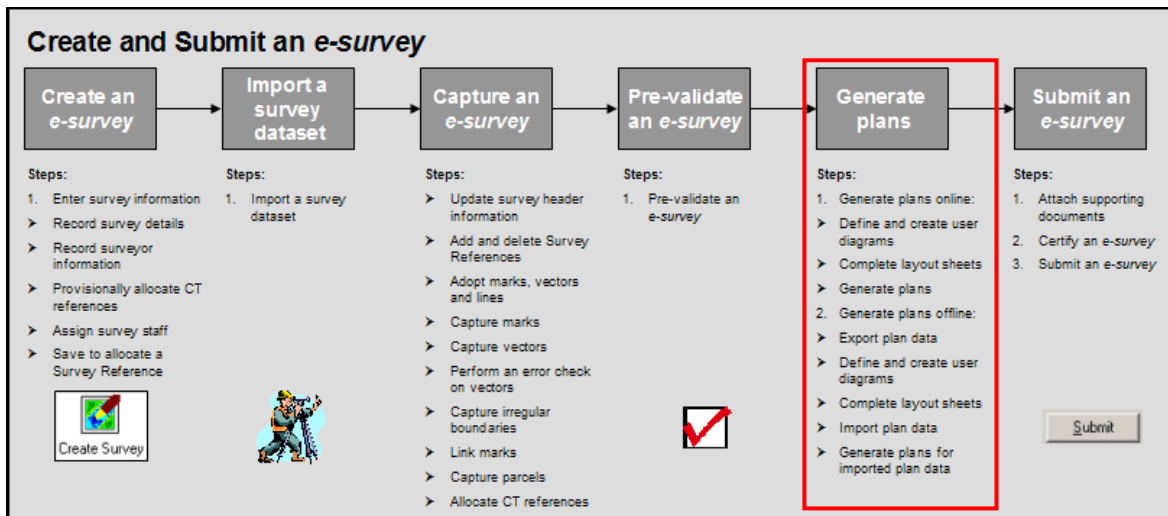


9 GENERATE PLANS

9.1 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 H: 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 L: e-survey supporting document types**.

Plans can be completely generated within Landonline (ie online). Alternatively you can export the survey capture data and use the Offline Plan Generation (OPG) application to complete layout plan sheets offline before importing the data back into Landonline.

OPG is an independent application you can use in conjunction with Landonline to define user diagrams and prepare layout sheets offline. For more information, refer to the **Offline Plan Generation (OPG) User Guide**.

To enable you to work with the plan data in Landonline you may need to change the status of the plan data between online and offline. For rules that apply when generating plans online and offline, see **9.4 Change the status of plan data**.

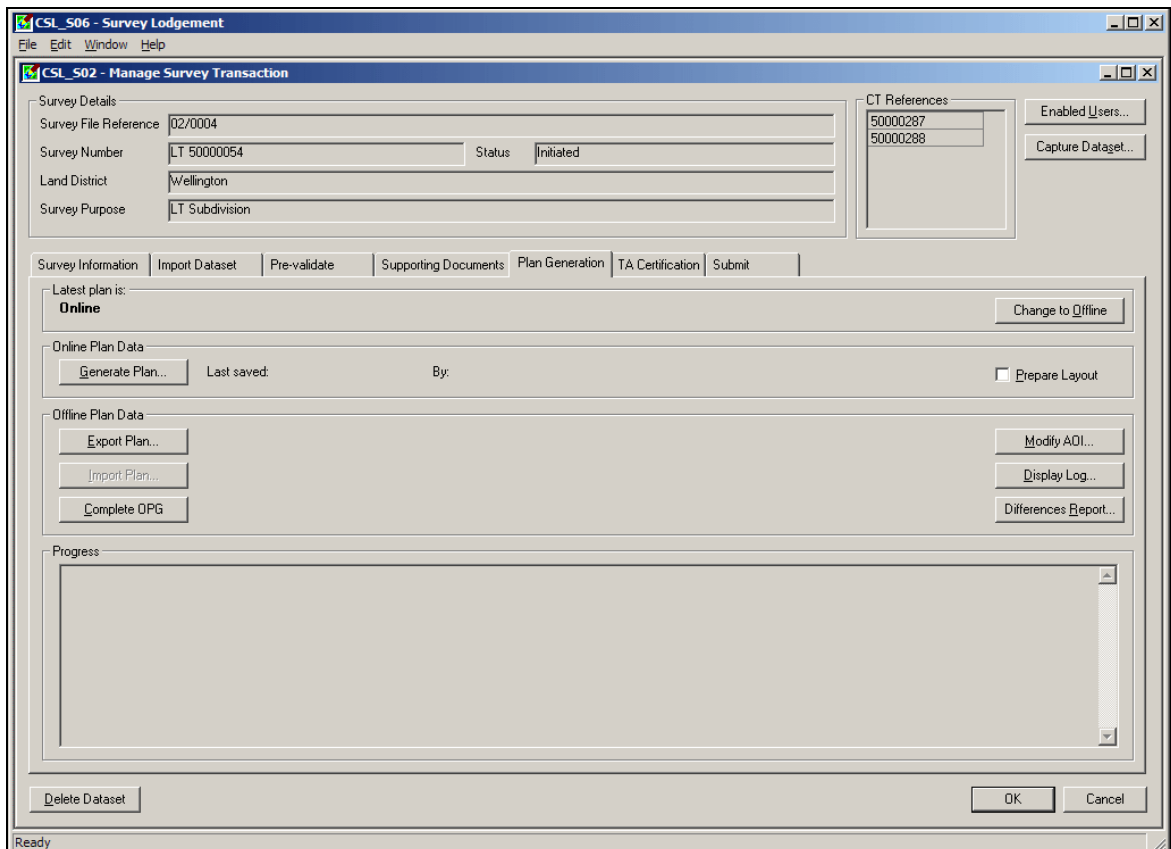
Tasks:

To generate plans you can:

- Display the Plan Generation tab.
- Generate plans online.
- Change the status of plan data (if required).
- Generate plans offline.
- (Use the) File Transfer Service (FTS).

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

9.2 Display the Plan Generation tab



To display the Plan Generation tab:

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

9.3 Generate plans online

You generate plans online 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 CT 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:

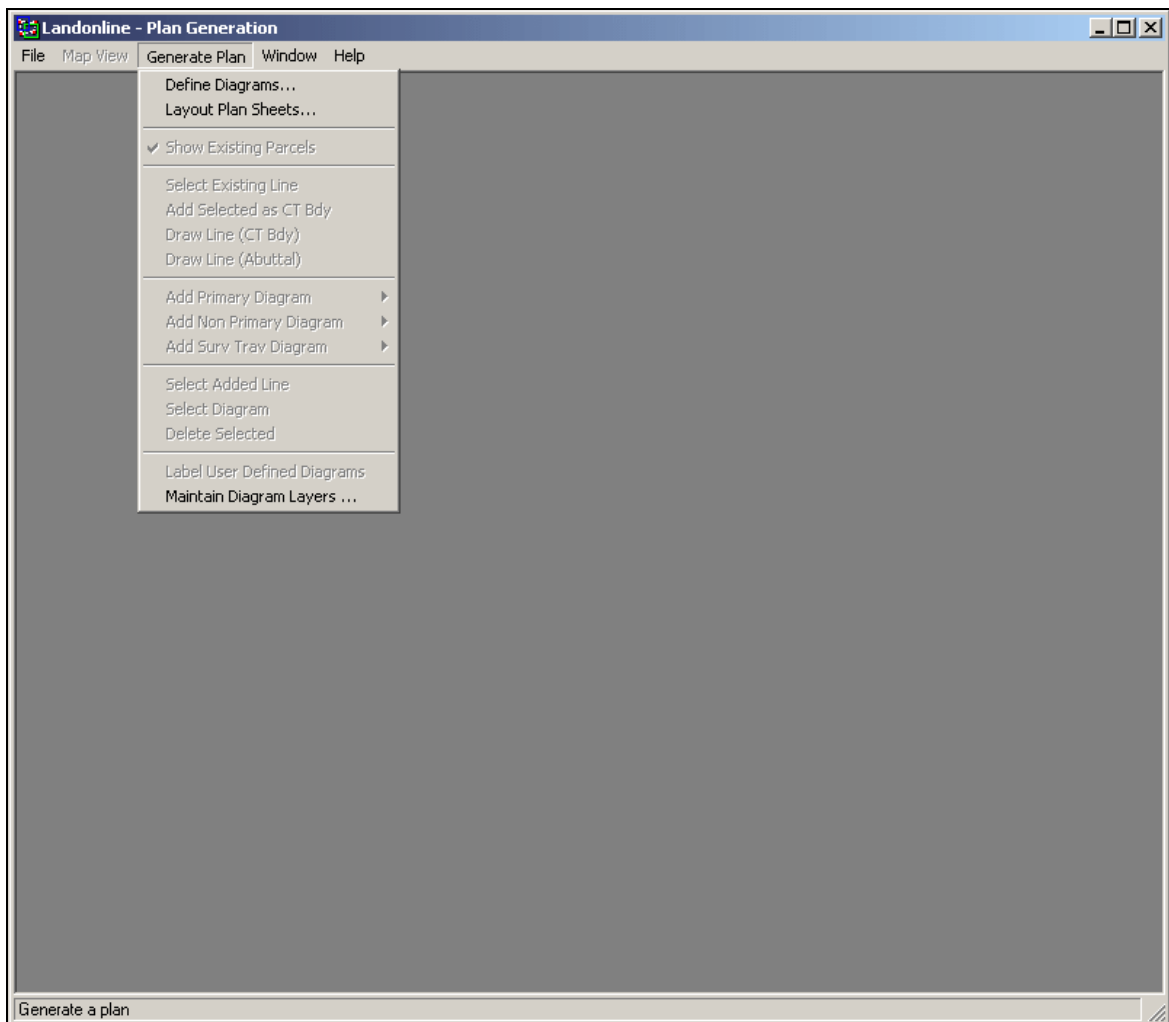
To generate the plans online you:

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 online.

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

9.3.1 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 online.

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.

9.3.2 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 outlined 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.

9.3.2.1 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 **9.3.2.5 Maintain diagram layers**.

9.3.2.2 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:

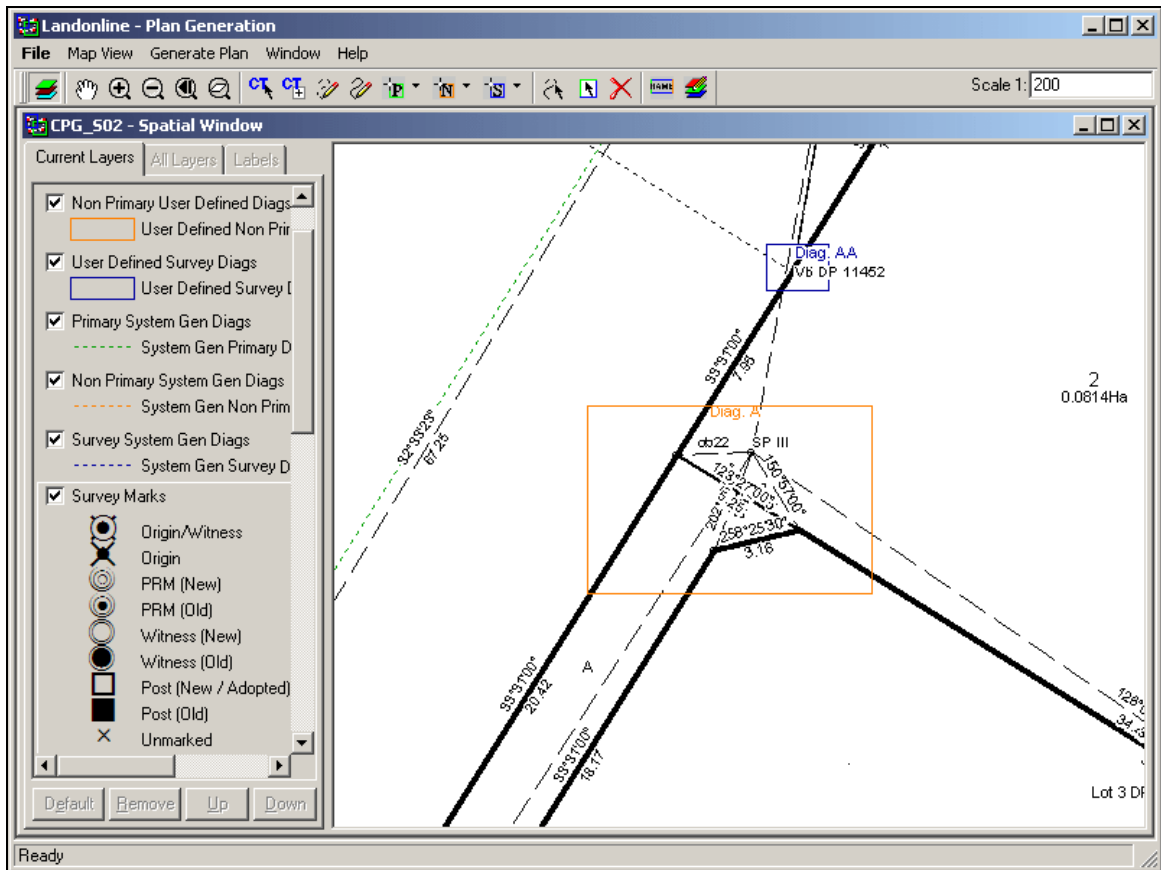
- all parcel boundaries including bearings and distances when shown in the CSD Plan
- parcels and their boundary distances when shown in the Title Plan and Title Diagram.

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 CT boundary lines and abutting lines are not correctly represented you can edit to correct these for the diagrams. See topic **9.3.2.3 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 than 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 CT 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.





9.3.2.2.1 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 ,
 - click , or
 - click .
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.





9.3.2.2.2 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 ,
 - click , or
 - click .
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.


9.3.2.2.3 Define a Non Primary diagram


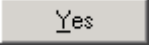
To define Non Primary diagrams, in the Spatial Window:

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 ,
 - click , or
 - click .
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.

9.3.2.2.4 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). A message displays asking you to confirm your deletion.
4. Click  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.

9.3.2.3 Edit diagrams

Once you have defined survey and title diagrams, you can edit CT boundaries and abutting lines to make sure they are represented correctly.



You can:

- Select boundary lines that will be extinguished to represent them as existing CT boundaries.
- Draw CT parcel boundaries and abutting parcel boundaries where these are not included or accurately represented in existing data.

Note: Select Generate Plan | Show Existing parcels to toggle the existing parcel boundary layer off or on.

9.3.2.3.1 Add CT boundary lines for boundaries you propose to extinguish



To add CT boundary lines for boundaries you propose to extinguish:

1. Click  (Select Existing Line) to make the existing CT parcel boundary lines layer active.
2. Select the line you require that forms the CT boundary. To select more than one line, hold Ctrl and select each line.
3. Click  (Add Selected as CT Bdy) to add the selected line(s) to your diagram. CT boundary lines display as dashed dot lines.

9.3.2.3.2 Manually draw a CT boundary line

Where the existing line work does not accurately represent the real situation you can choose to manually draw CT boundary lines.

To manually draw a CT boundary line:



1. Click  (Draw Line: CT Bdy). A message displays to explain how to add your line.
2. Click .
3. Click the start point for the line.
4. Click each vertex.
5. Double click the end point.

Note: A manually added CT Boundary line can have up to 47 points, including the start and end points.

9.3.2.3.3 Manually draw an abutting definition



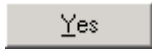
Where the existing line work does not accurately represent the real abutting situation you can choose to manually draw an abutting definition.

To manually draw an abutting definition:

1. Click  (Draw Line: Abuttal). A message displays to explain how to draw your line.
2. Click .
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.

9.3.2.3.4 Delete a CT 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  to delete the line.

9.3.2.4 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.

9.3.2.4.1 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.

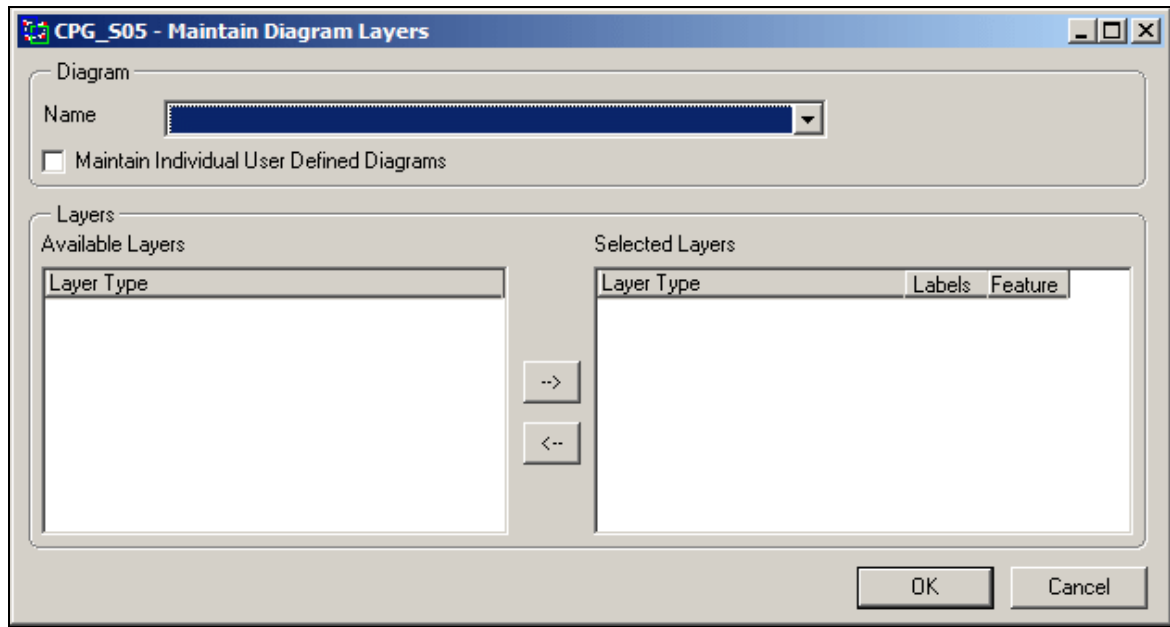
In this instance, the system generated diagram becomes a child of the user defined diagram. The system generated diagram label does not display in the parent diagram, therefore if you lay it out, you will have to add text to label it.

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.

9.3.2.5 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 I: 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.

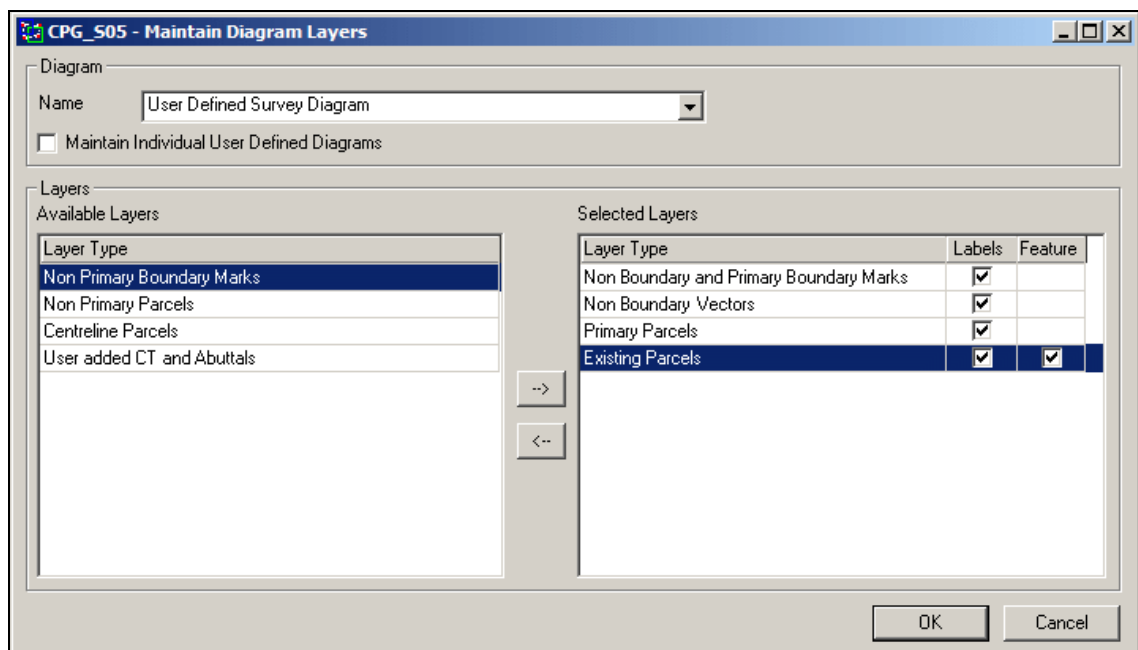
9.3.2.5.1 Display the Maintain Diagram Layers screen

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.



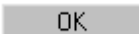
9.3.2.5.2 Maintain layers for all user defined diagrams of one type



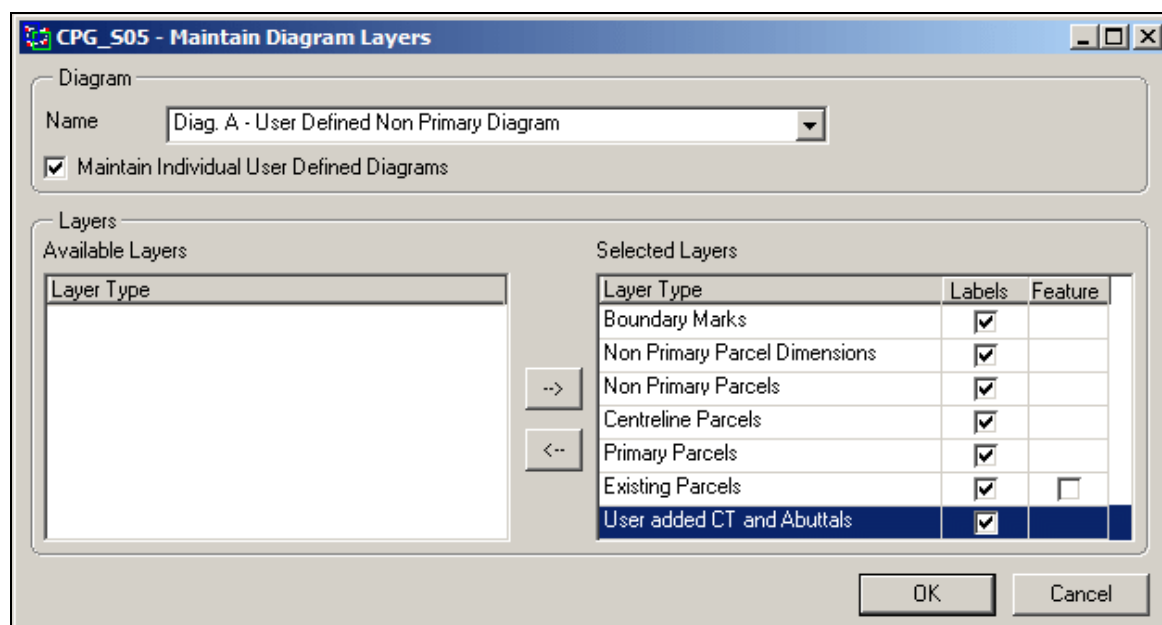
This is the Maintain Diagram Layers screen. Henry Brown wants to display the same layers for all user defined Survey diagrams. He has added some of the optional layers to the Selected Layers list. Labels for each layer default to on. Henry could choose not to display labels for some layers. He could 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  to save and close.

9.3.2.5.3 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.

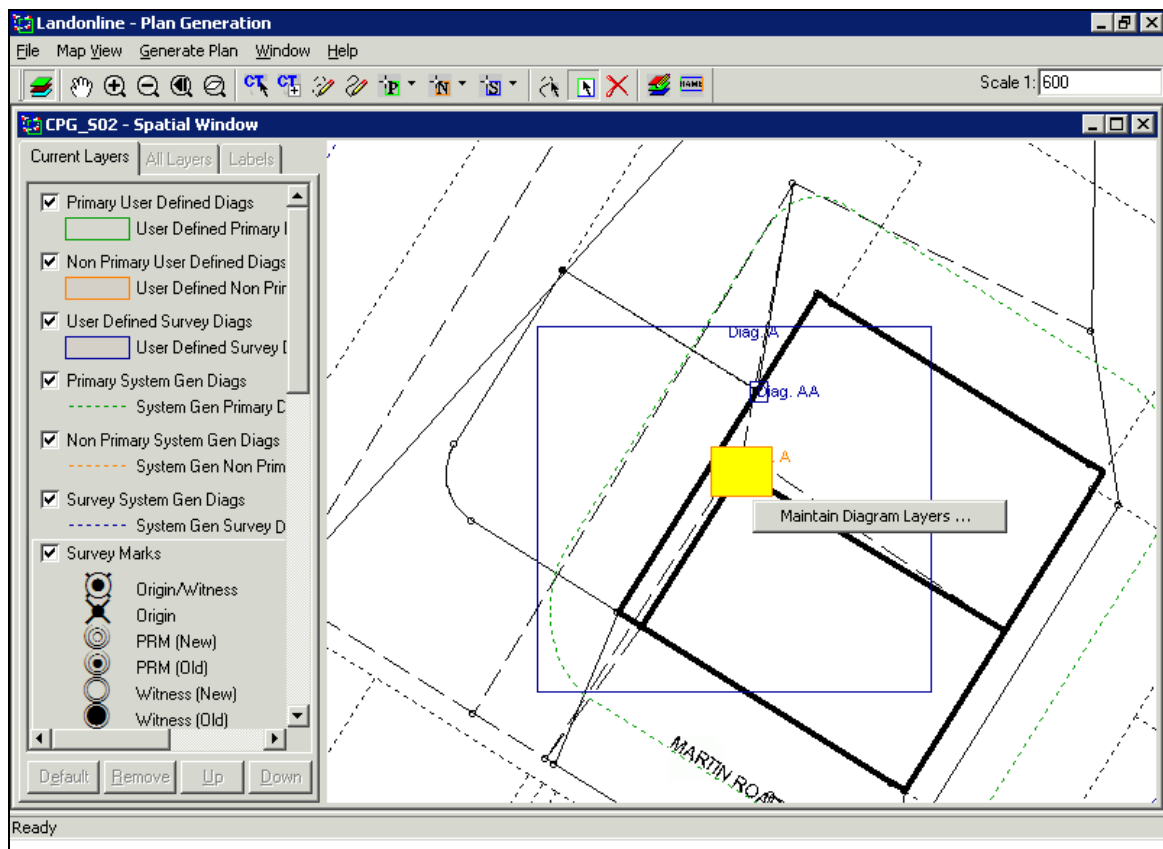
To maintain the layers of an individual user defined diagram:

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 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.



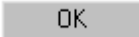
9.3.2.5.4 Maintain layers for a diagram using the right mouse



Henry Brown has selected to maintain layers in a User Defined Non Primary diagram in the Spatial Window. The selected diagram is coloured yellow. 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) yellow.
 - 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  to return to the Spatial Window.

9.3.2.6 Define and create diagrams Toolkit

Table 9-1 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: <i>e-surveys</i> . Topic: Generate Plans – Define Plan Diagrams.

Table 9-1 Define and create diagrams Toolkit

9.3.3 Request layout sheet preparation by batch

After you define diagrams for an online 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:

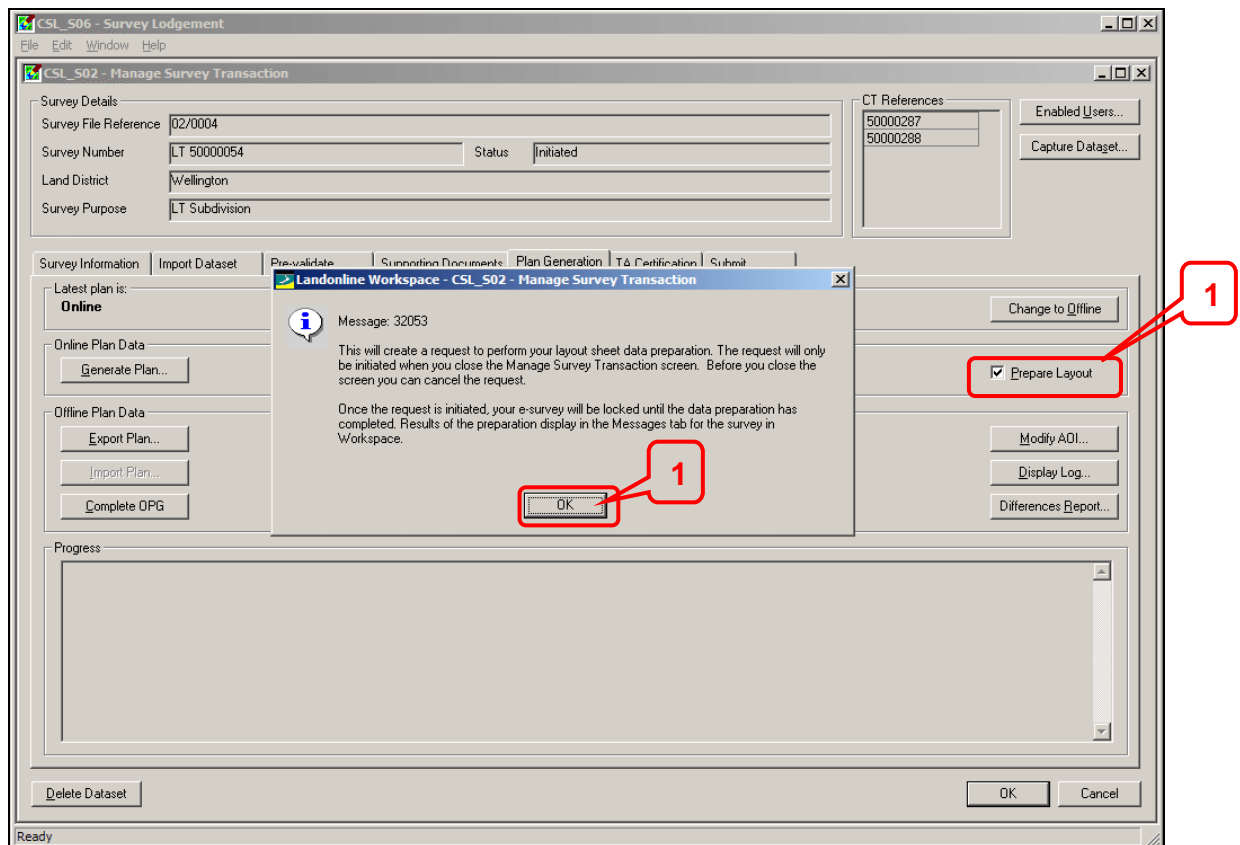
To request layout sheet preparation by batch process you:

1. Request layout sheet preparation.
2. View the batch preparation results.

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

9.3.3.1 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 Online 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 **9.3.3.2 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.

9.3.3.2 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 **9.3.5 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 **9.3.3.1 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.

9.3.4 Work with layout sheets

Layout sheets display in the Layout Plan Sheets screen.

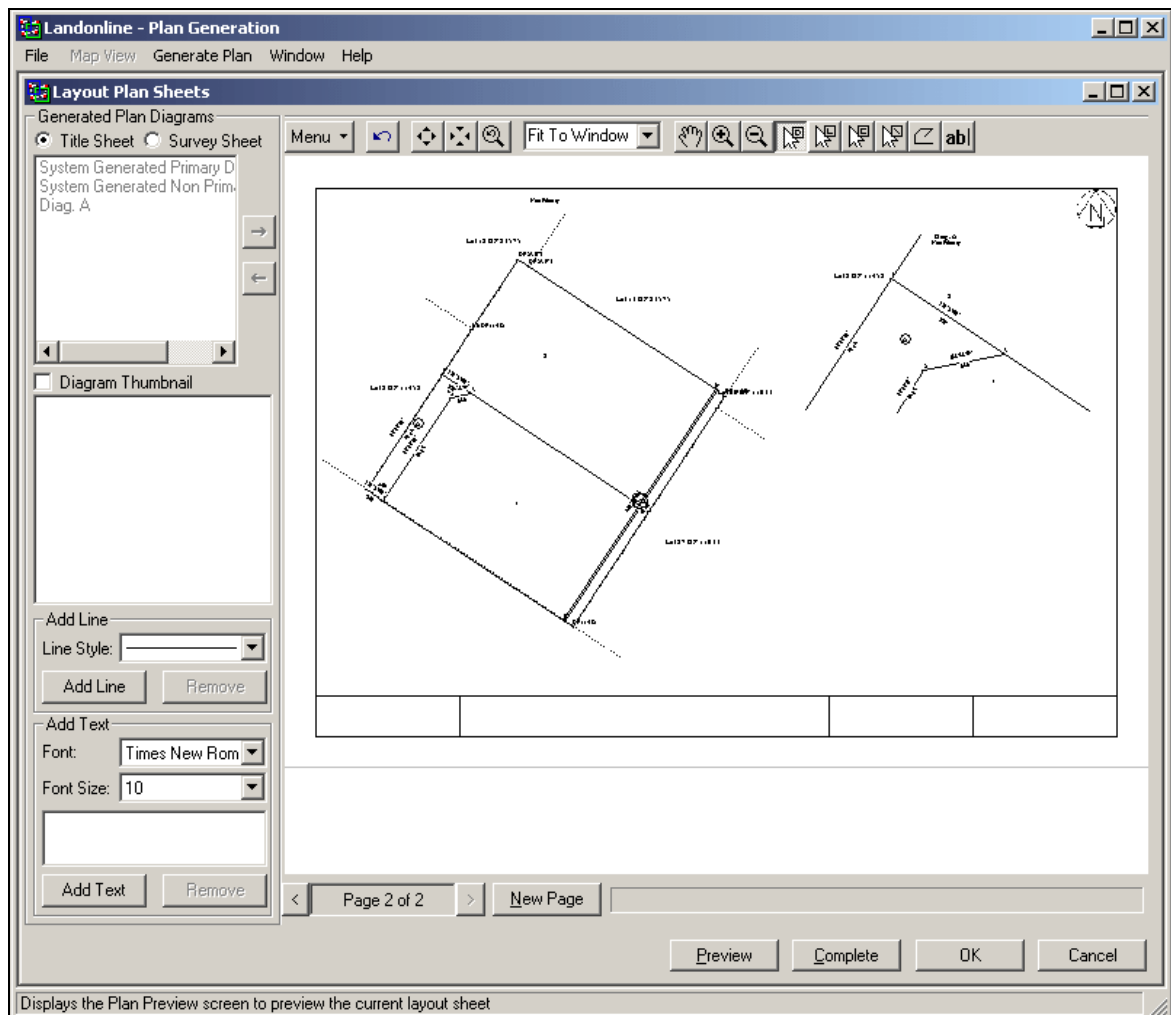
Landonline generates all system defined and user defined diagrams when you open the **Layout Plan Sheets** screen.

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 Diagram A to the Non-primary parcels 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.

9.3.4.1 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 **9.3.2.5 Maintain diagram layers**.

9.3.4.2 Layout Plan Sheets toolbar

Table 9-2 lists the icons and options for working with diagrams in the Layout Plan Sheets screen.






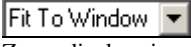









Menu, Icon or Field	Action
	Select the function you require from the list of options. All icon functions can also be accessed from this menu. For more information, see Layout Plan Sheets function menu options in Appendix P: Survey Plan Generation screen information .
 Undo	Click to reverse the last action. You can only undo one action.
 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%.
 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%.
 Zoom Previous	Click to immediately zoom in to out to the previous scale of the image.
 Zoom display size	Select one of the options from the list: <ul style="list-style-type: none"> • 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.
 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.
 Zoom In	Click, then click a location in the layout sheet image to zoom in to decrease the scale by 50%. The location you click is centred in the layout sheet. Each time you click a location in the image it displays 50% larger.
 Zoom Out	Click, then click a location in the layout sheet image to zoom out to increase the scale by 50%. The location you click is centred in the layout sheet. Each time you click a location in the image it displays 50% smaller.
 Diagram Selection Tool	Click, then select the diagram you want to work with.
 Label Selection Tool	Click, then select the label you want to work with.
 Coordinate Selection Tool	Click, then select the coordinate you want to work with.
 Line Selection Tool	Click, then select the line you want to edit.
 Add Line Tool	Click, then draw a line in the layout sheet.
 Add Text Tool	Click then select the location for the new text in the layout 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 and select the text, Make your changes directly in the layout sheet 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.

Table 9-2 Layout Plan Sheets toolbar

9.3.5 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.

9.3.5.1 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.

9.3.5.2 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.

9.3.5.2.1 Add a user defined diagram

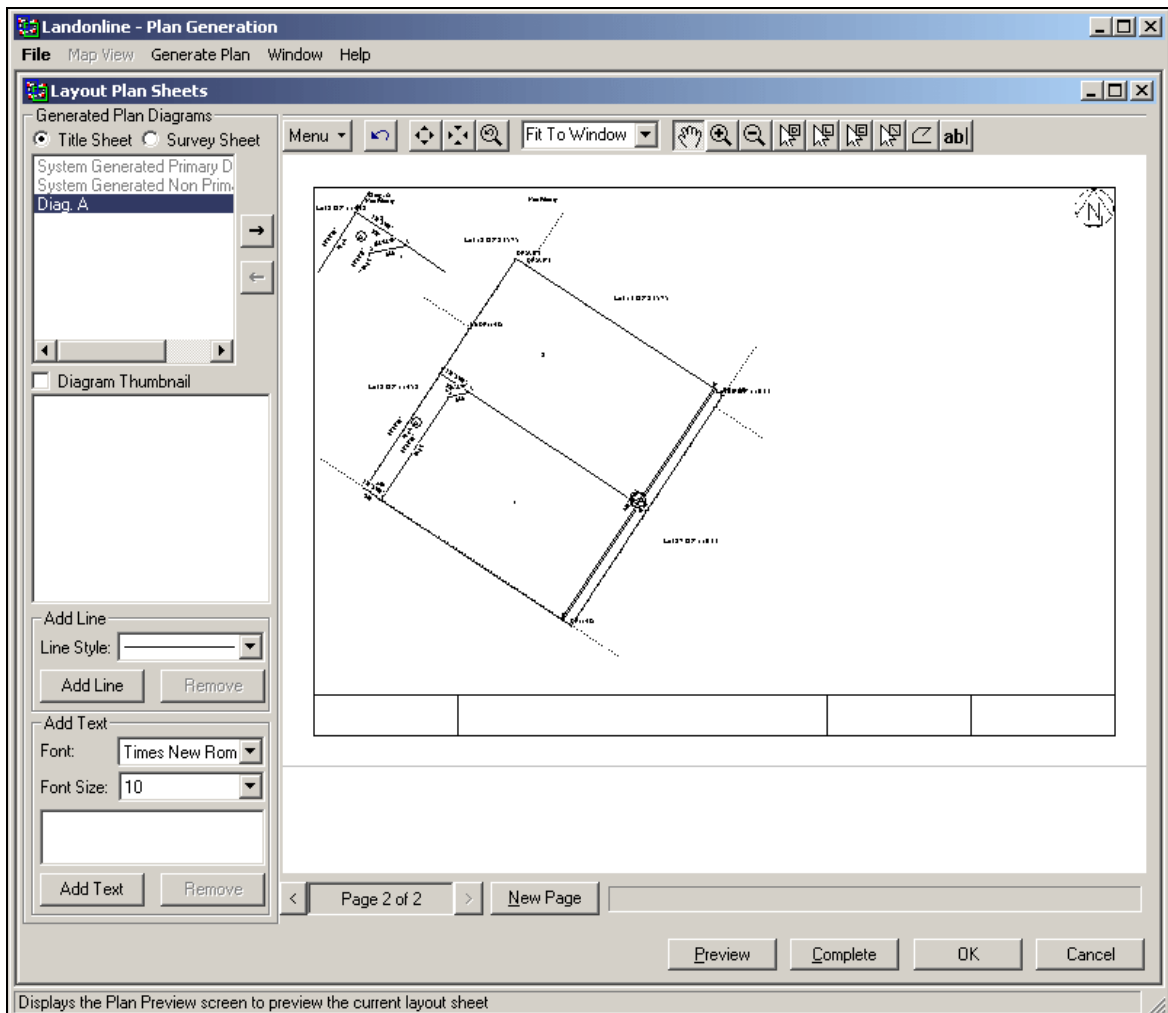
When you add a diagram to a layout sheet Landonline changes the name of the diagram in the Generated Plan Diagram list from black to grey.

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 **9.3.2.5 Maintain diagram layers**.
- If your diagrams do not display the layers or labels you require, see **9.3.4.1 Updating an e-survey captured in a previous version of Landonline**.



Henry Brown has added Diagram A to page 2 of the Title sheet. The diagram is automatically positioned in the top left corner. Henry will now drag Diagram A 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 **9.3.5.2.3 Add a new page**.




8. Click  to save and close without generating final plans.

Note: To generate digital plans now see topic **9.3.6 Generate final plans online**. 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.

9.3.5.2.2 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 **9.3.5.2.3 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  to save and close without generating final plans.

9.3.5.2.3 Add a new page

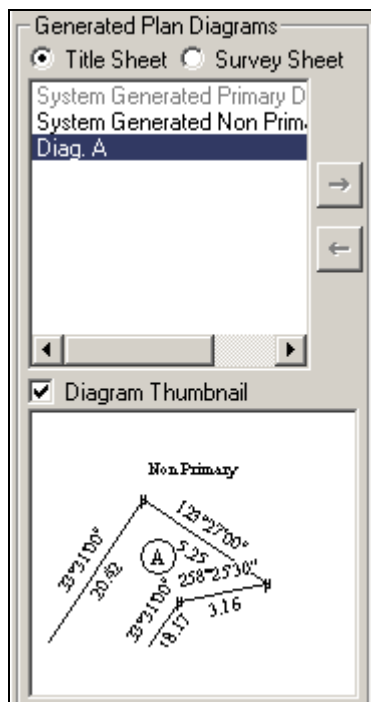
You add a new page to a layout sheet for adding the Non Primary System Generated diagram and additional user defined diagrams.

To add a new page to the selected layout sheet:

1. Click  to add a new page as the last page on the selected layout sheet.

9.3.5.2.4 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:

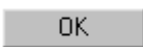
1. Check the Diagram Thumbnail checkbox.
2. Select the image in the list to view it in the preview window.

9.3.5.2.5 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.
2. Select Properties to display the Diagram Properties screen.
3. Edit the Zoom scale to the desired scale.
4. Click 

Note: Resizing a diagram will not affect the size of labels displayed for the diagram, but you will need to reposition any text you have added.

9.3.5.3 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 abutments to show the direction a stream flows). You can draw lines in any direction and draw multi segmented lines.

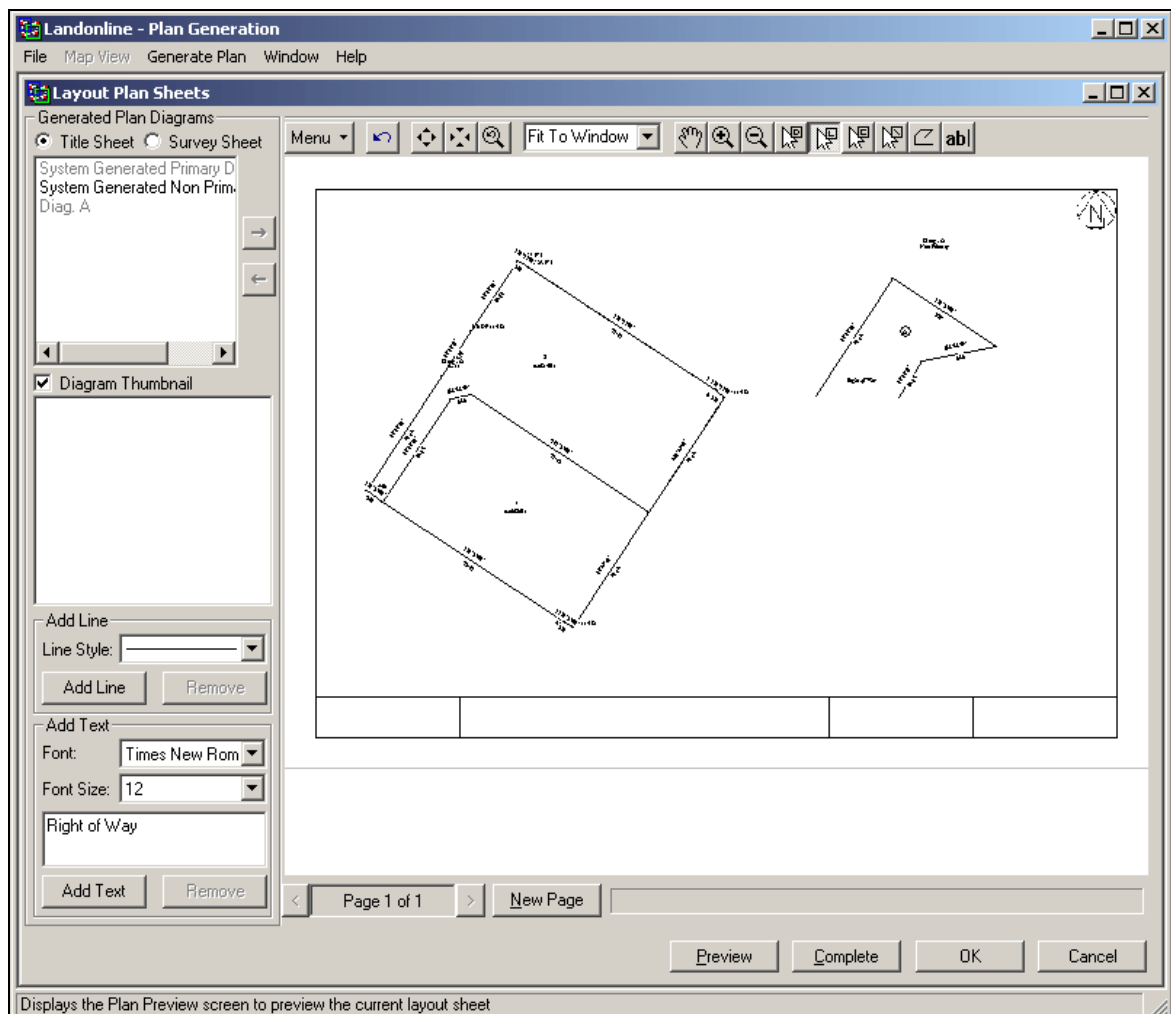
Tasks:

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.
- Edit a line added to a page.
- Delete a line added to a page.

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

9.3.5.3.1 Add text



Henry Brown has added an annotation to page 2 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 up to three 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.

9.3.5.3.2 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)
3. Select the text in the diagram. Landonline displays a 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).
2. Select Properties to display the Label Properties screen.
3. Edit the Text angle (eg 180.000)
4. Click **OK**

9.3.5.3.3 Bold text added to a page


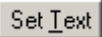
In the Layout Plan Sheets screen:

1. Select the required sheet (Title Sheet or Survey Sheet).
2. Click  (Label Selection Tool)
3. Select the text in the diagram you want to bold.
4. Right click on the selected label (ie text).
5. Select Properties to display the label Properties screen.
6. Check the Bold checkbox.
7. Click **OK**

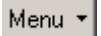
Note: You can also bold a label by selecting it and pressing Ctrl+B.

9.3.5.3.4 Edit text added to a page

In the Layout Plan Sheets screen:


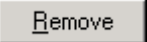
1. Select the required sheet (Title Sheet or Survey Sheet).
2. Click  (Label Selection Tool)
3. Select the text in the diagram. Landonline displays a dashed line box around the text and displays it in the Add Text area.
4. Make your edits in the Add Text area.
5. Click  to save.

Note:

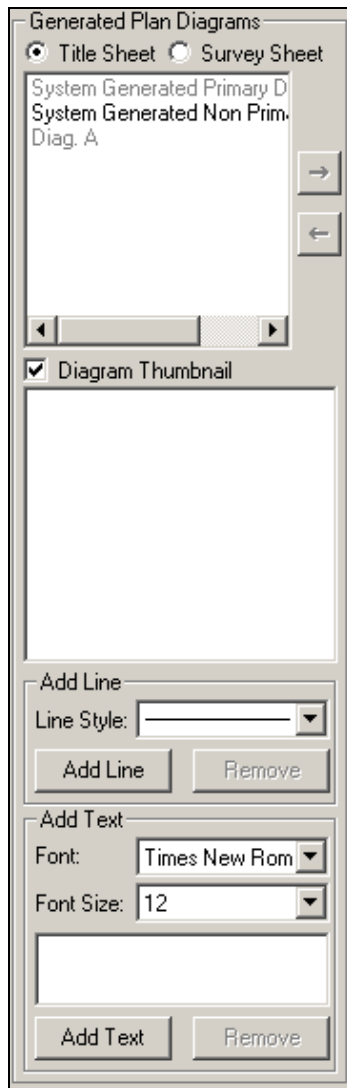
- You can also edit text added using the Label Properties screen. To display this screen, select the added text and select  | Edit | Properties, or right click on the added text and select Properties.
- You can type up to three lines of text in the Add Text area of the Layout Plan Sheets screen and in the Text field of the Label Properties screen. Press Enter to begin a new line.

9.3.5.3.5 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).
3. Select the text.
4. Click .

9.3.5.3.6 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.

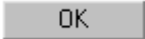
Note: To draw a multi segment line, click each point and drag in the direction you require. Double click to end the line.

9.3.5.3.7 Edit a line added to a page

In the Layout Plan Sheets screen:


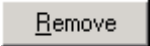
1. Select the required sheet (Title Sheet or Survey Sheet).
2. Click  (Line Selection Tool).
3. Select the line.
4. Select another Line Style in the Add Line area.
5. Click **Set Line** to save.

Alternatively:

1. Right click on the selected line.
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 

9.3.5.3.8 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).
3. Select the line.
4. Click 

9.3.5.4 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 **9.3.5.4.1 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.

9.3.5.4.1 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).

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).
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.

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.

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.

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).
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 using a polygon. Select **Menu** | Edit | Select Polygon then draw around the group of objects you require.

9.3.5.4.2 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:


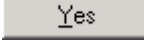
1. Select the required sheet (Title Sheet or Survey Sheet).
2. Display the page you require.
3. Click  (Coordinate Selection Tool).
4. Select the coordinate (ie mark symbol) and drag it to the required location. The mark and vectors from the selected mark move accordingly.
 - To remove the distortion, select  | 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.

9.3.5.5 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.

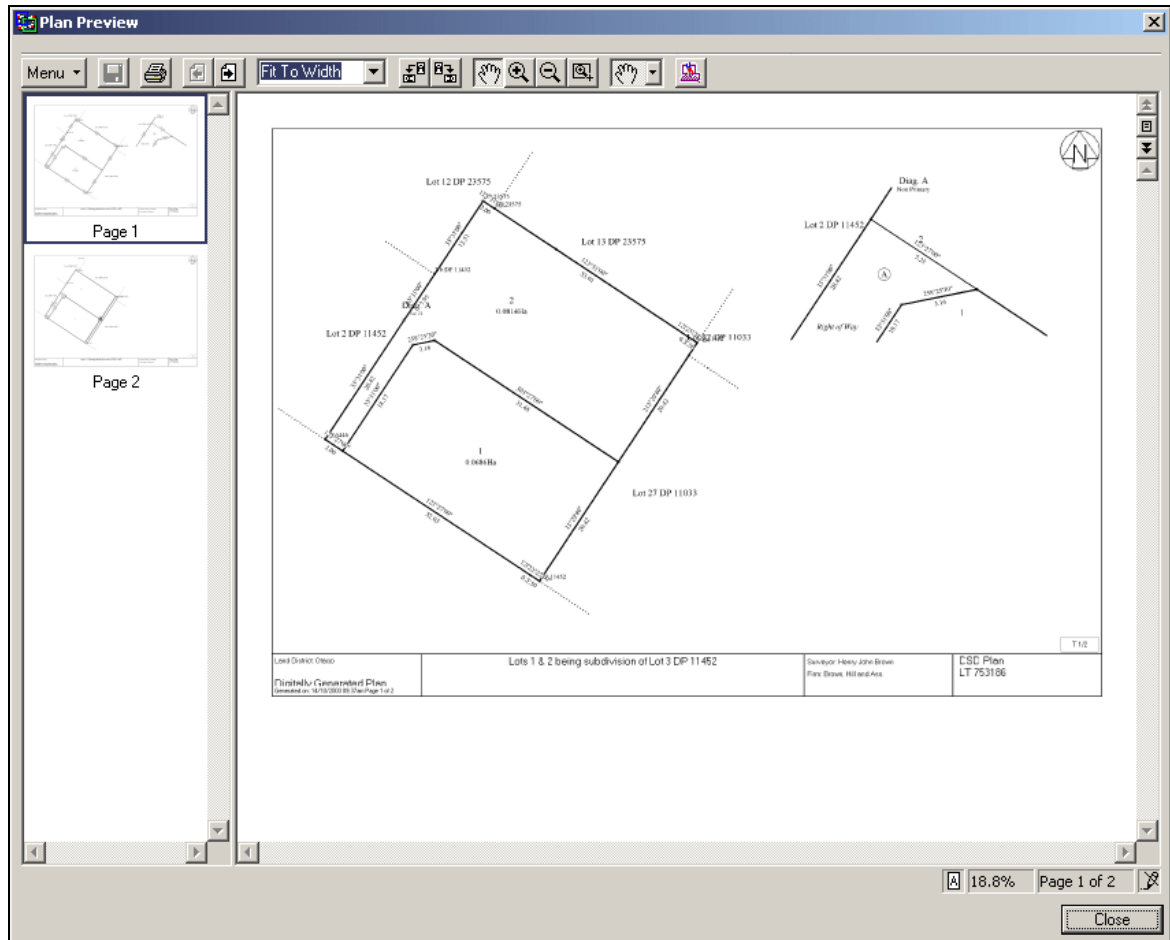
To remove a diagram from a page, in the Layout Plan Sheets screen:

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.
 - If the diagram is not on the currently displayed page, a message displays asking you to confirm removal. Click .

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*.

9.3.5.6 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.

9.3.5.6.1 Plan Preview icons

Table 9-3 lists the icons and options for viewing layout sheets in the Plan Preview screen.















Menu, Icon or Field	Action
 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 <i>e-search User Guide</i> .
 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).
 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 9-3 Plan Preview screen icons

9.3.5.6.2 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.

9.3.5.7 Work with layout sheets Toolkit

Table 9-4 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: <i>e-surveys</i> . Topic: Generate Plans – Layout Plan Sheets.

Table 9-4 Work with layout sheets Toolkit

9.3.6 Generate final plans online

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 H: 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 to save and generate the plans. A message displays advising when Plan Generation will run.
2. Click to confirm.
3. Close the Layout Plan Sheets screen.

Note:

- When you click 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 **8.5 Pre-validation report information**.
- Each time you click 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.

9.3.6.1 Generate plans Toolkit

Table 9-5 lists other tools that assist with generating plans.

Tool	Description
Landonline Help	Press F1 to display Landonline Help.
Quick Reference Cards	Section: <i>e-survey</i> Topic: Generate Plans – Layout Plan Sheets

Table 9-5 Generate plans Toolkit

9.3.7 Regenerate plans online

At any time prior to submission and after selecting 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*.

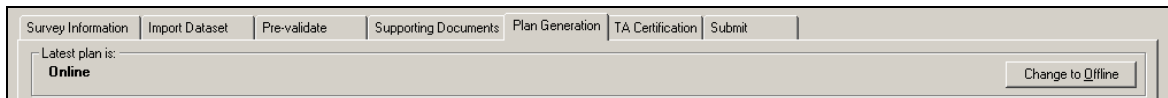
If you make changes to the user defined diagrams you will need to update layout sheets before generating the CSD Plans.

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 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.

9.4 Change the status of plan data



The Plan Generation tab displays:

- the status of the current plan (ie Online or Offline),
- any warning messages which may apply, and
- a button to allow you to manually toggle between Online and Offline states (ie and). This button also controls whether other buttons in the Plan Generation tab are active or not.

Sometimes you will need to manually toggle the Online/Offline status. For example, you export a plan for offline plan generation and then later decide you would prefer to perform online plan generation. To activate the button to perform online plan generation you must toggle the status from Offline to Online.

Note:

- When you change the status, Landonline will (if applicable) display a warning message in this area (eg **Warning: Current plan has been exported**).
- You can export plan data from Landonline when the status is either Online or Offline.

9.5 Generate plans offline

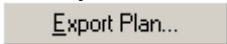
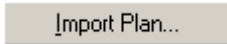
Generating plans offline allows you to export plan data (ie a package) from Landonline. Once exported, you can open this file in the Offline Plan Generation (OPG) application to define additional user diagrams and complete layout plan sheets for the *e-survey* offline.

When you are ready, you can then import the package back into Landonline and generate new plans.

There are two ways to export and import plan data:

- Direct method
- Indirect method

When you use the Indirect method to export or to import plan data, the File Transfer Service (FTS) server acts as a temporary repository for the packages being transferred. You use the FTS website to transfer (ie download and upload) the packages stored on the FTS server. For more information about FTS, see **9.5.6 Use the File Transfer Service (FTS)**.

You begin the offline plan generation process using the Plan Generation tab in the Manage Survey Transaction screen. Details of the last export or import (if any) display next to  and  in the Offline Plan Data area of the Plan Generation tab.

For more information about when you can use offline plan generation functionality, see **Appendix F: Rules for using Plan Generation**.

Tasks:

The tasks you can perform when generating a plan offline are:

- Export a plan data package.
- Re-define the Area of Interest (if required).
- Import a plan data package.
- Generate plans for imported data.
- View the event log (if required).
- Use the File Transfer Service (FTS).

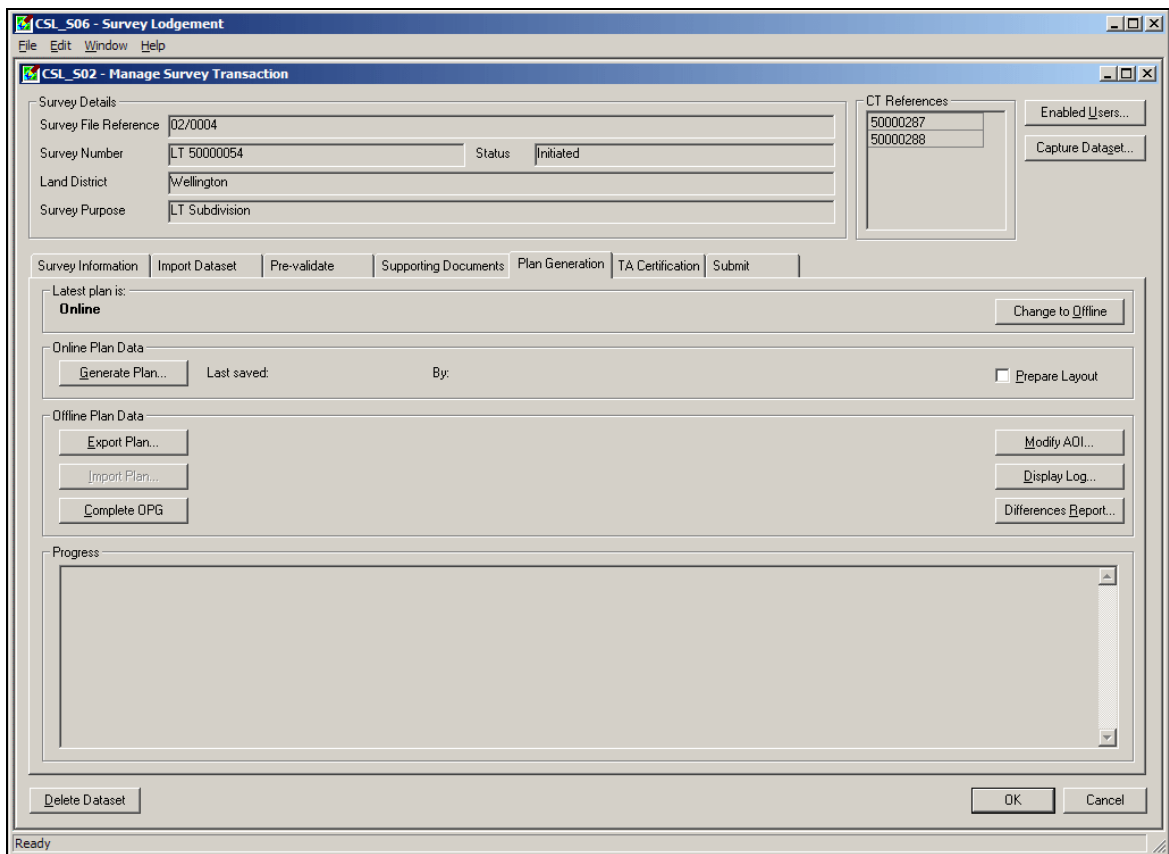
The following headings correspond with these tasks and describe them in more detail.

9.5.1 Export a plan data package

You can export plan data (ie a package) from Landonline at any time after completing Survey Capture. You can then work with the exported data offline using the Offline Plan Generation (OPG) application.

Before exporting plan data, ensure you pre-validate the *e-survey* and attend to any relevant Y rules that are fatal.

You export plan data using the Export Plan screen which is accessed from the Plan Generation tab of the Manage Survey Transaction screen.



You have two options when exporting plan data from Landonline:

- **Direct** method– you must remain in the *e-survey* transaction until the export has completed.
- **Indirect** method – using a batch process. Use this method for a very large or complex survey plan with many diagrams.

Blank pages in layout sheets will be removed before the export file is created. This includes any page with only user added text and/or lines on it (ie any page without a diagram added).

You can export the same plan data more than once. Details of the last export (if any) display next to **Export Plan...** in the Offline Plan Data area in the Plan Generation tab. For example, **Last export: 25/02/10 10:05 By: hjbrown001.**

Note: You cannot export plan data that does not contain vectors (eg Flat Plan).

Tasks:

The tasks you can perform when exporting a plan data package from Landonline are:

- Pre-validate the e-survey.
- Export by Direct method.
- Export by Indirect method.
- View an exported package email (if applicable).

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

9.5.1.1 Pre-validate the e-survey

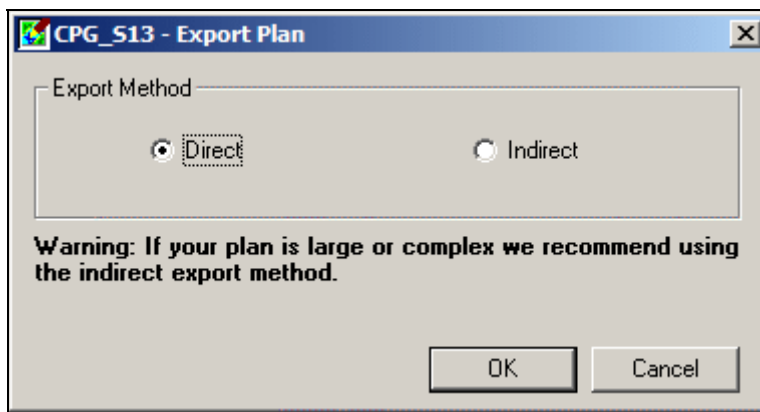
Before exporting plan data you should pre-validate the *e-survey* and attend to any relevant Y rules that are Fatal. For more information, see topic **8 Pre-validate an e-survey**.

If you export plan data and fail to correct the relevant Y rules, when you import the package into Landonline you risk being unable to submit the *e-survey*.

9.5.1.2 Export by Direct method

You export a plan data package from Landonline using the Export Plan screen. When you use the Direct method you remain in the *e-survey* until the export process has completed.

LINZ recommends that you do not use this method for a very large or complex plan with many diagrams.



To export plan data for an *e-survey*, in the Plan Generation tab:

1. Click **Export Plan...** to display the Export Plan screen.
2. Select Direct in the Export Method area.
 - To cancel exporting plan data, click **Cancel**.
3. Click **OK** to continue the export process and return to the Plan Generation tab. Progress messages display in the Progress area as the file is being prepared.
 - When data preparation has completed, the Survey Export Extract (Direct) screen displays.
 - If the preparation process fails, a message displays to advise details of the error. In this instance, the export process will be cancelled. Click **OK** to close the message and correct the problem or contact LINZ Customer Support.
4. Select the location for the exported data file in the Survey Export Extract (Direct) screen. Do not change the default name for the file.
5. Click **Save**. Landonline locks the *e-survey*, initiates the export and returns you to the Plan Generation tab. Progress messages display in the Progress area as the file is being prepared and exported.

Note:

- If you change the Survey Capture data within Landonline after exporting plan data, you will not be able to import the exported data back into Landonline. You can perform a new export and merge the updated data into your offline plan. This will then allow you to import the data.

- If a direct export fails, Landonline displays an entry in the Progress area of the Plan Generation tab as well as in the Offline Plan Generation Log screen, see **9.5.5 View the event log**.

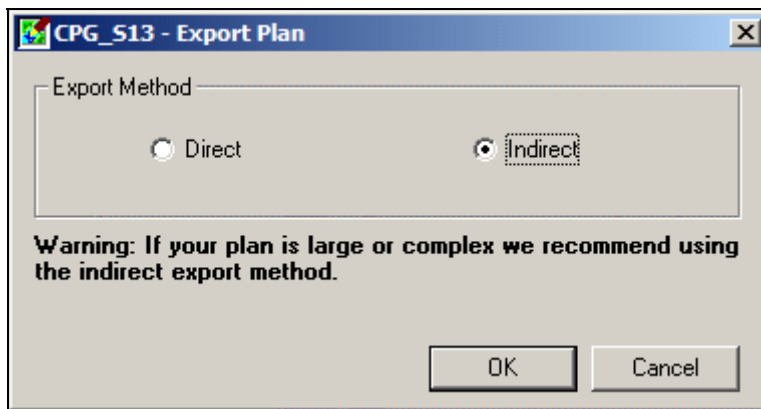
9.5.1.3 Export by Indirect method

You export a plan data package from Landonline using the Export Plan screen. The Indirect export method allows you to export plan data for an *e-survey* while you perform work on another *e-survey* or close Workspace.

Use this method for a very large or complex survey plan with many diagrams.

When the export process has completed, Landonline unlocks the *e-survey* and sends you an email advice to the email address recorded in the contact details in Landonline, see **3.8.1 Change your details**.

The exported OPG package will be available on the File Transfer Service (FTS) server for you to use offline in the Offline Plan Generation (OPG) application. You download the exported file using the FTS, see **9.5.6 Use the File Transfer Service (FTS)**.



To export plan data for an *e-survey*, in the Plan Generation tab:

1. Click **Export Plan...** to display the Export Plan screen.
2. Click **OK**. A message displays to advise that a request will be created to export the package and an email sent when the download is available.
3. Click **Yes** to continue the export process. Landonline closes the Manage Survey Transaction screen, locks the *e-survey* and creates the export request.
 - To cancel the export and return to the Plan Generation tab, click **No**.
4. When the export process has completed, Landonline unlocks the *e-survey* and sends you an email to advise whether the export was successful, see **9.5.1.4 View an exported package email**.

Note:

- If you change the Survey Capture data within Landonline after exporting plan data, you will not be able to import the exported data back into Landonline. You can perform a new export and merge the updated data into your offline plan. This will then allow you to import the data.
- Should you need to define a new Area of Interest (AOI) to export, see **9.5.2 Re-define the Area of Interest**.

9.5.1.4 View an exported package email

When you export plan data (ie a package) from Landonline using the Indirect export method, you receive an email advising the result:

- **Successful Export** - the email contains a link to the File Transfer Service (FTS) website for you to download the package to your computer to work with the data offline.
- **Failed Export** - the email contains details of the error encountered and the action you should take.

The email is sent to your current email address recorded in Landonline. To check or update these details, see **3.8.1 Change your details**.

To view the results of your indirect plan data export:

1. Open the email to view the results of your plan data export from Landonline.
 - If the export failed, follow the instructions in the email.
 - If successful, the email contains a link to the FTS website to download the package.

Note: For more information about the FTS website, see **9.5.6 Use the File Transfer Service (FTS)**.

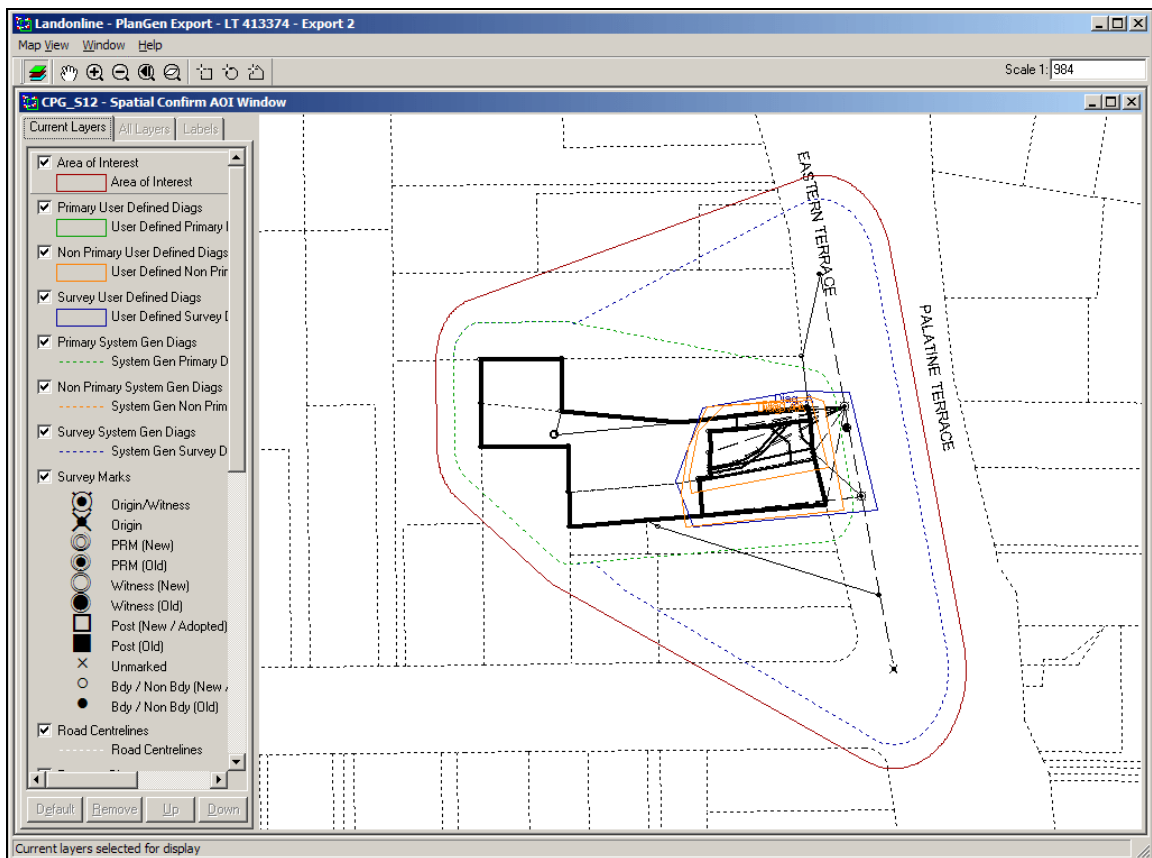
9.5.2 Re-define the Area of Interest

When you export plan data from Landonline, an Area of Interest (AOI) is automatically created around the extent of the captured survey data. You can define a new larger AOI to export, if required, using the Confirm AOI Window.

Caution: If your plan is large or you have defined complex diagrams, the Confirm AOI Window can take a long time to open. In this instance LINZ recommends you define a larger diagram using online plan generation, see **9.3.2 Define and label diagrams**.

Any new AOI you define must include all of your existing plan data. If it doesn't cover all the defined diagrams, a message displays to advise you.

Any new diagrams you define in Plan Generation online using the Spatial Window are automatically included in the default AOI to export.



Note: There is limited functionality in the Confirm AOI Window. You cannot use the Current Layers tab to select or change layers.

To define a new AOI, in the Plan Generation tab:

1. Click . A warning message displays to ask if you want to continue:
 - Click to cancel and return to the Plan Generation tab.
 - Click to display the Confirm AOI Window.
2. View details of your plan data in the Confirm AOI Window (if required). For example:
 - Click (Zoom Out) so you can define a wider AOI or click (Zoom In) to see information in more detail. For details about other icons in this window, see **9.5.2.1 Confirm AOI Window information**.
 - Select Map View | Show Context Layers to toggle these layers on or off. When context layers are toggled on, a tick displays in front of the menu option (eg Show Context Layers).
3. Define a new larger area of interest (AOI) using one of the icons in the toolbar (eg click (Define AOI by Rectangle)). A message displays to confirm whether you want to create this new AOI:
 - Click to cancel.
 - Click to confirm and continue. Landonline validates the new AOI, refreshes the Confirm AOI Window and removes the old AOI.
4. Click to close the Confirm AOI Window and return to the Plan Generation tab.

Note: Context Layers (eg coastline, lakes, urban areas) display in the Confirm AOI Window at scales smaller than 1:50,000. They exist to facilitate navigation and consist of generalised topographical information. You can toggle these layers off and on, as required using the Map View menu.

Table 9-6 lists the icons for defining a new Area of Interest in the Confirm AOI Window.











Icon or Tab	Action
 Layer Control	Click to show or hide the Layer Control tabs on the Confirm AOI Window.
 Pan	Click, then move (ie drag) the visible area in any direction.
 Zoom In	Click to zoom in to decrease the scale of the Confirm AOI Window. Each time you click the image it displays 50% larger.
 Zoom Out	Click to zoom out to increase the scale of the Confirm AOI Window. Each time you click the image it displays 50% smaller.
 Zoom Previous	Click to display the previous view of information in the Confirm AOI Window.
 Zoom Layer	Click to zoom to the minimum display scale of the active layer or to the maximum extent of the active layer if no scale has been defined.
 Define Area of Interest by Rectangle	Click and drag to define an area of interest using a rectangle.
 Define Area of Interest by Circle	Click and drag to define an area of interest using a circle.
 Define Area of Interest by Polygon	Click and drag to define an area of interest using a polygon.
 Change Scale	Enter the number in the Scale 1: field to change the zoom level of the viewing area.
Current Layers (tab)	Landonline displays the list of spatial layers currently loaded for this <i>e-survey</i> . To view Context layers (eg coastline, lakes, urban areas) use the toggle display option in the Map View menu. These will only display at scales smaller than 1:50,000. Note: You cannot select or change layers in the Current Layers tab and the All Layers tab and Labels tab are not active.


Table 9-6 Confirm AOI Window icons

9.5.3 Import a plan data package

You can import a previously exported plan data package into Landonline after working on the data offline. The status of your plan in Landonline must be Offline before you can import the new package.

There are two methods of importing an offline plan data package into Landonline:

- **Direct** – to manually import an offline plan data package from a location on your computer.
- **Indirect** – to automatically import an offline plan data package you have uploaded to the File Transfer Service (FTS).

Information about any previous import for the *e-survey* displays in the Offline Plan Data area next to  in the Plan Generation tab. For example, Last import: 26/02/10 12:15 By: hjbrown001.

During the import process, Landonline:

- Locks the *e-survey*.
- Automatically checks the *e-survey* details and version of the data file being imported.
- Generates a Differences Report detailing the changes between the previous data and the newly imported data.

Note: Packages imported into Landonline are not pre-validated. If required, you can pre-validate the *e-survey* after it has been imported. See **8 Pre-validate an *e-survey***.

Tasks:

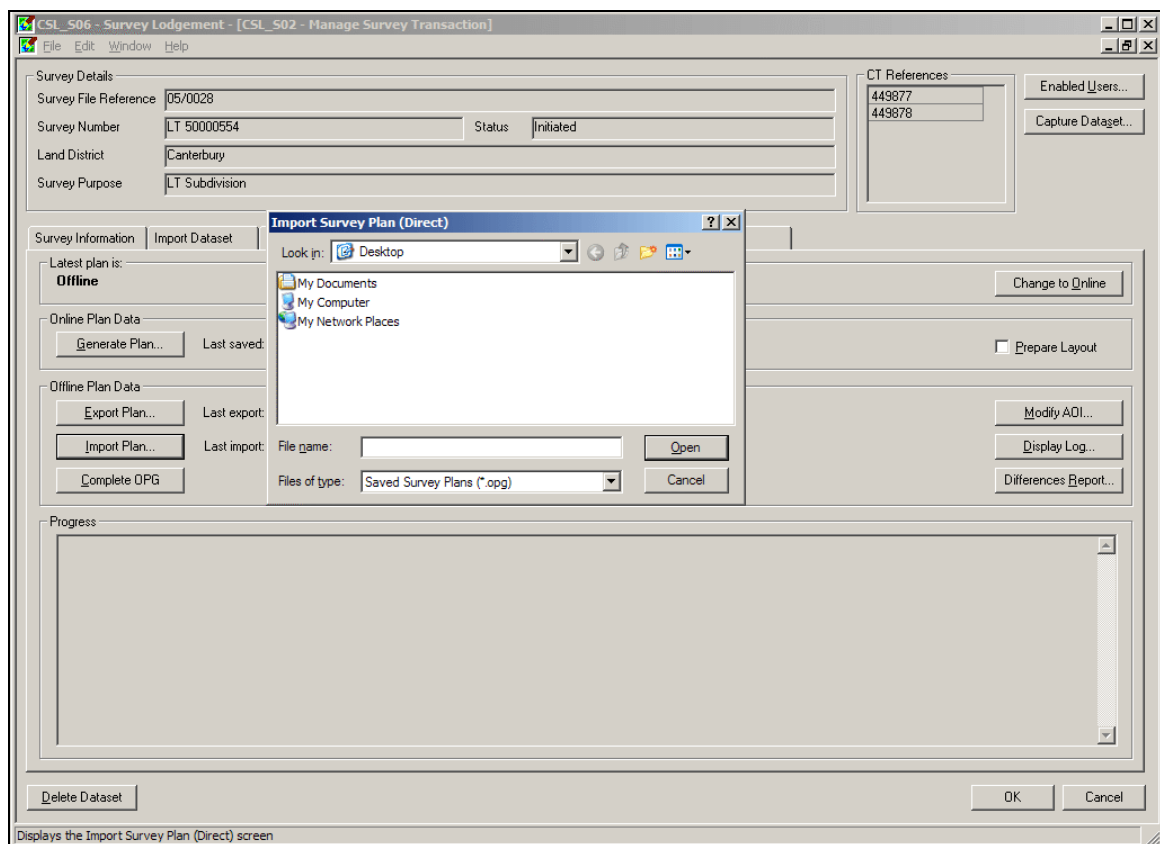
The tasks you can perform to import a plan data package into Landonline are:

- Import by Direct method.
- Import by Indirect method.
- View an imported package email (if applicable).
- View the Differences Report.

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


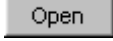
9.5.3.1 Import by Direct method

You use the Direct import method to manually import an offline plan data package back into Landonline from a location on your computer (eg after working on layout plan sheets offline using the Offline Plan Generation (OPG) application).



Packages imported into Landonline using the Direct method are not pre-validated.

To import a package data file using the Direct method, in Workspace:

1. Select the *e-survey* (for the imported package) to display the Manage Survey Transaction screen.
2. Select the Plan Generation tab.
3. Check the status in the Latest plan is area is Offline. Change if necessary. See **9.4 Change the status of plan data**.
4. Click  to display the Import Survey Plan (Direct) screen.
 - Navigate to the location of the package file on your computer and select the file to import (ie the file must have an .opg file extension).
 - Click . Landonline locks the *e-survey*, initiates the export and returns you to the Plan Generation tab. Progress messages display in the Progress area as the file is being imported.
5. If the file import does not complete successfully a message displays to advise. For more detailed information about the failure, see **9.5.5 View the event log**.
6. When the file has been imported successfully, you can:
 - View any changes between the previous data and the newly imported data, see **9.5.3.4 View the Differences report**. (A warning message also displays in the Progress area if the imported data differs.)
 - Generate plans for the imported data package, see **9.5.4 Generate plans for imported data**.

Note:

- Any changes you made online (eg to layout sheets) will be overwritten by the imported plan data.
- If you change the Survey Capture data in Landonline after exporting, the previously exported file will be rejected if imported. You can perform a new export and merge the updated data into your offline plan. This will then allow you to import the data.

9.5.3.2 Import by Indirect method

You use the Indirect import method to automatically import an offline plan data package which has been previously uploaded to the File Transfer Service (FTS). For more information about FTS, see **9.5.6 Use the File Transfer Service (FTS)**.

You don't have to be logged on to Landonline for the file to be imported. The import is automatically performed during normal business hours. Landonline locks the *e-survey* as soon as the import commences.

Should the *e-survey* be locked when the import process attempts to begin, the FTS server will continue to retry at regular intervals during normal business hours.

You receive an email to advise whether package was imported successfully. The email is sent to the email address recorded in your contact details in Landonline, see **3.8.1 Change your details**.

The import will fail if you include any invalid characters (eg superscript for metres squared or degrees) in layout sheets in the package you are importing. You will need to correct these errors before the package can be successfully imported.

Landonline also generates a Differences Report which allows you to review any difference between the original data and the new imported data. The Differences Report is available from the Plan Generation tab and also in the email you receive for a package imported using the Indirect import method.

Note:

- Any changes you made online (eg to layout sheets) will be overwritten by the imported plan data.
- If you change the Survey Capture data in Landonline after exporting, the previously exported file will be rejected if imported. You can perform a new export and merge the updated data into your offline plan. This will then allow you to import the data.

To import a package data file:

1. Check the *e-survey* in Workspace has a status of Offline. If required, change to Offline, see **9.4 Change the status of plan data**.
2. Upload the package to the FTS server. This is done outside of Landonline using the FTS website. See **9.5.6 Use the File Transfer Service (FTS)**.
 - You receive an email to advise the result of the import. See **9.5.3.3 View an imported package email**.
3. If the file was imported successfully, display the *e-survey* in Workspace and select the Plan Generation tab.
4. Perform the following actions, as required:
 - View any changes between the previous data and the newly imported data, see **9.5.3.4 View the Differences report**.
 - Generate plans for the new imported data. See **9.5.4 Generate plans for imported data**.

Note: Packages imported into Landonline using the Indirect method are not pre-validated.

9.5.3.3 View an imported package email

When you import plan data (ie a package) into Landonline using the Indirect import method, you receive an email advising the result:

- **Successful Import** - the email contains the result and a copy of the Differences Report.
- **Failed Import** - the email contains details of the error encountered and the action you should take.

The email is sent to your current email address recorded in Landonline. To check or update these details, see **3.8.1 Change your details**.

To view the results of your indirect plan data import:

1. Open the email to view the results of your plan data import into Landonline.
 - If successful, view details of the Differences Report contained in the email.
 - If the import failed, follow the instructions in the email. If required, view details of the event log for the imported package in the Plan Generation tab, see **9.5.5 View the event log**.

Note: The Differences Report is also available from the Plan Generation tab, see **9.5.3.4 View the Differences report**.

9.5.3.4 View the Differences report

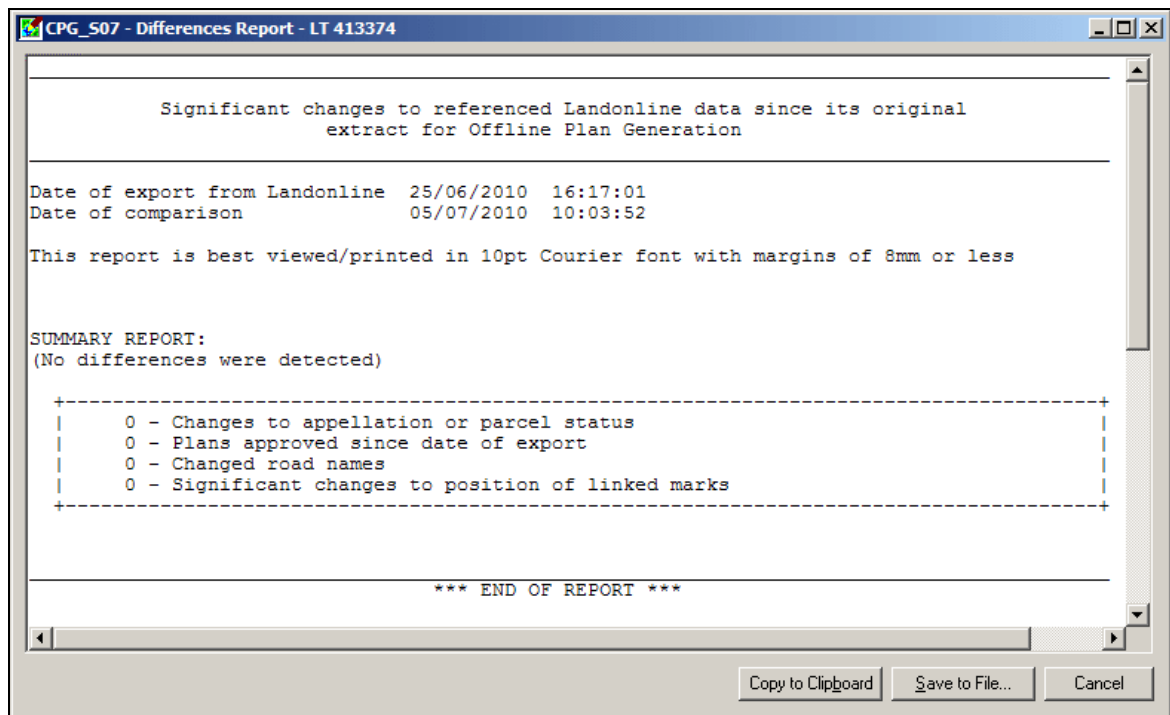
Landonline automatically generates a Differences Report each time you import a data file (ie a package) back into Landonline. The report outlines specific changes relevant to the Landonline data (if applicable). It also advises when no differences are detected.

The changes outlined in the Differences Report are:

- Appellation or parcel status.
- Plans approved since the date of export.
- Changed road names.
- Significant changes to the position of linked marks.

You can save the Difference Report to a file on your computer and copy the contents to the clipboard to paste into another application.

The Differences Report is available from the Plan Generation tab and also in the email you receive for a package imported using the Indirect import method.



To view the Differences report, in the Plan Generation tab:

1. Click **Differences Report...** to display the Differences Report screen.
2. Scroll to view all details in the report, if required.
3. To copy the report to the clipboard:
 - Click **Copy to Clipboard**. You can then paste the contents into another application outside Landonline.
4. To save the report to a file on your computer:
 - Click **Save to File...** to display the Save screen.
 - Select the location for the file.
 - Enter the name of the file and select the type of file to save (ie select Rich Text Format or Text format).
 - Click **Save** to save the file and return to the Differences Report screen.
5. Click **Cancel** to close the screen and return to the Plan Generation tab.

Note: The saved Differences Report file is designed to display in portrait on an A4 page. To correctly view or print this saved report in portrait on an A4 page, you must set the font to 10pt Courier and the margins to 8mm (or 0.80cm) or less.

9.5.4 Generate plans for imported data

After importing a plan data package into Landonline, you can then create a request to generate the final plans for the new plan data using the Plan Generation tab in the Manage Survey Transaction screen.

Note: You can only create this request to generate plans if:

- you have not accessed online Plan Generation since importing the new package data, or
- you did not open the Layout Plan Sheets screen in Landonline before exporting the plan data for this plan. For more information, see **Appendix F: Rules for using Plan Generation**.

Landonline does not pre-validate plan data before generating the plans. If you need to pre-validate before generating plans, see chapter **8 Pre-validate an e-survey**. The plan generation status must be Online to pre-validate.

The generated final plans contain the Title Plan and the Title Diagram, with reduced information and symbology from the CSD Plan. The layout of all plans are identical, see **Appendix H: Details of generated plans**.

All plan images have Draft displayed in the corner. Landonline removes this when you submit the *e-survey*.

To generate plans for imported plan data, in the Plan Generation tab:

1. Check the status of the plan is Offline. If necessary, change the status to Offline. See **9.4 Change the status of plan data**.
2. Click . A message displays to advise when the Plan Generation will run.
3. Click to generate the plans.
 - If you decide not to generate the plans at this time, click .
4. Close the Manage Survey Transaction screen to initiate the request.
 - You receive a Plan Generation Notice in your My Messages folder in Workspace with the plans attached. You can view and save the attached images, as required. See **3.7.1.2 View and save attachments in My Messages**.

Note: Each time you click a new set of images are created and attached to an online message. This enables you to build up a history of plan images, if required.

Caution: LINZ recommends that you use this option to view your uploaded plans in preference to entering online layout plan sheets. If you use online plan generation after importing a plan, there will be a delay while Landonline regenerates the plans. Due to the difference between the online and offline applications, the result will also be slightly different to that viewed offline.

9.5.5 View the event log

The plan generation event log enables you to view steps in the offline processes performed in Landonline for the current *e-survey* using the Offline Plan Generation Log screen.

Landonline adds a record to the event log in the Offline Plan Generation Log screen at every step of each process (eg when the process completes, a status changes, an error occurs and when the process has been terminated).

You can save the event log information in Text format (ie txt) or Comma Separated Value format (ie csv) which may be preferred by spreadsheet users.

Msg Type	Event	User Id	Date/Time	Description
Information	Export package	hjbrown001	20 May 2010 11:37:28	PlanGen data file created.
Information	Export package	hjbrown001	20 May 2010 11:37:28	Data compressed.
Information	Export package	hjbrown001	20 May 2010 11:37:28	Package Exported
Information	Export package	hjbrown001	20 May 2010 11:38:05	Package C:\Documents and Settings\Jan\My Documents\LINZ\Offline Plan Gen\Packages\Downloads\LT_419948_001.opg containing LT 419948 (Exp 1) created from Landonline on 20/05/2010 11:38 am by hjbrown001 (via direct export)
Information	Export package	hjbrown001	20 May 2010 11:38:39	PlanGen data file created.
Information	Export package	hjbrown001	20 May 2010 11:38:39	Data compressed.
Information	Export package	hjbrown001	20 May 2010 11:38:39	Package Exported
Information	Export package	hjbrown001	20 May 2010 11:38:46	Package C:\Documents and Settings\Jan\My Documents\LINZ\Offline Plan Gen\Packages\Downloads\LT_419948_002.opg containing LT 419948 (Exp 2) created from Landonline on 20/05/2010 11:38 am by hjbrown001 (via direct export)

To view the event log for plan data offline processes, in the Plan Generation tab:

1. Click **Display Log...** to display the Offline Plan Generation Log screen.
2. Scroll to view details in the event log.
 - If required, click a column heading to sort the data in that column in ascending or descending order.
3. Copy the log to a file on your computer:
 - Click **Copy to Clipboard**. You can then paste the contents into another application outside Landonline.
4. To save the log to a file on your computer:
 - Click **Save to File...** to display the Save screen.
 - Select the location for the file.
 - Change the default name of the file (if required) and select the type of file to save (ie Comma Separated Value format or Text format).
 - Click **Save** to save the file and return to the Offline Plan Generation Log screen.
5. Click **Cancel** to close the screen and return to the Plan Generation tab.

9.5.6 Use the File Transfer Service (FTS)

The File Transfer Service (FTS) allows the indirect transfer of Offline Plan Generation (OPG) packages to and from Landonline using a FTS Server.

You access the FTS Server from the FTS website (<https://fts.landonline.govt.nz>)

You use the FTS website to:

- Download a package exported from Landonline.

- Upload a package to the FTS server so it is available to be automatically imported into Landonline.

For details about the indirect export and import methods, see **9.5.1.3 Export by Indirect method** and **9.5.3.2 Import by Indirect method**.

To transfer files using the FTS website you must:

- be an enabled user for the survey, and
- have your current Landonline digital certificate on the computer you are using.

Any authorised user can use the OPG application to complete layout sheets once a package has been downloaded.

For complete details about transferring files using the FTS website and about the OPG application, refer to the **Offline Plan Generation (OPG) User Guide** or the **OPG Help**.