

# 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 <i>e-survey</i> . 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 <i>e-survey</i> , 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 proprietorship. 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	Generally easement parcels. Current parcels in this network may overlap each other and current primary parcels, but only in a way that a current secondary parcel cannot overlap more than one current primary parcel.
Tertiary	Polygonal	Current parcels in this network are similar to the current secondary parcels except that they cannot overlap more than one current primary parcel. For example, mining parcels, leasehold parcels, covenants, etc.
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: <ul style="list-style-type: none"> <li>flats and units where there is no spatial definition in Landonline, except as depicted on the plan image</li> <li>non-survey defined parcels.</li> </ul>

## 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 <i>e-survey</i> . When the <i>e-survey</i> is registered the parcel becomes current.
Extinguished	The parcel is replaced by parcels created on the <i>e-survey</i> , or the parcel is expired. When the <i>e-survey</i> is registered the parcel becomes historic.
Referenced	The parcel is related to the <i>e-survey</i> , but is not created or extinguished and its status will not change as a result of the <i>e-survey</i> . For example: <ul style="list-style-type: none"> <li>• fee simple parcels in flats or unit plans</li> <li>• an underlying fee simple parcel in an easement plan.</li> </ul> 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 <i>e-survey</i> 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 <i>e-survey</i> , but will most likely have their boundaries affected. For example: <ul style="list-style-type: none"> <li>• 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.)</li> <li>• When erosion occurs in favour of another parcel that is not created by the <i>e-survey</i>, that parcel will deem to be encroached.</li> </ul> Encroached parcels extend the external boundary of the <i>e-survey</i> 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 <i>e-survey</i> 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 CT 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: Rules for using Plan Generation

### Online and Offline plan generation status

The current status of plan data displays at the top of the Plan Generation tab in the Manage Survey Transaction screen.

- The status must be Online to access Survey Capture, Online Plan Data (in Plan Generation) and perform other *e-survey* functions.
- You can only change the status of plan data for an *e-survey* after it has been exported.
- You can export plan data more than once for the same plan. Once the initial export has been performed you can export again whether the status of this data is Online or Offline.
- The status must be Offline to import plan data (ie a package).
- When the status is Offline, all online Plan Generation screens display in View Only mode. (This also applies to screens in Survey Capture.)

### Complete OPG button

You cannot use the  button to generate plans for imported plan data in the Plan Generation tab in the Manage Survey Transaction screen when:

- There is no data to be imported (ie the plan data has not been exported)
- The status of the plan data is Offline.
- You have opened online Plan Generation since the last import.
- You have changed Survey Capture data since the last import.
- There were no images in the last imported package.
- You opened the Layout Plan Sheets screen before exporting the plan data. (You must return to the Layout Plan Sheets screen to preview and/or complete plan generation from there.)

#### Caution:

- Do not enter online layout plan sheets unless you have made a conscious decision to complete your work online.
- If you enter online layout plan sheets after importing offline data, there will be a delay while Landonline regenerates the diagrams. The result will also differ slightly to that viewed offline, due to the difference between the online and offline applications.

### Warning messages in Plan Generation tab

In the Plan Generation tab of the Manage Survey Transaction screen, Landonline will (if applicable) display warning messages about your plan data. These messages display at the top of the Plan Generation tab as a reminder or prompt to you.

For example:

- The current online plan data has been exported.
- Online plan data has changed since the last export.

- Current plan data has been exported.
- Survey Capture data has been edited since last export <edited datetime> By <user name>.
- Survey Capture data is more recent than Online plan data <edited datetime> By <user name>.
- A package is queued for indirect import, but will fail if Plan Generation status remains as Online.
- A package is queued for indirect import.



## Appendix G: 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. <b>Note:</b> 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. <b>Note:</b> 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. <b>Note:</b> 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. <b>Note:</b> <ul style="list-style-type: none"> <li>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.</li> <li>Vector dimensions include bearing, distance, chord bearing, arc length and arc radius measurements.</li> </ul>
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. <b>Note:</b> 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 H: 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 <i>e-survey</i> that form part of the CSD Plan.
Mark and Vector list	A list of all marks and vectors recorded in the <i>e-survey</i> .
Schedule / Memorandum	If applicable. This is a scanned .tiff image attached as a Schedule/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.
Occupation diagram	If applicable. This is a scanned .tiff image attached as an Occupation diagram type of supporting document.
Survey Graphic	<ul style="list-style-type: none"> <li>Survey System Generated Diagram.</li> <li>User defined detail survey diagrams.</li> </ul>
Title Graphic	<ul style="list-style-type: none"> <li>Primary System Generated Diagram (Primary parcels).</li> <li>Non Primary System Generated Diagram (Non-primary parcels).</li> <li>User defined detail title diagrams.</li> </ul>
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.

### Title Plan pages

Content	Details
Title Plan header	Structured text details for the <i>e-survey</i> 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)	<ul style="list-style-type: none"> <li>Primary System Generated Diagram (Primary parcels).</li> <li>Non Primary System Generated Diagram (Non-primary parcels).</li> <li>User defined detail title diagrams.</li> </ul>
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)	<ul style="list-style-type: none"> <li>Primary System Generated Diagram (Primary parcels).</li> <li>Non Primary System Generated Diagram (Non-primary parcels).</li> <li>User defined detail title diagrams.</li> </ul>
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 I: 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 CT 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 CT 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 CT 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

Layers	Labels	Layer Optional
User Added CT 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 CT 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 CT 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 CT 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 CT 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
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 CT 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 CT and Abuttals	None	Yes

## Appendix J: 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 <i>e-survey</i> .
Survey Firm	Name of the Survey firm associated with the <i>e-survey</i> .
Surveyor Declaration	Surveyor's declaration for the <i>e-survey</i> .
Survey Details	Description of the <i>e-survey</i> (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 <i>e-survey</i> .
Comprised In	Reference for the title or gazette/document being surveyed.
Created Parcels	Parcel, CT 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 <i>e-survey</i> .
Survey Firm	Name of the Survey firm associated with the <i>e-survey</i> .
Surveyor Declaration	Surveyor's declaration for the <i>e-survey</i> .
Survey Details	Description of the <i>e-survey</i> (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 <i>e-survey</i> (ie survey number, land district and (if applicable) bearing correction applied).
Territorial Authorities	Name of the territorial authorities recorded against the <i>e-survey</i> .
Comprised In	Reference for the title or gazette/document being surveyed.
Created Parcels	Parcel, CT 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 <i>e-survey</i> .
Coordinate System	Coordinate System of the <i>e-survey</i> .
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 K: e-survey notifications

This lists the *e-survey* notifications and who receives them.

Section	Description	Recipient
Pre-allocation of Cadastral Survey Dataset & CT References Notice	Advises the numbers of CT references allocated to the <i>e-survey</i> . You receive this notice when you save the <i>e-survey</i> and each time additional CTs are allocated.	Surveyor
Batch Pre-validation Result	Advises the results of a pre-validation performed on an <i>e-survey</i> 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 <i>e-survey</i> by LINZ.	Surveyor and Primary Contact
TA Certification Request Notice	Advises the Territorial Authority an <i>e-survey</i> 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 <i>e-survey</i> .	Surveyor
Rejection Notice	Advises an <i>e-survey</i> has failed submission.	Surveyor
Lodgement Notice	Advises an <i>e-survey</i> has been successfully submitted to Landonline. You receive this notice every time you successfully submit an <i>e-survey</i> , including when returned to LINZ from requisition.	Surveyor
Requisition Notice	Advises the actions required to make an <i>e-survey</i> compliant before re-submission.	Surveyor
Approval Notice	Advises an <i>e-survey</i> has been approved by LINZ.	Surveyor
MLC Approval Notice	Advises the Maori Land Court (MLC) a Maori Land <i>e-survey</i> has been approved by LINZ and requires MLC approval.	Maori Land Court
Deposit Notice	Advises an <i>e-survey</i> has been deposited.	Surveyor and Territorial Authority
Withdrawal / Deletion Notice	Confirms withdrawal or deletion of an <i>e-survey</i> .	Surveyor and Primary Contact
Inactive Survey Notice	Advises an <i>e-survey</i> in Workspace has been inactive for an extended period. This notice requests you to action the <i>e-survey</i> .	Surveyor and Primary Contact

## Appendix L: 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

Document Type	Intent or Purpose	Attach to an <i>e-survey</i>
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 <i>e-survey</i> .	Yes
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 <i>e-dealing</i> .	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 <i>e-survey</i> 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 <i>e-survey</i> .	Yes
Field Note	Record of observations taken in the field by a surveyor and associated with the <i>e-survey</i>	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 <i>e-survey</i> .	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

<b>Document Type</b>	<b>Intent or Purpose</b>	<b>Attach to an e-survey</b>
Plot / Diagram	Plot or diagram to support survey definition, eg aerial photograph, digitised stream fix.	Yes
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
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 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
Withdraw Instrument/Dealing	Request to withdraw an instrument or dealing.	No (Conveyancing firms only)

## Appendix M: 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.

<b>Survey Description</b>	<b>Dataset Types</b>	<b>Survey Type</b>	<b>Survey Usage</b>	<b>Usage to Define Spatial Extent of Interests</b>
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.
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

<b>Survey Description</b>	<b>Dataset Types</b>	<b>Survey Type</b>	<b>Survey Usage</b>	<b>Usage to Define Spatial Extent of Interests</b>
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.

<b>Survey Description</b>	<b>Dataset Types</b>	<b>Survey Type</b>	<b>Survey Usage</b>	<b>Usage to Define Spatial Extent of Interests</b>
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.
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.

<b>Survey Description</b>	<b>Dataset Types</b>	<b>Survey Type</b>	<b>Survey Usage</b>	<b>Usage to Define Spatial Extent of Interests</b>
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.
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

<b>Historical Survey Purpose</b>	<b>Substitute Survey Purpose</b>
Control	Monumentation CSD
Covenant	Land Transfer Plan Land Covenant, or 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 N: Manage Survey Transaction screen information

### Manage Survey Transaction screen

Field and Button	Action
Survey Details	Landonline displays details of the <i>e-survey</i> . To change these details, edit the corresponding field in the Survey Information tab. You can edit details until submitted.
CT References	If an existing survey plan has pre-allocated CT references, Landonline displays a list of the numbers. For a new plan, Landonline displays a list of CT references you allocated to this <i>e-survey</i> . This is based on the number you typed in the Additional No. of CT References field.
Enabled Users...	Click to display the Enabled Users screen to add the names of staff members who can work on this <i>e-survey</i> .
Capture Dataset...	Click to open Survey Capture to capture an <i>e-survey</i> . For more information, see <b>Chapter 7 Capture an <i>e-survey</i></b> .
Delete Dataset / Withdraw Dataset	Click to delete or withdraw the <i>e-survey</i> 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 <i>e-survey</i> .

### 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 <i>e-survey</i> making it easy to identify when billing your clients.
Survey Purpose	Select the purpose of the <i>e-survey</i> from the drop down list.
Previous Unit Plan Stage	If this <i>e-survey</i> 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 <i>e-survey</i> (eg Lots 14-17 being subdivision of Lot 1 DP 70806).
Surveyor	Type the user Id of the surveyor who is responsible for the <i>e-survey</i> . 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 <i>e-survey</i> .
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 <i>e-survey</i> . 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 <i>e-survey</i> .
Additional No. of CT References	Type the number of provisional CT references required for this <i>e-survey</i> . You can only allocate CT references after a survey number has been allocated. You cannot allocate more than 99 CT references at one time.
Allocate CTs	Click to allocate the additional CT references and add them to the list in the CT References area.
Inactive Survey Notification Date	Landonline displays the date on which this <i>e-survey</i> will become inactive. The date is based on a pre-defined inactive survey period. If there has been no activity for the <i>e-survey</i> 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 <i>e-survey</i> .

## Pre-validate tab

Field and Button	Action
Last Pre-validate	Landonline displays the date the <i>e-survey</i> was last pre-validated.
Batch Pre-validate	Click to indicate this <i>e-survey</i> 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 <i>e-survey</i> .
Exception...	Click to display the Exception Process screen to request LINZ to further investigate why your <i>e-survey</i> 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 <i>e-survey</i> .

## Supporting Documents tab

Field and Button	Action
Type	Landonline displays the type of supporting document. For more information, see <b>Appendix L: <i>e-survey</i> supporting document types</b> .
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 <i>e-survey</i> 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 <i>e-survey</i> .
View...	Click to display the image of the selected supporting document.

## Plan Generation tab

Field and Button	Action
Latest Plan is	Landonline displays the status of your layout sheet data (ie Online or Offline). When applicable, a warning message also displays here (eg Survey capture data has altered since the last export <date:time> by <user Id>).
Change to Offline Change to Online	Click to manually change the status of your plan data from Offline to Online or vice versa. Each time you click this button the button name changes to the opposite status.
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 <i>e-survey</i> 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 <i>e-survey</i> .  <b>Note:</b> 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.
Export Plan...	Click to display the Export Plan screen to select the export method you require. If plan data has already been exported, Landonline displays the details next to the Export Plan... button (ie the date and time and the User Id of the person who last exported the data).

Field and Button	Action
Import Plan...	Click to import a file of plan data back into Landonline using the Direct import method. You can only import a file with an OPG extension. If plan data has already been imported, Landonline displays the details next to the Import Plan... button (ie date and time and the User Id of the person who last imported the data). Any new imported data will overwrite this file.
Complete OPG	Click to create a request to generate the CSD Plan components for the imported plan data package. Landonline only initiates this request after you close the Maintain Survey Transaction screen. When the plans have been generated, you receive a notice in your My Messages folder in Workspace with the plan files attached. <b>Note:</b> The pre-validation rules do not run during this process.
Modify AOI...	Click to display the Confirm AOI Window to change the area of interest for the plan to export.
Display Log...	Click to display the Offline Plan Generation Log screen to view the event log for offline plan generation processes (eg export process, import process).
Differences Report...	Click to display the Differences Report screen to view any changes to relevant Landonline data.
Progress	Landonline displays progress messages as each offline plan generation process is being executed (eg while data is being exported and imported).

## 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 <i>e-survey</i> . The TA can provide you with a reference to enter when you submit the <i>e-survey</i> if one has been allocated.
Certification Required	Check to indicate you require TA Certification for the <i>e-survey</i> 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.

## 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 <i>e-survey</i> . Note: LINZ does not provide a scanning service. They will only scan and attach documents to your <i>e-survey</i> 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 <i>e-survey</i> in XML file. This copy will always be in the latest version of LandXML Schema.
Online Messaging	Click to indicate you wish to receive notification of the approved <i>e-survey</i> by online message.
email	Click to indicate you wish to receive notification of the approved <i>e-survey</i> by email.
Batch Submit	Check to indicate you wish to submit the <i>e-survey</i> by batch.
Submit	Click to certify and submit the <i>e-survey</i> .

## Appendix O: 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 <i>e-survey</i> 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 <i>e-survey</i> was completed. Use the format dd/mm/yyyy.
Survey Class	Select the class of the <i>e-survey</i> from the drop down list. For an <i>e-survey</i> 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 <i>e-survey</i> was created, Landonline displays the description. You can change it if required.
Coordinate System	Select the coordinate system used by the surveyor for the <i>e-survey</i> from the drop down list.
Comprised in Reference	Type details of all titles and documents affected by the <i>e-survey</i> . 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 <i>e-survey</i> . 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 <i>e-survey</i> .
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.

## 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 <i>e-survey</i> , the plan number defaults to the current <i>e-survey</i> 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.
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.
Action	Click to indicate whether the mark is: <ul style="list-style-type: none"> <li>• Original – an original mark. (All other fields in this area of the screen are read only.)</li> <li>• Renewed– replaces an existing mark in Landonline.</li> <li>• Disturbed – is a disturbed mark in Landonline.</li> </ul>
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.

Field and Button	Action
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 <i>e-survey</i> , the plan number defaults to the current <i>e-survey</i> 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: <ul style="list-style-type: none"> <li>• 0-Nbdy (ie Non Boundary)</li> <li>• 1-Pri (ie Primary)</li> <li>• 2-Sec (ie Secondary)</li> <li>• 3-Pri,Sec (ie Primary, Secondary)</li> <li>• 4-SecCL (ie Secondary Centreline)</li> <li>• 5-Ter (ie Tertiary)</li> <li>• 6-TerCL (ie Tertiary Centreline)</li> <li>• 7-Str (ie Strata)</li> </ul> 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.
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.
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.

Field and Button	Action
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: <ul style="list-style-type: none"> <li>• 0-Nbdy (ie Non Boundary)</li> <li>• 1-Pri (ie Primary)</li> <li>• 2-Sec (ie Secondary)</li> <li>• 3-Pri,Sec (ie Primary, Secondary)</li> <li>• 4-SecCL (ie Secondary Centreline)</li> <li>• 5-Ter (ie Tertiary)</li> <li>• 6-TerCL (ie Tertiary Centreline)</li> <li>• 7-Str (ie Strata)</li> </ul>
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: <ul style="list-style-type: none"> <li>• 0-Nbdy (ie Non Boundary)</li> <li>• 1-Pri (ie Primary)</li> <li>• 2-Sec (ie Secondary)</li> <li>• 3-Pri,Sec (ie Primary, Secondary)</li> <li>• 4-SecCL (ie Secondary Centreline)</li> <li>• 5-Ter (ie Tertiary)</li> <li>• 6-TerCL (ie Tertiary Centreline)</li> <li>• 7-Str (ie Strata)</li> </ul>
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.

Field and Button	Action
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.
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: <ul style="list-style-type: none"> <li>Bearing of the misclose</li> <li>Distance of the misclose</li> <li>Misclose RF representative fraction (ie the ratio of the misclose to the entire circuit distance).</li> </ul>
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: <ul style="list-style-type: none"> <li>0-Nbdy (ie Non Boundary)</li> <li>1-Pri (ie Primary)</li> <li>2-Sec (ie Secondary)</li> <li>3-Pri,Sec (ie Primary, Secondary)</li> <li>4-SecCL (ie Secondary Centreline)</li> <li>5-Ter (ie Tertiary)</li> <li>6-TerCL (ie Tertiary Centreline)</li> <li>7-Str (ie Strata)</li> </ul>

## Parcel List screen

Field and Button	Action
Parcel List	Landonline displays details of appellations for parcels captured in the <i>e-survey</i> .
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.

Field and Button	Action
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 <b>Parcel intents in Landonline Help</b> .
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.
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.



Field and Button	Action
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 <i>e-survey</i> , including their Area and CT when it has been allocated. When a parcel has more than one CT allocated to it, the CT field displays Multiple instead of a reference number.
Available CTs	Landonline displays a list of available CT references for the selected parcel.
Allocated CTs	Landonline displays a list of CT references allocated to the selected parcel.
Add ->	Click to copy CTs selected in Available CTs to the Allocated CTs list.
<- Remove	Click to remove the selected CTs from the Allocated CTs list.
New CT	If there is no CT reference provisionally allocated, click New CT to allocate a new CT for the <i>e-survey</i> and automatically link it to the selected parcel. The new CT reference displays in the Available CTs list.



## Appendix P: 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 CT boundary.
 Add Selected as CT Bdy	Click to add the selected existing parcel boundary line to the title diagram(s) as a CT boundary line.
 Draw Line (CT Bdy)	Click, then draw a CT 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: <ul style="list-style-type: none"> <li> (Define Primary Diagram by Rectangle) To define the area click in the top left corner and drag over the area.</li> <li> (Define Primary Diagram by Circle) To define the area click where you want the centre of the circle and drag outwards.</li> <li> (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.</li> </ul>
 Add Non Primary Diagram	Click to define a Non Primary diagram in the Spatial Window by selecting one of the following: <ul style="list-style-type: none"> <li> (Define Non Primary Diagram by Rectangle) To define the area click in the top left corner and drag over the area.</li> <li> (Define Non Primary Diagram by Circle) To define the area, click where you want the centre of the circle and drag outwards.</li> <li> (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.</li> </ul>
 Add Survey Diagram	Click to define a Survey diagram in the Spatial Window by selecting one of the following: <ul style="list-style-type: none"> <li> (Define Survey Diagram by Rectangle) To define the area click in the top left corner and drag over the area.</li> <li> (Define Survey Diagram by Circle) To define the area, click where you want the centre of the circle and drag outwards.</li> <li> (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.</li> </ul>
 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.
 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: <ul style="list-style-type: none"> <li>• Dashed dot</li> <li>• Arrow head both ends</li> <li>• Arrow head one end</li> <li>• Dashed</li> <li>• Solid</li> </ul>
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.
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.

Field and Button	Action
Remove	Click to remove the selected annotation from the layout sheet.
 Previous page	Click to display the previous page of the selected layout sheet.
Page x of x	Landonline displays the current page number and number of pages of the selected layout sheet.
 Next Page	Click to display the next page of the selected layout sheet.
New Page	Click to append a new layout sheet page to the current set of layout sheets. Landonline adds it to the end.
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  (Function Menu) contains the same functions as the toolbar icons, as well as additional options.

Field and Button	Action
Edit	<ul style="list-style-type: none"> <li>Undo - reverses the last action. You can only undo one action.</li> <li>Delete - deletes the selected line or text.</li> <li>Original Location - returns the labels in the current diagram to their original location (ie when the diagram was defined).</li> <li>Show Selected Objects - changes Hidden objects to Shown text (ie changes the text or line from grey to black).</li> <li>Hide Selected Objects - changes Shown objects to Hidden objects (ie changes the text or line from black to grey).</li> <li>Select Polygon - allows you to draw a polygon around a number of objects to modify simultaneously.</li> <li>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).</li> </ul> <p>For more information about Shown, Hidden and Not Displayed objects, see <b>9.3.5.4.1 Show and hide objects in a diagram.</b></p>
View	<ul style="list-style-type: none"> <li>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.</li> <li>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). <ul style="list-style-type: none"> <li>Observation Arc Radii - Arc Radii.</li> <li>Mark Names - eg Non Boundary/Witness marks, Boundary marks.</li> <li>Node Symbols - eg Non Boundary mark symbols (origins/double circles/single circles), Primary, Non Primary, symbols (circles/posts/crosses) etc.</li> <li>Observation Bearings - eg Vector Bearing, Vector Chord Bearing.</li> <li>Observation Codes - Vector Code Obx.</li> <li>Observation Distances - eg Vector Distance, Arc Length.</li> <li>Parcel Areas - Parcel area.</li> <li>Parcel Appellations - Parcel Appellation.</li> </ul> </li> </ul> <p>For more information about Shown, Hidden and Not Displayed objects, see <b>9.3.5.4.1 Show and hide objects in a diagram.</b></p>

Field and Button	Action
Image	<ul style="list-style-type: none"> <li>• Zoom In - immediately zooms in to decrease the scale of the image.</li> <li>• 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).</li> <li>• Zoom Out - immediately zooms out to increase the scale of the image.</li> <li>• Zoom To Selection - immediately zooms to the selected object.</li> <li>• Zoom Previous - immediately zooms in to out to the previous scale of the image.</li> <li>• Fit To Window - fits the complete image to the size of the window.</li> <li>• Fit to Width - fits the width of the image to the size of the window.</li> <li>• Fit to Height - fits the height of the image to the size of the window.</li> </ul>
Tool	<p>The active option has a tick (✓) in front of it.</p> <ul style="list-style-type: none"> <li>• Dragging - drags the image in any direction.</li> <li>• Zoom In - zooms in to decrease the scale of the image. Each time you click the image it displays larger.</li> <li>• Zoom Out - zooms out to increase the scale of the image. Each time you click the image it displays smaller.</li> <li>• Diagram - allows you to select one or more diagrams on the layout page.</li> <li>• Label - allows you to select on or more labels on the layout page.</li> <li>• Coordinate - allows you to select on or more coordinates on the layout page.</li> <li>• Line - allows you to select on or more lines on the layout page.</li> <li>• New Line - allows you to add a new line based on the settings in the Line Style field.</li> <li>• New Text - allows you to add a new annotation based on the settings in the Add Text fields.</li> </ul>

## Plan Preview screen

Filed or button	Action
Close	Click to close the screen and return to the Layout Plan Sheets screen.

## Export Plan screen

Filed or button	Action
Direct	<p>Select to export the plan data while you remain in the Plan Generation tab of the Manage Survey Transaction screen.</p> <p><b>Note:</b> LINZ recommends that you do not use this method for a large or complex plan with many diagrams.</p>
Indirect	Select to create a request to initiate the export of plan data for the <i>e-survey</i> after you close the Manage Survey Transaction screen.
OK	<p>Click to lock the <i>e-survey</i> and initiate the export method selected. If you selected:</p> <ul style="list-style-type: none"> <li>• Direct - the Survey Export Extract (Direct) screen displays for you to select the location for the file. The export begins immediately you click Save and you remain in the Plan Generation tab until the export has completed.</li> <li>• Indirect - a message displays to ask whether you want to continue. Select Yes to close the Manage Survey Transaction screen and initiate the indirect export process or click No to cancel the export (if required).</li> </ul>
Cancel	Click to cancel any changes and close the screen.

## Differences Report screen

Filed or button	Action
Report Details	<p>Landonline displays the:</p> <ul style="list-style-type: none"> <li>• Date and time of the export from Landonline.</li> <li>• Date and time of the comparison.</li> </ul>

Filed or button	Action
Summary Report	Landonline displays a summary of specific the differences found or states that no differences were found.
Detailed Report	Landonline displays detailed information with the following section headings: <ul style="list-style-type: none"> <li>• Changes to parcel status or appellation (ie parcels which abut or underlay survey capture parcels).</li> <li>• Plans approved since date of export (ie plan labels that fall within the extracted Area of Interest).</li> <li>• Changes to Road Names (ie road centrelines that fall within the extracted Area of Interest).</li> <li>• Significant changes to position of linked marks (ie linked marks that have moved by a pre-determined distance or more, eg 0.20m). <b>Note:</b> This distance is pre-determined by the System Administrator in Landonline.</li> </ul> This section does not display when there are no differences found.
Copy to Clipboard	Click to copy the content of the report to the clipboard.
Save to File...	Click to display the Save screen to save the report to a location on your computer. You can save the file in .txt format (ie text) or .csv format (ie comma separated value).
Cancel	Click to close the screen.

## Offline Plan Generation Log screen

Filed or button	Action
Msg Type	Landonline displays the type of message (eg Information, Fatal error).
Event	Landonline displays the event initiated (eg Export package, Import package, Other).
User Id	Landonline displays the user Id of the user who initiated the event.
Date/Time	Landonline displays the date and time the message type occurred.
Description	Landonline displays the description of the message type.
Copy to Clipboard	Click to copy details in the log to the clipboard.
Dave to File...	Click to display the Save screen to save details in the log to a file on your computer.
Cancel	Click to close the screen.

## Appendix Q: 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 <i>e-survey</i> . 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 <b>TA Certification status</b> in <b>Landonline Help</b> .
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. <ul style="list-style-type: none"> <li>Created - surveyor or TA user has created the package.</li> <li>Signed - TA has signed the package.</li> </ul>
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: <ul style="list-style-type: none"> <li>View the TA Approvals form</li> <li>enter your password</li> <li>unlock your digital certificate file to sign the package.</li> </ul>
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. <ul style="list-style-type: none"> <li>Created - surveyor or TA user has created the certificate.</li> <li>Pending TA Approval - Surveyor has notified the TA about the certificate (after creating a new certificate).</li> <li>Certified - TA has certified the certificate.</li> </ul>
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. <ul style="list-style-type: none"> <li>Name - short name for each certificate.</li> <li>Description - description of each certificate.</li> </ul>
Certificate Fields	Landonline displays predefined field(s) you can edit in the selected certificate: <ul style="list-style-type: none"> <li>Field Name - the name of the field.</li> <li>Field Value - enter the value to display in the certificate.</li> </ul>
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 <i>e-certification</i> 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.

<b>Field and Button</b>	<b>Action</b>
Contact Person	Select the name of the contact person for the request from the drop down list. Only displays for the Request option.
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 R: Other survey screens

### Enabled Users screen

Field and Button	Action
Survey Details	Landonline displays details of the <i>e-survey</i> .
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 <i>e-survey</i> .

### 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 <i>e-survey</i> 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 <b>Appendix L: <i>e-survey</i> supporting document types</b> .
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 <i>e-survey</i> .
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 <i>e-survey</i> 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 <i>e-survey</i> . The transaction is not submitted.

## Sign Survey Dataset screen

Field or Button	Action
Structured text view details	Displays details of the <i>e-survey</i> to be signed. If necessary, scroll to view all details.
Sign	Click to display screens to: <ul style="list-style-type: none"> <li>enter your password</li> <li>unlock your digital certificate file to sign the <i>e-survey</i>.</li> </ul>
Cancel	Click to cancel signing the <i>e-survey</i> . Landonline returns you to the Manage Survey Transaction screen.

## Exception Process screen

Field or Button	Action
Survey Details	Landonline displays details of the <i>e-survey</i> .
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 <i>e-survey</i> 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 <i>e-survey</i> 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.