.8 Text justification

System generated labels can be edited via an option in the Label Properties screen to justify the position of the label and is particularly useful when labels are split over multiple lines.

In the Justify box in the Label Properties screen, select Left, Centre and Right justification to be applied to the selected label.

Note that this option is also available for user added text.

10.3.5.3.9 Insert carriage returns in labels

System generated labels can be edited via the Text box in the Label Properties screen to allow parts of the label text to be split over multiple lines.

Where there is a space in the text, press the Enter key to insert a carriage return. To remove a carriage return, position the cursor at the beginning of the line and press the Backspace key.

Use the Justify (left / centre / right) option in the Label Properties screen to present a tidy multi-line label.

Note that user added text can have unlimited carriage returns entered via the same method as well as via the Add Text area and on screen editing. See **10.3.5.4.1 Add text**.

10.3.5.3.10 Suppress bearing seconds = 00

When an Observation Bearing has seconds equal to 00, the Label Properties screen will have an option to allow the seconds to be suppressed. Tick the checkbox to suppress the seconds and un-tick to allow 00 seconds to be re-displayed.

10.3.5.3.11 Add border around text

A border can be added to non-symbol system generated labels via an option in the Label Properties screen.

To add a border, tick the Border checkbox in the **Label Properties** screen. The line thickness defaults to 0.7 points and can be increased to 1, 1.4 or 2 points as required by selecting from the drop down options.

Note that this option is also available for user added text.

10.3.5.4 Add text and lines to pages

To clarify details on a page of a layout sheet, you can add text in the form of an annotation. There is range of line styles and text fonts and sizes for annotations to select. All text added displays in italics and can be rotated in the diagram.

You can also add lines for clarification (eg to draw abuttals to show the direction a stream flows). You can draw lines in any direction, draw multi segmented lines and draw rectangles.

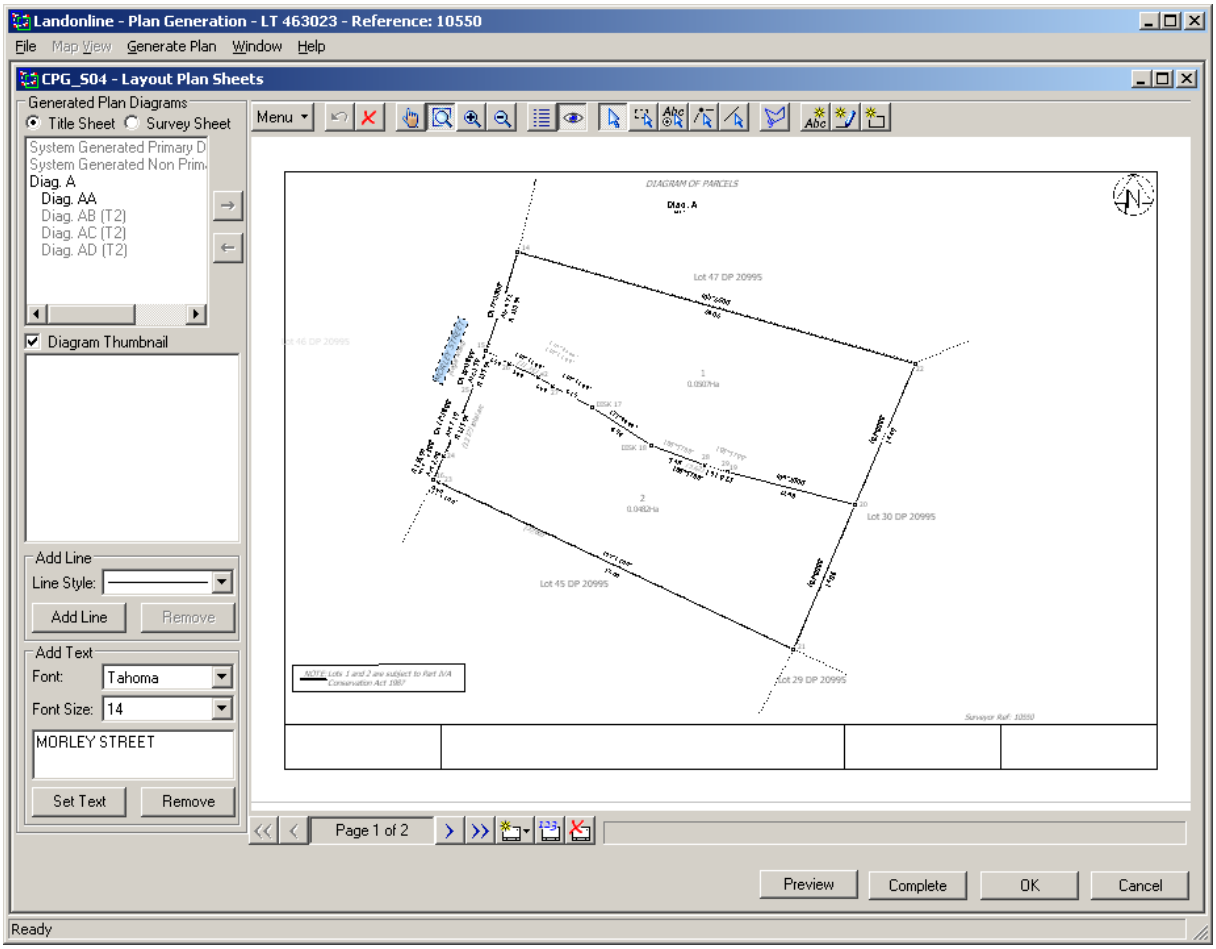
Tasks:

The tasks you can perform to clarify and provide more information for diagrams are:

- Add text.
- Rotate added text added to a page.
- Bold text added to a page.
- Edit text added to a page.
- Delete text added to a page.
- Add a line or rectangle.
- Edit a line or rectangle added to a page.
- Delete a line or rectangle added to a page.

The following headings correspond with these tasks and describe them in more detail.

10.3.5.4.1 Add text



Henry Brown has added the annotation "Morley Street", highlighted in blue, to page 1 of the Title Sheet. He has positioned it within Diagram A as it provides explanation of a feature in this diagram.

In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet) and page.
2. Select the Font you require. Tahoma is the default font.
3. Select the size of font you require in the Font Size field.
4. Type the text in the Add Text area.
   - To add a new line to your annotation, press Enter. You can add an unlimited number of lines of text.
5. Click Add Text. This changes to Set Text once the text is added.
6. Click the location for the annotation on the layout page.
   Landonline adds the text to the page.

Caution: Do not use superscript or subscript when adding text. You can add areas as hectares (eg 0.0250ha rather than 250m²).

Note: When a user added annotation contains invalid characters (eg metres squared or superscript for degrees) and you click Complete or OK, or you select File | Save, a message displays to advise you have invalid characters. Click OK to the message. You must remove the invalid characters before you can continue.

10.3.5.4.2 Rotate text added to a page

In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet).

2. Click (Label Selection Tool) or (Generic Selection Tool).
3. Select the text in the diagram. Landonline displays a highlighted dashed line box around the text.
4. Hold the cursor over the corner of the box until the (double arrow symbol) displays.
5. Click and drag the annotation in the direction required.

Alternatively:

1. Right click on the selected label (ie text) (or double click to display properties).
2. Select Properties to display the Label Properties screen.
3. Edit the Text angle (eg 180.000)
4. Click OK

Note: If a text angle greater than 180.000 is entered, it will be converted to a corresponding angle to ensure that the text does not appear upside down.

10.3.5.4.3 Bold text added to a page

In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet).
2. Click (Label Selection Tool) or (Generic Selection Tool).
3. Select the text in the diagram you want to bold.
4. Right click on the selected label (ie text) (or double click to display properties).
5. Select Properties to display the label Properties screen.
6. Check the Bold checkbox.
7. Click OK

Note: You can also bold a label by selecting it and pressing Ctrl+B.

10.3.5.4.4 Edit text added to a page

In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet).
2. Click (Label Selection Tool) or (Generic Selection Tool).
3. Select the text in the diagram. Landonline displays a highlighted dashed line box around the text and displays it in the Add Text area.
4. Make your edits in the Add Text area.
5. Click Set Text to save.

Note:

- You can also edit text added using the Label Properties screen. To display this screen, select the added text and select Menu | Edit | Properties, or right click on the added text and select Properties, or double click the added text.
- You can type an unlimited number of lines of text in the Add Text area of the Layout Plan Sheets screen and in the Text field of the Label Properties screen. Press Enter to begin a new line.
- If all text is removed leaving behind only spaces and/or carriage returns, the whole label is deleted.

10.3.5.4.5 Delete text added to a page

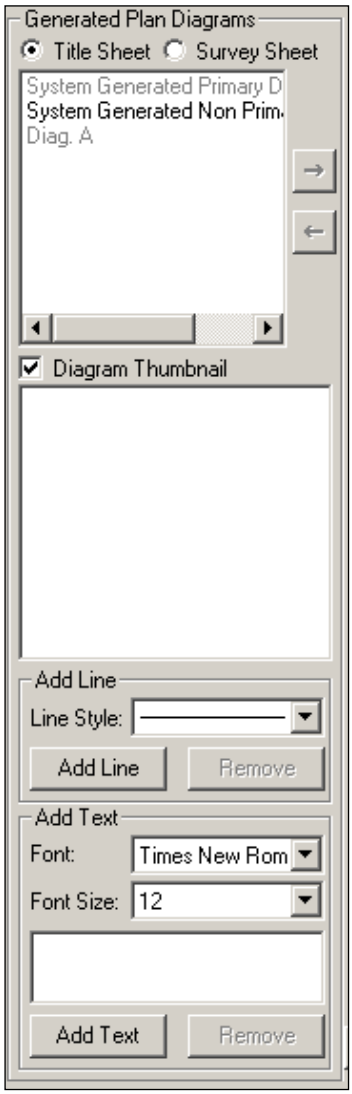
In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet).
2. Click (Label Selection Tool) or (Generic Selection Tool).
3. Select the text.
4. Click Remove

Note: After selecting the text, you can also delete via the following methods:

- Menu | Edit | Delete.
- Right click on the text displays a menu, listing delete as an option.
- Clicking in the toolbar.
- Keyboard shortcuts such as the Delete key.
- During editing, if all text is removed leaving behind only spaces and/or carriage returns, the whole label is deleted.

10.3.5.4.6 Add a line



Henry Brown could add a line to a diagram to indicate the direction a stream flows or to draw an abuttal.

In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet) and page.

2. Select the style of line to use in the Line Style field.
3. Click Add Line. This button changes to Set Line once the line is added.
4. Click the start location for the line on the page and drag in the direction you require.
5. Double click to end the line.

Note: To draw a multi segment line:

- Click each point and drag in the direction you require. Double click to end the line.
- Alternatively, select , to add a rectangle by dragging in the direction required.

10.3.5.4.7 Edit a line added to a page

In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet).
2. Click (Line Selection Tool) or (Generic Selection Tool).
3. Select the line.
4. Select another Line Style in the Add Line area.
5. Click Set Line to save.

Alternatively:

1. Right click on the selected line (or double click to display properties).
2. Select Properties to display the Line Properties screen.
3. Select the line style in the Style field.
4. Select the width of the line in the Width field, if required.
5. Click OK

10.3.5.4.8 Delete a line added to a page

In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet).
2. Click (Line Selection Tool) or (Generic Selection Tool).
3. Select the line.
4. Click Remove

Note: After selecting the text, you can also delete via the following methods:

- Menu | Edit | Delete.
- Right click on the text displays a menu, listing delete as an option.
- Clicking in the toolbar.
- Keyboard shortcuts such as the Delete key.

10.3.5.5 Customise diagrams

Diagrams laid out on layout sheets can be customised. For example:

- Choose whether to show or hide labels, coordinates and lines in a diagram or set them not to display. For more information, see **10.3.5.5.1 Show and hide objects in a diagram**.
- Distort a user defined diagram for clarity.

Tasks:

The tasks you can perform to customise user diagrams are:

- Show and hide objects in a diagram.
- Distort part of a user diagram.

The following headings correspond with these tasks and describe them in more detail.

10.3.5.5.1 Show and hide objects in a diagram

Labels, coordinates and lines can be Shown, Hidden or Not Displayed on pages of your layout sheets. You can:

- Hide an object
- Set a hidden object to not displayed
- Show hidden objects

To make an object not display you must first make it hidden. For example, when a bearing is replicated and overlaps, you can hide one or more of these bearings to show only one bearing along a line.

Shown	Shown information is **Black**. It can be seen on the layout page and when you preview the page. It is included in the final plan.
Hidden	Hidden information is **Grey**. It can be seen in the layout page, but does not display when you preview the page. It is not included in the final plan. Hidden objects can be displayed or not displayed on layout pages.

The right mouse menu has an option you can use to Hide or Show selected objects.

The View option in the Menu (Function Menu) contains the option to display Hidden Objects or not display them at all. The default setting is to display hidden objects on layout sheet pages (ie in grey). Alternatively, click in the toolbar to toggle display and hide Hidden Objects.

To hide a label, in a diagram:

1. Display the diagram on the layout sheet page at the size you require.
2. Click (Label Selection Tool) or (Generic Selection Tool).
3. Select the label you want to hide (eg a vector).
4. Right click and select Hide. The vector turns grey indicating it is Hidden.

Note: To select multiple vector labels, either hold Ctrl and click each label, or draw a rectangle or polygon around the vector labels. If the (**Generic Selection Tool**) has been used, a request will be made to choose which of coordinates, lines or labels are to be selected within the area of the polygon or rectangle. If there is only one type of object within the area of the polygon or rectangle, they will be automatically selected and the request to choose will not be made.

To set all hidden labels to not displayed:

1. Display the layout sheet you require.

2. Select Menu | View | ✓Hidden Objects, to set all labels not to display (or click in the toolbar).

Note: If the label is common to all sheets it will be hidden on each page.

To display hidden labels again which have been set to not displayed:

1. Select Menu | View | Hidden Objects, to display all hidden labels on the page in grey (or click in the toolbar).

To set a hidden label to shown again:

1. Display the diagram on the layout sheet page at the size you require.
2. Click (Label Selection Tool) or (Generic Selection Tool).
3. Select the label you want to show (eg a vector). To select more than one label hold Ctrl and click each label.
4. Right click and select Show. The vector turns black indicating it is Shown.

Note: You can also select objects by drawing a rectangle or polygon around the vector labels:

- Select Menu | Selection Tools | Select by Polygon (Lasso) then draw around the group of objects you require.
- Alternatively, select then draw around the group of objects you require.
- Click and draw rectangle where required.
- If the (**Generic Selection Tool**) has been used, a request will be made to choose which of coordinates, lines or labels are to be selected within the area of the polygon or rectangle. If there is only one type of object within the area of the polygon or rectangle, they will be automatically selected and the request to choose will not be made.

10.3.5.5.2 Distort part of a diagram

You can distort part of a diagram to clarify a user defined Title or Survey diagram. User defined diagrams do not have to be to scale.

To distort a part of a user defined diagram, in the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet).
2. Display the page you require.
3. Click (Coordinate Selection Tool) or (Generic Selection Tool).
4. Select the coordinate (ie mark symbol) and drag it to the required location. The mark and vectors from the selected mark move accordingly.

- To remove the distortion, select Menu | Edit | Original Location. The diagram returns to its original configuration.

Note: When distorting a diagram you must ensure the diagram and its vectors remain within the borders of the layout page.

10.3.5.6 Remove a diagram from a page

You can remove a diagram from a page of a layout sheet. Any diagram not added to a layout sheet will not form part of the CSD Plan.

To remove a diagram from a page, in the Layout Plan Sheets screen:

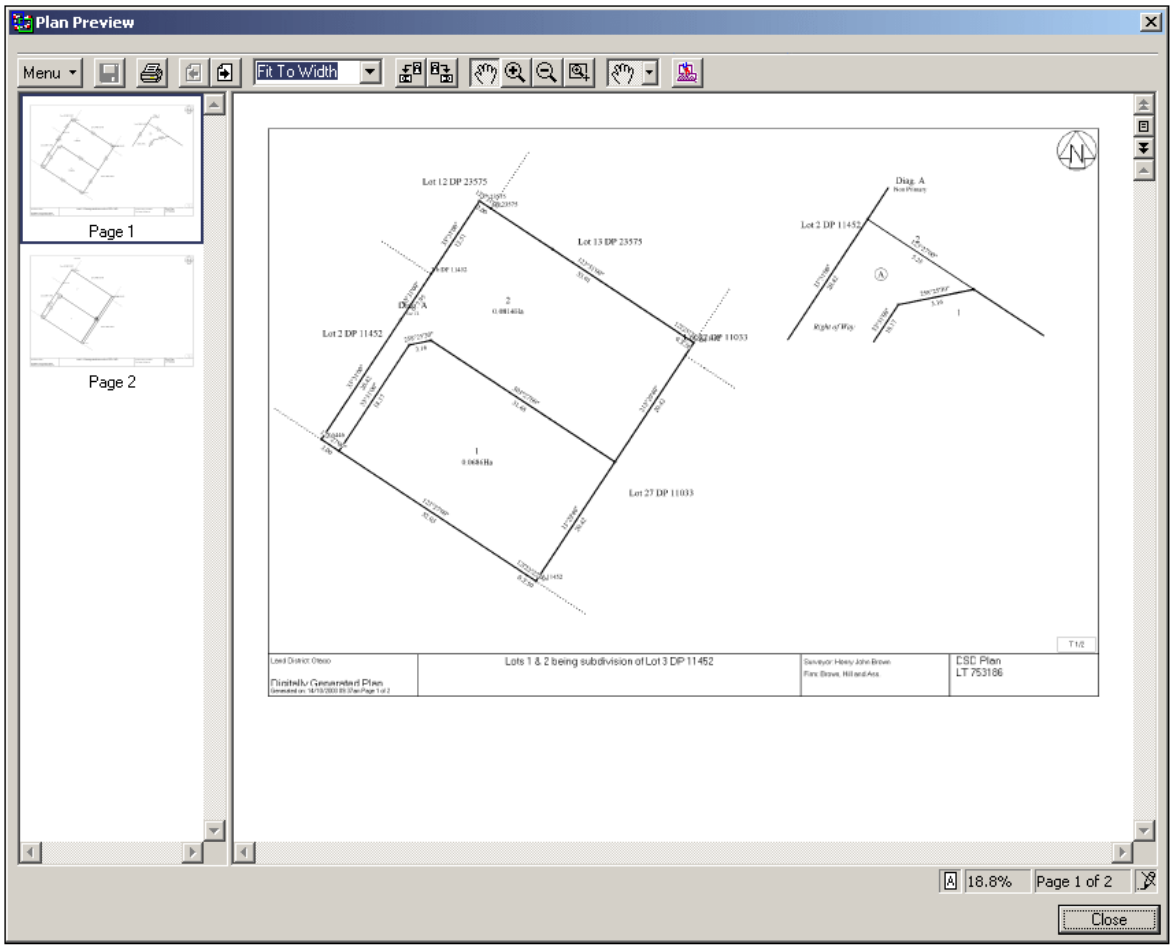
1. Select the layout sheet you require (ie Title Sheet or Survey Sheet).
2. Select the diagram in the list.
3. Click <-- (Remove Diagram). Landonline removes the diagram from the layout sheet. The name of the diagram in the list changes from grey to black. The reference to the sheet type and page number in the name is also removed.

- If the diagram is not on the currently displayed page, a message displays asking you to confirm removal. Click Yes

Note: If you defined your own diagram (ie user defined diagram) to replace a system generated diagram because the area covered was not appropriate, you can remove the system generated diagram from the layout page. Your *e-survey* will fail pre-validation but you can choose to ignore this business rule and submit the *e-survey*.

10.3.5.7 Preview layout sheets

You can preview all pages of a layout sheet to ensure that detail diagrams do not conflict.



Henry Brown is previewing Page 1 of the Title sheet.

In the Layout Plan Sheets screen:

1. Select the layout sheet and page to preview.
2. Click Preview. Landonline draws the diagrams displayed in the layout sheet, as they will appear in the CSD Plan. They display in the Plan Preview screen.
3. To navigate to and view other pages of the layout sheet, click (Next Page) and (Previous Page).
4. Click Close to close the Plan Preview screen.

Note: The Plan Preview screen shows layout pages as they will appear in the CSD Plan, and as they would display if printed on an A3 sheet of paper if the zoom scale was set to 100%. This includes title block information, which does not display on the layout sheet.

10.3.5.7.1 Plan Preview icons

Table 10-3 lists the icons and options for viewing layout sheets in the Plan Preview screen.

Menu, Icon or Field	Action
Menu Function Menu	Select the function you require from the list of options. All icon functions can also be accessed from this menu. For more information, see **Appendix E: Image View function menu options** in the ***e-search*** **User Guide**.
Print	Click to print all pages of the layout sheet. The Print screen displays and you can select the print options you require.
Next page	Click to display the next page (if applicable).
Previous Page	Click to display the previous page (if applicable).
Fit To Width Zoom Display Size	This field displays between the and icons. Select the fixed display option you require from the drop down list. Alternatively, type the size in which to display the image directly into the field.
Rotate Left	Click to rotate the image 90° to the left (ie anti-clockwise).
Rotate Right	Click to rotate the image 90° to the right (ie clockwise).
Drag	Click and drag the visible area of the image to move it in any direction. This is also known as the Pan icon.
Zoom In	Click to zoom in to decrease the scale of the image. Each time you click the image, it displays larger.
Zoom Out	Click to zoom out to increase the scale of the image. Each time you click the image, it displays smaller.
Zoom Area	Click to zoom in to an area of the image selected. The selected area enlarges to cover the screen. If required, use the (Drag) icon to move and view the image.

Table 10-3 Plan Preview screen icons

10.3.5.7.2 Print layout sheets

You can print layout sheets while previewing them.

In the Plan Preview screen,

1. Click (Print).

Landonline prints all pages of the selected layout sheet.

10.3.5.8 Work with layout sheets Toolkit

Table 10-4 lists other tools that assist working with layout sheets.

Tool	Description
Landonline Help	Press F1 in the Layout Plan Sheets screen to display information about this screen.
Quick Reference Cards	Section: *e-surveys*. Topic: Generate Plans – Layout Plan Sheets.

Table 10-4 Work with layout sheets Toolkit

10.3.6 Generate final plans

When all user defined diagrams are added to the layout pages you can generate the Cadastral Survey Dataset Plan (CSD Plan). Landonline automatically generates the Title Plan and the Title Diagram, with reduced information and symbology, from the CSD Plan. The layout of all plans is identical. See **Appendix G: Details of generated plans**.

When generated, you receive a Plan Compilation Notification in My Messages folder in Workspace with the plans attached. You can view and save the attached images. These are not the approved plans and display Draft in the corner. These can be used for TA Certification. When approved the plans are available through Searches. For more information about searching for surveys, refer to the ***e-search* User Guide**.

To generate plans, in the Layout Plan Sheets screen:

1. Click [Complete] to save and generate the plans. A message displays advising when Plan Generation will run.
2. Click [Yes] to confirm.
3. Close the Layout Plan Sheets screen.

Note:

- When you click [Complete] Landonline runs pre-validation rules, saves the layout sheets and generates the CSD Plans. The pre-validation rules identify any diagrams, vectors and labels, which have not been laid out on a page. You can view these in the Pre-Validation Report. For more information, see **9.5 Pre-validation report information**.
- Each time you click [Complete] a new set of images are created and attached to an online message. Until the *e-survey* is submitted, these images are identified as Draft.

10.3.6.1 Generate plans Toolkit

Table 10-5 lists other tools that assist with generating plans.

Tool	Description
Landonline Help	Press F1 to display Landonline Help.
Quick Reference Cards	Section: *e-survey* Topic: Generate Plans – Layout Plan Sheets

Table 10-5 Generate plans Toolkit

10.3.7 Regenerate plans

At any time prior to submission and after selecting [Complete] you can redefine diagrams and regenerate the graphic pages of CSD Plans. You may wish to do this because you:

- have made changes in Survey Capture
- wish to amend the existing pages of the layout sheets.

You may need to redefine diagrams following changes to your *e-survey*.

If you make changes to the user defined diagrams you will need to update layout sheets before generating the CSD Plans.

To regenerate plans, in Plan Generation:

1. Display the Spatial Window. All user defined diagrams previously created for this *e-survey* display.
2. Delete existing and add new user defined diagrams in the Spatial Window, as required. Deleted user defined diagrams are also removed from the Layout Plan Sheets screen.
3. If required:

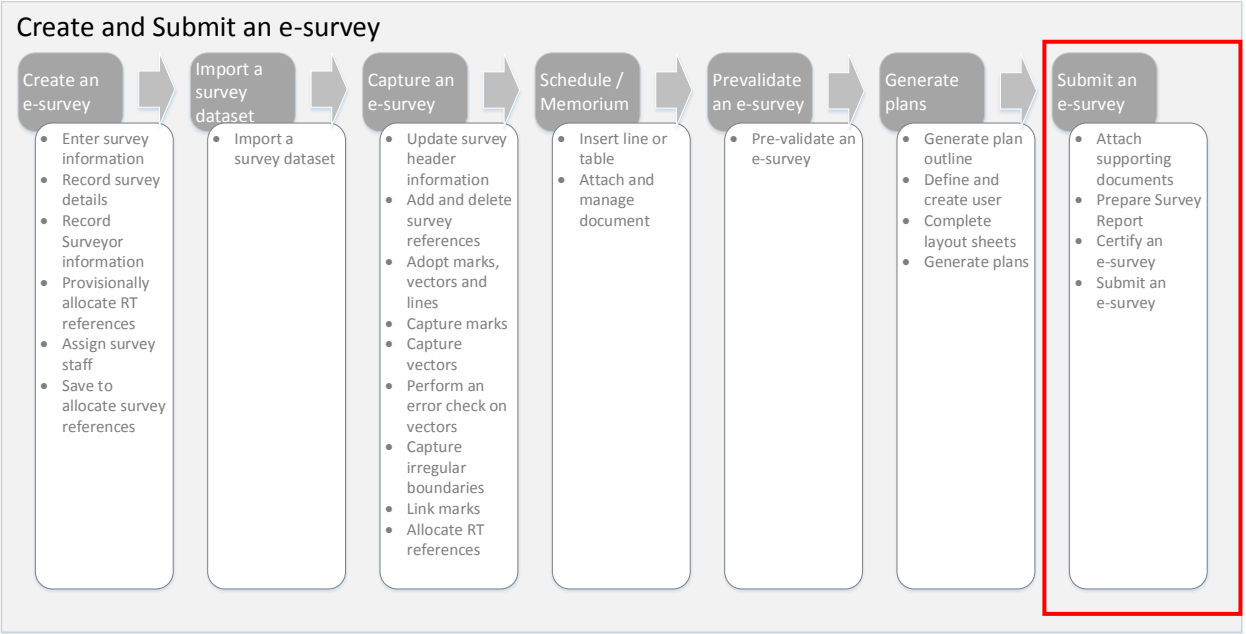
- Make edits to diagrams.
- Label the diagrams.
- Maintain diagram layers.

4. Select Generate Plan | Layout Plan Sheets…
5. Make any changes or additions to layout sheets.
6. Click Complete to generate the CSD Plans when you are satisfied with the Layout.

Note: Unless you have deleted a user defined diagram, any details previously added to it in a layout page will remain unchanged.

11 SUBMIT AN *e-survey*

11.1 Overview



Submission is the final stage of the *e-survey* process. This is when you electronically sign the *e-survey* and lodge it with Land Information New Zealand (LINZ) for approval.

Before submitting your *e-survey*, you must:

- complete Survey Capture
- undertake plan generation
- specify the TA Certification requirements (if required)
- prepare the Survey Report (or attach as a supporting document)
- attach the required supporting documents (eg Traverse Sheet, Survey Report).

Your *e-survey* dataset will contain:

- CSD Plan.
- Title Plan.
- Supporting Documents (eg Traverse Sheet, Survey Report)
- Survey Report (if not attached as a supporting document).

This chapter explains the tasks you perform to submit an *e-survey*. Specifically it describes how to:

- attach supporting documents
- prepare the Survey Report
- specify TA Certification requirements
- certify and submit an *e-survey*
- use the exception process
- action requisitions
- delete an *e-survey*
- withdraw an *e-survey*.

11.2 Attach supporting documents

Supporting documents are attached in the Manage Survey Transaction screen.

You scan all supporting documents and attach them as images (ie .tif, .jpg, .pdf) to your *e-survey*. LINZ does not provide a scanning service except where you have a colour image that cannot be converted to one of the accepted formats.

For parcels without spatial definition (ie Units and Cross Lease Developments), attach the manually drawn plan as a Plan Image type supporting document.

If attaching a .tif file the standard CCITT G4 compression must be used and resolution range of 150 to 300 DPI is suggested.

When a .pdf file is attached Landonline converts it to a .tif on upload.

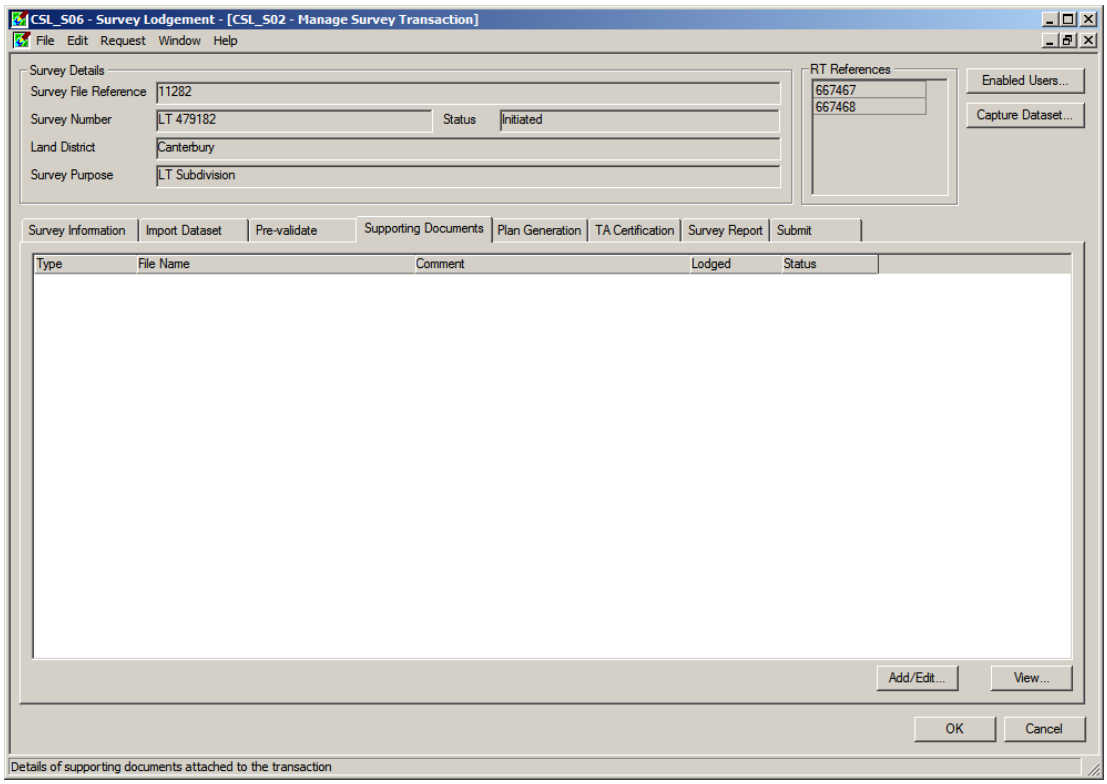
Tasks:

The tasks required to add supporting documents are:

- Display the Supporting Documents tab.
- Display the Record Supporting Documents tab
- Attach a single supporting document.
- Attach multiple supporting documents
- Edit or add comments for a supporting document.
- Overwrite a supporting document.
- Delete a supporting document.
- Request LINZ to scan colour supporting documents (only if necessary).

The following headings correspond with these tasks and describe them in more detail.

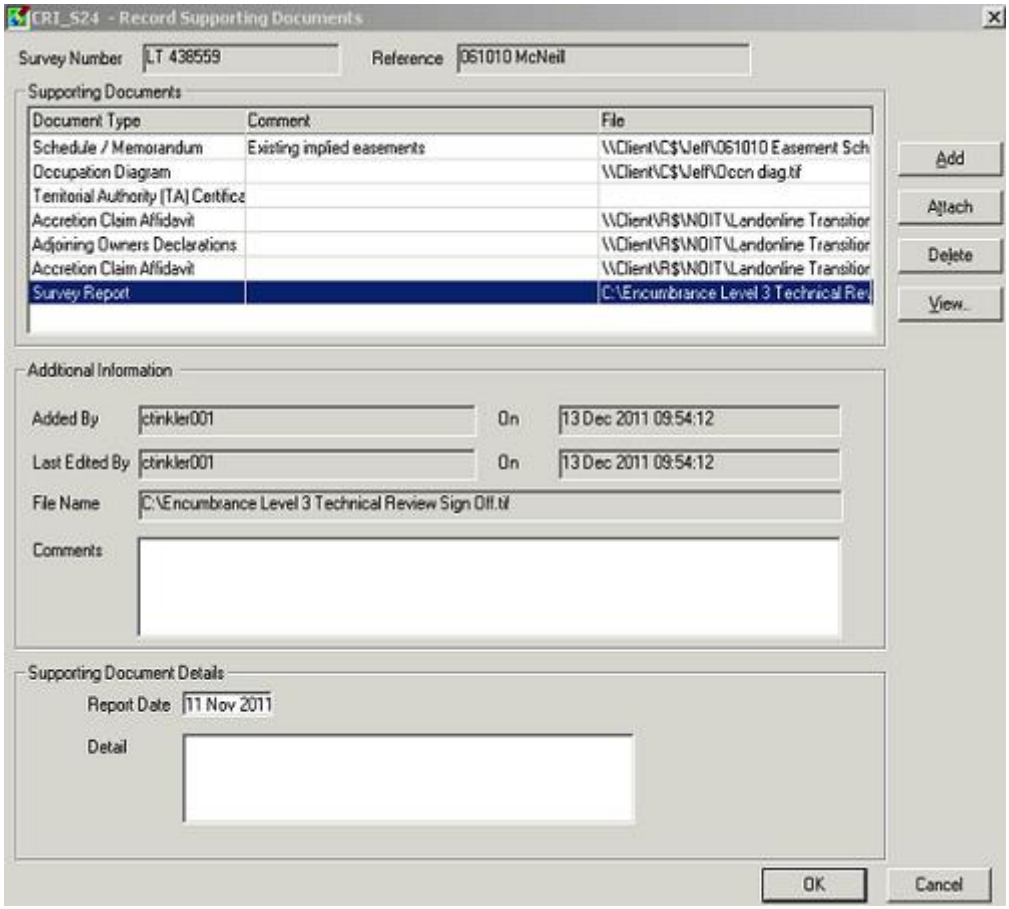
11.2.1 Display the Supporting Documents tab



To display the Supporting Documents tab:

1. Display the Manage Survey Transaction screen.
2. Select the Supporting Documents tab.

11.2.2 Display the Record Supporting Documents tab



To display the Record Supporting Documents screen:

1. Display the Supporting Documents tab.
2. Click Add/Edit to display the Record Supporting Document screen

11.2.3 Attach a single supporting document

In the Record Supporting Document screen:

1. Click Add... to insert one or more rows to the supporting document grid.
2. Select the Document Type for the supporting document. See **Appendix K: *e-survey* supporting document types**.
   - Landonline displays Cadastral Survey in the Type field and the Dataset Id and Land District in the Survey(s) field.
3. Enter Comments about the supporting document if required.
4. Complete other details in the Supporting Document Details area. The fields that display depend on the type of document you select. See **Record Supporting Document screen** in **Appendix Q: Other survey screens**.
5. Highlight the row to which the document is to be attached.
6. Click Attach... and select the image file to be attached.

- If you selected a read only image file a standard Windows error message displays. Click [OK] to continue.

7. Click [OK] to save the supporting document and return to the Supporting Documents tab. Details of the attached file display.

11.2.4 Attach multiple supporting documents

In the Record Supporting Document screen:

1. Click [Attach...] and navigate to the folder containing the files you wish to attach. You can select multiple files within a single folder by holding the **Ctrl** key while selecting the images to be attached.
   - If you selected a read only image file a standard Windows error message displays. Click [OK] to continue.
2. Click OPEN to attach the files. Any additional rows which are needed will be created at this point.
3. Select the Document Type for the supporting document. See **Appendix K: *e-survey* supporting document types**.
   - Landonline displays Cadastral Survey in the Type field and the Dataset Id and Land District in the Survey(s) field.
4. Enter Comments about the supporting document if required.
5. Complete other details in the Supporting Document Details area. The fields that display depend on the type of document you select. See **Record Supporting Document screen** in **Appendix Q: Other survey screens**.
6. Click [OK] to save the supporting document and return to the Supporting Documents tab. Details of the attached file display.

Note: If the document type or comments fields have been populated prior to attaching multiple documents, the files will be attached to new blank rows.

11.2.5 Edit or add comments for a supporting document

In the Record Supporting Document screen:

1. Select the document to be edited.
2. Edit or add Comments.
3. Click [OK] to save and return to the Supporting Documents tab of the Manage Survey Transaction screen.

11.2.6 Overwrite a supporting document

In the Record Supporting Document screen:

1. Select the document.
2. Click [Attach...]. Select the image file to be attached and click [OK]
3. A message displays asking if you want to overwrite the existing supporting document. Click [Yes]
4. Change the Document Type if required.
5. Click [OK] to save and return to the Supporting Documents tab of the Manage Survey Transaction screen.

11.2.7 Delete a supporting document

In the Record Supporting Document screen:

1. Select the document to delete.
2. Click Delete. A message displays asking you to confirm deletion. Click Yes.

11.2.8 Request LINZ to scan colour supporting documents

You must have all supporting documents attached to an *e-survey* before submitting the *e-survey* to LINZ.

Images can be attached with a file format or .tif, .jpg and .pdf. LINZ does not provide a scanning service, except where you have a colour image that cannot be converted to one of the accepted formats. In this instance, you can use Landonline to request LINZ to scan and attach the supporting document to your *e-survey*. You can also choose to be advised by online message when this has been completed by LINZ.

To request LINZ to scan and attach the supporting documents to your *e-survey*, in the Manage Survey Transaction screen:

1. Select the Submit tab.
2. Check the Notify when Scanning Complete checkbox.
3. Email the supporting documents to customersupport@linz.govt.nz and include the Survey Number of the *e-survey* as a reference. This is to ensure the scanned documents are attached to the correct *e-survey*.

- When LINZ has scanned the documents you receive notification to advise scanning is complete.

11.2.9 Attach supporting documents Toolkit

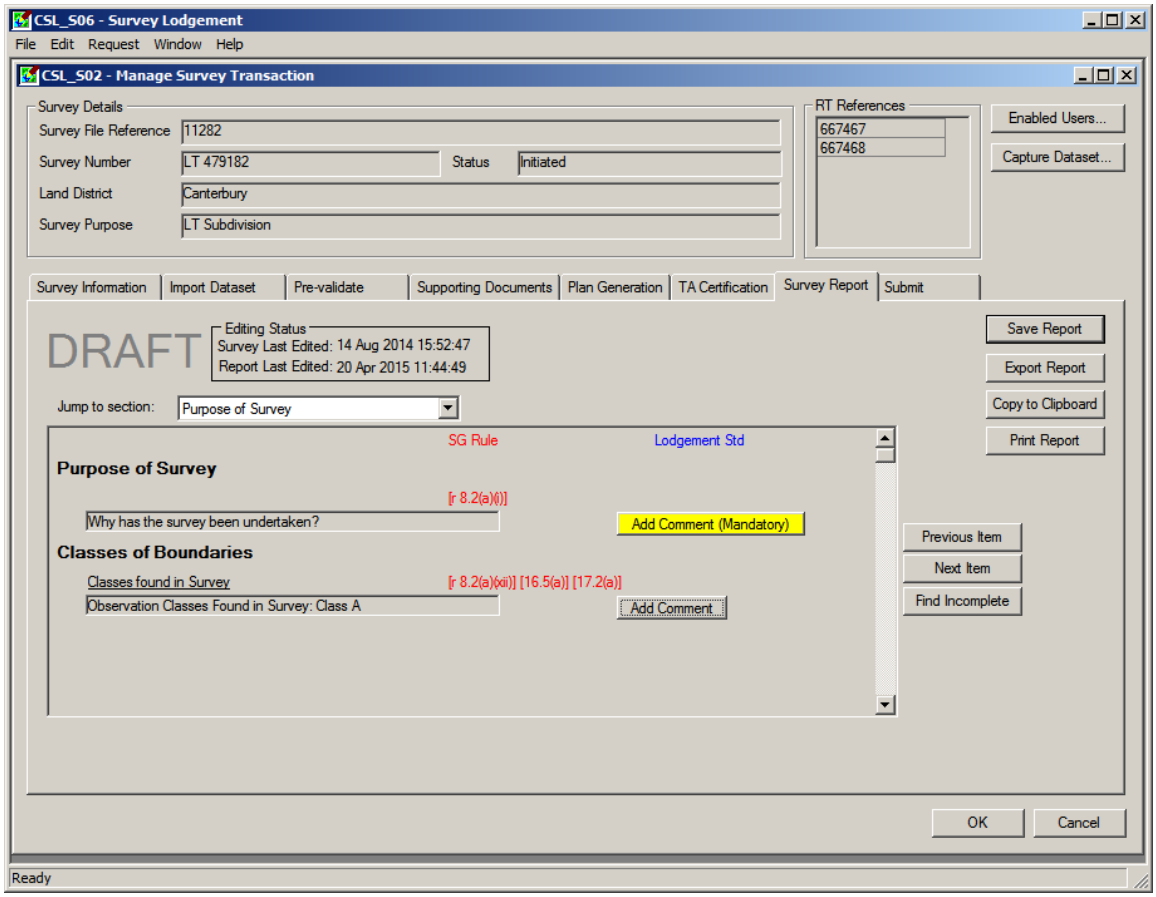
Table 11-1 lists other tools that assist with attaching supporting documents.

Tool	Description
Landonline Help	Press F1 in the Supporting Documents tab and Submit tab in the Manage Survey Transaction screen to display information about these tabs.
Quick Reference Cards	Section: *e-surveys* Topic: Attach Supporting Documents.

Table 11-1 Attach supporting documents Toolkit

11.3 Prepare the Survey Report

Landonline enables surveyors to generate a Survey Report using the information provided in the e-survey using the Survey Report tab.



To prepare a Survey Report:

1. The information which is already available in the e-survey is automatically populated in the form. Add the additional information required as indicated in the form.
   - Jump to section, Previous Item and Next Item can be used to navigate through the items in the form.
2. Click Find Incomplete to check if any mandatory item in the form has not been completed.
   - Complete the form if any incomplete items are found.
3. Click Save Report to save the changes.
4. Click Export Report to save a copy of the report in .Tiff format.
5. Click Print Report if a printout of the report is required.

11.4 Specify Territorial Authority Certification requirements

A surveyor can prepare and request a TA Certification for their *e-survey* online.

The diagram in **Table 11-2** explains the process for TA Certification of an *e-survey* plan. The process flow indicates the simplified process where a surveyor creates the TA Certification, notifies the TA and the TA signs the TA Certification.

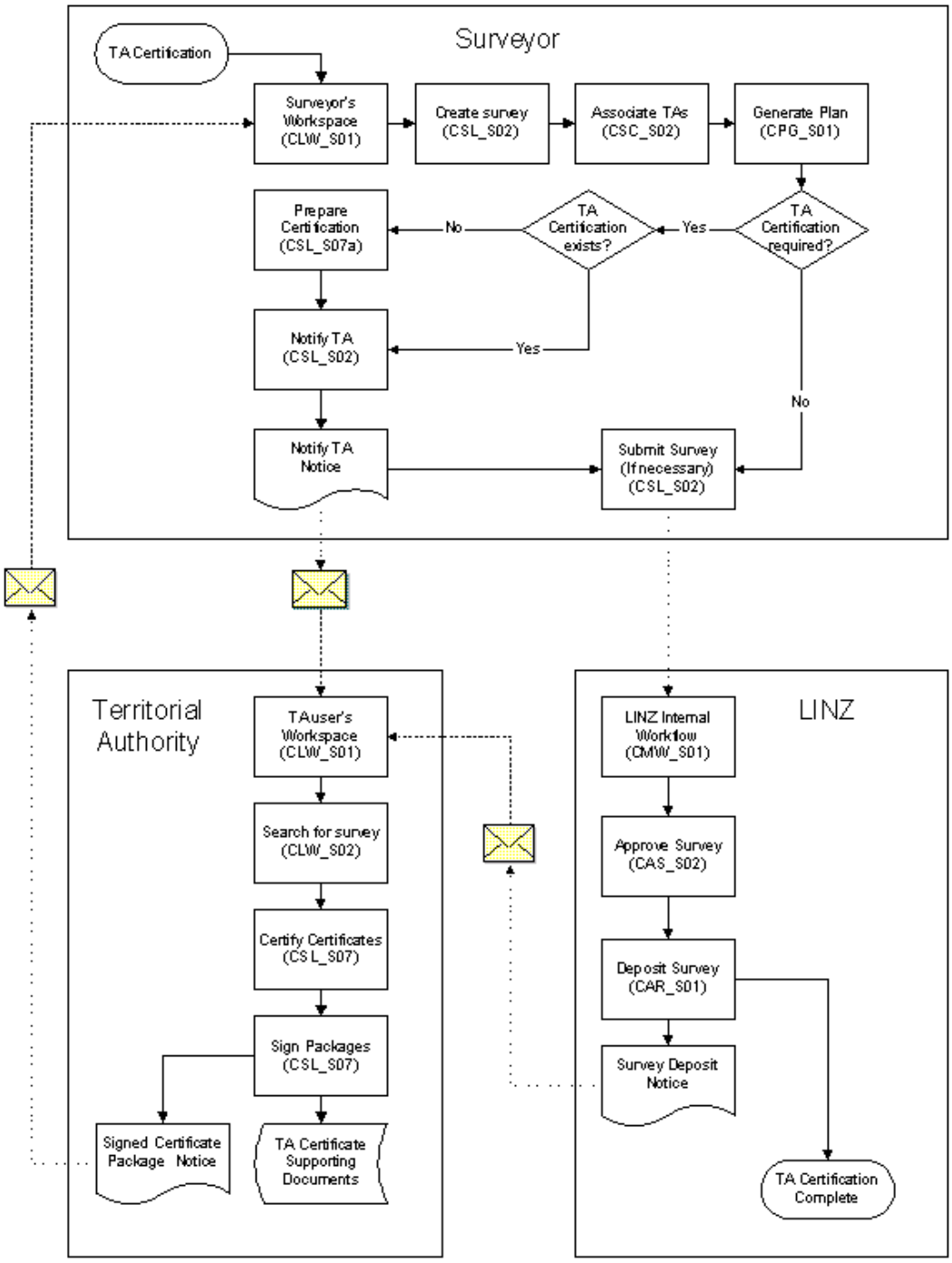


Table 11-2 Simplified TA Certification Process

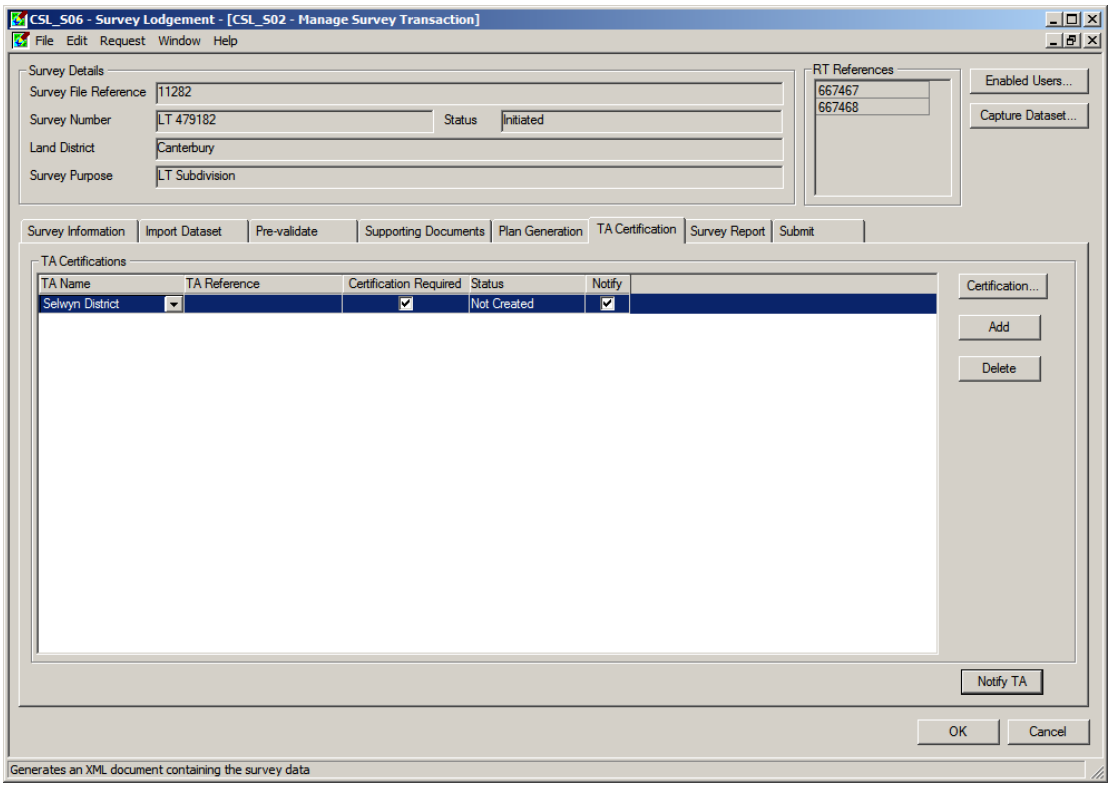
Tasks:

The tasks you perform for Territorial Authority (TA) Certifications are:

- Display the TA Certification tab.
- Add a Territorial Authority.
- Prepare a TA Certification package online.
- Request a TA Certification online.
- Check TA Certification progress online.
- Attach a paper TA Certification.
- Attach a TA Certification after submission of an *e-survey*.

The following headings correspond with these tasks and describe them in more detail.

11.4.1 Display the TA Certification tab



In the Manage Survey Transaction screen:

1. Select the TA Certification tab.

11.4.2 Add a Territorial Authority

You must add name of the Territorial Authority (TA) in which your *e-survey* is located. You can add more than one TA if required.

To add a TA name, in the TA Certification tab of the Manage Survey Transaction screen:

1. Select the name of the TA in which the survey is located in the TA Name field drop down list.
2. Click Add to add another TA name if required.

- To delete a TA name added in error, select the name and click Delete.

Note:

- Each TA you add to the TA Certification tab has a status of Not Created.
- The name of each TA you enter in the TA Certification tab will display in the Survey Header screen in Survey Capture.

11.4.3 Prepare a TA Certification package online

Surveyors can prepare a TA Certification package for their *e-survey* if they have been assigned the Prepare TA Certification privilege. You do this before you notify the TA.

Tasks:

The tasks you perform to prepare a TA Certification package online:

- Display the Manage TA Certification screen.
- Rename a package.
- Create a new package of certificates.
- Customise certificates in a package.
- Change the order of certificates in a package.
- Modify a package of certificates.
- Delete a certificate from a package.
- Delete a package.

The following headings correspond with these steps and describe them in more detail.

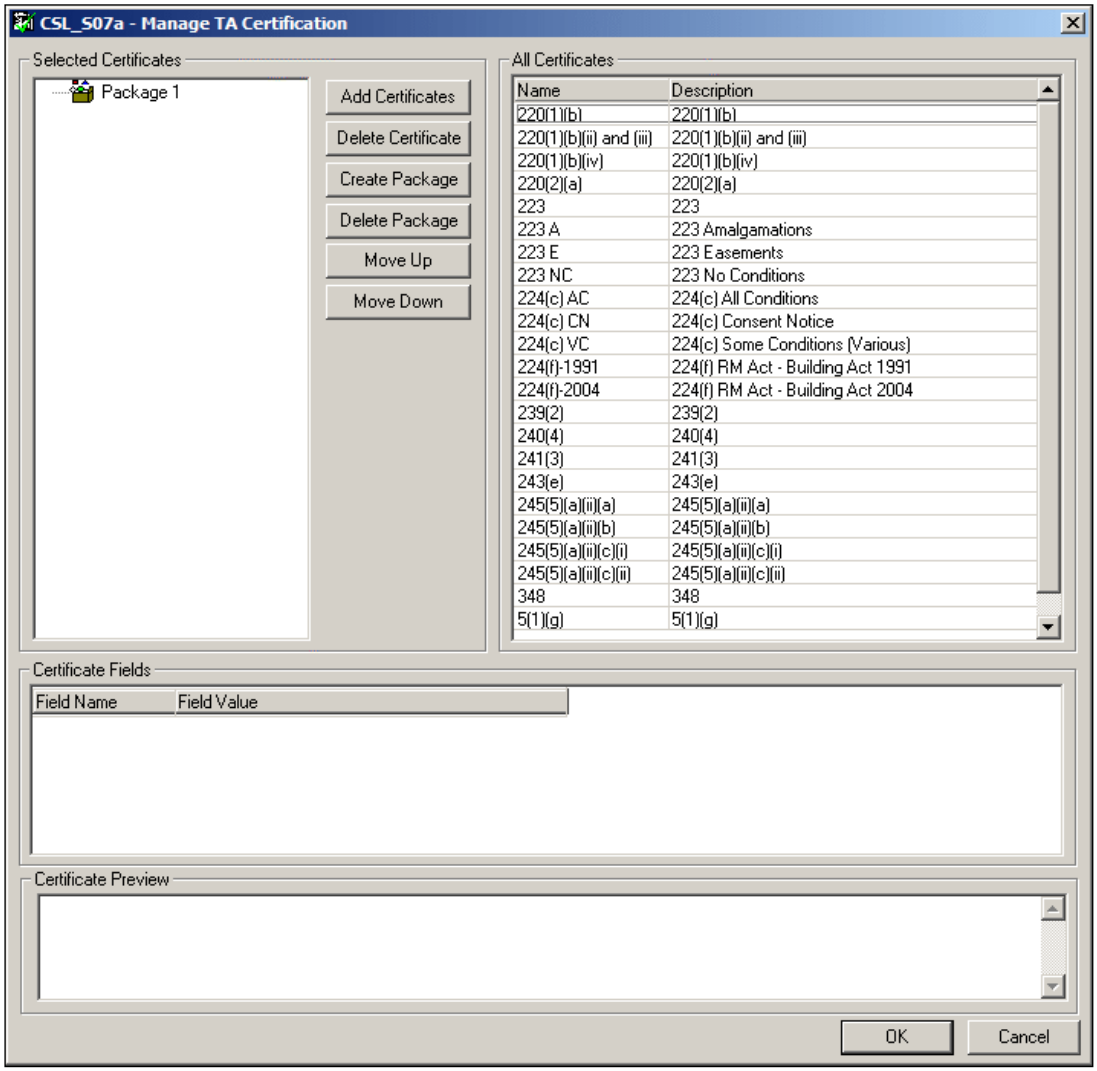
11.4.3.1 Display the Manage TA Certification screen

You use the Manage TA Certification screen to create packages of certificates for the TA Certification for your *e-survey*. When you open this screen for a new TA Certification, Landonline creates a default package named Package 1 and displays it in the tree. You can modify and rename this package, or create a new package. When you add certificates to a package their names display under the package. You cannot change the name of certificates.

Some certificates have one or more pre-defined editable fields. You can enter values in these fields to customise the certificate to your *e-survey*.

Pre-defined editable fields display a placeholder for your text (ie "_____"). Not all certificates have pre-defined editable fields. You can leave a pre-defined field blank.

In some instances when you open this screen, another user may have already generated the TA Certification and the information for the existing TA Certification displays.



In the TA Certification screen:

1. Select the TA name.
2. Check the Certification Required checkbox.
3. Click Certification... to display the Manage TA Certification screen.

Note: The default Package 1 displays in the tree of the Manage TA Certification screen. You can use this package by adding certificates to it and/or create a new package. TA Certifications can contain more than one package.

11.4.3.2 Rename a package

You can rename a package if necessary.

In the Manage TA Certification screen:

1. Select the package name (eg Package 1).
2. Click the package again. Landonline displays a box around the name.
3. Type the name for your package. We recommend you limit the package name to 25 characters or less.
4. Click elsewhere in the screen.

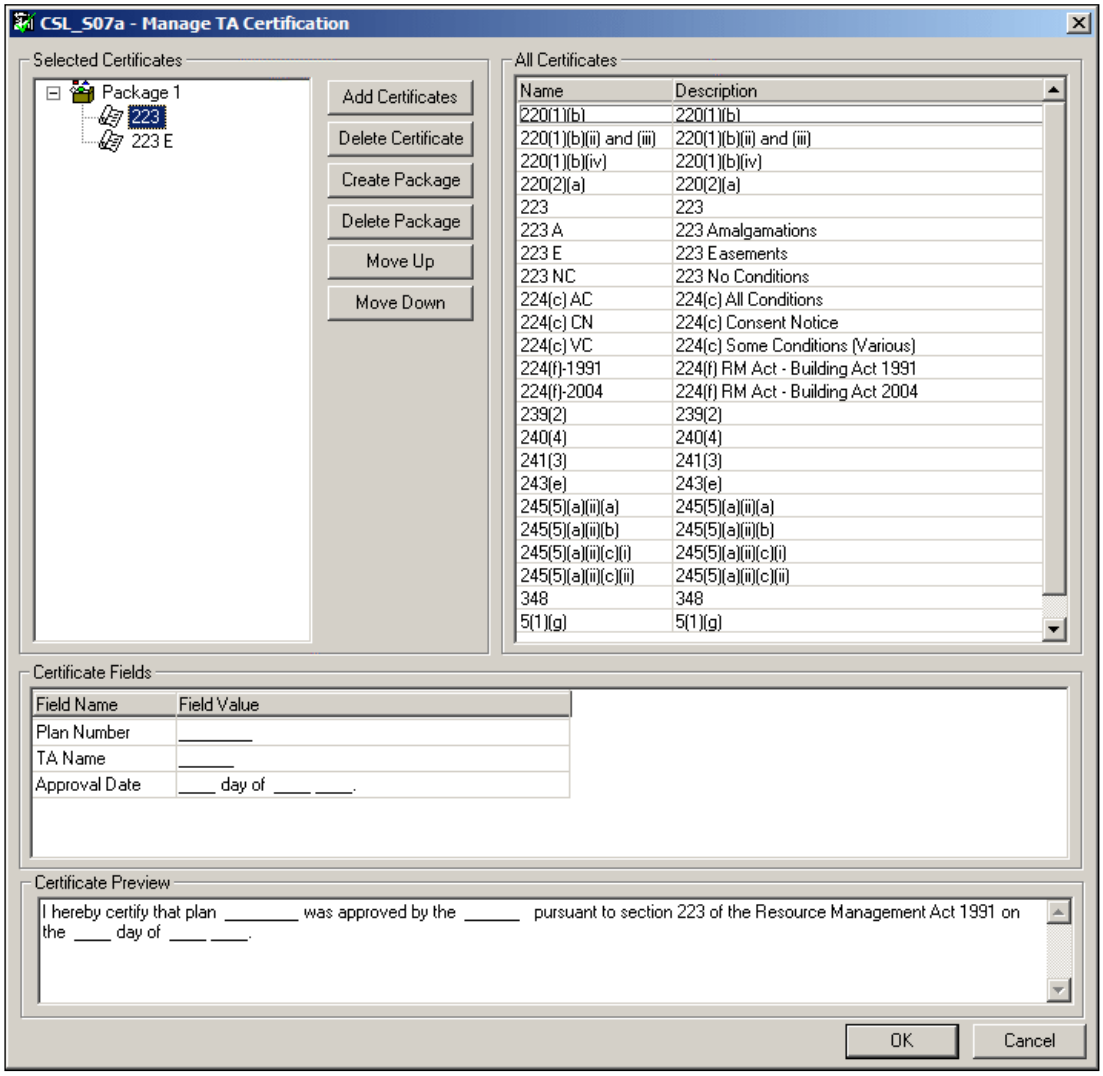
Note: You cannot have a blank package name. Landonline displays a message if you try to close the screen without renaming a package.

11.4.3.3 Create a new package of certificates

In the Manage TA Certification screen:

1. Click Create Package if required. You can use the default Package 1. Landonline adds the package to the tree (eg Package 2).
2. Select the Name of each certificate you want to include in the package in the All Certificates area.
3. Click Add Certificates to add them to the package. Landonline lists the selected certificates under the package in the tree.

11.4.3.4 Customise certificates in a package



In the Manage TA Certification screen:

1. Select the first certificate for the package in the tree.
2. Review its details in the Certificate Preview area. Any editable fields display in the Certificate Fields area.
3. Select the Field Name in the Certificate Fields area and enter the value in the Field Value field (eg TA Name, Approval Date), if applicable.
4. Press Tab. The value you entered displays in the Certificate Preview area.
5. Repeat Steps 3 and 4 if there are other values to enter.
6. Review the values you entered to ensure they are correct.
7. Repeat these steps for each certificate.

8. Click [OK] to save. Landonline returns you to the TA Certification tab of the Manage Survey Transaction screen.

11.4.3.5 Change the order of certificates in a package

In the Manage TA Certification screen:

1. Select the certificate in the tree.
2. Click [Move Up] to move it up, or click [Move Down] to move it down, Every time you click is moves up or down one position.
3. Click [OK] to save.

11.4.3.6 Modify a package of certificates

You can modify the certificates in a package at any time until the *e-survey* is Deposited.

In the Manage TA Certification screen:

1. Expand the package.
2. Select the certificate and change any pre-defined field values (if necessary).
3. Add a new certificate (if required)
4. Click [OK] to save.

Note: You cannot change a field value of a Certified certificate.

11.4.3.7 Delete a certificate from a package

In the Manage TA Certification screen:

1. Select the certificate to delete.
2. Click [Delete Certificate]

11.4.3.8 Delete a package

You must delete each certificate in the package before you can delete a package.

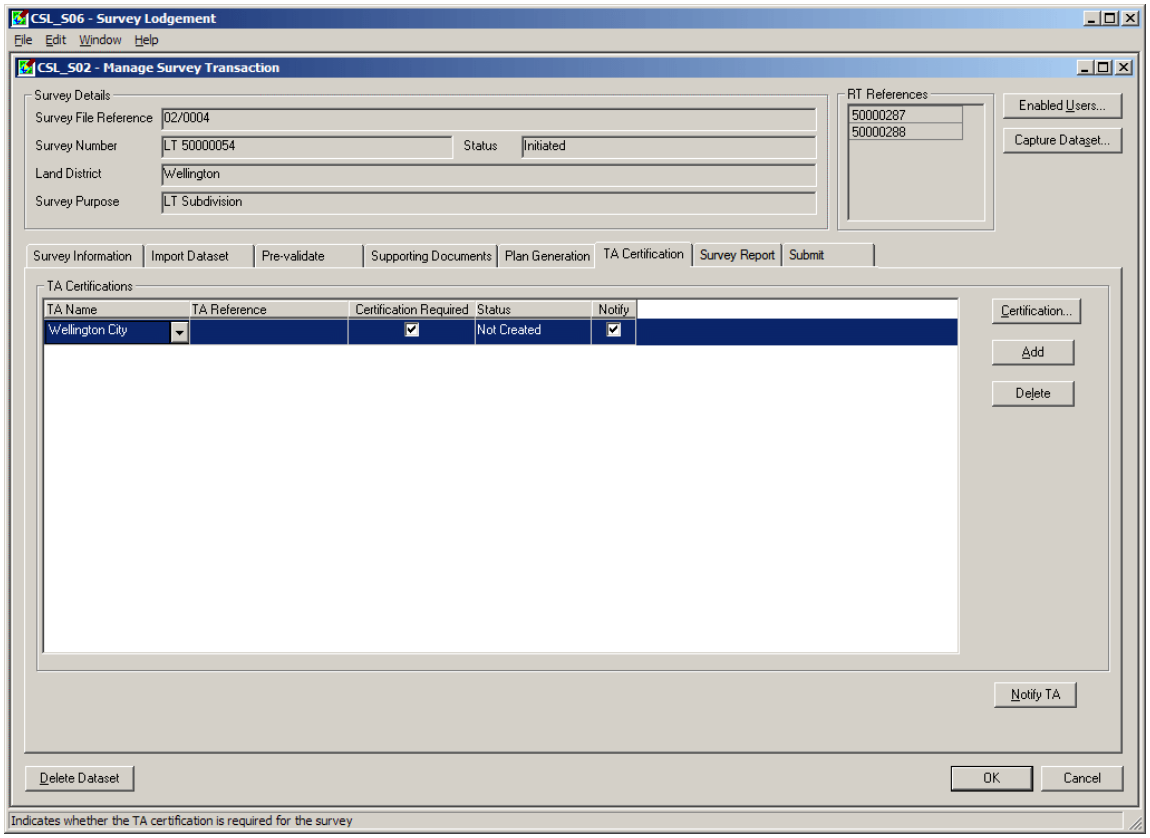
In the Manage TA Certification screen:

1. Expand the package and select the first certificate in the package.
2. Click [Delete Certificate]
3. Repeat Steps 1 and 2 to delete all certificates in the package.
4. Select the package and click [Delete Package]

11.4.4 Request a TA Certification online

You can indicate whether you require a TA Certification for your *e-survey* and send a message to the TAs listed to advise a request for certification is forthcoming.

All TAs associated with your *e-survey* are listed in the TA Certification tab with a status of Not Created. Once you create the certification, the status changes to Created.



Henry Brown has created a certificate package and is ready to notify the Territorial Authority his *e-survey* is ready for TA Certification. The Territorial Authority will insert a reference in the TA Reference field so Henry has left it blank.

In the TA Certification tab:

1. Select the TA Name.
2. Add a reference in the TA Reference field, if required.
3. Check the Certification Required field if you require the TA to certify your *e-survey*.
4. Check the Notify field for the TA if you want to notify the TA online.
5. Repeat Steps 1 to 4 for other TAs for your *e-survey* if required.
6. Click Notify TA
   - A message displays to advise you have indicated you require TA Certification and the TA has yet to generate the certification. Click Yes to continue.
   - Landonline generates a XML file and displays second message advising the estimated size of the extract file. Click Yes to display the Save File window.
7. Select the destination for the file on your computer, eg C:\My Documents and click Save. A message displays advising the extract was successfully completed. Click OK

   Landonline notifies each TA (with the Notify checkbox checked) your *e-survey* is ready for TA Certification.

Note:

- Landonline notifies all TAs indicated in the TA Certification tab whether they perform TA Certification online or manually (ie a paper TA Certification.)
- You can modify the TA Reference, Certification Required and Notify fields at any time until you first click Notify TA
- The TA can also provide you with a TA Reference to enter when you submit your *e-survey*.

11.4.5 Check TA Certification progress online

If the Territorial Authority uses Landonline, you can view the progress of TA Certification for an *e-survey* in the TA Certification screen.

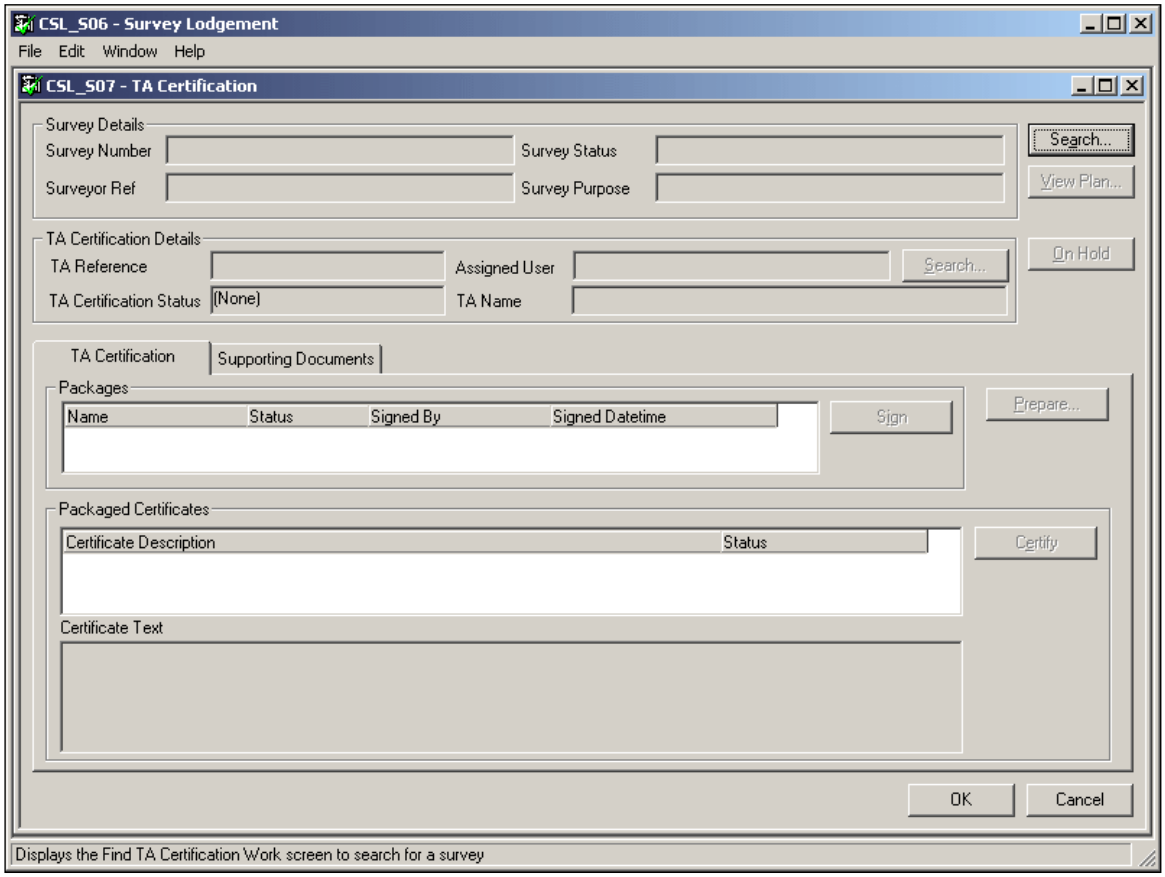
Steps:

The steps you perform to check TA Certification progress online:

1. Display the TA Certification screen.
2. Display the Find Work/Request screen (for TA Certification).
3. Find the *e-survey* awaiting TA Certification.
4. Review the TA Certification status.
5. View the TA Approvals.

The following headings correspond with these steps and describe them in more detail.

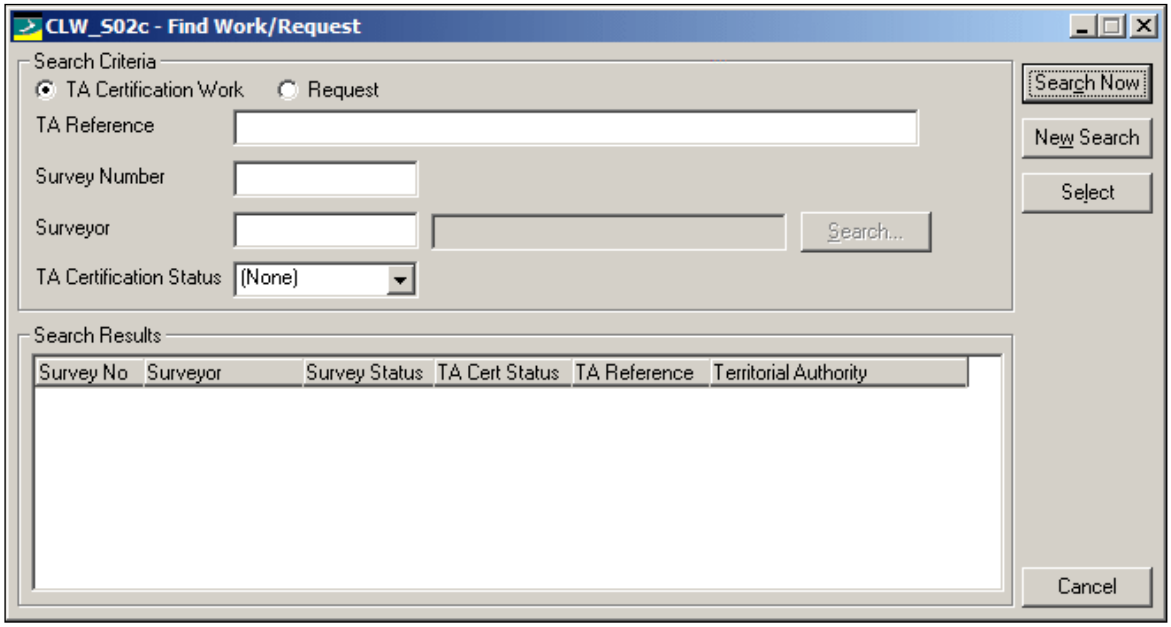
11.4.5.1 Display the TA Certification screen



To display the TA Certification screen, in Workspace:

1. Select Survey | TA Certificate.

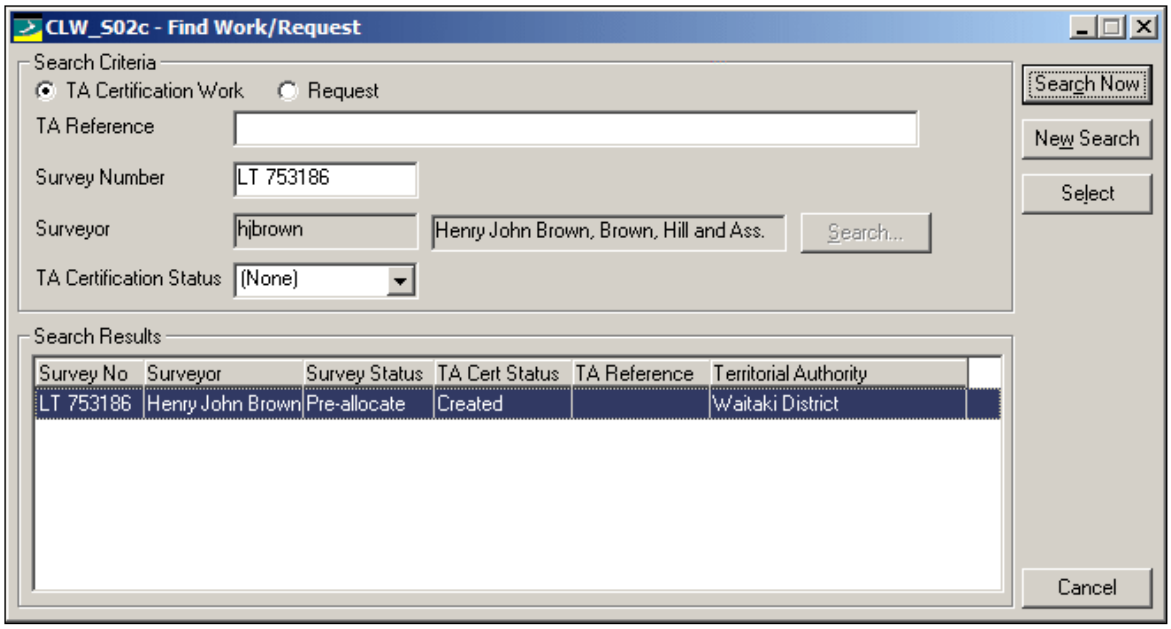
11.4.5.2 Display the Find Work/Request screen



To display the Find Work/Request screen, in the TA Certification screen:

1. Click Search... to display the Find Work/Request screen.

11.4.5.3 Find the *e-survey* awaiting TA Certification



In the Find Work/Request screen:

1. Select the TA Certification Work option.
2. Enter your Survey Number.
3. Click Search Now
4. Select the survey from the Search results area.
5. Click Select to return to the TA Certification screen with details of the survey. The Find Work/Request screen minimises.

Note: The Find TA Certification Work screen remains minimised allowing you perform another search if required. To close this screen, maximise the screen and click Cancel

11.4.5.4 Review the TA Certification status

In the TA Certification screen:

1. View the status of certificates and packages.
2. Click OK to close and return to Workspace.

Package Status

Certificate Status	Description
Created	Surveyor or TA user has created the package.
Signed	TA has signed the package.

Certificate Status

Certificate Status	Description
Created	Surveyor or TA user has created the package.
Pending TA Approval	Surveyor has notified the TA that the certificate is ready for signing.
Certified	TA user has certified the certificate.

11.4.5.5 View the TA Approvals

You can view the TA Approvals for each signed package and print them if required.

In the Manage Survey Transaction screen:

1. Select the Supporting Documents tab.
2. Select the TA document to view, eg Territorial Authority (TA) Certificate, Schedule/Memorandum.
3. Click View…
   Landonline displays the image of the selected TA Approval or Schedule/Memorandum.
4. Click to print the image, if required.
5. Click to close the screen and return to the Supporting Documents tab.

Note: The File Name in the Supporting Documents tab will be blank for any TA Certifications carried out by TAs using Landonline.

11.4.6 Attach a paper TA Certification

Any TA Certifications required for an *e-survey* must be attached as supporting documents. When a TA cannot perform online certification they will send you a paper TA Certification.

To attach a TA Certification:

1. Scan the TA Certification.
2. Attach the image as a supporting document to the *e-survey*. Select Territorial Authority (TA) Certificate as the Document Type. See topic **11.2.3 Attach a single supporting document**.

Note: You can attach a paper TA Certificate to your *e-survey* after it has been submitted, but prior to approval. See **11.4.7 Attach a TA Certification after submission of an *e-survey***.

11.4.7 Attach a TA Certification after submission of an *e-survey*

When you submit an *e-survey* it remains in Workspace as 'Read Only'. The submitting surveyor can attach a scanned paper TA Certification to their *e-survey* after if has been submitted, but prior to it being approved.

If your *e-survey* has already been approved (ie it no longer display in Workspace) you can either:

- Send a scanned .tif image of the TA Certificate to LINZ and request them to attach it to the plan, or
- Send the TA Certificate to the Territorial Authority and request them to attach it to the plan.

To attach a scanned paper TA certification to a submitted *e-survey*:

1. In Workspace, select Survey | TA Certificate to display the TA Certification screen.
2. Click [Search...] to display the Find Work/Request screen and search for the *e-survey*:
   - Select the TA Certification Work option.
   - Enter your Survey Number and click [Search Now]
   - Select the survey from the Search results area and click [Select] to return to the TA Certification screen with details of the survey. The Find Work/Request screen minimises.
3. Select the Supporting Documents tab.
4. Click [Add/Edit] to display the Record Supporting Document screen and attach the image:
   - Click [Add...] to add a row.
   - Select Territorial Authority (TA) Certification as the Document Type..
   - Click [Attach...] to find the image file to be attached.
   - Click [OK] to save the TA Certificate image and return to the Supporting Documents tab.
5. Click [OK] to close the TA Certification screen and return to Workspace.

Note:

- You cannot view the attached image from within the TA Certification screen.
- A Territorial Authority can attach either a signed paper TA Certificate or online TA Certification to a submitted and approved survey plan right up until the survey is registered.

11.4.8 Prepare TA Certification package Toolkit

Table 11-3 lists other tools that assist with preparing a TA Certification package for an *e-survey*.

Tool	Description
Landonline Help	Press F1 in the TA Certification tab in the Manage Survey Transaction screen to display information about this tab. Press F1 in the Manage TA Certification screen to display information about preparing a TA Certifications package.
Quick Reference Cards	Section: *e-surveys* Topic: Preparing a TA Certification Package.

Table 11-3 Prepare TA Certification package Toolkit

11.5 Certify and submit an *e-survey*

Submission is completed by:

- digitally certifying your *e-survey*, and

- submitting for Approval as to Survey with LINZ.

There are two options for submitting an *e-survey*:

- by batch, and
- immediately.

Certification and submission can only be completed by the surveyor listed in the Manage Survey Transaction screen.

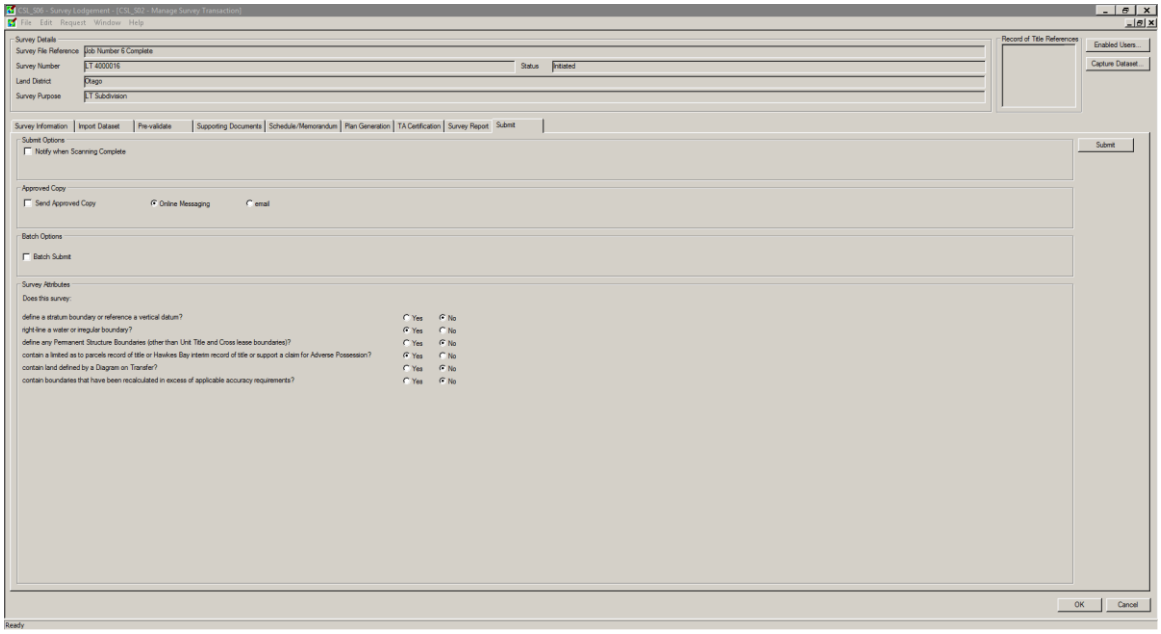
Tasks:

The tasks you perform to certify and submit an *e-survey* are:

- Display the Submit tab.
- Prepare an *e-survey* for submission.
- Certify and submit an *e-survey*.
- Confirm fees.
- Submit by batch process.

The following headings correspond with these tasks and describe them in more detail.

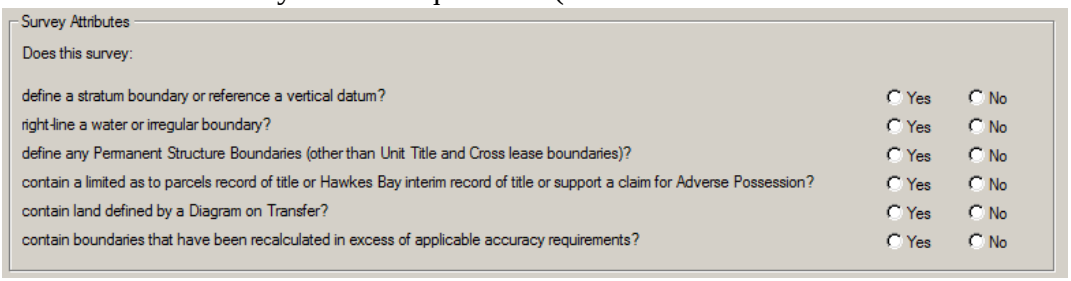
11.5.1 Display the Submit tab



Henry Brown is about to submit his *e-survey* to LINZ electronically. He has chosen to submit online by leaving the Batch Submit checkbox unchecked.

To display the Submit tab, in the Manage Survey Transaction screen:

1. Select the Submit tab.
2. Answer the six Survey Attribute questions (these must be answered before submitting).



Note: The status of plan generation data must be Online before you can submit your *e-survey*.

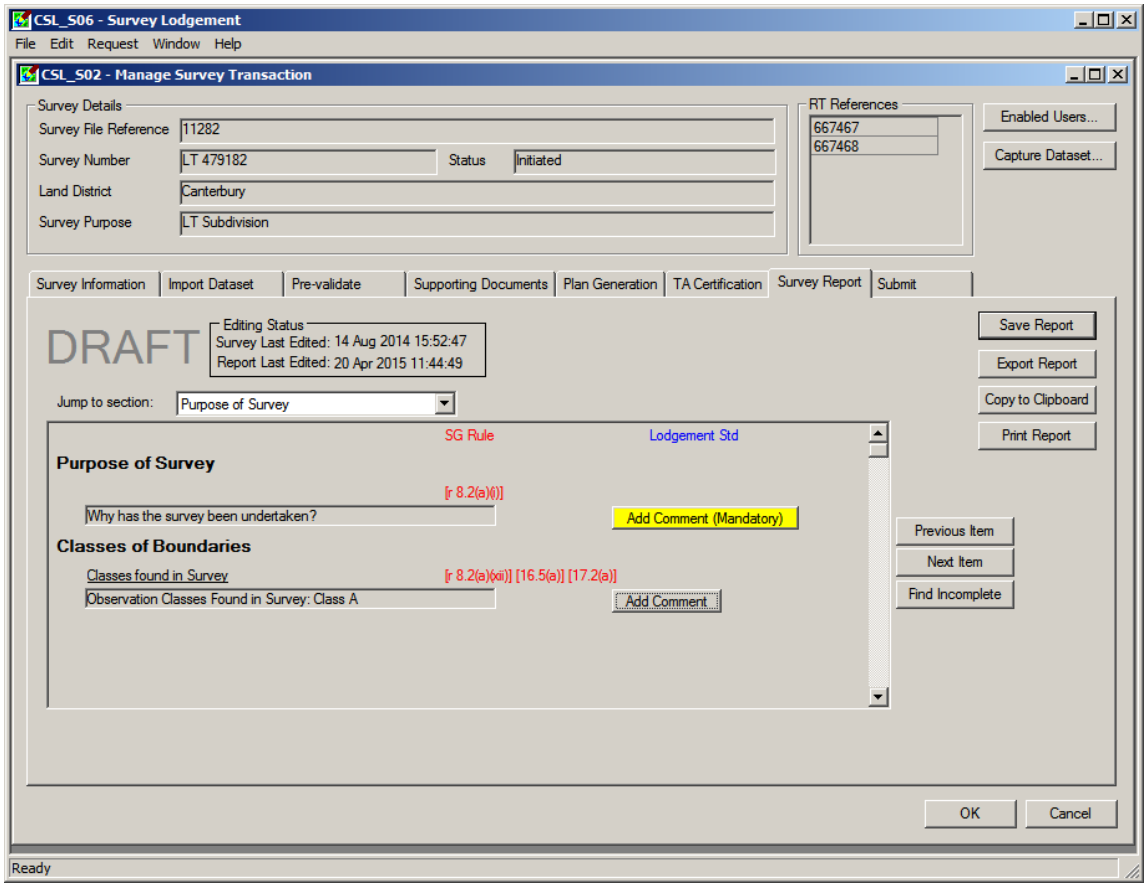
11.5.2 Prepare an *e-survey* for submission

To prepare an *e-survey* for submission, in the Manage Survey Transaction screen:

1. Select the Submit tab.
2. Check the Send Approved Copy checkbox if you want to receive a copy of the approved *e-survey*. This will be a XML file in the latest LandXML Schema version.
3. Click Online Messaging or email to indicate how you want to receive the XML file.
4. Check the Batch Submit checkbox if you want to submit by batch process. Leave unchecked to submit immediately.

Note: If your *e-survey* requires TA Certification, create a certificate package and notify the Territorial Authority online before submission. For more information, see **11.3 Prepare the Survey Report**

Landonline enables surveyors to generate a Survey Report using the information provided in the e-survey using the Survey Report tab.



To prepare a Survey Report:

6. The information which is already available in the e-survey is automatically populated in the form. Add the additional information required as indicated in the form.
   - Jump to section, Previous Item and Next Item can be used to navigate through the items in the form.
7. Click Find Incomplete to check if any mandatory item in the form has not been completed.
   - Complete the form if any incomplete items are found.
8. Click Save Report to save the changes.
9. Click Export Report to save a copy of the report in .Tiff format.

10. Click Print Report if a printout of the report is required.

Specify Territorial Authority Certification requirements.

11.5.3 Certify and submit an *e-survey*

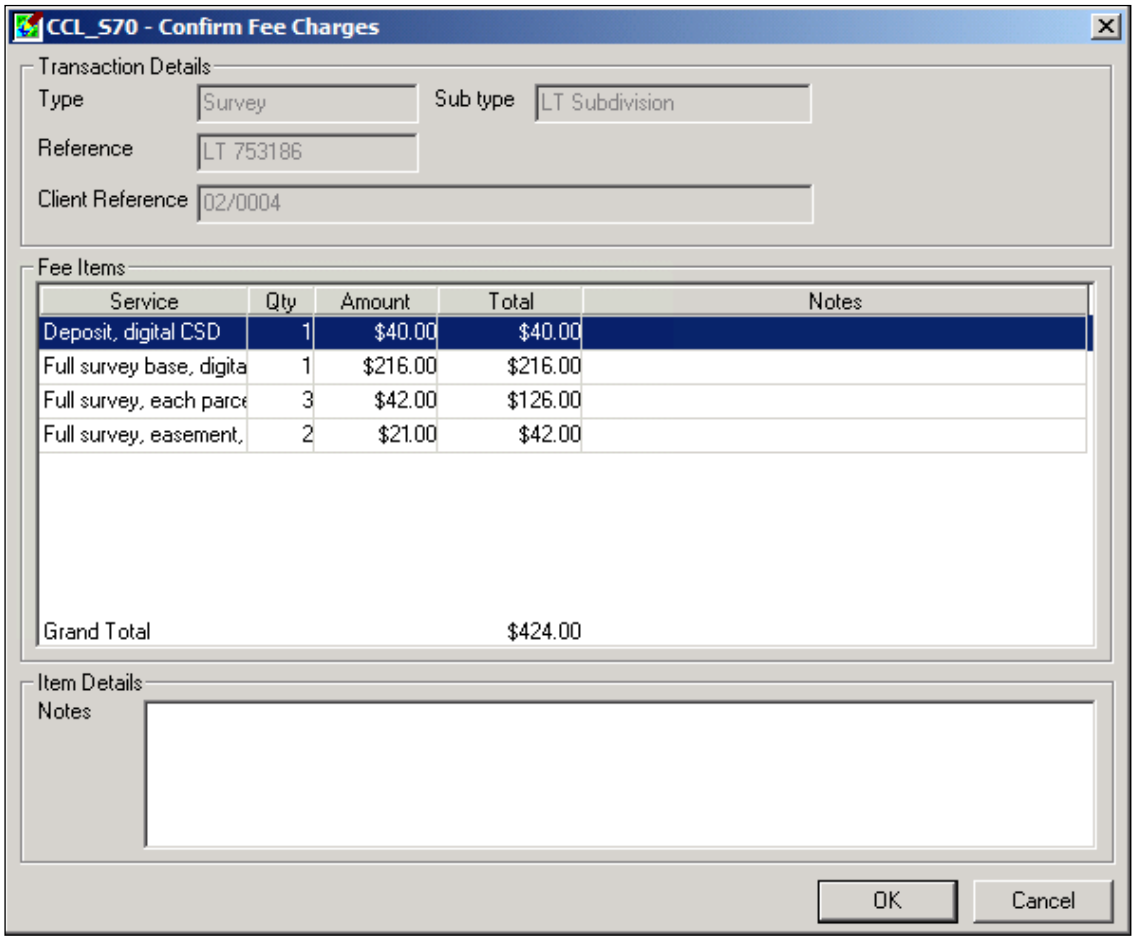
To certify an *e-survey*, in the Manage Survey Transaction screen:

1. Select the Submit tab.
2. Click Submit
   The Confirm Fee Charges screen displays.
3. Review fees for the *e-survey*. Add notes if required. See topic **11.5.4 Confirm fees**.
4. Click OK to display the Sign Survey Dataset screen.
5. Scroll to review the Cadastral Survey Dataset Summary of your *e-survey*.
6. Click Sign to confirm you are satisfied the summary is correct.
   Landonline displays the Enter Landonline Password screen.
7. Enter your Landonline Password and click OK to display the Unlock Certificate File screen.
8. Browse to locate your digital signature on your computer.
9. Enter your Passphrase and click OK to digitally sign the *e-survey*.
   Landonline displays the Signing Status screen with an option to print the signed copy for your records. This is the only time you can print a receipt as proof of signing.
10. Click Print to print proof of signing.
11. Click Close to return to the Manage Survey Transaction screen.

- If you have selected immediate submission, Landonline performs checks and transfers your *e-survey* to LINZ for processing. You are advised of progress in the Manage Survey Transaction screen.
- If you have selected batch submission you must close the Manage Survey Transaction screen to initiate the batch.

11.5.4 Confirm fees

When you submit an *e-survey* Landonline displays the Confirm Fee Charges screen.



You can review the fees and, if required, make notes against individual fee items. Notes made here display on your firm's account from LINZ.

To confirm fees charged for an *e-survey*:

1. Display the Confirm Fee Charges screen. See topic **11.5.3 Certify and submit an *e-survey***.
2. View the fee items charged for the *e-survey*.
3. Add a note against a fee item, if required:
   - Select the fee item.
   - Enter details in the Notes field in the Item Details area. You can enter up to 255 characters in the Notes field. Press Ctrl and Enter to add an additional line, if required. Do not use an apostrophe ('), double quotation (") or pipe (|) in this field.
   - Repeat to add a note for another fee item.
4. Click OK to continue or Cancel to cancel submission.

Note: Any notes you enter in the Confirm Fee Charges screen are only saved if the submission is successful.

11.5.5 Failed submit due to errors

If your *e-survey* fails submission it is returned to you as a read only file. You need to view the Pre-validation report to identify the reasons why it failed and then correct the errors in the *e-survey* before submitting it again.

In the Manage Survey Transaction screen:

1. Select the Pre-validate tab and view the submission results in the Reports area.

2. Click [Exception...] to display the Exception process screen.
3. Click [Cancel Exception] to make the *e-survey* editable.
4. Edit the *e-survey*, pre-validate it and submit it again.

Note: If the Pre-validation report shows the *e-survey* failed due to conflicts outside the surveyor's control you need to request exception processing by LINZ for the *e-survey*. For more information see **11.6 Exception processing**.

11.5.6 Certify an *e-survey* Toolkit

Table 11-4 lists other tools that assist with certifying an *e-survey*.

Tool	Description
Landonline Help	Press F1 in the Submit tab in the Manage Survey Transaction screen to display information about this tab.
Quick Reference Cards	Section: *e-surveys* Topic: Certify and Submit an *e-survey*.

Table 11-4 Certify an *e-survey* Toolkit

11.6 Exception processing

The exception process allows surveyors to flag their *e-survey* for further inspection by LINZ because of conflicts outside the surveyor's control (eg underlying topology).

Until the assessment for the exception process is complete no further work can be done on the *e-survey*. However, LINZ staff can pre-validate the *e-survey* and the surveyor, enabled users and LINZ staff can view the *e-survey*.

Comments you make outlining why the *e-survey* has been sent to the exception process must be within 2000 characters. If you have further comments you can provide this to LINZ in a separate document (eg by fax or email).

You cannot perform exception processing for an *e-survey* submitted by batch until you receive notification of a failed batch submission.

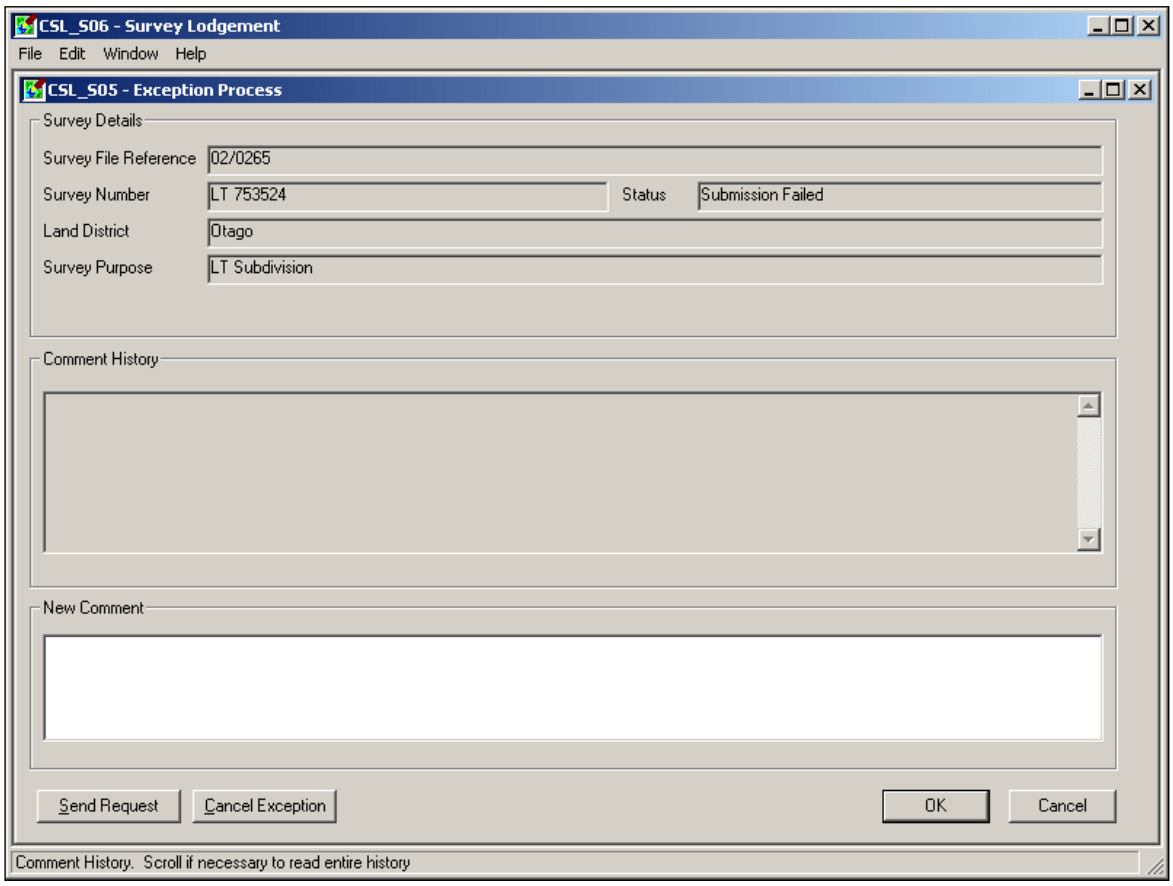
Steps:

The steps you perform for exception processing are:

1. Display the Exception Process screen.
2. Request exception processing.
3. Receive notification of exception processing

The following headings correspond with these steps and describe them in more detail.

11.6.1 Display the Exception Process screen



In the Manage Survey Transaction screen:

1. Select the Pre-validate tab.
2. Click Exception... to display the Exception Process screen.

Note: If you find you can correct the problem yourself without sending it to LINZ for investigation, click Cancel Exception to cancel the exception process and make your corrections.

11.6.2 Request exception processing

In the Exception Process screen:

1. Enter the reasons in the New Comment area explaining the conflicts causing the fatal submission failures.
2. Click Send Request
3. Click OK to return to the Manage Survey Transaction screen.

11.6.3 Receive notification of exception processing

When LINZ has assessed your request you receive a Survey Exception Processing Notice by your preferred notification method. The notice contains all comments from the Comment History area of the Exception Process screen.

11.6.3.1 Action a response from LINZ for your *e-survey*

In the Exception Process screen:

1. Click Continue Capture if you agree with the LINZ resolution or recommendation.

2. Make the recommended changes to your *e-survey*.

Note: Under some circumstances, after the *e-survey* has been through exception processing, there can still be problems that prevent submission. If this happens, you can create a new request for exception processing. Landonline returns the request to LINZ with all previous comments recorded.

11.6.3.2 Cancel exception processing

In the Exception Processing screen:

1. Click [Cancel Exception]. You can now make corrections to the *e-survey*.

11.6.4 Exception processing Toolkit

Table 11-5 lists other tools that assist with exception processing an *e-survey*.

Tool	Description
Quick Reference Cards	Section: *e-surveys* Topic: Exception processing.

Table 11-5 Exception processing Toolkit

11.7 Action requisitions

If LINZ requisitions your *e-survey*, the Surveyor and Primary Contact receive an online message in Workspace. Landonline also automatically sends an email to the Surveyor and Primary Contact to alert them to the requisition. These emails are sent to the email address recorded in the Contact Details tab of the Maintain User screen for each user. (Refer to **3.8.1.1 Change your Contact details**.)

If you receive a requisition from LINZ:

1. Undertake the actions required to make the *e-survey* compliant, or document your reply as an additional report and attach it as a Response to Requisition type supporting document.
2. Resubmit your *e-survey* for Approval as to Survey. See chapter **11 Submit an *e-survey***.

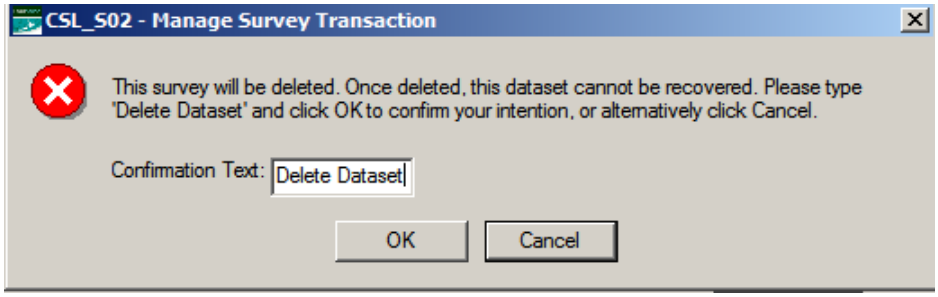
Note: If you change data in your *e-survey* to make it compliant, you may need to recapture data, relink parcels and regenerate the CSD Plans.

11.8 Delete an *e-survey*

You can delete an *e-survey* prior to submission if you have the privilege to delete. When you delete an *e-survey*, Landonline removes all details of the *e-survey* from Workspace. Landonline retains basic header information about the *e-survey*.

To delete an *e-survey*:

1. Display the Manage Survey Transaction screen for the *e-survey*.
2. Click [Delete Dataset]. A warning displays.
   - If a TA is linked to the survey and the TA notified, then a message indicating the association is displayed. Click [Yes].
3. A confirmation message requiring the user to enter a confirmation text is displayed. Enter 'Delete Dataset' in the field provided and click [OK].



- If you have notified the Territorial Authority, the e-survey will also be deleted from their Workspace.

Note: If your e-survey has been assigned to a TA user, they receive a message in their My Messages folder to advise the survey number and the name of the surveyor who deleted it.

Caution: Once an *e-survey* has been deleted it cannot be recovered and the Survey Reference cannot be reused.

11.9 Withdrawing an *e-survey*

Once a survey transaction has been submitted, you can still open the survey from Workspace, in 'View Only' mode, and if need be, withdraw the dataset using the Withdraw Dataset key in the CSL_S02 – Manage Survey Transaction screen. When you select the Withdraw Dataset button, a withdrawal request is created and sent to LINZ to be completed. LINZ will return the *e-survey* on requisition to your workspace.

When you select the Withdraw Dataset button, a withdrawal request is created and sent to LINZ to be completed. LINZ will return the *e-survey* on requisition to your workspace.

Steps:

1. In the **Manage Survey Transaction** screen, click **Withdraw Dataset**. A warning displays. Click **No** if you don't want to withdraw the *e-survey*.
2. Click **Yes** to create a Survey Withdraw request and send it to LINZ for processing.
3. LINZ will send the e-survey back to your workspace on requisition. At this stage the dataset can be deleted from workspace using the "Delete Dataset" option.

Until LINZ complete the request, the *e-survey* header details remain in Workspace with a status of **Withdrawn** and the e-survey cannot be edited.

If your e-survey has been assigned to a TA user, they receive a message in their **My Messages** folder to advise the survey number and the name of the surveyor who withdrew it.

12 SYSTEM MANAGEMENT

12.1 Overview

All users and firms are initially entered into Landonline by LINZ System Administrators. They enter the user and firm details, associate users with firms and set up the initial security access levels. The day to day management of firm and user information and user access are managed by a firm's System Manager. Each firm appoints a member of their firm to be their System Manager. A firm may appoint more than one System Manager if required.

System Managers undertake their Landonline duties through the External System Administration screen. This provides access to other screens where user and firm information is maintained and user access levels are set. This chapter explains how a System Manager can:

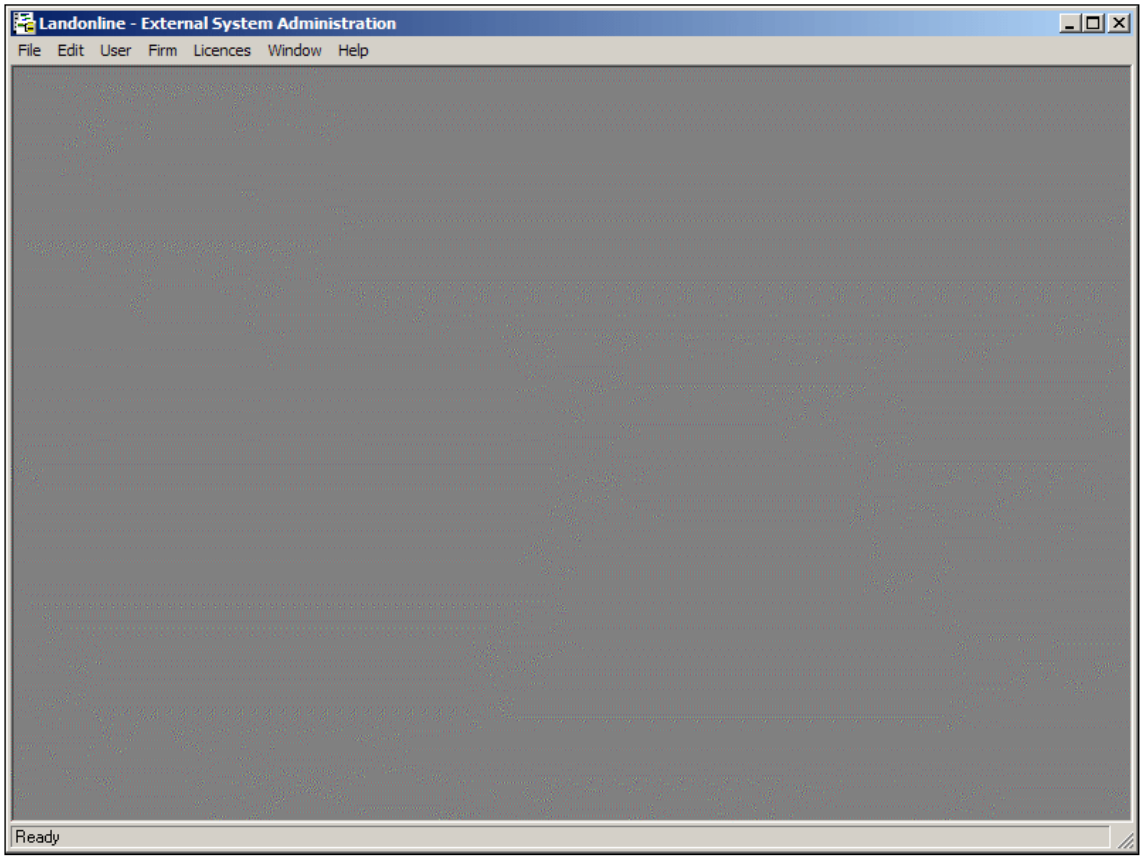
- view an individual user's details
- modify the firm's contact details
- associate and disassociate privileges with a user
- modify user groups
- disassociate a user from the firm
- generate a licence usage report.

Note: Individual users also access the Maintain User screen in External System Administration to update their own details. See topic **3.8 Change your details or password**.

12.2 External System Administration screen

The External System Administration screen provides System Managers with access to the:

- Maintain User screen where System Managers can view a user's details
- Maintain Firm screen where System Managers can maintain their firm's contact details and the privileges of users in their firm.
- Licence Usage Report screen where you can generate a report detailing how licences are used in your firm.



This shows the menus available to a System Manager in the External System Administration screen.

12.2.1 Display the External System Administration screen

Only System Managers can display the External System Administration screen.

To display the External System Administration screen, in Workspace:

1. Click  (System Maintenance) from the Workspace Toolbar.

12.3 View an individual user's details

A System Manager can view a user's contact details and preferences through the Maintain User screen. Individual users maintain their own details.

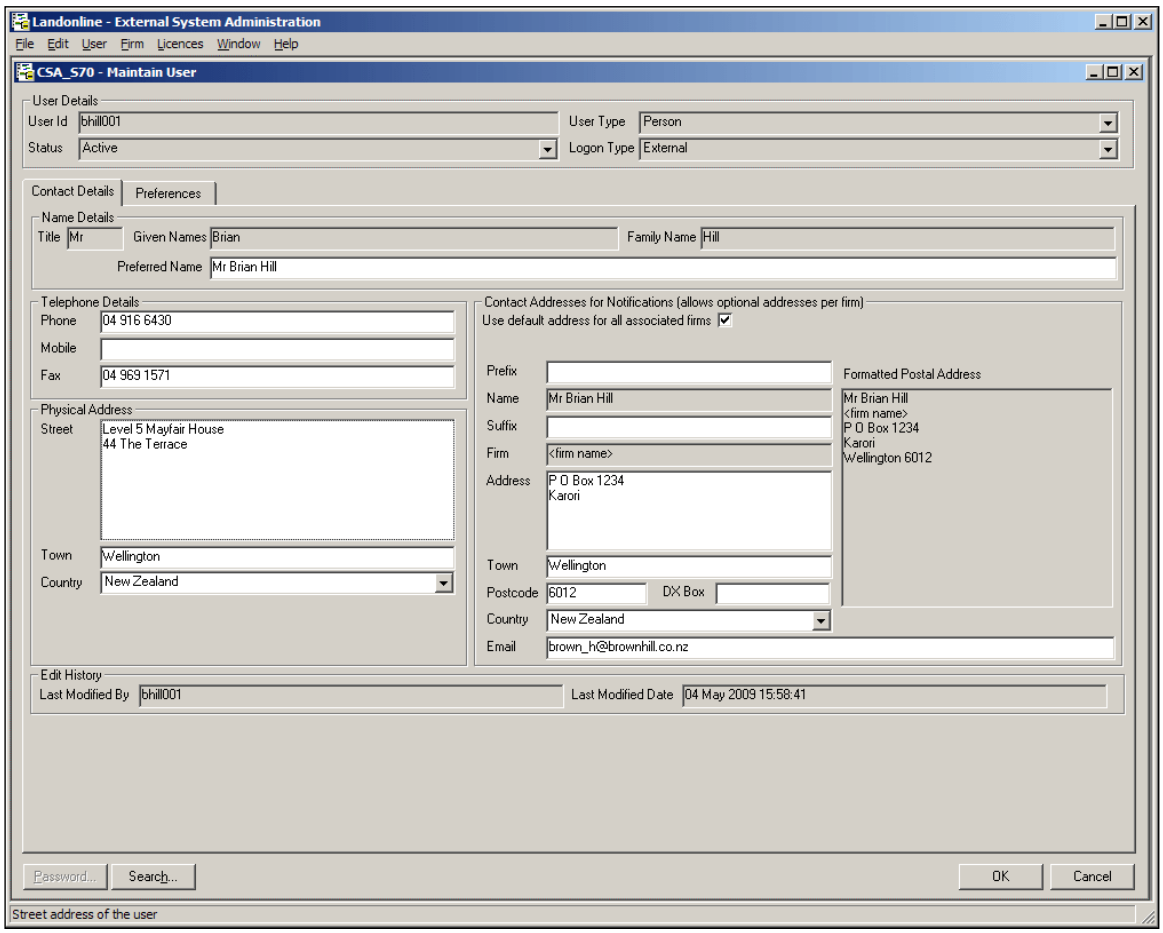
Steps:

To view an individual user's details you:

1. Display the Maintain User screen.
2. Search for the user.
3. View the user's contact details and preferences.

The following headings correspond with these steps and explain them in more detail.

12.3.1 Display the Maintain User screen



When Brian Hill (the System Manager at Brown Hill and Associates) opens the Maintain User screen it displays his user details. Brian must search for a user to display their details.

To display the Maintain User screen, in External System Administration:

1. Select **User | Maintain User…**

12.3.2 Search for the user

When the Maintain User screen is opened by a System Manager it displays their user details. The System Manager must search for a user to display their details. The selected user's details will display in the User Details area. These cannot be modified. The selected users contact details will display in the Contact Details tab and their preferences will display in the Preferences tab.

To search for the user:

1. Click Search... to display the External Search screen.
2. Search for the user. See topic **4.2.2 Search for a user or firm and add the details to the current screen**.

12.3.3 View user contact details and preferences

To view a user's contact details and preferences, select the Contact Details tab and Preferences tab in the Maintain User screen. For more information, see topic **3.8.1 Change your details**.

12.4 Modify your firm's contact and user details

A System Manager can maintain a firm's contact details through the Maintain Firm screen. They can also modify user details as they relate to the firm (eg the branch a user works for).

Tasks:

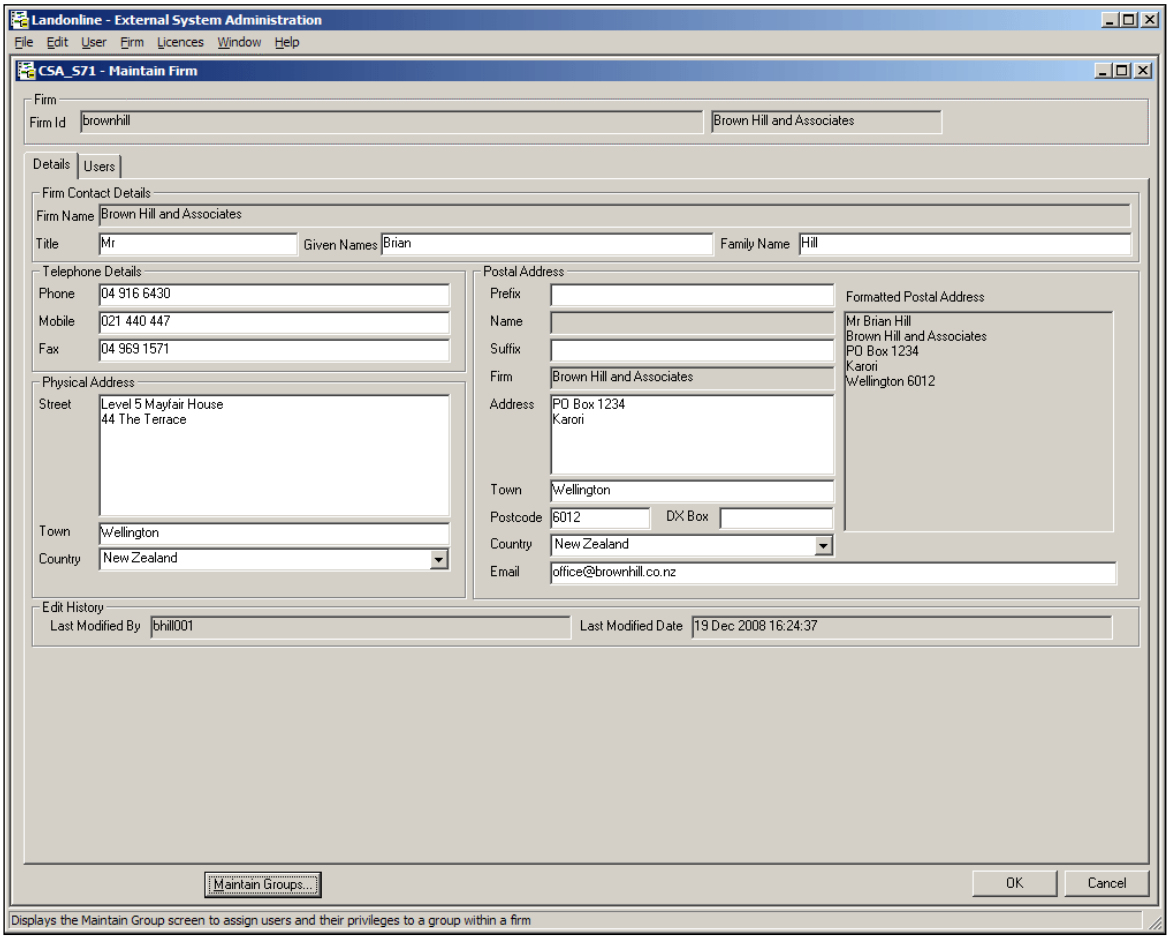
To maintain a firm's contact details System Managers:

- Display the Maintain Firm screen.
- Modify the required details in the Details tab.
- Modify a users details as they relate to a firm.

The following headings correspond with these tasks and describe them in more detail.

12.4.1 Display the Maintain Firm screen

The Maintain Firm screen is where System Managers can modify their own firm's details and manage users.



The System Manager from Brown, Hill and Associates has opened the Maintain Firm screen to update the address details for the firm.

To display the Maintain Firm screen, in External System Administration:

1. Select **Firm | Maintain Firm…**

When the Maintain Firm screen is opened the firm's details display. The System Manager can only view their own firm's details.

12.4.2 Modify firm details in the Details tab

In the Details tab of the Maintain Firm screen:

1. Update the contact person and address details if required. The contact person receives all general communications on behalf of the firm. Do not use an apostrophe ('), double quotation (") or pipe (|) in any field in the Details tab.
2. Save the changes.

Note: To maintain the method by which your firm receives specific notifications, refer to the **Notices User Guide**.

12.4.3 Modify user details for the firm

In the Maintain Firm screen:

1. Select the Users tab to display the users for the firm.
2. Select the user.
3. Modify the Firm Office (branch) or Default Licence for the user if required.
4. Save the changes.

Note:

- You cannot alter any other details for the user in the Associated Users list.
- A check in the Contractor field indicates the user is a contractor to your firm. A contractor is a user who performs work for your firm but is not a member of your firm. They can be affiliated to more than one firm.

12.5 Maintain user privileges in your firm

User privileges are associated with a user through the Maintain Firm screen. Privileges determine what actions a user can perform in Landonline (eg certify an *e-survey*). The System Manager allocates appropriate privileges to each user based on their role (eg, Searches, Surveyor, Primary Contact). The privileges the System Manager can allocate to a user are limited to those allowed by the types of Landonline licences allocated to the firm. For example, if the firm didn't have a licence that enabled Searches then a user could not be assigned the privileges required to search.

Steps:

To allocate privileges to, or remove privileges from, a user:

1. Display the Maintain Firm screen.
2. Display the user's privileges in the Allocate Privilege screen.
3. Allocate privileges or remove privileges.

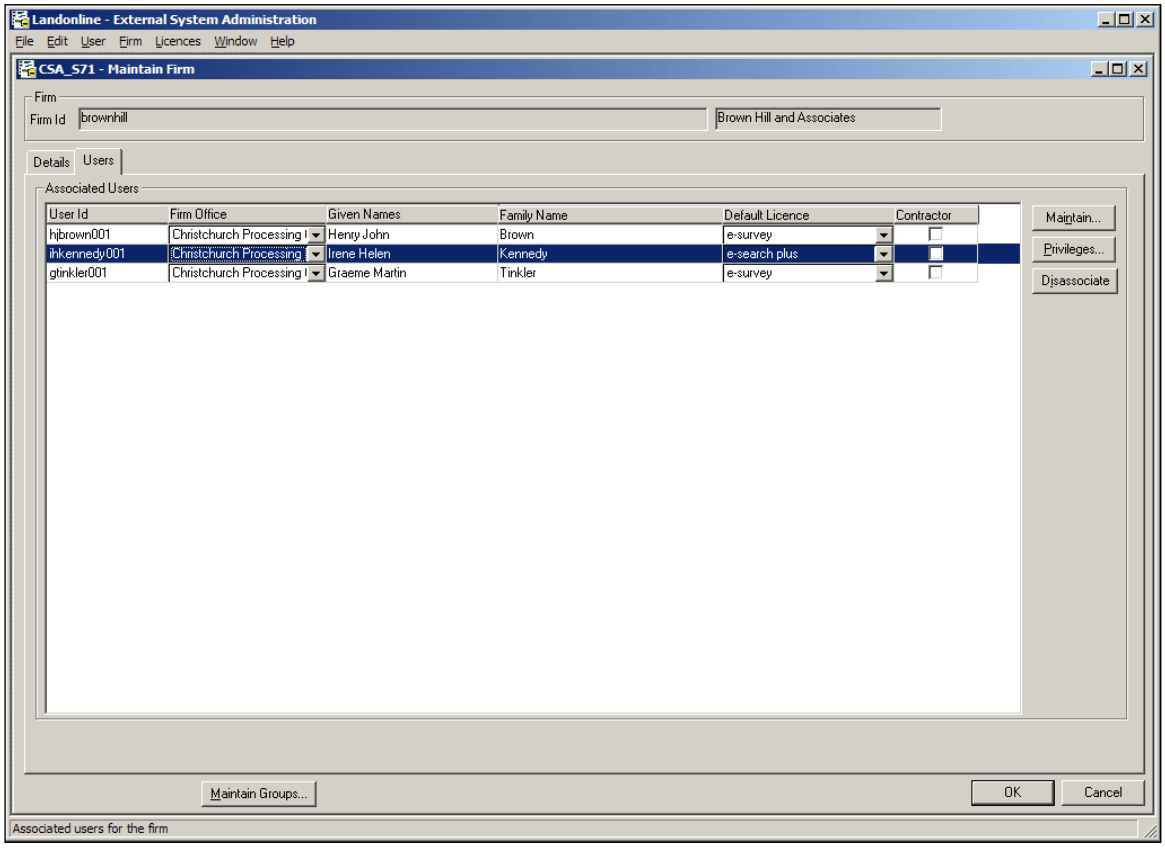
The following headings correspond with these steps and describe them in more detail.

12.5.1 Display the Maintain Firm screen

To **display** the Maintain Firm screen:

1. See topic **12.4.1 Display the Maintain Firm screen**.

12.5.2 Display the Allocate Privileges screen

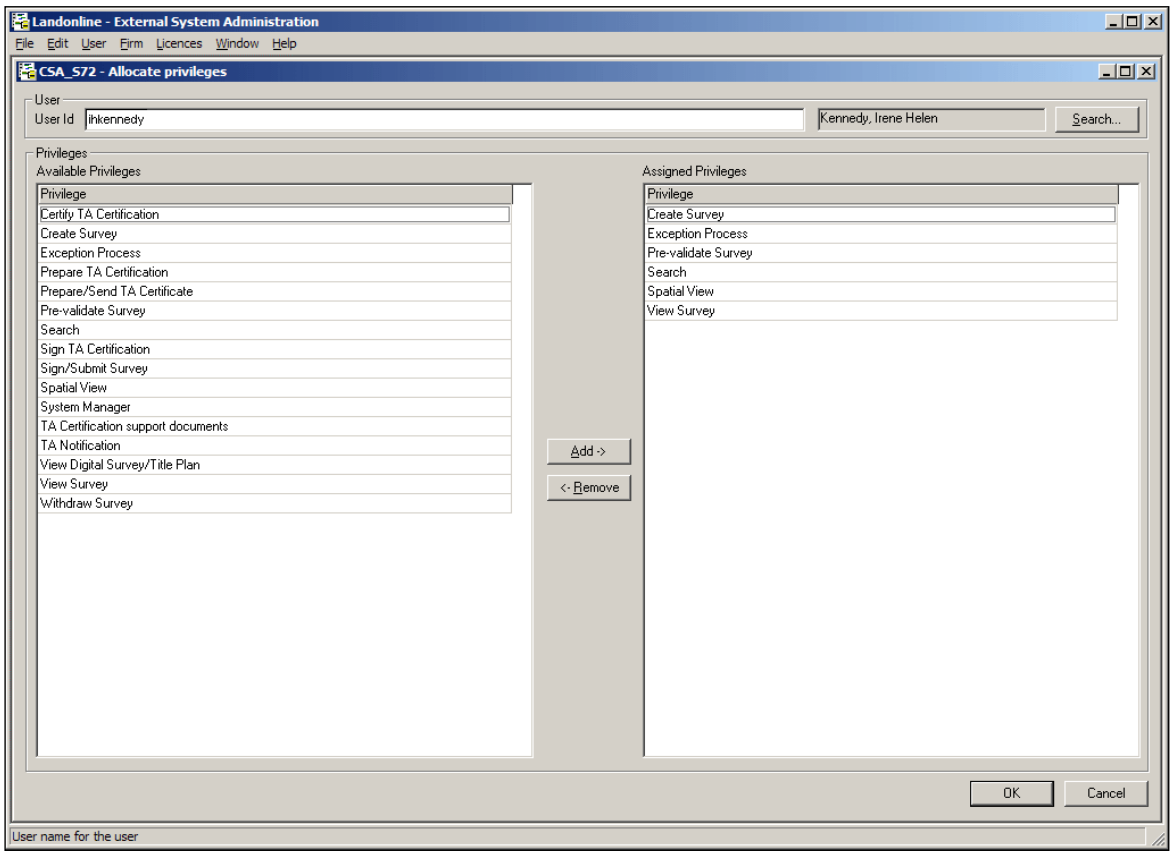


The System Manager has selected Irene Kennedy to perform some maintenance work on.

To display the user's privileges in the Allocate Privileges screen:

1. Select the Users tab in the Maintain Firm screen to display the users for the firm.
2. Select the user from the Associate Users list.
3. Click Privileges... to display the Allocate Privileges screen.

12.5.3 Allocate or remove privileges



Here you can see the privileges that have been allocate to Irene Kennedy.

12.5.3.1 Allocate privileges to a user

In the Allocate Privileges screen:

1. Select the required privileges from the Available Privileges list.
2. Click Add -> to copy the privileges to the Assigned Privileges list.
3. Click OK to save the changes and close the screen.

12.5.3.2 Remove privileges from a user

In the Allocate Privileges screen:

1. Select the required privileges from the Assigned Privileges list.
2. Click <- Remove to delete the privileges from the list.
3. Click OK to save the changes and close the screen.

12.6 Modify user groups

User groups are established by the System Manager. They contain groups of privileges and are used to assign the same privileges to multiple users. For example, a System Manager can establish a user group for Conveyancing Professionals within the firm.

Tasks:

To modify user groups System Managers:

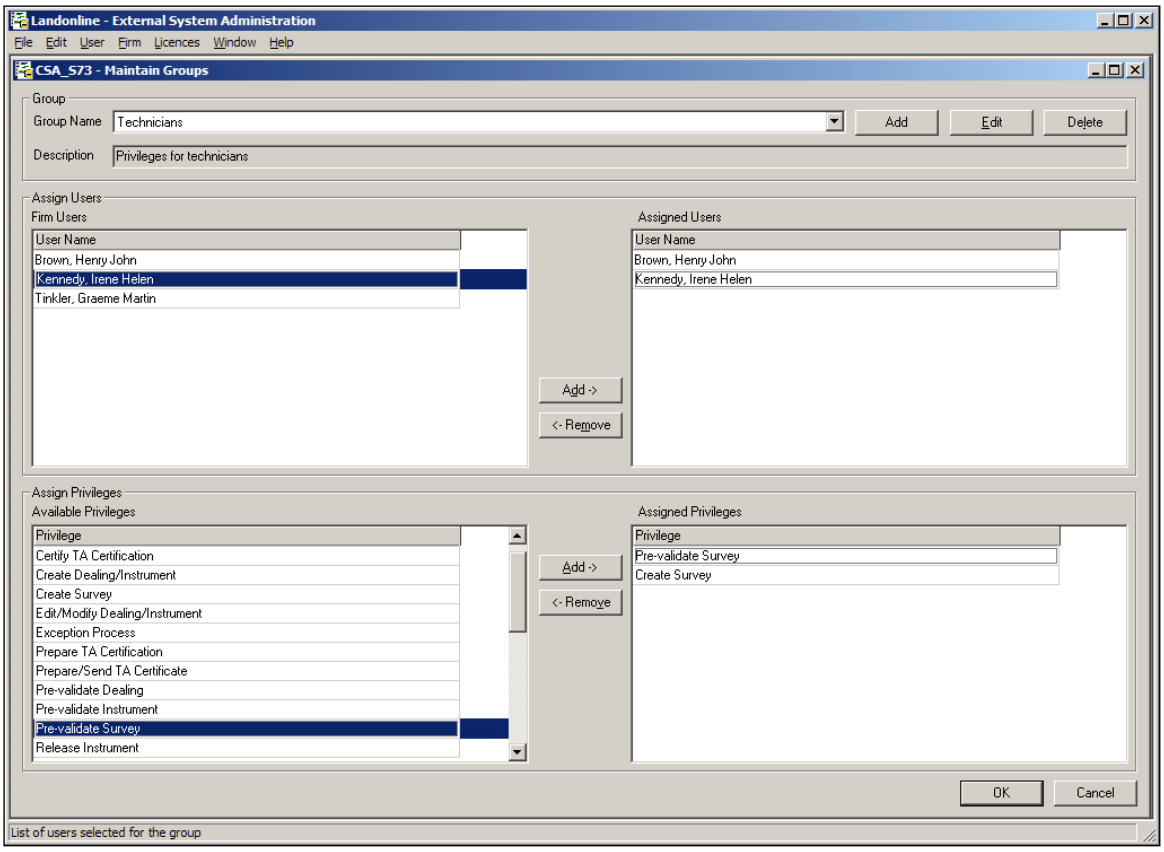
- Display the Maintain Groups screen.
- Create a new user group.
- Modify a group name or description.
- Assign users to, or remove users from, a group.
- Add privileges to, or remove privileges from, a group.
- Delete a group.

The following headings correspond with these tasks and describe them in more detail.

12.6.1 Display the Maintain Groups screen

The Maintain Groups screen is divided into three areas.

- The Group area is where the user group name and description are created and modified.
- The Assign Users area is where users are assigned to and removed from user groups.
- The Assign Privileges area is where privileges are assigned to, and removed from, a user group.



The System Manager is establishing some user groups for the users at Brown, Hill and Associates.

To display the Maintain Groups screen, in the Maintain Firm screen:

1. Click Maintain Groups...

12.6.2 Create a new user group

In the Maintain Groups screen:

1. Click Add to display the Maintain Group Name screen.
2. Type the name for the group in the Group Name field.
3. Type a description for the group in the Description field.
4. Click OK to save the new group and return to the Maintain Groups screen.

12.6.3 Modify a group name or description

In the Maintain Groups screen:

1. Select the group in the Group Name field.
2. Click Edit to open the Maintain Group name screen.
3. Modify the group name or description.
4. Click OK to save the change and return to the Maintain Groups screen.

12.6.4 Assign and remove users

12.6.4.1 Assign users to a group

In the Maintain Groups screen:

1. Select the Group in the Group Name field.
2. Select the user from the Firm list.
3. Click Add -> to copy the user to the Assigned Users list.
4. Save the changes.

12.6.4.2 Remove users from a group

In the Maintain Groups screen:

1. Select the Group in the Group Name field.
2. Select the user from the Assigned User list.
3. Click <- Remove to delete the user from the Assigned User list.
4. Save the changes.

Note: A user can be assigned to more than one group.

12.6.5 Add privileges to, or remove privileges from a group

12.6.5.1 Add privileges to a group

In the Maintain Groups screen:

1. Select the Group in the Group Name field.
2. Select the required privileges from the Available Privileges list.
3. Click Add -> to copy the privileges to the Assigned Privileges list.
4. Save the changes.

12.6.5.2 Remove privileges from a group

In the Maintain Groups screen:

1. Select the user group in the Group Name field.
2. Select the privileges to be removed from the Assigned Privileges list.
3. Click <- Remove to delete the privileges from the Assigned Privileges list.
4. Save the changes.

Note: When privileges are deleted from a user group, they are also deleted from all users in that user group.

12.6.6 Delete a user group

In the Maintain Groups screen:

1. Select the user group in the Group Name field.
2. Click Delete to delete the Group.
3. Save the changes.

Note: When you delete a group all users associated with that group lose the group privileges.

12.7 Disassociate a user from the firm

System Managers can disassociate a user from their firm if, for example, the user leaves the firm. When a user is disassociated they can no longer log on to Landonline from the firm and cannot perform work for that firm.

To disassociate a user, in the Maintain Firm screen:

1. Select the Users tab in the Maintain Firm screen.
2. Select the user to be disassociated from the Associated Users list.
3. Click Disassociate
4. Click OK to close the Maintain Firm screen and save the change.

Caution: Once you disassociate a user you cannot associate the user with the firm again. This can only be done by LINZ. The disassociated user's work will still display in Workspace but can only be edited by someone with the same privileges.

12.8 Generate a Licence usage report

A System Manager can produce a report to show current and historic licence usage information within their firm.

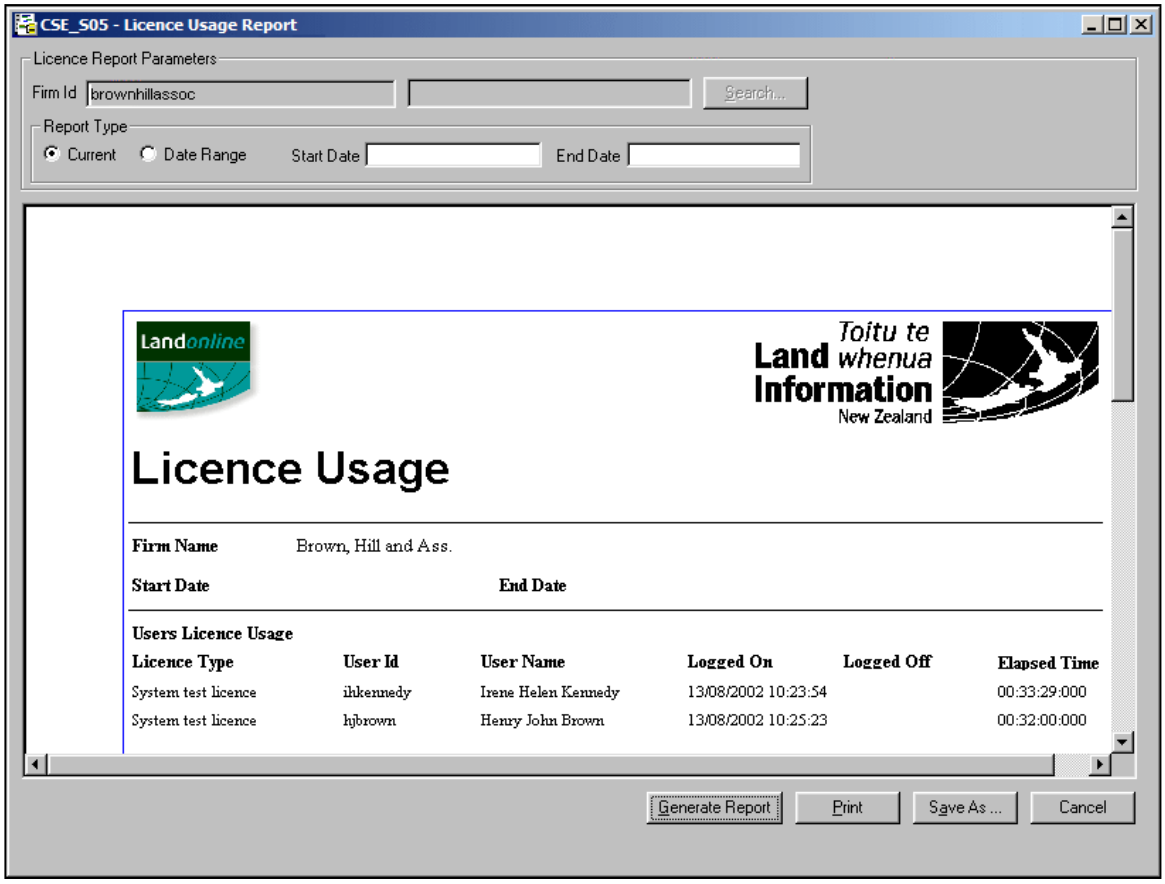
Tasks:

A System Manger can:

- Display the Licence Usage Report screen.
- Generate a Licence Usage Report.
- Print the Licence Usage Report.
- Save the Licence Usage Report to their computer.

The following headings correspond with these tasks and describe them in more detail.

12.8.1 Display the Licence Usage Report screen



This is a Licence Usage Report for Brown, Hill and Associates.

To display the Licence Usage Report screen, in the External System Administration screen:

1. Select Licence | Licence Report…

12.8.2 Generate a Licence Usage Report

In the Licence Usage Report screen:

1. Click Current or Date Range in the Report Type area.
2. If you selected Date Range type a Start Date and End Date to specify the period you want to generate the report for.
3. Click Generate Report...

12.8.3 Print the Licence Usage Report

In the Licence Usage Report screen:

1. Generate the Licence Usage Report.
2. Click Print

12.8.4 Save the Licence Usage Report

You can save the Licence Usage Report to your computer.

To save the Licence Usage Report, in the Licence Report screen:

1. Generate the Licence Usage Report.
2. Click Save As...

3. Select a location on your computer to save the file to.
4. Type a name for the file.
5. Select a file format for the report. (eg tif).
6. Click Save

12.9 System Management Toolkit

Table 12-1 lists other tools that assist a System Manager to maintain user security access levels to Landonline, and user and firm information.

Tool	Description
Landonline Help	Press F1 in to display Landonline Help in any System Management screen.
Quick Reference Cards	Section: System Management Topics: • Change firm details • Change firm details for a user • Change privileges • Create privilege groups • Generate usage report.

Table 12-1 System Management Toolkit

13 SPECIAL TASK OVERVIEWS IN LANDONLINE

13.1 Add a Survey Reference

You can add a Survey Reference in Landonline as soon as you begin work on the *e-survey*.

Enter Survey information for mandatory fields only. See **5.2 Enter survey information**.

↓

Add the Survey Reference. See **7.7 Add and delete survey references**.

13.2 Capture an *e-survey* involving accretion

Capture the *e-survey* including the new irregular boundary. See **7.13.3 Digitise a new irregular boundary**.

- Make sure the marks are linked where the underlying irregular boundaries intersect with the parcels.

↓

Incorporate the existing boundaries of the hydro parcel. See **7.8.4 Select existing boundary lines**.

- Include the opposite bank of the stream if the parcel on the opposite side is encroached.

↓

Merge irregular boundaries if the old and new irregular boundaries intersect. See topic **7.13.6 Merge irregular boundaries**

- If the accretion extends beyond the other side of the steam you will need to merge the old opposite bank with the new irregular boundaries.

↓

Process balance parcels, see **7.8.4 Select existing boundary lines**.

- Extinguish the existing parcels altered by the irregular boundaries and create new balance parcels.

↓

Capture the parcels. See **7.17 Capture parcels**.

- Make sure the adjacent hydro parcel is included. The hydro parcel must be unnamed and the Title and Survey checkboxes unchecked in the Parcel Detail screen. See **7.17.2.3 Complete a General appellation**.
- Capture the parcel on the opposite bank if it is overlapped by accretion. You must give the overlapped parcel the Action of Encroached in the Parcel Detail screen.
- For more information about Parcel Actions see **Appendix E: Parcel action definitions**.

13.3 Capture a multi class *e-survey*

Complete the Survey Header. See **7.6 Complete additional survey information**.

- Enter the Survey Class. Make sure it is the highest class. See **7.6.2 Complete survey header details**.

↓

Capture your vectors. See **7.10 Capture vectors**.

- Capture all vectors in the default class. When all vectors are captured change the survey class from the default for vectors with a different class. You can change the class for multiple vectors at the same time. See **7.10.9 Apply one value to multiple vectors**.

13.4 Capture a legalisation parcel including balance parcels

Note: This process also applies to an *e-survey* where part of a road is stopped. Process the balance parcel and follow the same process for the remainder of the road.

Capture the *e-survey* for the new legalisation parcel. See chapter **7 Capture an e-survey**.

- Ensure the *e-survey* includes balance primary and non primary dimensions from intersection points.

Adopt existing boundary lines for the balance parcel. There are two ways to do this:

1. See **7.8.3 Adopt existing boundary definitions**.
2. See **7.8.4 Select existing boundary lines**.

- Make sure you adopt all primary balance parcel boundary lines.
- Make sure you adopt all non primary balance parcel boundary lines (if relevant).
- Make sure you change the purpose of captured balance parcel boundary points to Accepted in order to avoid failure on the 2-vector rule.

Capture parcels for the *e-survey*. See **7.17 Capture parcels**.

- Include the new legalisation parcel.
- Include the balance primary parcel.
- Include the balance non primary parcels (if relevant).
- Extinguish the existing parcel.

13.5 View an estimate of submission fees

Begin the process for certifying and submitting the *e-survey*. Cancel the process from the Confirm Fee Charges screen after viewing estimated submission fees. See topics:

- **11.5.1 Display the Submit tab**
- **11.5.2 Prepare an *e-survey* for submission**
- **11.5.3 Certify and submit an *e-survey***
- **11.5.4 Confirm fees** – Click [Cancel] at step 4 of this process to cancel out of the Certify and Submit process.

13.6 Change a parcel boundary for an *e-survey* on requisition

Follow this process to change a boundary in an *e-survey* that is returned to you on requisition.

View the requisition message to determine what needs to be altered in the *e-survey*.

- See **3.7.1 Using the My Messages folder**.

↓

Display the Vector Capture screen for the *e-survey*:

- Locate the *e-survey* in Workspace and double click it to open the Manage Survey Transaction screen.
- Click [Capture Dataset...] to display Survey Capture.
- Select **Capture | Vector Capture…**

↓

Edit the vectors for the parcel. See:

- **7.10.4 Add new vector rows**
- **7.10.5 Enter a right line**
- **7.10.6 Enter an arc**
- **7.10.7 Enter information for a mark**
- **7.10.8 Change the vectors view**
- **7.10.9 Apply one value to multiple vectors**
- **7.10.14 Delete selected vectors**
- **7.11 Edit captured marks**.

↓

Unlink the parcels affected by the changes to the vectors in the Parcel List screen.

- Display the parcel list screen. See **7.17.1 Display the Parcel List screen**.
- Select the first parcel affected by the changes and click [Unlink]
- Select each remaining parcel affected by the change and click [Unlink]

↓

Link the affected parcels to the new spatial definitions. See **7.17.6 Link new parcels**.

- Link the first parcel affected.
- Link each remaining parcel affected.

↓

Prepare the *e-survey* for submission and submit it.

- Pre-validate. See chapter **8 Schedule/Memorandum**
- Regenerate the digital plans. See **10.3.7 Regenerate plans**.
- Submit the *e-survey*. See chapter **11 Submit an e-survey**.

13.7 Best practice in the Vector Capture screen

This process provides an example of an order you could use to capture vectors in the Vector Capture screen.

Before capturing vectors in the Vector Capture screen, adopt existing Landonline information from the Spatial Display.

Capture vectors in the following order into the Vectors list:

- Measured Vectors
- Measured Vector Pegging Ties
- Adopted Vectors
- Primary Boundaries
- Non primary Boundaries.

↓

Edit multiple vectors using the common fields in the Vector Details and Mark Information areas. See **7.10.9 Apply one value to multiple vectors**.

APPENDICES

Appendix A: Survey Capture layers

When you display the Spatial Display in Survey Capture, Landonline displays the layers specific to the *e-survey* at the top of the Current Layers list. All the other survey layers display below.

Survey Capture layers contain only the spatial layers required to capture an *e-survey*. Some of the layers only display when required (eg placeholders). Landonline inserts temporary layers or images loaded by you at the top of the list (eg image of an irregular boundary). For information about layers and other spatial functionality, refer to the ***e-search* User Guide**.

Appendix B: Survey Capture right mouse options

Click an alternate mouse button in Survey Capture to display the right mouse button menu.

Menu Option	Action
Adopt	Adopts the selected mark(s) or marks and vectors.
Edit	Displays a screen to edit the selected feature.
Delete	Deletes the selected feature from the *e-survey*. This cannot be used to delete authoritative data from Landonline.
Link	Displays the Mark Detail screen or Parcel List screen to link the selected mark(s) or parcel(s).
Unlink	Unlinks the selected mark, parcel or vector.
Refresh	Updates (ie redraws) the information in the Spatial Window.

Appendix C: Vector layer definitions

For a complete list of the vector layers showing all combinations possible, refer to **Vector layer definitions** in **Landonline Help**.

Vector Layer	Description
Vector	Measured, Calculated or Adopted vectors that exist between two survey marks. Also use this layer for boundary lines that are not boundaries on parcels created by this *e-survey*, eg Adoptions along abutting parcel boundaries.
Primary	Vectors which form the extents of primary parcels. Examples are vectors that form the boundaries of lots, sections, Maori land blocks, roads, railways, rivers, lakes, the sea, etc.
Strata	Vectors that form strata parcels, eg tunnels.
Secondary	Generally vectors that form easement parcels. These easements must be contained wholly within one current primary parcel. They can overlap tertiary easements.
Tertiary	Generally vectors that form easement parcels. These easements are similar to the current secondary parcels. They cannot overlap more than one current primary parcel.
Secondary Centreline	Vectors that form secondary centreline parcels (typically easements in gross) that are defined by a line rather than a polygon. These easements must be contained wholly within one current primary parcel. They can overlap secondary easements.
Tertiary Centreline	Vectors that form tertiary centreline parcels (typically easements in gross) that are defined by a line rather than a polygon. These easements cannot overlap more than one current primary parcel.

Appendix D: Topology layer definitions

This lists the classes of parcel topology and their topology type.

Topology Class	Topology Type	Description
Primary	Polygonal	The parcels which, when they have 'current' status, define the extent of fundamental rights of ownership. They form the network layer of current parcels that covers New Zealand without gaps or overlaps. Examples are lots, sections, Maori land blocks, roads, railways, rivers, lakes, the sea, etc.
Strata	Polygonal	A special type of parcel that can be associated with primary parcel intents. They are commonly used for primary parcels but are defined in three dimensions and therefore may overlap current primary parcels. These are primary parcels, however when they become current, they violate the no-overlaps rule (eg tunnels).
Secondary	Polygonal	This layer consists of "Non Primary" parcels only. Current parcels in this network can neither overlap more than one current primary parcel, or any other non primary parcels in this network. If parcels in this network overlap, intersection points must be included where they intersect and individual parcels must be created for each portion. To avoid intersections the Tertiary layer can be used where parcels cross each other. Generally parcels in this network are Easement parcels.
Tertiary	Polygonal	This layer consists of "Non Primary" parcels only. Current parcels in this network can neither overlap more than one current primary parcel or any other non primary parcels in this network. If parcels in this network overlap, intersection points must be included where they intersect and individual parcels must be created for each portion. To avoid intersections the Secondary layer can be used where parcels cross each other. Generally parcels in this network are Mining, Leasehold or Covenant parcels.
Secondary Centreline	Lineal	Secondary parcels (typically easements) that are defined by a line rather than a polygon.
Tertiary Centreline	Lineal	Tertiary parcels (typically easements in gross) that are defined by a line rather than a polygon.
None	No topology	Parcels which have no topology defined in Landonline. This includes: • flats and units where there is no spatial definition in Landonline, except as depicted on the plan image • non-survey defined parcels.

Appendix E: Parcel action definitions

This table describes the options you can select in the Action field of the Parcel Detail screen. If you select Extinguished, Referenced, Encroached or Affected you must search for the existing parcel in Landonline to add its details to the Parcel Detail screen.

Option	Description
Created	The parcel is created by the *e-survey*. When the *e-survey* is registered the parcel becomes current.
Extinguished	The parcel is replaced by parcels created on the *e-survey*, or the parcel is expired. When the *e-survey* is registered the parcel becomes historic.
Referenced	The parcel is related to the *e-survey*, but is not created or extinguished and its status will not change as a result of the *e-survey*. For example: • fee simple parcels in flats or unit plans • an underlying fee simple parcel in an easement plan. Sometimes the topology of the referenced parcel will need to be captured possibly by generating a balance parcel boundary (eg when an easement or redefinition adds boundary marks to it).
Proposed	The parcel is introduced on the *e-survey* but has not actually been created. This will generally only apply to parcels such as principal and accessory units on a Proposed Unit Development plan (PUD). The parcel will be created in a subsequent plan (eg Stage 1 of the Unit Development).
Encroached	This is relevant for plans that define accretion and/or erosion for parcels that are not actually extinguished by the *e-survey*, but will most likely have their boundaries affected. For example: • A parcel on one side of a stream can be encroached as a result of an accretion claimed for the parcel on the other side of the stream. (The stream parcel will probably be extinguished.) • When erosion occurs in favour of another parcel that is not created by the *e-survey*, that parcel will deem to be encroached. Encroached parcels extend the external boundary of the *e-survey* for topology processing at approval and can result in parcel overlaps that will need to be manually corrected by LINZ internal staff.
Affected	Where a parcel created in a new *e-survey* is affected by an amalgamation condition and requires deposit, the existing parcel with which the new parcel is to be amalgamated is an Affected parcel. Use Affected as the action for the parcel. The Affected action is only used for RT amalgamations. Titles cannot be linked to Encroached, Extinguished or Referenced parcels. Where there is no amalgamation condition, but an adjoining parcel is Encroached upon, Extinguished by or Referenced, use the actions Encroached, Extinguished or Referenced for the parcel.

Appendix F: Plan Layout validation rules (P rules)

The table below contains a list of business rules Landonline uses to check layout sheets for an *e-surveys*.

Plan Rule	Description	Explanation
P001	All boundary marks captured for the survey are displayed.	Ensures that every boundary mark captured for the survey is displayed at least once on the set of diagrams used to illustrate the Title Sheets on the CSD Plan and the Title Plan. **Note**: This check excludes system added marks created by the balance parcel process.
P002	All boundary marks captured for the survey are labelled.	Ensures that every boundary mark captured for the survey has its mark name label displayed (if applicable) at least once on the set of diagrams used to illustrate the Title Sheets of the CSD Plan. **Note**: This check excludes system added marks created by the balance parcel process.
P003	All vectors captured for the survey are displayed.	Ensures that every vector captured for the survey is displayed at least once on the set of diagrams used to illustrate the CSD Plan and/or is displayed at least once on the set of diagrams used to illustrate the Title Plan. **Note**: The set of diagrams used to illustrate the CSD Plan includes diagrams used for the Survey Sheets as well as diagrams used for the Title Sheets.
P004	All vector dimensions captured for the survey are displayed on the CSD Plan.	Ensures that the every vector dimension captured for the survey is displayed at least once on the set of diagrams used to illustrate the CSD Plan. **Note**: • The set of diagrams used to illustrate the CSD Plan includes diagrams used for the Survey Sheets as well as diagrams used for the Title Sheets. • Vector dimensions include bearing, distance, chord bearing, arc length and arc radius measurements.
P005	All primary parcel boundary distances are displayed on the Title Plan.	Ensures that every primary parcel boundary distance recorded for the survey is displayed at least once on the set of diagrams used to illustrate the Title Plan. **Note**: The parcel boundary distance includes vector distance and arc length measurements.
P006	Created primary parcels are displayed in full on the Title Plan.	Ensures that every primary parcel created by the survey is completely contained by at least one diagram used for the Title Plan.
P007	Appellation and area displayed for created parcels on the Title Plan.	Ensures that every primary and non primary parcel created for the survey has its appellation and area (if applicable) displayed at least once on the set of diagrams used to illustrate the Title Plan.
P008	All diagrams created for the survey are displayed	Checks that every system generated and user defined diagram created for the survey is displayed on the CSD Plan.

Appendix G: Details of generated plans

Landonline generates plans for the *e-survey* from the layout sheets. The generated plans include CSD Plan pages, Title Plan pages and Title Diagram pages. These products can be viewed in Searches once the *e-survey* has been registered.

CSD Plan pages

Content	Details
CSD Plan header	Structured text details for the *e-survey* that form part of the CSD Plan.
Mark and Vector list	A list of all marks and vectors recorded in the *e-survey*.
Schedule / Memorandum	If applicable. This is a scanned .tiff image attached as a Schedule/Memorandum type of supporting document.
Occupation diagram	If applicable. This is a scanned .tiff image attached as an Occupation diagram type of supporting document.
Survey Graphic	• Survey System Generated Diagram. • User defined detail survey diagrams.
Title Graphic	• Primary System Generated Diagram (Primary parcels). • Non Primary System Generated Diagram (Non-primary parcels). • User defined detail title diagrams.
Plan Graphic	If applicable. This is a scanned .tiff image of a unit tile plan or flat/cross lease plan attached as a Plan Graphic type of supporting document.
Survey Data Graphic	A type of plan graphic containing survey data to be incorporated with the CSD plan. Used to depict survey data that is not required to be captured by the Standard for lodgement of cadastral survey datasets (LINZS70000). For example can be used for recording survey data on some Boundary Marking – Monumentation or Reinstatement CSDs.

Title Plan pages

Content	Details
Title Plan header	Structured text details for the *e-survey* that form part of the Title Plan.
Schedule / Memorandum	If applicable. This is a scanned .tiff image attached as a Schedule or Memorandum type of supporting document.
Unit Entitlement and Valuers Certification	If applicable. This is a scanned .tiff image attached as a Unit Entitlement and Valuers Certification type of supporting document.
Title Graphic (reduced information)	• Primary System Generated Diagram (Primary parcels). • Non Primary System Generated Diagram (Non-primary parcels). • User defined detail title diagrams.
Plan Graphic	If applicable. This is a scanned .tiff image of a unit tile plan or flat/cross lease plan attached as a as a Plan Graphic type of supporting document.

Title Diagram pages

Content	Details
Title Graphic (reduced information)	• Primary System Generated Diagram (Primary parcels). • Non Primary System Generated Diagram (Non-primary parcels). • User defined detail title diagrams.
Plan Graphic	If applicable. This is a scanned .tiff image of a unit tile plan or flat/cross lease plan attached as a as a Plan Graphic type of supporting document.

Appendix H: Spatial layers included in plan diagrams

Layout sheets pages in the Layout Plan Sheets screen display the spatial layers applied to each type of plan diagram produced in Plan Generation. When you generate your final plans, Landonline creates each page as an individual image file in a tif file format. The following tables list these spatial layers.

Survey Diagram

System Generated Primary Diagram

Layers	Labels	Layer Optional
Primary Boundary Marks	Mark Name	No
Primary Parcel Dimensions	Bearing, Distance	No
Primary Parcels	Appellation, Area	No
Non Primary Boundary Marks	Mark Name	Yes
Non Primary Parcel Dimensions	Bearing, Distance	Yes
Non Primary Parcels	Appellation	Yes
Centreline Parcels	Appellation	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

System Generated Survey Diagram

Layers	Labels	Layer Optional
Non Boundary and Primary Boundary Marks	Mark Name	No
Non Boundary Vectors	Bearing, Distance	No
Non Primary Boundary Marks	Mark Name	Yes
Primary Parcels	Appellation, Area	Yes
Non Primary Parcels	Appellation	Yes
Centreline Parcels	Appellation	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

System Generated Non Primary Diagram

Layers	Labels	Layer Optional
Boundary Marks	Mark Name	No
Non Primary Parcel Dimensions	Bearing, Distance	No
Non Primary Parcels	Appellation	No
Centreline Parcels	Appellation	No
Primary Parcels	Appellation, Area	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

User Defined Primary Diagram

Layers	Labels	Layer Optional
Primary Boundary Marks	Mark Name	No
Primary Parcel Dimensions	Bearing, Distance	No
Primary Parcels	Appellation, Area	No
Non Primary Boundary Marks	Mark Name	Yes
Non Primary Parcel Dimensions	Bearing, Distance	Yes
Non Primary Parcels	Appellation	Yes
Centreline Parcels	Appellation	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

User Defined Survey Diagram

Layers	Labels	Layer Optional
Non Boundary and Primary Boundary Marks	Mark Name	No
Non Boundary Vectors	Bearing, Distance	No
Non Primary Boundary Marks	Mark Name	Yes
Primary Parcels	Appellation, Area	Yes
Non Primary Parcels	Appellation	Yes
Centreline Parcels	Appellation	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

User Defined Non Primary Diagram

Layers	Labels	Layer Optional
Boundary Marks	Mark Name	No
Non Primary Parcel Dimensions	Bearing, Distance	No
Non Primary Parcels	Appellation	No
Centreline Parcels	Appellation	No
Primary Parcels	Appellation, Area	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

Title Diagram

System Generated Primary Diagram

(Based on the diagram extents of the System Generated Survey Plan Primary Diagram)

Layers	Labels	Layer Optional
Primary Boundary Marks (reduced symbology)	None	No
Primary Parcel Dimensions	Bearing, Distance	No
Primary Parcels	Appellation, Area	No
Non Primary Boundary Marks	None	Yes
Non Primary Parcel Dimensions	Bearing, Distance	Yes
Non Primary Parcels	Appellation	Yes
Centreline Parcels	Appellation	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

System Generated Non Primary Diagram

(Based on the diagram extents of the System Generated Survey Plan Non Primary Diagram)

Layers	Labels	Layer Optional
Boundary Marks (reduced symbology)	None	No
Non Primary Parcels	Appellation	No
Centreline Parcels	Appellation	No
Non Primary Parcel Dimensions	Bearing, Distance	No
Primary Parcels	Appellation, Area	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

User Defined Primary Diagram

(Based on the diagram extents of the User Defined Survey Plan Primary Diagram)

Layers	Labels	Layer Optional
Primary Boundary Marks (reduced symbology)	None	No
Primary Parcel Dimensions	Bearing, Distance	No

Layers	Labels	Layer Optional
Primary Parcels	Appellation, Area	No
Non Primary Boundary Marks	None	Yes
Non Primary Parcel Dimensions	Distance	Yes
Non Primary Parcels	Appellation	Yes
Centreline Parcels	Appellation	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

User Defined Non Primary Diagram

(Based on the diagram extents of the User Defined Survey Plan Non Primary Diagram)

Layers	Labels	Layer Optional
Boundary Marks (reduced symbology)	None	No
Non Primary Parcel Dimensions	Bearing, Distance	No
Non Primary Parcels	Appellation	No
Centreline Parcels	Appellation	No
Primary Parcels	Appellation, Area	Yes
Existing Parcels	Appellation /Road Name where applicable	Yes
User Added RT and Abuttals	None	Yes

Appendix I: Structured text information for plans

Landonline creates the structured text CSD Plan header, Marks and Vectors list and Title Plan header when you generate plans. These details form part of the CSD Plan and Title Plan files attached to the Plan Compilation Notification you receive in your My Messages folder.

Title Plan header

The Title Plan header contains the details of the *e-survey*, as well as data that Landonline updates automatically at submission, approval and registration stages. A summary of the Title Plan header is:

Section	Description
Survey Number	Number of the survey.
Surveyor Reference	File number or client reference.
Surveyor	Name of the certifying surveyor for the *e-survey*.
Survey Firm	Name of the Survey firm associated with the *e-survey*.
Surveyor Declaration	Surveyor's declaration for the *e-survey*.
Survey Details	Description of the *e-survey* (eg dataset description, status, land district, survey class, submit date, survey approval date, deposit date).
Territorial Authorities	Name of the territorial authorities recorded against the *e-survey*.
Comprised In	Reference for the title or gazette/document being surveyed.
Created Parcels	Parcel, RT reference and area of parcels created in the survey, parcel intent and area.

CSD Plan header

The CSD Plan header contains constant data for the *e-survey*, as well as data that Landonline updates automatically at submission, approval and registration stages. A summary of the CSD Plan header is:

Section	Description
Survey Number	Number of the survey.
Surveyor Reference	File number or client reference.
Surveyor	Name of the certifying surveyor for the *e-survey*.
Survey Firm	Name of the Survey firm associated with the *e-survey*.
Surveyor Declaration	Surveyor's declaration for the *e-survey*.
Survey Details	Description of the *e-survey* (eg dataset description, purpose, status, type, land district, survey class, and coordinate system).
Survey Dates	Survey date, certified date, survey approval date, submit date and deposit date.
Referenced Surveys	List of surveys referenced in the *e-survey* (ie survey number, land district and (if applicable) bearing correction applied).
Territorial Authorities	Name of the territorial authorities recorded against the *e-survey*.
Comprised In	Reference for the title or gazette/document being surveyed.
Created Parcels	Parcel, RT reference and area of parcels (parcel intent) created in the survey.

Mark and Vector list

The Mark and Vector list contains all marks and vectors recorded in the *e-survey*. This list has three parts:

- Right Line vectors and marks.
- Arcs and marks.
- Mark Name and description.

The order of right line and arcs display in the list is based on the order in which they were captured in the Vector Capture screen. The mark description is the description added in the Mark Information area of the Vector Capture screen or in the Mark Details screen during capture.

Where vectors cannot be represented on the plan images due to complexity, a vector code is shown. These codes are listed against each vector in this list.

You can refer to this list when a vector on the survey plan image is not clearly defined. A summary of the Mark and Vector list is:

Section	**Description**
Survey Number	Survey number of the *e-survey*.
Coordinate System	Coordinate System of the *e-survey*.
From	From mark name for the vector.
To	To mark name for the vector.
Bearing	Value of the bearing for the vector in degrees, minutes and seconds and indicates whether the bearing is measured (M), calculated (C), or adopted (A).
Code	Sequential code for the vector if Landonline cannot clearly insert it on the plan image. The format is obx where x represents a unique number for this survey.
Bearing Adopted Survey	Number of the survey from which the bearing was adopted.
Distance	Value of the distance for the vector in metres. Landonline displays the distance to an accuracy of 0.01m and indicates whether the distance is measured (M), calculated (C), or adopted (A).
Distance Adopted Survey	Number of the survey from which the distance was adopted.
Chord Bearing	Value of the chord bearing for the vector in degrees, minutes and seconds and indicates whether the chord is measured (M), calculated (C), or adopted (A).
Arc Length	Value of the arc length in metres.
Arc Radius	Value of the arc radius in metres.
Arc Adopted Survey	Number of the survey from which the arc was adopted.
Mark Name	Name of the mark.
Mark Description	Description of the mark. This can include additional details relating to the physical description of the mark and its location.

Appendix J: *e-survey* notifications

This lists the *e-survey* notifications and who receives them.

Section	Description	Recipient
Pre-allocation of Cadastral Survey Dataset & RT References Notice	Advises the numbers of RT references allocated to the *e-survey*. You receive this notice when you save the *e-survey* and each time additional RTs are allocated.	Surveyor
Batch Pre-validation Result	Advises the results of a pre-validation performed on an *e-survey* using the batch process.	User requesting pre-validation or Primary Contact
Supporting Document Attachment Notice	Advises that a supporting document has been added to an *e-survey* by LINZ.	Surveyor and Primary Contact
TA Certification Request Notice	Advises the Territorial Authority an *e-survey* is ready for TA Certification. You initiate this notice when you click Notify TA on the Submit tab of the Manage Survey Transaction screen.	Territorial Authority
Plan Compilation Message	Advises the CSD Plans have been generated and includes them as attachments. You initiate this message when you click Complete on the Layout Plan Sheets screen.	Surveyor and Primary Contact
Survey Exception Processing Notice	Outlines a resolution to the exception processing of an *e-survey*.	Surveyor
Rejection Notice	Advises an *e-survey* has failed submission.	Surveyor
Lodgement Notice	Advises an *e-survey* has been successfully submitted to Landonline. You receive this notice every time you successfully submit an *e-survey*, including when returned to LINZ from requisition.	Surveyor
Requisition Notice	Advises the actions required to make an *e-survey* compliant before re-submission.	Surveyor
Approval Notice	Advises an *e-survey* has been approved by LINZ.	Surveyor
MLC Approval Notice	Advises the Maori Land Court (MLC) a Maori Land *e-survey* has been approved by LINZ and requires MLC approval.	Maori Land Court
Deposit Notice	Advises an *e-survey* has been deposited.	Surveyor and Territorial Authority
Withdrawal / Deletion Notice	Confirms withdrawal or deletion of an *e-survey*.	Surveyor and Primary Contact
Inactive Survey Notice	Advises an *e-survey* in Workspace has been inactive for an extended period. This notice requests you to action the *e-survey*.	Surveyor and Primary Contact

Appendix K: *e-survey* supporting document types

This lists supporting document types you can select in the Record Supporting Document screen and their purpose or intent.

Document Type	Intent or Purpose	Attach to an *e-survey*
Accretion Claim Affidavit	Affidavit required in support of the claim for accretion to land. Declaration by an independent person verifying that accretion has been caused by the slow and imperceptible build up of land.	Yes
Additional Colour Plan Image	Additional image of a colour plan.	Yes
Adjoining Owners Declarations	Fees for s207 Land Transfer Act notices are recorded against dealings, but the request can be linked to dealings or surveys (plans) Adjoining owners consents for the definition of boundaries as set out in the *e-survey*	Yes
Amendment List	List of amendments required to amend a cadastral survey transaction.	No (LINZ Internal only)
Amendment Report	Report of the items amended for a cadastral survey transaction and how the amendments were done.	No (LINZ Internal only)
Amendments Request	Request from a surveyor giving authority for a change to be made to their *e-survey*.	Yes
Appellation Request Declined	Declining a request for issue of an appellation for the creation of a parcel of land.	No (LINZ Internal only)
Approval notice from MLC	Correspondence that may accompany a plan returned from the Maori Land Court with the Judge's signature.	No (LINZ Internal)
Approved Form	Form approved for use in registration, either by the RGL or SRA. (Fees if any are paid against the instrument type FAP.)	No (Conveyancing firms only)
Calculation Sheet	Sheet of calculations associated with the *e-survey*.	Yes
Change of Trustee	Trustee details for Friendly Societies etc (as opposed to Charitable Trusts). No fees are paid and the application is not registered	No (Conveyancing firms only)
Chief Surveyors Plan Report to DLR	A report prepared by the approving surveyor outlining any anomalies found by a cadastral survey with existing title.	No (LINZ Internal only)
Consent / Permit	Miscellaneous consents. Note consents to the deposit of unit plans have a document type of CON and fees are recorded against that instrument type.	No (Conveyancing firms only)
Correspondence	Miscellaneous. Letters and other correspondence associated with the *e-survey*.	Yes
Court Order	Court Orders received for Lapsing of Caveats, Joint Family Home advertising etc.	No (Conveyancing firms only)
CSLB (Cadastral Survey Licensing Board) Document	A Supervision Order requested by the Cadastral Survey Licensing Board (CSLB). The affected surveyor submits their survey with a letter from another licensed surveyor (attached as a supporting document) stating that the survey meets the survey rule requirements. The CSLB will advise the affected surveyor when this supporting document type is to be used.	Yes
Dataset Lodgement Profile Form	A template form for the surveyor to complete to indicate the complexity of the *e-survey*.	Yes
Datum Details	Details of a particular datum used for an *e-survey*.	No (LINZ Internal Geodetic only)
Deposit Document	Document deposited to support a survey.	No
Description of Boundaries ML Court	Description of the land as set out by the MLC. Maori Land Court Order copy associated with a Maori Land *e-survey*.	Yes

Document Type	Intent or Purpose	Attach to an *e-survey*
Disciplinary Action Recommendation	Report details from Chief Surveyor recommending disciplinary action against a surveyor.	No (LINZ Internal only)
E-Dealing Dispensation	A request accompanying a manual dealing requesting LINZ to exempt the conveyancer from having to present it as an *e-dealing*.	No
Equipment Test	Report of equipment test results.	Yes
Error Item Report	Report detailing the errors identified and the impact on other data.	No (LINZ Internal only)
E-Survey Fast Track Processing Request Form	Requests priority processing for an *e-survey* with an associated lodged dealing. This document is available as a .pdf file from the LINZ website.	Yes
Fee Query	A fee query linked to an associated e-dealing or *e-survey*.	Yes
Field Note	Record of observations taken in the field by a surveyor and associated with the *e-survey*	Yes
Field Report	The report prepared after field audit of a survey.	No (LINZ Internal only)
Field Request	Instructions issued for field audit of a cadastral survey.	No (LINZ Internal only)
Geodetic Other	Miscellaneous geodetic report associated with a geodetic work.	No (LINZ Internal Geodetic only)
Geodetic Work Report	A report supplied by a geodetic contractor giving details of a geodetic work.	No (Geodetic Contractors only)
Lodgement Form	A form included with a survey or dealing transaction when manually lodged.	No (LINZ Internal only)
Mark and Vector list	Mark and vector list for the *e-survey*.	Yes
Mark Details	Details of a survey mark. Usually associated with a geodetic mark.	No (LINZ Internal Geodetic and Geodetic Contractors only)
Mark Photograph	Photograph of a mark. Usually associated with a geodetic mark.	No (LINZ Internal Geodetic and Geodetic Contractors only)
Memorandum	Memoranda under s155A Land Transfer Act 1952 (also registered as a document).	No (Conveyancing firms only)
Node Confirmation	Confirmation of location of a proposed node/mark.	No (LINZ Geodetic Internal only)
Occupation Diagram	Diagram of occupation associated with the survey to attach to a CSD Plan.	Yes
Office Report	Report prepared after office audit of a cadastral survey.	No (LINZ Internal only)
Office Request	The instructions issued for an office audit of a cadastral survey.	No (LINZ Internal only)
Owners Consent	Owner's consent or adjoining owner's consent submitted as a separate document but as part of a transaction.	Yes
Plan Graphic	Commonly used to depict parcels on CSD's that have permanent structure boundaries or stratum boundaries (e.g. Unit & Cross Lease CSD's). Can be used to show plan, elevation or cross-section views. The Plan Graphic forms part of the Diagram of Survey and Diagram of Parcels and bundles with the CSD and Title Plans. This SUD type can also be used for a plan returned from the Maori Land Court signed by the Judge to attach to CSD and Title Plans.	Yes
Plot / Diagram	Plot or diagram to support survey definition, eg aerial photograph, digitised stream fix.	Yes

Document Type	Intent or Purpose	Attach to an *e-survey*
Power of Attorney	Power of Attorney summary (also registered as a document.	No (Conveyancing firms only)
Pre-Allocation Request	A request for LINZ to allocate one or more new title numbers what will issue when a land transfer survey deposits.	No
Pre-Check Rejection Letter	A copy of a rejection letter or report from LINZ attached to the re-lodged dealing or survey.	No
PSB NonPrimary Graphic (PSBG)	Used to depict easements defined by Permanent Structure Boundaries where survey purpose is Easement, Lease or Statutory Easement/Right. When this supporting document type is selected, the attached documents are incorporated into the CSD or Title Plan images, allowing the CSD to be submitted without spatial capture.	Yes
Request to produce instrument (s211Land Transfer Act 1952)	Request by the SRA for a customer to produce an instrument or title.	No (LINZ Internal Titles only)
Requisition/Rejection Review	An online form provided by LINZ to allow conveyancers and surveyors to request LINZ to review the reasons for rejection or requisition of a dealing or survey.	Yes
Response to Requisition Notice	Surveyors reply to a requisition associated with an *e-survey*.	Yes
Re-submission Fee Review	An online form provided by LINZ to allow conveyancers and surveyors to request LINZ to review the fees for rejection or requisition of a dealing or survey.	Yes
Schedule / Memorandum	Schedule or memorandum containing information about easements as required by Rule 10.2 of the Rules for Cadastral Survey 2010. Can also be used for recording covenant information required by Rule 10.3 of the Rules for Cadastral Survey 2010.	Yes
Scheme Plan	Geodetic network planning.	No (LINZ Internal only)
Search Fee Wastage	Report associated with searching.	No (LINZ Internal only)
Site Details	Details of a geodetic site which may contain one or more survey marks.	No (LINZ Internal Geodetic only)
Site Photograph	Photo of survey monuments (usually associated with geodetic marks).	No (LINZ Internal Geodetic only)
Survey Assistance Report	Report responding to a request for survey assistance on an *e-survey*.	Yes
Survey Data Graphic	A type of plan graphic containing survey data to be incorporated with the CSD plan. Used to depict survey data that is not required to be captured by the Standard for lodgement of cadastral survey datasets (LINZS70000). For example can be used for recording survey data on some Boundary Marking – Monumentation or Reinstatement CSDs.	Yes
Survey Report	A report by a surveyor as required by Rule 8.2 of the Rules for Cadastral Survey 2010.	Yes
TA Correspondence	Miscellaneous. Territorial Authority correspondence associated with the survey.	Yes
Territorial Authority (TA) Certificate	Certification from a TA to attach to a CSD Plan and Title Plan.	Yes
Territorial Authority (TA) Certificate Plan Image	A scanned image of a certified paper survey plan.	Yes
Traverse Sheet	Traverse sheets associated with the *e-survey*.	Yes
Unit Entitlements and Valuers Certifications	Valuer's Unit Entitlement and Certification for Unit Development plans.	Yes

Document Type	Intent or Purpose	Attach to an *e-survey*
Withdraw Instrument/Dealing	Request to withdraw an instrument or dealing.	No (Conveyancing firms only)

Appendix L: Survey Purpose

When paper copies of surveys are lodged with LINZ and entered into Landonline, staff determine the:

- survey type - Land Transfer/Deposited Plan (LT/DP), Survey Office (SO) or Maori Land (ML)
- dataset type – Survey or Parcels Without Survey Information
- survey purpose.

Surveyors now define these attributes when creating an *e-survey*.

Record Purpose and Graphical Description surveys should only include header data and supporting document images when submitted. These surveys must not include structured vector and mark data. If this information is included and the *e-survey* was inadvertently approved, you should not adopt these marks and vectors into your *e-survey*. Record Purpose and Graphical Description surveys are not to be used for any land tenure or title purposes.

The following tables briefly describe all the survey purposes available in Landonline, the survey types and dataset types applicable to them, the general usage of such surveys, and the use to which this information can be put for future survey and legal purposes.

LT Plan Survey Purpose (except Unit Plans)

Survey Description	Dataset Types	Survey Type	Survey Usage	Usage to Define Spatial Extent of Interests
Application	Survey or Parcels Without Survey Information	LT	To be used when registering land under the Land Transfer Act for the first time – usually from Deeds Registered land. Includes Adverse Possession under the Land Transfer Amendment Act 1963. Application for Accretion.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Crown Forest Lease	Survey or Parcels Without Survey Information	LT	To be used to depict Crown Forest License areas. Note: to be recorded in terms of OSG Policy 1997/01	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in crown forest licenses only.
Easement	Survey or Parcels Without Survey Information	LT	To be used for depicting an easement when it is not part of a current land subdivision survey. Includes survey of Profit-a-Prendre and Esplanade Strips.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in easements only.
Flat plan/Cross-lease Plan	Survey	LT	To depict a standard CSD that shows Flats or Cross Leases. Survey of Restrictive Covenant areas only.	No survey system information is provided. Tenure system information may be used to define interests in flat and cross lease parcels only.
Flat plan/Cross-lease with Survey Sheet	Survey	LT	To depict a standard CSD that shows Flats or Cross Leases and Survey of Restrictive Covenant areas only that includes a survey sheet.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in flat and cross lease parcels, easements or covenants only.
Land Transfer Plan Land Covenant	Survey or Parcels Without Survey Information	LT	To be used for depicting land covenants on registered land when only the covenant is shown on the plan i.e. not associated with a current land subdivision survey.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in land covenants only.

Survey Description	Dataset Types	Survey Type	Survey Usage	Usage to Define Spatial Extent of Interests
LT Subdivision	Survey or Parcels Without Survey Information	LT	To be used to depict subdivisions of land owned in fee simple. Includes a new definition of a single parcel. Includes surveys of Amalgamation.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Lease	Survey or Parcels Without Survey Information	LT	To be used to depict parcels for leasehold title. These overlay but do not supersede the underlying cadastre.	Survey system information may be adopted by other surveys. Tenure system information may be used to define leasehold interest in the land only.
Limited Title	Survey	LT	To be used to depict a definition or subdivision of land owned in fee simple when that land is held in a title Limited as to parcels.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Reclamation	Survey or Parcels Without Survey Information	LT	To be used to depict land registered under the Land Transfer Act for reclamation of seabed, foreshore, stream/riverbed, or lakebed.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.

LT Unit Plan Survey Purpose

Survey Description	Dataset Types	Survey Type	Survey Usage	Usage to Define Spatial Extent of Interests
Standard Unit Plan	Survey	LT	To depict a standard Unit Title CSD produced under the Unit Titles Act 1972.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
Standard Unit Plan with Survey Sheet	Survey	LT	To depict a standard Unit Title CSD with survey sheet produced under the Unit Titles Act 1972.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Subsidiary Standard Unit Plan	Survey	LT	To depict a subsidiary standard Unit Title CSD produced under the Unit Titles Act 2010.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
Subsidiary Standard Unit Plan with Survey Sheet	Survey	LT	To depict a subsidiary standard Unit Title CSD with survey sheet produced under the Unit Titles Act 2010.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Proposed Unit Development	Survey	LT	To depict a standard proposed Unit Development CSD produced under the Unit Titles Act 1972.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.

Survey Description	Dataset Types	Survey Type	Survey Usage	Usage to Define Spatial Extent of Interests
Proposed Unit Development with Survey Sheet	Survey	LT	To depict a proposed Unit Development plan with survey sheet produced under the Unit Titles Act 1972.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
First Stage Unit Plan	Survey	LT	To depict the first stage of a Unit Title staged development CSD produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
First Stage Unit Plan with Survey Sheet	Survey	LT	To depict the first stage of a Unit Title staged development CSD with survey sheet, produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Stage Unit Plan	Survey	LT	To depict a further stage (other than the complete stage) of a Unit Title staged development CSD produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
Stage Unit Plan with Survey Sheet	Survey	LT	To depict a further stage (other than the complete stage) of a Unit Title staged development CSD with survey sheet, produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Complete Stage Unit Plan	Survey	LT	To depict a complete Unit Title staged development CSD produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
Complete Stage Unit Plan with Survey Sheet	Survey	LT	To depict a complete Unit Title staged development CSD with survey sheet produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Subsidiary Proposed Unit Development	Survey	LT	To depict a subsidiary proposed Unit Development CSD produced under the Unit Titles Act 2010.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
Subsidiary Proposed Unit Development with Survey Sheet	Survey	LT	To depict a subsidiary proposed Unit Development CSD with survey sheet, produced under the Unit Titles Act 2010.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Substituted Proposed Unit Development	Survey	LT	To depict a substituted proposed Unit Title staged development CSD produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.

Survey Description	Dataset Types	Survey Type	Survey Usage	Usage to Define Spatial Extent of Interests
Substituted Proposed Unit Development with Survey Sheet	Survey	LT	To depict a substituted proposed Unit Title staged development CSD with survey sheet produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Redevelopment Unit Plan	Survey	LT	To depict a redevelopment Unit Title staged development CSD produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
Redevelopment Unit Plan with Survey Sheet	Survey	LT	To depict a redevelopment Unit Title staged development CSD with survey sheet, produced under the Unit Titles Act 1972 and the Unit Titles Amendment Act 1979.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Simple Redevelopment Unit Plan	Survey	LT	To depict a simple redevelopment Unit Title CSD produced under the Unit Titles Act 2010.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
Simple Redevelopment Unit Plan with Survey Sheet	Survey	LT	To depict a simple redevelopment Unit Title CSD with survey sheet produced under the Unit Titles Act 2010.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.
Unit Plan in Substitution	Survey	LT	To depict a standard Unit Title 'CSD in substitution' produced under the Unit Titles Act 1972.	No survey system information is provided. Tenure system information may be used, or adopted for use, in defining applicable interests in unit tenures.
Unit Plan in Substitution with Survey Sheet	Survey	LT	To depict Unit Title 'CSD in substitution' with survey sheet produced under the Unit Titles Act 1972.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in units, easements or covenants only.

Survey Office Plan Survey Purpose

Survey Description	Dataset Types	Survey Type	Survey Usage	Usage to Define Spatial Extent of Interests
Boundary Reinstatement – full CSD	Survey	SO	To be used to record one or more boundary marks when the boundary points are not required by Cadastral Survey 2010 rules 6.2(a)(vi) or (vii) to be defined by survey and the survey does not create a new parcel.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Crown Subdivision Plan	Survey or Parcels Without Survey Information	SO	To be used to depict subdivisions of Crown land. Includes definition of a single Crown land parcel.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Survey Office Plan Land Covenant	Survey or Parcels Without Survey Information	SO	To be used for depicting land covenants over unregistered land when only the covenant is shown on the plan (ie not associated with a current land subdivision survey).	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in land covenants only.
Legalisation	Survey or Parcels Without Survey Information	SO	To be used to depict land to be taken for road or other public purpose. Also may include definition of severances or areas of road to be closed. Includes Treaty Settlement Plans.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Marine Farming	Survey or Parcels Without Survey Information	SO	To be used to depict areas required for Marine Farming purposes.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in marine farming leases only.
Mining	Survey or Parcels Without Survey Information	SO	To be used to depict areas of land (including water) with a mining permit or license. These overlay but do not supersede the underlying cadastre.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Monumentation CSD	Survey	SO	To be used to record the placement of one or more boundary marks on an existing boundary point in accordance with rule 11 of Cadastral Survey 2010.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Nohoanga (Campsite)	Survey or Parcels Without Survey Information	SO	To be used to depict areas of land designated as Nohoanga (campsite) sites in Maori Claim Settlement legislation.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in Nohoanga sites only.
Customary Entitlement	Survey or Parcels Without Survey Information	SO	To be used to depict areas of land of customary entitlement (other than Nohoanga (campsite) sites) in Maori Claim Settlement legislation.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in Customary Entitlement sites only.
Spatial Parcel Improvement	Survey	SO	To be used to improve the topology of Non SDC areas.	Internal use only.
Statutory Easement/ Right	Survey or Parcels Without Survey Information	SO	To be used for depicting a statutory easement or right when it is not part of a current land subdivision survey. Includes plans of Marginal Strips.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in statutory easements or rights only.

Survey Description	Dataset Types	Survey Type	Survey Usage	Usage to Define Spatial Extent of Interests
Statutory Vesting	Survey	SO	To depict the boundary of a land area when such is required for Statutory vesting purposes only.	Survey system information may be adopted by other surveys. Tenure system information to be used for the Statutory vesting purposes only. It is NOT to be used for any land tenure or title purposes.
Survey Information	Survey or Parcels Without Survey Information	SO	To depict survey work which does not define parcels.	Survey system information may be adopted by other surveys. These surveys contain no tenure system information.

Maori Land Plan Survey Purpose

Survey Description	Dataset Types	Survey Type	Survey Usage	Usage to Define Spatial Extent of Interests
Amalgamations	Survey or Parcels Without Survey Information	ML	To be used to depict amalgamations of Maori land Blocks.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Consolidations	Survey or Parcels Without Survey Information	ML	To be used to depict consolidations of Maori land Blocks	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Partition	Survey or Parcels Without Survey Information	ML	To be used to depict partitions (subdivisions) in accordance with a Maori Land Court Partition Order.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Revesting	Survey or Parcels Without Survey Information	ML	To be used to depict parcels to be revested as Maori land Blocks.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.
Roadway	Survey or Parcels Without Survey Information	ML	To be used to depict roadways over Maori land.	Survey system information may be adopted by other surveys. Tenure system information may be used to define interests in all land tenures.

Historical Survey Purpose Types

There are a number of survey purpose types in Landonline which are only there for historical purposes and should not be used for new surveys. These are listed below with the correct substitute survey purpose to be used in their place indicated.

Historical Survey Purpose	Substitute Survey Purpose
Compiled Survey Information	Not Applicable
Control	Monumentation CSD
Covenant	Land Transfer Plan Land Covenant, or

Historical Survey Purpose	Substitute Survey Purpose
	Survey Office Plan Land Covenant
Crown Parcel Definition	Crown Subdivision
Inspection	Monumentation CSD
Offsetting (for approval as to survey)	Monumentation CSD
Offsetting (for record purposes only)	Not Applicable
Redefinition Record Purposes Only	Not Applicable
Statutory Boundary	Not Applicable
Traverses	Monumentation CSD

Appendix M: Manage Survey Transaction screen information

Manage Survey Transaction screen

Field and Button	Action
Survey Details	Landonline displays details of the *e-survey*. To change these details, edit the corresponding field in the Survey Information tab. You can edit details until submitted.
RT References	If an existing survey plan has pre-allocated RT references, Landonline displays a list of the numbers. For a new plan, Landonline displays a list of RT references you allocated to this *e-survey*. This is based on the number you typed in the Additional No. of RT References field.
Enabled Users…	Click to display the Enabled Users screen to add the names of staff members who can work on this *e-survey*.
Capture Dataset…	Click to open Survey Capture to capture an *e-survey*. For more information, see **Chapter 7 Capture an *e-survey***.
Delete Dataset / Withdraw Dataset	Click to delete or withdraw the *e-survey* dataset from Landonline. The status of Plan Generation must be Online to use this button. The name of this button changes depending on the status of the *e-survey*.

Survey Information tab

Field and Button	Action
Survey File Reference	Type a file number or client name. Landonline records this reference against fees incurred for the *e-survey* making it easy to identify when billing your clients.
Survey Purpose	Select the purpose of the *e-survey* from the drop down list.
Previous Unit Plan Stage	If this *e-survey* is part of a staged unit development, type the plan number of the previous stage of the staged unit development. Do not include the unit plan suffix.
Land District	Select the land district in which the survey is located from the drop down list.
Type of Dataset	Select the type of dataset from the drop down list. This defaults to Survey.
Survey Description	Type a complete description of the *e-survey* (eg Lots 14-17 being subdivision of Lot 1 DP 70806).
Surveyor	Type the user Id of the surveyor who is responsible for the *e-survey*. If you don't know the surveyor's user Id, click Search… to search and select the name. This is the person who will certify, submit and receive notices about the *e-survey*.
Accreditation status	Landonline defaults the Accreditation Status to Accredited.
Surveyor's Firm	Type the user Id of the surveyor's firm. If you don't know the firm's user Id, click Search… to search and select the firm.
Legal Firm / Agent	Type the user Id of the solicitor or legal agent for associated dealing transactions for your client. If you don't know the solicitor's user Id, click Search… to search and select the name or firm.
Primary Contact	Type the user Id of the person who is the Primary Contact for this *e-survey*. If you don't know the Primary Contact's user Id, click Search… to search and select the name. This can be any person from your firm or the surveyor responsible for the *e-survey*.
Additional No. of RT References	Type the number of provisional RT references required for this *e-survey*. You can only allocate RT references after a survey number has been allocated. You cannot allocate more than 99 RT references at one time.
Allocate RTs	Click to allocate the additional RT references and add them to the list in the RT References area.
Inactive Survey Notification Date	Landonline displays the date on which this *e-survey* will become inactive. The date is based on a pre-defined inactive survey period. If there has been no activity for the *e-survey* during this time Landonline sends a notice.

Import Dataset tab

Field and Button	Action
File Name	Landonline displays the directory path of the XML file being imported.
Import Progress	Landonline displays details of progress while importing a XML file.

Import	Click to import a XML file into Landonline to link to this *e-survey*.

Pre-validate tab

Field and Button	Action
Last Pre-validate	Landonline displays the date the *e-survey* was last pre-validated.
Batch Pre-validate	Click to indicate this *e-survey* is to be pre-validated by batch.
Report	Landonline displays a detailed report of the pre-validation results.
Est. Prevail Time	Landonline displays the estimated time to pre-validate this *e-survey*.
Exception…	Click to display the Exception Process screen to request LINZ to further investigate why your *e-survey* failed submission or because the underlying data is in error.
Copy to Clipboard	Click to copy the contents of the pre-validation report to the clipboard. You can paste the contents to any other text editing tool (eg Microsoft Word).
Pre-validate	Click to pre-validate the *e-survey*.

Supporting Documents tab

Field and Button	Action
Type	Landonline displays the type of supporting document. For more information, see **Appendix K: *e-survey* supporting document types**.
File Name	Landonline displays the file name of the supporting document attached as an image.
Comment	Landonline displays your comments for the supporting document. This is optional.
Lodged	Landonline displays the date on which the supporting document was lodged. This only displays after the *e-survey* has been submitted.
Status	Landonline displays the status of the supporting document. (LINZ use.)
Add/Edit…	Click to display the Record Supporting Document screen to enter details of a new supporting document and attach it to the *e-survey*.
View…	Click to display the image of the selected supporting document.

Schedule/Memorandum tab

Field and Button	Action
Select Table	Click to select a table from the drop-down list. The table list contents will depend on the survey purpose of the plan. (e.g. If the plan has a survey purpose of Easement or Statutory Easement, only the schedule tables, amalgamation condition and notes will be included in the table list.)The fields displayed under its panel will depend on the selected table.
Insert Line / Update Line	Click Insert Line to insert a line into the table selected. The text of the button changes to Update Line when Edit is activated. Click Update Line to save the changes made to the line selected.
Cancel Edit	Click to cancel the changes being made to a line during edit mode.
Preview	A panel that displays all the line details inserted for each table.
Edit	Click to edit a line from the Preview panel.
Remove (Line)	Click to remove a line from the Preview panel. Only enabled when a line is selected from Preview.
Sort	Click to sort out the order of the lines being displayed in Preview. A pop-out sort window displays to enable this function.
Remove (Sched/Mem)	Click to remove a table from the Preview panel. Only enabled when a table line is selected from Preview.
Undo Remove	Click to restore the last deleted table via Remove (Sched/Mem).
Save	Click to save the Schedule/Memorandum changes.
Export	Click to save the Schedule/Memorandum document in TIFF format.
Print	Click to print the Schedule/Memorandum contents from Preview.
Copy to Clipboard	Click to copy the Preview contents to a clipboard.

Plan Generation tab

Field and Button	Action
Generate Plan…	Click to open Plan Generation to perform plan generation functions online. If you previously saved Layout Plan Sheets, Landonline displays the date and time they were saved and the User Id next to this button.
Prepare Layout	Check to create a request to prepare Layout Plan Sheets. Uncheck to cancel this request. Landonline only initiates the request after you close the Maintain Survey Transaction screen. The *e-survey* will be locked until this process has completed. Landonline sends an online message when completed. You view the message in the Messages tab for the *e-survey*. **Note:** Use this process for very large or complex plans that will take a long time to generate Layout Sheets before the Layout Plan Sheets screen opens.

TA Certification tab

Field and Button	Action
TA Name	Select the name of the Territorial Authority in which the survey is located from the drop down list.
TA Reference	Type the reference for the *e-survey*. The TA can provide you with a reference to enter when you submit the *e-survey* if one has been allocated.
Certification Required	Check to indicate you require TA Certification for the *e-survey* from this TA.
Status	Landonline displays the status of the TA Certification.
Notify	Check to indicate to notify the TA you require TA Certification.
Certification…	Click to display the Manage TA Certification to prepare package(s) of certifications for the TA to certify and sign. Only surveyors with a certifications privilege can prepare certificates.
Add	Click to add row to enter another TA.
Delete	Click to delete the selected TA.
Notify TA	Click to notify the TAs with Notify checkbox checked. Landonline generates a XML file.

Survey Report tab

Field and Button	Action
Jump to section	Allows the user to jump to selected section of the survey report.
Previous Item	Selects the previous item in the survey report.
Next Item	Selects the next item in the survey report.
Find Incomplete	Finds the next mandatory item which is incomplete.
Save Report	Saves the changes made to the report.
Export Report	Saves the report in the .tiff format.
Copy to Clipboard	Copies the contents of the report to the clipboard to allow it to be pasted to external application e.g. Microsoft Word, Microsoft Outlook.
Print Report	Prints the report using the configured printer.
Jump to section	Allows the user to jump to selected section of the survey report.

Submit tab

Field and Button	Action
Notify When Scanning Complete	Check to request notification from LINZ to confirm when supporting documents are attached to the *e-survey*. Note: LINZ does not provide a scanning service. They will only scan and attach documents to your *e-survey* in instances when you cannot convert the colour document to black and white.
Send Approved Copy	Check to indicate you wish to receive an approved copy of the *e-survey* in XML file. This copy will always be in the latest version of LandXML Schema.

Field and Button	Action
Online Messaging	Click to indicate you wish to receive notification of the approved *e-survey* by online message.
email	Click to indicate you wish to receive notification of the approved *e-survey* by email.
Batch Submit	Check to indicate you wish to submit the *e-survey* by batch.
Submit	Click to certify and submit the *e-survey*.

Appendix N: Survey Capture screen information

Survey Header screen

Field and Button	Action
Survey Number	Landonline displays the number of the survey.
Survey Purpose	Landonline displays the purpose of the survey.
Land District	Landonline displays the land district (previously entered) in which the survey is located.
Lodged Date	Landonline displays the date and time the *e-survey* was submitted.
Type of Dataset	Select the type of survey dataset from the drop down list. This defaults to Survey.
Survey Finish Date	Type the date on which the field work for the *e-survey* was completed. Use the format dd/mm/yyyy.
Survey Class	Select the class of the *e-survey* from the drop down list. For an *e-survey* with multiple survey classes, select the highest class.
Certified Date	Landonline displays the date on which the survey was successfully submitted.
Survey File Ref	Type a reference number or client name.
Surveyor	Type the user Id of the surveyor who conducted the survey. If you don't know the surveyor's user Id, click Search… to search and select the name.
Surveyor's Firm	Type the user Id of the surveyor's firm. If you don't know the firm's user Id, click Search… to search and select the firm.
Legal Firm / Agent	If known, type the user Id of the solicitor or legal agent for associated dealing transactions for the surveyor's client. If you don't know the solicitor's user Id, click Search… to search and select the name.
Description	Type the description of the survey (also known as the survey title). If this was entered when the *e-survey* was created, Landonline displays the description. You can change it if required.
Meridional Circuit	Select the meridional circuit (horizontal datum and circuit projection) used for the CSD from the drop down list.
Vertical Datum	Select the vertical datum used for the CSD from the drop down list.
Coordinate System	Select the coordinate system used by the surveyor for the *e-survey* from the drop down list.
Comprised in Reference	Type details of all titles and documents affected by the *e-survey*. These can include gazette notices and Crown Land. This must be in the correct format for existing titles (eg OT13B/278).
Add Ref	Click to add a row to the Comprised in Reference area to add a reference.
Delete Ref	Click to delete the selected reference.
Type	Select the type of reference from the drop down list.
Reference	Type the number of the reference.
Limited	Check if this is a limited title otherwise leave unchecked.
Survey Number	Type the number of the referenced survey. If you don't know the number, click Search… to search and select a survey number.
Land District	Type the land district in which the referenced survey is located.
Bear Corr.	Type the correction value applied to adopted vectors from this referenced survey. For example, to enter –0° 01' 30", type –0.0130.
Add Survey	Click to add a row to enter a new referenced survey.
Delete Sur	Click to delete the selected referenced survey.
Search…	Click to display the Search Survey screen to select a survey number.
Territorial Authority	Landonline displays the name of each Territorial Authority (TA) associated with the *e-survey*. You Add TAs in the TA Certification tab in the Manage Survey Transaction screen.
Add Auth	This button is only available to LINZ staff.
Delete Auth	This button is only available to LINZ staff.

Mark List screen

Field and Button	Action
Mark/Node List	Landonline displays details of marks and nodes captured for an *e-survey*.

Add…	Click to display the Mark Detail screen to enter details of a new mark.
Edit…	Click to display the Mark Detail screen to edit details of the selected mark.
Delete	Click to delete the selected mark from the list. You must delete vectors associated with the marks before deleting the marks.
Refresh	Click to update marks in the Spatial Window and the Mark List screen. Landonline redraws the graphical display once rather than after each edit. Use this function if you have several edits to make or if you are adding or editing existing Landonline marks.
Locate	Click to display the Spatial Display screen with the selected mark highlighted. The Locate button is only available when the Spatial Display screen is open.
Multiple / Single	Click to select multiple rows to make common field updates using the Mark Information panel. Click Single to select only one row to make common field updates using the Mark Information panel. The name of this button changes depending on the display.
Mark Information	Landonline displays standard details for mark(s) selected in Mark/Node List.
Name	Landonline displays the mark name (ie the data from the Mark Type Abbrev, Mark No, and Mark Plan Ref fields).
Purpose	Select the purpose of the mark from the drop down list.
Mark State	Select the state of the mark from the drop down list.
Linked	Shows if a mark is listed as linked.
Mark Type	Select the type of mark from the drop down list.
Condition	Select the condition of the mark from the drop down list. Note: The condition for geodetic marks cannot be edited in Workspace.
Mark Disturbed	Shows if a mark is listed as Disturbed.
Mark Renewed	Shows if a mark is listed as Renewed.
Plan Ref	The e-survey number of the plan this mark is located in. If this is a new mark on this e-survey, the plan number defaults to the current e-survey number.
Apply	Click to apply the changes in the Mark Information to the rows selected. Only enabled when Multiple mode is clicked.
Hide Details / Show Details	Click to hide or show the Mark Information details. The name of this button changes depending on the display.

Mark Detail screen

Field and Button	Action
Mark Ref	Landonline displays the number of the mark. The default value for the first mark is 1000. You can change this to an unallocated mark number if required.
Lol Mark Id	Landonline displays the number of the underlying mark you indicated as being linked to this captured mark.
Mark Type Abbrev	Type the name type of the mark (eg RM, IT).You can type any name but it is recommended to use standard abbreviations that correspond to the Mark Type.
Mark No	Type the number of the mark (eg 46, Ivb, 46b).
Mark Plan Ref	Type the plan reference for the mark (eg SO 10408, DP 312345). If this is a new mark on this *e-survey*, the plan number defaults to the current *e-survey* number. If this is an existing or adopted mark, enter the appropriate survey number.
Name	Landonline displays the mark name (ie the data from the Mark Type Abbrev, Mark No, and Mark Plan Ref fields).
Mark Type	Select the type of mark from the drop down list.
Condition	Select the condition of the mark from the drop down list. Note: The condition for geodetic marks cannot be edited in Workspace.
Mark State	Select the state of the mark from the drop down list.
Purpose	Select the purpose of the mark from the drop down list.
Northing	Landonline displays the northing coordinate for the existing Landonline mark. For a new mark, Landonline automatically generates the northing coordinate once it has been linked by vector to an existing Landonline mark.
Easting	Landonline displays the easting coordinate for the existing Landonline mark. For a new mark, Landonline automatically generates the easting coordinate once it has been linked by vector to an existing Landonline mark.
Description	Type a complete description of the mark determined in association with this survey. If necessary, record additional details relating to the physical description of the mark and its location.

Field and Button	Action
Action	Click to indicate whether the mark is: • Original – an original mark. (All other fields in this area of the screen are read only.) • Renewed– replaces an existing mark in Landonline. • Disturbed – is a disturbed mark in Landonline.
Date	Type the date the mark was Renewed or reported as being Disturbed.
Lol Mark	If this Disturbed or Renewed mark is recorded in Landonline, type the number to identify it. If you don't know the number, click New Search… and select a mark.
Annotation	If a Disturbed or Renewed mark is recorded in Landonline, type any relevant comments.
Link Mark…	Click to display the Search Mark screen to search for an existing mark in Landonline to link this captured mark to.
Unlink Mark	Click to remove the link between a captured mark and an existing mark in Landonline.
Next	Click to save the current mark details and clear the screen to enter details of a new mark. This option is only available when adding marks.

Vector Capture screen

Field and Button	Action
Vectors	When you enter the first vector in this list, Landonline defaults appropriate values to each field. The value of all following vectors defaults to the same as the previous vector. Change the values as required. Landonline numbers each vector in sequence, however the actual sequence is determined by each From Mark Ref and To Mark Ref.
From Mark Ref	Type the number to identify the From mark for the vector (eg 1000).
To Mark Ref	Type the number to identify the To mark for the vector (eg 1001). You can change this if required.
Mark State	Select the state of the mark from the drop down list.
Mark Type Abbrev.	Type the abbreviation of the mark name type (eg RM, IT). You can type any name but it is recommended to use standard abbreviations that correspond to the Mark Type.
Mark No.	Type the number of the mark (eg 46, Ivb, 46b).
Mark Plan Ref	Type the plan reference for the mark (eg SO 10408, DP 312345). If this is a new mark on the *e-survey*, the plan number defaults to the current *e-survey* number. If this is an existing or adopted mark, enter the appropriate survey number.
Vector Type	Select the type of vector from the drop down list (ie right line or arc). Depending on your selection, the column labels in the Vectors area of the screen and fields in the Vector Details area of the screen change.
Bearing	Type the value of the right line bearing. You can enter a maximum of three significant digits and five decimal digits for a bearing (eg 260.14000). This label only displays for a right line vector.
Chord Bearing	Type the value for the chord bearing for the arc. This label only displays for an arc.
Distance	Type the value for the right line distance. This label only displays for a right line vector.
Arc Length	Type the value for the arc length. This label only displays for an arc.
Rev	Check if you need to reverse the bearing vector captured between two marks.
Layer	Select the type of topology layer for the vector from the drop down list. The main options are: • 0-Nbdy (ie Non Boundary) • 1-Pri (ie Primary) • 2-Sec (ie Secondary) • 3-Pri,Sec (ie Primary, Secondary) • 4-SecCL (ie Secondary Centreline) • 5-Ter (ie Tertiary) • 6-TerCL (ie Tertiary Centreline) • 7-Str (ie Strata) If you press Enter or Tab in this field, Landonline adds a new row to the Vectors list.
Exc	Check to exclude the selected non boundary vector from plan generation for this survey. You can only exclude vectors from the 0-Nbdy type of topology layer.

Field and Button	Action
Insert	Click to insert a row to enter details of a new vector. To insert a new row within the list, select the row below the insertion point and click Insert.
Add	Click to add a row to enter details of a new vector. Landonline inserts the row at the bottom of the list.
Delete	Click to delete the selected vector. When deleting selected vectors, some continuing sequential vectors may not show in the Spatial Window and coordinates cannot be generated.
Refresh	Click to update the mark coordinates in the Vector Capture screen and redraw information in the Spatial Window.
Up	Click to move the selected vector up one position in the sequence.
Down	Click to move the selected vector down one position in the sequence.
Multiple / Single	Click Multiple to select multiple rows in the Vectors area. Once clicked this button changes label to Single. Click Single to select or edit a single row in the Vectors area. Once clicked this button changes label to Multiple.
Locate	Click to display the Spatial Display screen with the selected vector highlighted. The Locate button is only available when the Single button is selected and the Spatial Display screen is open.
Print	Click to print a summary information report of all vectors listed (ie right line vectors and arcs).
Error Check	Click to check for close errors in the traverse for selected right line vectors and arcs. Landonline displays the Vector Error Check screen with details.
Apply	Click to apply an updated value to the selected vectors. You can select only one type of vector (ie right line or arc). You cannot select both types at the same time.
Hide Details / Show Details	Click to hide or show the Vector Details and Mark Information area of the screen. When you hide these areas, the Vectors list expands to the full length of the screen. The name of this button changes depending on the display.

Vector Capture screen: Right line vector

Field and Button	Action
Bear Type	Select the type of bearing from the drop down list.
Source	If the bearing is adopted, select the number of the referenced survey from which the Bearing Type was adopted.
Bear Source...	Click to display the Search Survey screen to search for a referenced survey number.
Bearing Correction	Type the bearing correction that has been applied to an adopted bearing.
Layer	Select the type of topology layer for the vector from the drop down list. The main options are: • 0-Nbdy (ie Non Boundary) • 1-Pri (ie Primary) • 2-Sec (ie Secondary) • 3-Pri,Sec (ie Primary, Secondary) • 4-SecCL (ie Secondary Centreline) • 5-Ter (ie Tertiary) • 6-TerCL (ie Tertiary Centreline) • 7-Str (ie Strata)
Dist Type	Select the distance type from the drop down list.
Source	If the distance is adopted, select the number of the referenced survey from which the Distance Type is adopted.
Dist Source...	Click to display the Search Survey screen to search for a referenced survey number.
Survey Class	If a vector requires a different survey class than you specified in the Survey Header screen, select the survey class from the drop down list. This field is disabled when you select a vector from the Non Boundary layer.
Equip	Select the type of equipment used to record the vector from the drop down list. Select Unknown when a vector has been calculated or adopted.

Vector Capture screen: Arc

Field and Button	Action
Arc Type	Select the type of arc from the drop down list.
Source	If the arc type is adopted, select the number of the referenced survey from which the arc is adopted.
Search Arc...	Click to display the Search Survey screen to search for a referenced survey number.
Ch Bear Corr	Type the chord bearing correction that has been applied for the adopted bearing.
Layer	Select the type of topology layer for the arc from the drop down list. The main options are: • 0-Nbdy (ie Non Boundary) • 1-Pri (ie Primary) • 2-Sec (ie Secondary) • 3-Pri,Sec (ie Primary, Secondary) • 4-SecCL (ie Secondary Centreline) • 5-Ter (ie Tertiary) • 6-TerCL (ie Tertiary Centreline) • 7-Str (ie Strata)
Arc Radius	Type the radius required to define the arc.
Arc Direction	Select the direction of the arc from the drop down list. This is the side of the line that the arc is on (from start mark to end mark).
Survey Class	If the arc requires a different survey class than you specified in the Survey Header screen, select the survey class for the arc from the drop down list. This field is disabled when you select a vector from the Non Boundary layer.
Equipment	Select Unknown as the type of equipment from the drop down list, as you cannot measure arcs.

Vector Capture screen: Mark Information

Field and Button	Action
Name	Landonline displays the name of the mark. You can edit the name in the Vectors area or in the Mark Details screen.
Mark Type	Select the type of mark from the drop down list.
Description	Type a complete description of the mark determined in association with this survey.
Purpose	Select the purpose of the mark from the drop down list.
Condition	Select the condition of the mark from the drop down list. Note: The condition for geodetic marks cannot be edited in Workspace.
Mark State	Select the state of the mark from the drop down list.
Linked	Landonline checks this to indicate the mark has been linked to an existing mark.
Mark Disturbed	Landonline checks this to indicate the mark has been disturbed.
Mark Renewed	Landonline checks this to indicate the mark renews an existing mark.
Unlink	Click to remove the link made between this mark and an underlying mark.
Mark Details...	Click to display the Mark Detail screen.

Vector Error Check screen

Field and Button	Action
Error Check	Landonline displays any misclose found. It displays the: • Bearing of the misclose • Distance of the misclose • Misclose RF representative fraction (ie the ratio of the misclose to the entire circuit distance).
Copy to Clipboard	Click to copy the contents of the report to the clipboard. You can paste it into a text editor on your computer (eg Microsoft Word).
Print	Click to print the report.
Save	Click to save the report to a file on your computer in a location you specify.

Line Layer screen

Field and Button	Action
Line Layer	Select the topology class of the line you are capturing. An example of the layers are: • 0-Nbdy (ie Non Boundary) • 1-Pri (ie Primary) • 2-Sec (ie Secondary) • 3-Pri,Sec (ie Primary, Secondary) • 4-SecCL (ie Secondary Centreline) • 5-Ter (ie Tertiary) • 6-TerCL (ie Tertiary Centreline) • 7-Str (ie Strata)

Parcel List screen

Field and Button	Action
Parcel List	Landonline displays details of appellations for parcels captured in the *e-survey*.
Add...	Click to display the Parcel Detail screen to add details of a new appellation.
Edit...	Click to display the Parcel Detail screen to edit details of the selected parcel appellation.
Delete	Click to delete the selected parcel appellation.
Link...	Click to link the selected new parcel appellation to the selected spatial parcel in the Spatial Window. If the Spatial Window is not open, you are prompted to open it.
Unlink	Click to remove the link between the selected textual parcel information and the spatial definition.
Link Lol...	Click to add a selected Landonline spatial parcel in the Spatial Window to the Parcel List screen. Use this to select an existing parcel to be extinguished, affected, referenced or encroached. If the Spatial Window is not open, you are prompted to open it.
Move Label	Click to move the position of a parcel label in the Spatial Window. Landonline moves the nearest label in the Spatial Window to the position you click. You can only move the label for created parcels. If you move the label outside the extent of the parcel, Landonline will reposition the label within the parcel.

Parcel Detail screen

Field and Button	Action
Search...	Click to display the Search Appellation screen to search for a referenced, affected, or extinguished parcel in Landonline.
Action	Select the action for the parcel from the drop down list.
Parcel Intent	Select the intent for the parcel from the drop down list (eg Fee Simple Title, Easement, Hydro ,Principal Unit). For more information, refer to **Parcel intents** in **Landonline Help**.
Topology Class	Select the topology class for the parcel from the drop down list. The items on this list change, depending on the Parcel Intent you select.
Area (ha)	Type the area of the parcel in hectares (if applicable).
Appellation Format	Select the format of the appellation from the drop down list. If you select Maori or Other as the appellation format, the fields change in the lower part of the screen.

Parcel Detail screen: General Appellation

Field and Button	Action
CSC Parcel Id	If this is a captured parcel appellation, Landonline displays its unique number.
LOL Parcel Id	If this is an existing parcel appellation, Landonline displays its unique number.
Simple	Click to indicate this parcel appellation has a simple format. Landonline activates the Simple Appellation area of the screen.
Complex	Click to indicate this parcel appellation has a complex format. Landonline activates the Complex Appellation area of the screen.

Field and Button	Action
Title	Check to indicate the appellation is a title appellation (ie it relates to a legal description). You can check Title and Survey for the same parcel appellation.
Survey	Check to indicate the appellation is a survey appellation (ie it relates to a survey plan). You can check Survey and Title for the same parcel appellation.
Part	Check to indicate that the appellation is part of a block, section or lot. Leave unchecked for a whole appellation.
Parcel Type	Select the primary type for this parcel from the drop down list. Landonline lists these options in the order they are most frequently used. They are not listed in an alphabetical order.
Parcel Number	Type the first numerical number for the parcel.
Plan Type	Select the type of plan on which the appellation is recorded from the drop down list. Landonline lists these options in the order they are most frequently used. They are not listed in an alphabetical order. For a Maori Land Plan with a Parcel Intent of Maori, this field will default to Maori Land Plan and cannot be changed.
Plan Number	Type the number of the plan. You must enter a number in this field for a Maori Land Plan.
2nd Parcel Type	If this is an appellation with a Complex format, select the second type for this parcel from the drop down list.
2nd Parcel Number	If this is an appellation with a Complex format, type the second number for the parcel. Only type a value in this field if you have to make a selection in the 2nd Parcel Number field.
Block Number	If this is an appellation with a Complex format, type the number of the block for this appellation.
Plan/Registration Type	If this is an appellation with a Complex format, select the type of plan or registration district from the drop down list. Landonline lists these options in the order they are most frequently used. They are not listed in an alphabetical order. For a Maori Land Plan with a Parcel Intent of Maori, this field will default to Maori Land Plan and cannot be changed.
Plan/ Registration Number	If this is an appellation with a Complex format, type the number of the plan or the name of the registration district. You must enter a number in this field for a Maori Land Plan.
Suffix	If this is an appellation with a Complex format, check to reverse the Registration Type and Registration Name (eg Survey District Kaiteriteri to Kaiteriteri Survey District).

Parcel Detail screen: Maori Appellation

Field and Button	Action
Part Indicator	Check to indicate the appellation is part of a block.
Title	Check to indicate the appellation is a title appellation (ie it relates to a legal description). You can check Title and Survey for the same parcel appellation.
Survey	Check to indicate the appellation is a survey appellation (ie it relates to a survey plan). You can check Survey and Title for the same parcel appellation.
Plan Type	Select the plan type for the appellation from the drop down list. For a Parcel Intent of Maori, this field will default to Maori Land Plan.
Plan Number	Enter the number of the plan. You must enter a number in this field for a Maori Land Plan.
Number of Block	Type the parcel number for this appellation (eg 3C2A).
Name of Block	Type the name of the Maori block for this appellation (eg Puketapu).

Parcel Detail screen: Other Appellation

Field and Button	Action
Part Indicator	Check to indicate the appellation is part of a block.
Title	Check to indicate the appellation is a title appellation (ie it relates to a legal description). You can check Title and Survey for the same parcel appellation.
Survey	Check to indicate the appellation is a survey appellation (ie it relates to a survey plan). You can check Survey and Title for the same parcel appellation.
Appellation	Type the text for the appellation. Type appellation details in a format that will enable them to be searched on. Be particularly careful of spaces and capital letters.

Title Allocation screen

Field and Button	Action
Parcel Appellation	Landonline displays details of all parcel appellations captured for an *e-survey*, including their Area and RT when it has been allocated. When a parcel has more than one RT allocated to it, the RT field displays Multiple instead of a reference number.
Available RTs	Landonline displays a list of available RT references for the selected parcel.
Allocated RTs	Landonline displays a list of RT references allocated to the selected parcel.
Add ->	Click to copy RTs selected in Available RTs to the Allocated RTs list.
<- Remove	Click to remove the selected RTs from the Allocated RTs list.
New RT	If there is no RT reference provisionally allocated, click New RT to allocate a new RT for the *e-survey* and automatically link it to the selected parcel. The new RT reference displays in the Available RTs list.

Appendix O: Survey Plan Generation screen information

Spatial Window icons for Plan Generation

All options for Plan Generation icons can also be accessed from the Generate Plan menu.

Icon	Action
Select Existing Line	Click, and select the existing parcel boundary line you wish to represent as a RT boundary.
Add Selected as RT Bdy	Click to add the selected existing parcel boundary line to the title diagram(s) as a RT boundary line.
Draw Line (RT Bdy)	Click, then draw a RT boundary line in the Spatial Window (ie click on the starting point, click on each vertex, then double click on the end point).
Draw Line (Abuttal)	Click, then draw an abuttal parcel boundary line in the Spatial Window (ie click the starting point, click each vertex, then double click the end point).
Add Primary Diagram	Click to define a Primary diagram in the Spatial Window by selecting one of the following: • (Define Primary Diagram by Rectangle) To define the area click in the top left corner and drag over the area. • (Define Primary Diagram by Circle) To define the area click where you want the centre of the circle and drag outwards. • (Define Primary Diagram by Polygon) To define the area, click the start point, click each point then double click the penultimate point to close the polygon. Landonline automatically connects to the start point to close the polygon. The polygon can have a maximum of 47 sides.
Add Non Primary Diagram	Click to define a Non Primary diagram in the Spatial Window by selecting one of the following: • (Define Non Primary Diagram by Rectangle) To define the area click in the top left corner and drag over the area. • (Define Non Primary Diagram by Circle) To define the area, click where you want the centre of the circle and drag outwards. • (Define Non Primary Diagram by Polygon) To define the area, click the start point, click each point then double click the penultimate point to close the polygon. Landonline automatically connects to the start point to close the polygon. The polygon can have a maximum of 47 sides.
Add Survey Diagram	Click to define a Survey diagram in the Spatial Window by selecting one of the following: • (Define Survey Diagram by Rectangle) To define the area click in the top left corner and drag over the area. • (Define Survey Diagram by Circle) To define the area, click where you want the centre of the circle and drag outwards. • (Define Survey Diagram by Polygon) To define the area, click the start point, click each point then double click the penultimate point to close the polygon. Landonline automatically connects to the start point to close the polygon. The polygon can have a maximum of 47 sides.
Select Added Line	Click, then select a line you have added.
Select Diagram	Click, then select a diagram you have defined in the Spatial Window.
Delete Selected	Click to delete the selected line or diagram in the Spatial Window.
Enlarge a diagram using a rectangle / polygon / circle	After selecting a user defined diagram, position the cursor on the diagram at a position from where the extension can be drawn. The new shape must overlap part of the existing diagram. Alternative options to enlarge by polygon or circle are available via the accompanying drop box.

Icon	Action
Reduce a diagram using a rectangle / polygon / circle	After selecting a user defined diagram, position the cursor on the diagram at a position from where the reduction can be drawn. Alternative options to reduce by polygon or circle are available via the accompanying drop box.
Label user Diagram Diagrams	Click to label all user defined diagrams.
Maintain Diagram Layers	Click to display the Maintain Diagram Layers screen to maintain layers of defined diagrams.

Maintain Diagram Layers screen

Field and Button	Action
Name	Select the diagram type or name from the drop down list.
Maintain Individual User-Defined Diagrams	Check to maintain layers for individual user defined diagrams. The name of each diagram you defined displays in the Name field. Leave unchecked to maintain layers for all diagrams of the type selected in the Name field (ie all diagrams of the selected type will display the same layers).
Available Layers	Landonline displays layers available for allocation to the selected diagram(s).
-->	Click to move the selected Available Layer to the Selected Layers list. This button will not be active if you select an available layer that is dependent on another layer. For example, you must select Non Primary Boundary Marks before you can select the Non Primary Parcel Dimensions, Non Primary Parcels or Centreline Parcels layers.
<--	Click to move the selected layer from the Selected Layers list to the Available Layers list. You cannot remove a mandatory layer. When you select a mandatory layer, this button will not be active. To remove Non Primary Boundary Marks from this list, you must first remove the Non Primary Parcel Dimensions, Non Primary Parcels and Centreline Parcels layers.
Selected Layers	Landonline displays layers selected for the diagram(s).
Labels	Check to indicate you want the labels of the selected layer display in the diagram(s) in the Layout Plan Sheets screen. Uncheck to hide labels for the selected layer in the diagram(s).
Feature	Check to indicate you want the boundaries of Existing parcels layers display in the diagram(s) in the Layout Plan Sheets screen. Uncheck to display only the labels (ie no boundaries) of Existing Parcels layers in the diagram(s).

Layout Plan Sheets screen

Field and Button	Action
Title Sheet	Click to display the pages of the Title Sheet. Landonline lists any detail diagram images.
Survey Sheet	Click to display the pages of the Survey Sheet. Landonline lists any detail diagram images.
--> Add Diagram	Click to add the selected diagram image to the current page.
<-- Remove Diagram	Click to remove the selected diagram image from a page.
Diagram Thumbnail	Check to preview a thumbnail of the currently selected diagram image in the list.
Line Style	Select the style of line to add to the diagram from the drop down list. Line styles you can select are: • Dashed dot • Arrow head both ends • Arrow head one end • Dashed • Solid
Add Line	Click, then click the starting location for the line on the layout page and drag the line in the direction and to the length you require.

Field and Button	Action
Remove	Click to remove the selected line from the layout sheet.
Font	Select the style of font from the drop down list (ie Tahoma, Arial or Times New Roman). Tahoma is the default font for text and labels.
Font Size	Select the size of font from the drop down list (ie 9pt, 10pt, 12pt, 14pt or 16pt).
(Text)	Type the text for the annotation. This will display in italics when added to the page. To start a new line, press Enter at the end of the line. You can add up to three lines of text. There is no limit to the number of characters you can type per line. You need to ensure the text fits on the page as there are no horizontal or vertical scroll bars
Add Text	Click, and click the location on the layout page to add the text.
Set Text	Click to save changes to the selected annotation. When you select an existing annotation to edit, the text displays in the Text field and the Add Text button changes to Set Text.
Remove	Click to remove the selected annotation from the layout sheet.
Go to First page	Click to display the first page of the selected layout sheet.
Go to Previous page	Click to display the previous page of the selected layout sheet.
Page 2 of 3	Landonline displays the current page number and number of pages of the selected layout sheet. A double click on this area will provide the option to jump to a specific page.
Go to Next Page	Click to display the next page of the selected layout sheet.
Go to Last page	Click to display the last page of the selected layout sheet.
Add a New Page	Click to append a new layout sheet page to the current set of layout sheets. A drop-down option allows for the new page to: • Add New last Page • Add New Page After This One • Add New First Page
Renumber This Page	Click to renumber the selected page of the selected layout sheet. The new page number will be requested for entry and the page will be repositioned according to the page number given. All pages following the new page's position will be incremented accordingly.
Remove This Page	Click to delete the selected page of the selected layout sheet. All pages following the one deleted will be renumbered accordingly.
Preview	Click to preview the diagrams on pages of the selected layout sheet.
Complete	Click to generate the plans. The pages are produced in a .tif file format.

Layout Plan Sheets Function Menu options

The Layout Plan Sheets screen Menu (Function Menu) contains the same functions as the toolbar icons, as well as additional options.

Field and Button	Action

View	• Show Selected Objects - changes Hidden objects to Shown text (ie changes the text or line from grey to black).
	• Hide Selected Objects - changes Shown objects to Hidden objects (ie changes the text or line from black to grey).
	• View Hidden Objects - indicates whether selected objects can be viewed in the layout sheet. When this option is active there is a tick (✓) in front of it. The selected items display on the layout page as grey (ie Hidden). Un-ticked items (ie Not Displayed items) do not display on the layout sheet.
	• View Labels - indicates whether specific labels for objects in diagrams can be viewed in the layout sheet. Each option is active when there is a tick (✓) in front of the name (eg ✓Mark Name). Only active labels display on the layout page in grey (ie Hidden).
	  • Observation Arc Radii - Arc Radii.
	  • Mark Names - eg Non Boundary/Witness marks, Boundary marks.
	  • Node Symbols - eg Non Boundary mark symbols (origins/double circles/single circles), Primary, Non Primary, symbols (circles/posts/crosses) etc.
	  • Observation Bearings - eg Vector Bearing, Vector Chord Bearing.
	  • Observation Codes - Vector Code Obx.
	  • Observation Distances - eg Vector Distance, Arc Length.
	  • Parcel Areas - Parcel area.
	  • Parcel Appellations - Parcel Appellation.
	For more information about Shown, Hidden and Not Displayed objects, **see 10.3.5.5.1 Show and hide objects in a diagram**.

Edit	• Undo - reverses the last action. You can only undo one action. • Cut - deletes the selected line, rectangle or text and places it in the pasting buffer. • Copy - copies the selected line, rectangle or text and places it in the pasting buffer. • Paste - pastes the copied or cut line, rectangle or text. • Delete - deletes the selected user added line, user added rectangle or user added text. • Add Text - allows you to add a new annotation based on the settings in the Add Text fields. • Add Line - allows you to add a new line based on the settings in the Line Style field. • Add Rectangle - allows you to add a new rectangle based on the settings in the Line Style field. • Properties - displays the properties of the selected diagram, label, coordinate or line. You can make some modifications to these objects (eg bold or align a label). • Original Location - returns the labels in the current diagram to their original location (ie when the diagram was defined).

Field and Button	Action
Layout Sheets	• Work with Survey Sheets - allows you to work with the diagrams on the Survey Sheets. • Work with Title Sheets - allows you to work with the diagrams on the Title Sheets. • Go To First Page - allows you to immediately navigate to the first page of the Survey or Title Sheets. • Go To Previous Page - allows you to navigate to the page before the current page of the Survey or Title Sheets. • Go To Next Page - allows you to navigate to the page after the current page of the Survey or Title Sheets • Go To Last Page - allows you to immediately navigate to the last page of the Survey or Title Sheets. • Add New First Page - creates a new blank first page within the Survey or Title Sheets. • Add New Page After This One - creates a new blank page after the current page within the Survey or Title Sheets. • Add New Last Page - creates a new blank last page within the Survey or Title Sheets. • Renumber This Page - allows you to renumber the current page within the Survey or Title Sheets. • Remove This Page - allows you to delete the current page within the Survey or Title Sheets. For more information about these pagination options, see the details with **Layout Plan Sheets screen** above.
Zoom and Pan	• Zoom In - immediately zooms in to increase the size of the image. • Zoom Out - immediately zooms out to decrease the size of the image. • Zoom Previous – displays the previous view of the image. • Zoom To Selection - immediately zooms to the selected object. • Zoom - immediately zooms in or out to the selected percentage (ie 25%, 50%, 75%, 100%, 200%, 400% or Other... where you can type your own percentage). • Fit To Window - fits the complete image to the size of the window. • Fit to Width - fits the width of the image to the size of the window. • Fit to Height - fits the height of the image to the size of the window. • Zoom In Tool – zooms in to double the size of the image. Each time you click the image it displays larger. • Zoom Out Tool - zooms out to halve the size of the image. Each time you click the image it displays smaller. • Drag Image Tool (Pan) - drags the image in any direction.
Selection Tools	The active option has a tick (✓) in front of it. • Generic Select - allows you to select one or more labels, coordinates and lines on the layout page. • Select Diagrams - allows you to select one or more diagrams on the layout page. • Select Labels - allows you to select on or more labels on the layout page. • Select Coordinates - allows you to select on or more coordinates on the layout page. • Select Lines - allows you to select on or more lines on the layout page. • Select by Polygon (Lasso) - allows you to draw a polygon around a number of objects to modify simultaneously. If the Generic Selection Tool is active instead of one the specific selection tools at the same time, a request will be made to choose which of coordinates, lines or labels are to be selected within the area of the polygon. If there is only one type of object within the area of the polygon, they will be automatically selected and the request to choose will not be made.

Plan Preview screen

Filed or button	Action
Close	Click to close the screen and return to the Layout Plan Sheets screen.

Appendix P: Survey TA Certification screen information

TA Certification screen

Surveyors cannot edit details in this screen.

Field and Button	Action
Survey Details	Landonline displays detail of the survey awaiting TA Certification (ie Survey Number, Survey Status, Surveyor Reference and Survey Purpose).
Search…	Click to display the Search TA Certification Work screen.
View Plan…	Click to display the TA View Plan screen to view an image of the plan. Title Plan and CSD Plan images display for an *e-survey*. Title and Survey sheets display for a paper plan.
TA Reference	TA's Resource Consent reference for the survey.
Assigned User	Landonline displays the name of the TA user currently working on the TA Certification. The survey must be assigned to a TA user before any work can be performed in the TA Certification.
Search…	Click to display the External Search screen to search for a TA user within your firm.
TA Certification Status	Landonline displays the status of the TA Certification. For more information, refer to **TA Certification status** in **Landonline Help**.
TA Name	Landonline displays the name of the TA firm
On Hold	Click to change the TA Certification Status to On Hold. Once clicked, the name of the button changes to Off Hold.
Off Hold	Click to change the TA Certification Status to Under Action. Once clicked, the name of the button changes to On Hold.

TA Certification screen – TA Certification tab

Surveyors cannot edit details in this screen.

Field and Button	Action
Package Name	Landonline displays the name of the package.
Status	Status of the package. • Created - surveyor or TA user has created the package. • Signed - TA has signed the package.
Signed By	Name of the user who signed the package. You must have the Sign TA Certification privilege to sign a package.
Signed Date/Time	Date and time the package was signed.
Sign	Click to display screens to: • View the TA Approvals form • enter your password • unlock your digital certificate file to sign the package.
Prepare	Click to display the Manage TA Certification screen to select certificates, enter values for certificates and assign them to the relevant package.
Certificate Description	Description of the certificate in the package.
Status	Status of the certificate in the package. • Created - surveyor or TA user has created the certificate. • Pending TA Approval - Surveyor has notified the TA about the certificate (after creating a new certificate). • Certified - TA has certified the certificate.
Certificate Text	Landonline displays the complete text for the selected certificate in the package.
Certify	Click to change the status of the selected certificate to Certified.

TA Certification screen – Supporting Documents tab

Surveyors cannot edit details in this screen.

Field and Button	Action
Type	Landonline displays the type of supporting document.
File Name	Landonline displays the file name of the supporting document.
Comments	Landonline displays any comments added for the supporting document in the Record Supporting Document screen.
Lodged	Landonline displays the date and time the supporting document was lodged.
Status	Landonline displays the status of the supporting document.
Add/Edit	Click to display the Record Supporting Document screen to add a TA supporting document.
View	Click to display the image of the selected supporting document.

Manage TA Certification screen

Field and Button	Action
Selected Certificates	Landonline displays the list of TA Certificate packages. Expand the tree to view certificates in each package.
Add Certificates	Click to add the selected TA Certificate to the selected package.
Delete Certificate	Click to delete the selected TA Certificate from the package.
Create Package	Click to create a new TA Certificate package.
Delete Package	Click to delete the selected TA Certificate package and its certificates.
Move Up	Click to move the certificate up one position in the package.
Move Down	Click to move the certificate down one position in the package.
All Certificates	Landonline displays all current certificates available for selection. • Name - short name for each certificate. • Description - description of each certificate.
Certificate Fields	Landonline displays predefined field(s) you can edit in the selected certificate: • Field Name - the name of the field. • Field Value - enter the value to display in the certificate.
Certificate Preview	Landonline displays the complete text that will display on the TA Certificate.

Find Work/Request screen (TA)

Field and Button	Action
TA Certification Work	Select to search for a TA *e-certification* work in Workspace.
Request	Select to search for a request in Workspace.
TA Reference	Type the TA reference for the survey. You can use a wildcard search in this field.
Survey Number	Type the number of the survey (eg DP 312345). If you type this number, you don't need to enter any other criteria in the screen. To display details of a paper plan in the TA Certification screen you must type the exact number of the plan. For a request, enter the number of the survey linked to the request.
Surveyor	Type the user Id of a surveyor. If you don't know the user Id, click Search... and select a name. Only displays for the TA Certification Work option.
Search…	Click to display the External Search screen to search for a surveyor, enabled user or Primary Contact. Only displays for the TA Certification Work option.
TA Certification Status	Select the status of the TA Certification. Only displays for the TA Certification Work option.
Request Id	Enter the number of the request. If you type this number you don't need to enter any other criteria. Only displays for the Request option.
Contact Person	Select the name of the contact person for the request from the drop down list. Only displays for the Request option.

Field and Button	Action
Search Now	Click to search for surveys or requests based on your criteria.
New Search	Click to clear the screen to enter new search criteria.
Select	If you are in Workspace, click to display the selected survey or request in the Workspace tree. If you are in the TA. Certification screen, click to display details of the selected survey.
Search Results	Landonline displays surveys based on your search criteria.

Appendix Q: Other survey screens

Enabled Users screen

Field and Button	Action
Survey Details	Landonline displays details of the *e-survey*.
User Id	Landonline displays the user Id for the enabled user.
Name	Landonline displays the name of the enabled user.
Firm	Landonline displays the name of the firm for the enabled user.
email	Landonline displays the email address of the enabled user.
Add	Click to display the External Search screen to search for an enabled user.
Remove	Click to remove the selected user from the list so they cannot access the *e-survey*.

Filter Vectors screen

Field or Button	Action
Survey Number	Type the number of the survey to be used to filter vectors. If you don't know the survey number, click Search... and search for the number.
Work Name	For LINZ internal use only.
Select Vtc Type...	Click to display the Select Items screen to select vector type(s) to filter.
Select Vtc Class...	Click to display the Select Items screen to select vector class(es) to filter.
Select Reduction...	For LINZ internal use only.
Select Eqp Type...	Click to display the Select Items screen to select equipment type(s) to filter.
From	Type the start date range used to filter vectors. Each vector has a date of survey recorded with it. You can use this date to refine your search.
To	Type the end date range used to filter vectors. Each vector has a date of survey recorded with it. You can use this date to refine your search.

Record Supporting Document screen

Field and Button	Action
Survey Number	Landonline displays the number of the *e-survey* to which the supporting document is being attached and the land district for the survey.
Reference	A file number or client name.
Document Type	Select the type of document from the drop down list. For more information, see **Appendix K: *e-survey* supporting document types**.
Comments	Type any relevant comments about the supporting document. This is optional.
File Name	Landonline displays the file name of the supporting document attached as an image.
Added By	Displays the user Id of the person who added the supporting document.
Added by On	Displays the date which the supporting document was added.
Last Edited By	Displays the user Id of the person who last edited the supporting document.
Last Edited By On	Displays the date which the supporting document was last edited.
Supporting Document Details	The fields that display in this area change depending on the Document Type selected. Complete the details of each field listed (eg Report Date, Detail, Inspection Date).
Add…	Click to insert a row.
Attach...	Click to display a browser window to select the path and file name of the supporting document image file to attach to the *e-survey*.
Delete…	Click to delete a row and the attached supporting document.
View…	Click to display the image of the selected supporting document.

Confirm Fee Charges screen

Field or Button	Action
Transaction Details	Displays details of the *e-survey* being submitted.
Fee Items	Displays details of the fees charged for each item with a Grand Total below.
Notes	Type notes about the selected item. These comments display below each item on your firm's account from LINZ. To add an additional line, press Ctrl and Enter. Do not use an apostrophe (‘), double quotes (“) or pipe (|) in this field.
OK	Click to save any notes entered, accept the charges and complete the submit process.
Cancel	Click to reject these charges and return to the *e-survey*. The transaction is not submitted.

Sign Survey Dataset screen

Field or Button	Action
Structured text view details	Displays details of the *e-survey* to be signed. If necessary, scroll to view all details.
Sign	Click to display screens to: • enter your password • unlock your digital certificate file to sign the *e-survey*.
Cancel	Click to cancel signing the *e-survey*. Landonline returns you to the Manage Survey Transaction screen.

Exception Process screen

Field or Button	Action
Survey Details	Landonline displays details of the *e-survey*.
Comment History	Landonline displays a history of comments between the surveyor and LINZ staff. The user Id, date and time of each comment also displays.
New Comment	Type your comments about why the *e-survey* requires exception processing. There is a limit of 2000 characters for your comments. If your comments exceed 2000 characters, create a document and fax or email it to LINZ.
Send Request	Click to create an exception request and send it to LINZ Internal personnel.
Cancel Exception	Click to cancel the exception process request. If the status of the *e-survey* is Exception Recommendation, the name of this button changes to Continue Capture.
Continue Capture	Click to accept the recommendation from LINZ and continue to capture data.