User Guide 52   Creating ePlan Applications and Using ePlan Services

Purpose of this User Guide

The purpose of this User Guide is to provide information on how to create ePlan applications and use the validation, data viewer, visualisation and Plan PDF enhancement services available within SPEAR.

Who should read this guide?

Primary audience: **ePlan enabled Applicant Organisations**

For information: **Other SPEAR users**

Introduction

Organisations in SPEAR must be ePlan-enabled to access the services described in this guide. An ePlan application is a standard SPEAR application with an ePlan (XML file) uploaded as a plan of subdivision or consolidation. Surveyors can upload an ePlan at the first stage of creating the application. Some of the required information will be pre-populated within the application wizard (e.g. Plan Number, Dealing Type, Application Parcels and Number of Lots). Once the ePlan application is created, a Validation Report and a Plan PDF will be automatically generated by SPEAR and added to the Details tab. The visualised Plan PDF will be used as the legal visual representation of the plan.

52.01. What is an ePlan?

ePlan is a data file, prepared in the LandXML data format in a surveyor's software package. This data file contains information about the plan of subdivision, parcels structure, owners corporation schedule, survey marks information and a subset of the abstract of field records.

52.02. What types of subdivision applications can be lodged as ePlan in SPEAR and who can lodge them?

Most Subdivision Act application types currently supported by SPEAR can be lodged as ePlans. The full list of Subdivision Act dealing types is available in User Guide 1 - Creating a subdivision application in SPEAR.

It should be noted, ePlan currently allows for plans that depict boundaries defined by buildings, however it does not allow for plans that contain multiple levels/cross sections. If a plan contains these elements, it cannot be lodged as an ePlan.

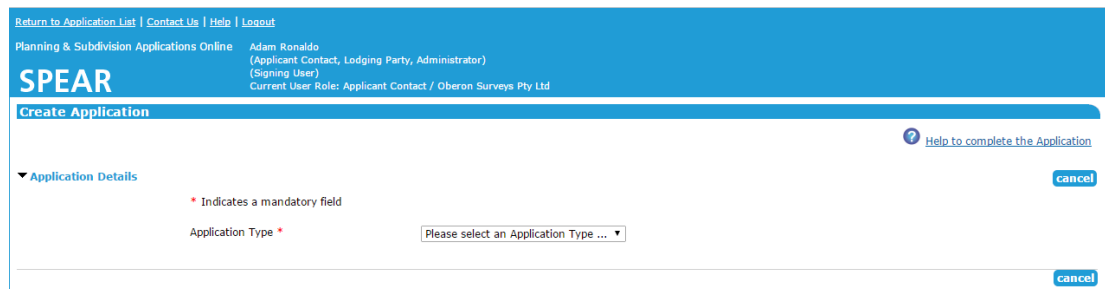Only ePlan-enabled applicant organisations may lodge applications using ePlan.

52.03. How do I create an ePlan application?

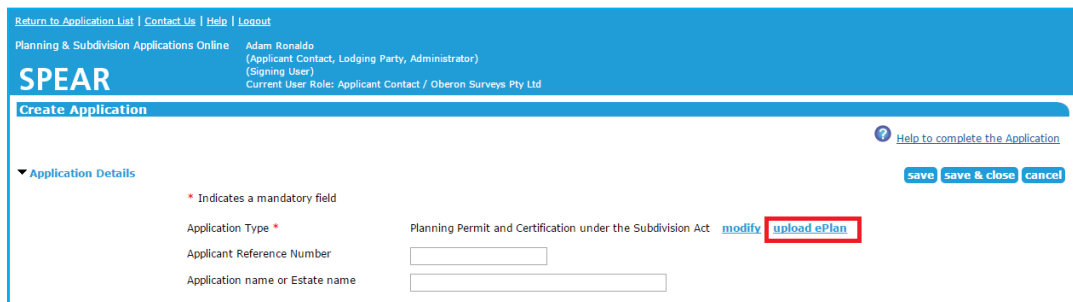Follow the steps below to create an ePlan application in SPEAR:

1- Once logged in, click on the Create New Application link located in the header in the Application List screen.
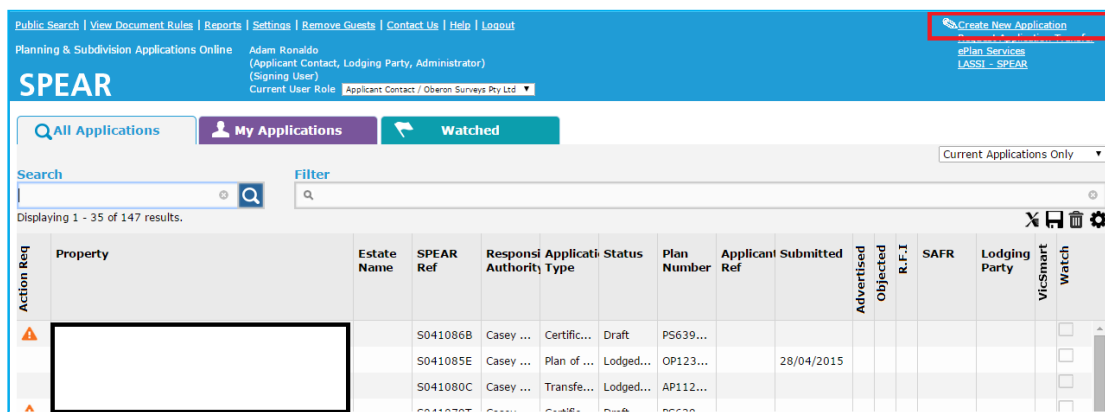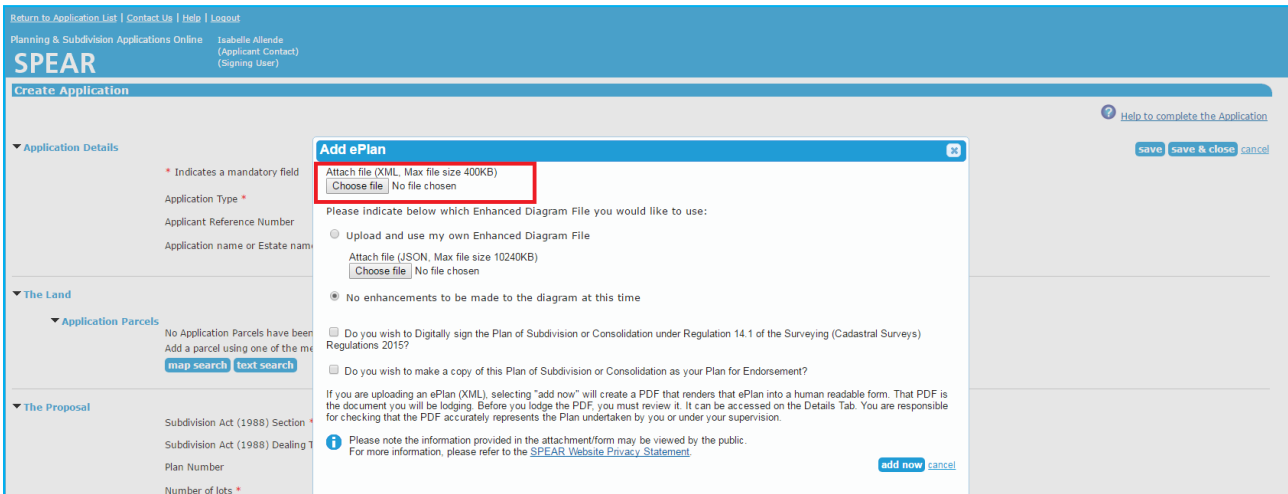

2- Select an Application Type.


3- Click on the upload ePlan link.

4- Click on the 'Choose File' button to browse for and attach the XML file.

NOTE: If you already have an Enhanced Diagram File, you can upload it with your XML file in this screen. An Enhanced Diagram File is a file in JSON format which includes the diagram representation information and can be downloaded from the ePlan Visualisation Enhancement Tool. For more information, see 'What is the ePlan Visualisation Enhancement Tool and how does it work?' section of this guide.

5- Once the appropriate check boxes are ticked, click 'add now'. If your ePlan has no schema issues, the ePlan will be uploaded successfully and the information highlighted in the image below will be pre-populated within the application wizard.
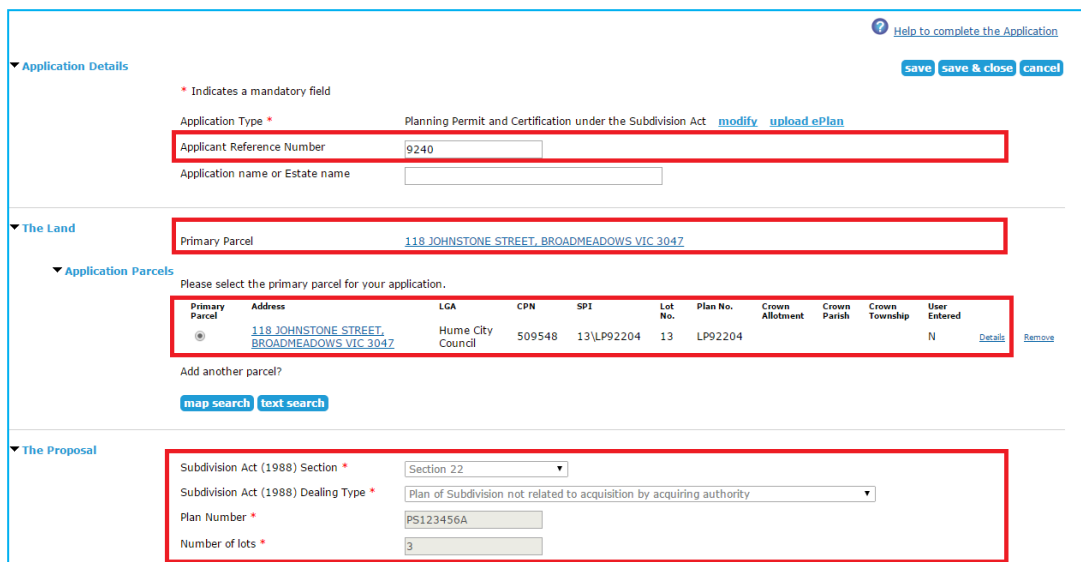
6- Complete the rest of the required information and save and close the application.

7- Once an ePlan is successfully uploaded to the application wizard, SPEAR automatically validates and visualises the ePlan. This can be accessed by clicking on the Plan of Subdivision document link in the Details screen of the application.

NOTE: To access the ePlan related resources provided by SPEAR, please make sure that the following check box is *NOT ticked* in User Settings of your SPEAR account.

The Document Versions Screen provides a number of resources generated by SPEAR:

- Plan PDF (automatically generated by the ePlan Visualisation Service, for more information see 'What is the ePlan Visualisation Service and how does it work?' section of this guide).

- ePlan LandXML File (for downloading the current ePlan LandXML file).

- ePlan Textual and Graphical Data View (generated by the ePlan Data Viewer, for more information see 'What is the ePlan Data Viewer and how does it work?' section of this guide).

- ePlan Validation Report (automatically generated by the ePlan Validation Service, for more information see 'What is the ePlan Validation Service and how does it work?' section of this guide).

- ePlan Visualisation Enhancement Tool (enables Applicant Contacts to enhance the Plan PDF generated by the ePlan Visualisation Service, for more information see 'What is the ePlan Visualisation Enhancement Tool and how does it work?' section of this guide).

- Enhanced Diagram File (for downloading the current enhanced diagram file).

NOTE: **In accordance with the current PDF registration process, once the ePlan application is registered at Land Use Victoria the Owners Corporations Entitlement and Liability information will be automatically removed from the ePlan LandXML file**.

52.04.   What are the ePlan Services?

The ePlan Services are designed to allow applicants to test the prepared ePlans prior to uploading into SPEAR. It is recommended to use the ePlan Services during the ePlan capturing process and resolve most of the issues prior to uploading it into SPEAR.

The ePlan Services can be accessed from the SPEAR Website:
https://www.spear.land.vic.gov.au/spear/eplanPublicServices/Prepare.do or by clicking the link located in the header in the Application List screen.

Click on the 'choose File' button to browse for and attach the previously prepared ePlan. Choose any of the three options available for validating ePlan, visualising ePlan, and previewing ePlan data and click 'submit'.

NOTE: **If you already have an Enhanced Diagram File in JSON format which has been downloaded from the ePlan Visualisation Enhancement Tool, you can upload it to SPEAR with the XML file to receive the enhanced Plan PDF.**

Once submitted, you will be able to review the validation status, view or download the validation report (by clicking on the pink 'VR' icon), preview the ePlan textual and graphical data (by clicking on the blue 'DV' icon), visualise the Plan PDF (by clicking on the yellow 'eP' icon), and enhance the diagram (by clicking on the orange 'ET' icon).
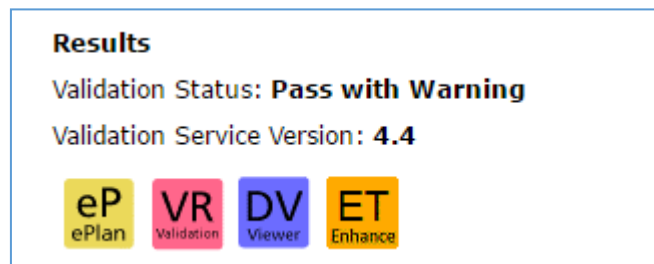
52.05. What is the ePlan Validation Service and how does it work?

The ePlan Validation Service checks for completeness and correctness to the ePlan Protocol and plan examination rules. Once an ePlan is uploaded, this service automatically validates the ePlan and provides the user with an ePlan Validation Report.

If the uploaded file does not conform to the ePlan schema, the following error message will appear on the Add Plan of Subdivision page. The issues need to be resolved and the ePlan file needs to be re-validated. A report of existing schema issues would be accessible through clicking on the Show Technical Detail link.
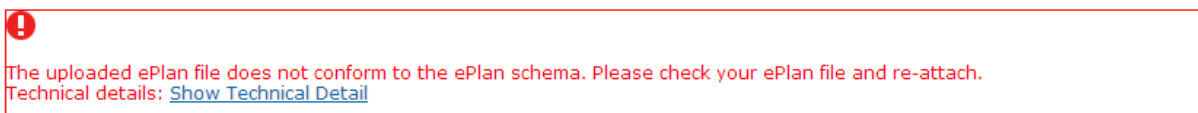
If the ePlan file is uploaded successfully, the plan of subdivision is added to the Details screen of the application after the application creation process. To review the status of the ePlan Validation click on the Plan of Subdivision document link in the Details screen. The validation status may be one of the following:

- 'Pass' – continue with the authentication process.

- 'Pass with Warning' – all warnings must be reviewed and appropriately clarified or justified.

- 'Fail' – all errors should be fixed then ePlan uploaded again.

See 'How do I fix ePlan validation warnings and failures?' section of this guide for more information.

52.06. How do I access or modify the ePlan Validation Report?

ePlan Validation Report is automatically generated when the ePlan is uploaded and the application is created in SPEAR or in the ePlan Services - see 'What are the ePlan Services?' section of this guide for more information.

The ePlan Validation Report can be viewed in read-only mode or modify mode in SPEAR or viewed in read-only mode by accessing the ePlan Services.

SPEAR Modify Mode

You can modify comments in the Validation Report from the Details Screen of the application. Select 'Modify' in the drop-down box alongside the ePlan Validation Report and click 'go' .

| ePlan Validation Report (Version: 1, Status: Fail) | Supplied | 28/04/2015 | Modify ▾ | go |

You can leave comments next to the validation rules' results for the consideration of Land Use Victoria. You may also be able to tick the 'Valid Exemption' check box after consultation with appropriate personnel at Land Use Victoria.

Rule Name	Result		Rule Message	Surveyor Comments	Valid Exemption
VR002 - Survey Header Completeness	✘		The plan has not defined the surveyor version number.		☐
VR040 - Address in Vicmap Address	⚠		Lot "2~6\PP5717" with address "6 Beaufort Road Skipton 3361" is different to Vicmap Address which specifies it as "address not found".		
VR034 - Depth Limitation Manual Check	ℹ		Plan has identified that depth limitation does not apply.		
VR001 - ePlan CIF Schema Validation	✔				
VR004 - Parcel Geometry Exists	✔				

SPEAR Read-only Mode

You can access the read-only view of ePlan Validation Report from the Details screen of the application. Click on the ePlan Validation Report document link to bring up the Current Document Details view, and then click on the Open Current ePlan Validation Report link.

Public View

By accessing the ePlan Services, see 'What are the ePlan Services?' section of this guide.

52.07. How do I fix the ePlan validation warnings and failures?

There are several statuses displayed in the ePlan Validation Report, always peruse all non-passed results, but paying attention to 'Error' and 'Input Required' results.

ℹ️ For Information	These are conditions that require attention by examiners, thus 'for information' to surveyors. They provide different flags for examiners based on the content of ePlan. You should still review all messages and confirm that the stated is consistent to what you intended, eg "Plan has identified that depth limitation of 15.24 metres applies to parcels 3\PS601504, 4\PS601504".
⚠️ Input Required	These conditions require additional input to clarify or justify. You can do this by typing it in the 'Surveyor Comments' field. Remember to click 'save & close'. If the ePlan was re-validated, all comments will be maintained unless its status has changed.
❌ Error	If a rule condition is not satisfied, you should try to fix it. There are a number of reasons that may cause an error: 1) there are mistakes when creating the ePlan, 2) the software package may not be exporting ePlan correctly; or, 3) the validation is not catering for a valid scenario. If the issue is related to the creation of the ePlan, you should seek help from the software provider such as the CAD vendor and use the validation rules summary to identify the issue. **Valid Exemption** – If you believe the error qualifies for valid exemption, you should consult the appropriate Land Use Victoria personnel before ticking this box. You should always include a note in the 'Surveyors Comments' field to state whom you have talked to and why it is a valid exemption.
🚫 System Error	On rare occasions there may be a critical SPEAR error, or one of the dependent systems that external rule accesses, such as VOTS or Vicmap, may be temporarily down. You should try to revalidate the ePlan later. If the problem still persists, contact the SPEAR Service Desk on 9194 0612.

52.08. What is the ePlan Visualisation Service and how does it work?

The ePlan Visualisation Service generates a fully drafted Plan PDF from the ePlan file. The generated PDF is then used for the **council application process** and **registration process**. The PDF is used as the legal visual representation of the plan.

The ePlan Visualisation Service is accessible through the following views:

Document Details View

From the Details screen of the application, click on the Plan of Subdivision document link and then in the Current Document details page click on the Open Current Plan of Subdivision link. At this time, the Plan PDF will be downloaded from SPEAR.

Public View

By accessing the ePlan Services, see 'What are the ePlan Services?' section of this guide.

52.09. What is the ePlan Data Viewer and how does it work?

The ePlan Data Viewer allows surveyors, plan examiners and ePlan team to review the content of an ePlan LandXML file, using the following main functions:

- Visualise ePlan layers on top of Vicmap layers

- Turn on/off ePlan layers

- Visualise ePlan textual information such as plan details, annotations and Owners Corporation details

- Identify ePlan features

- Identify Vicmap parcels

- Visualise and identify survey marks from SMES

- Measure bearing and distance between points

- Search based on parcel SPI and address

- Search ePlan features

- Validate ePlan and highlight objects causing errors on the screen

- Visualise PDF plan
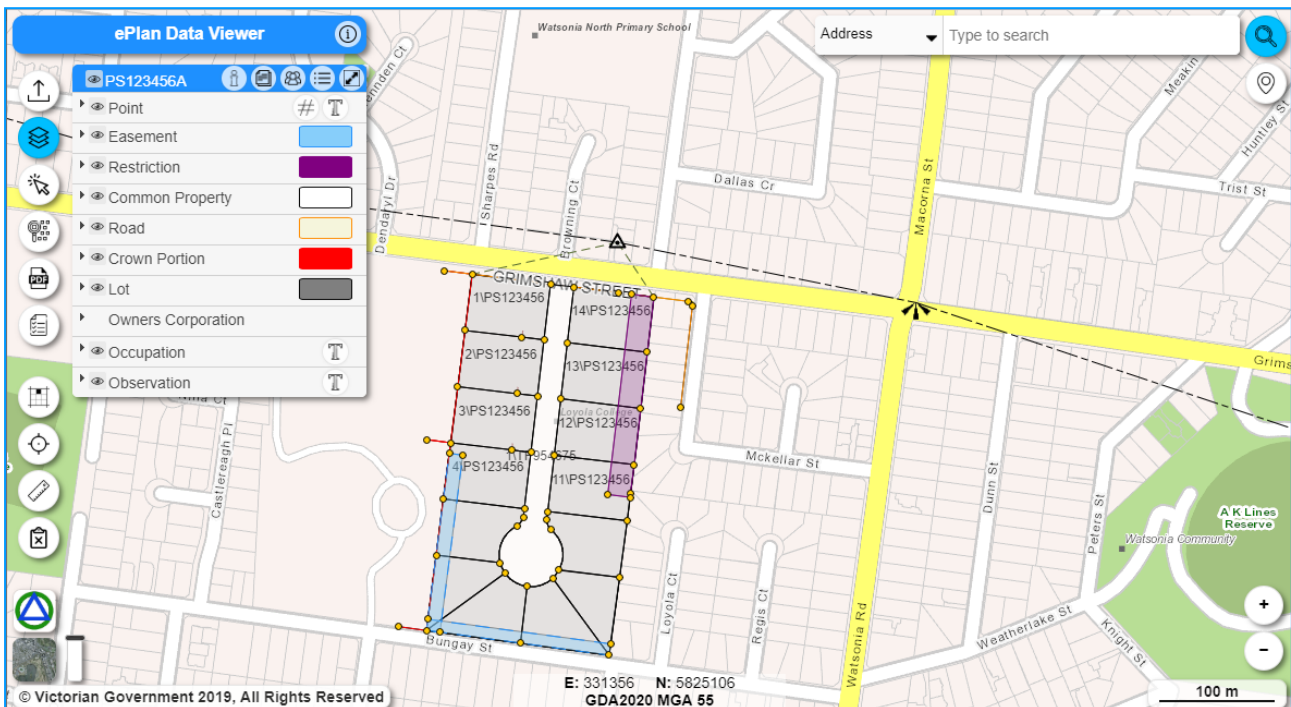
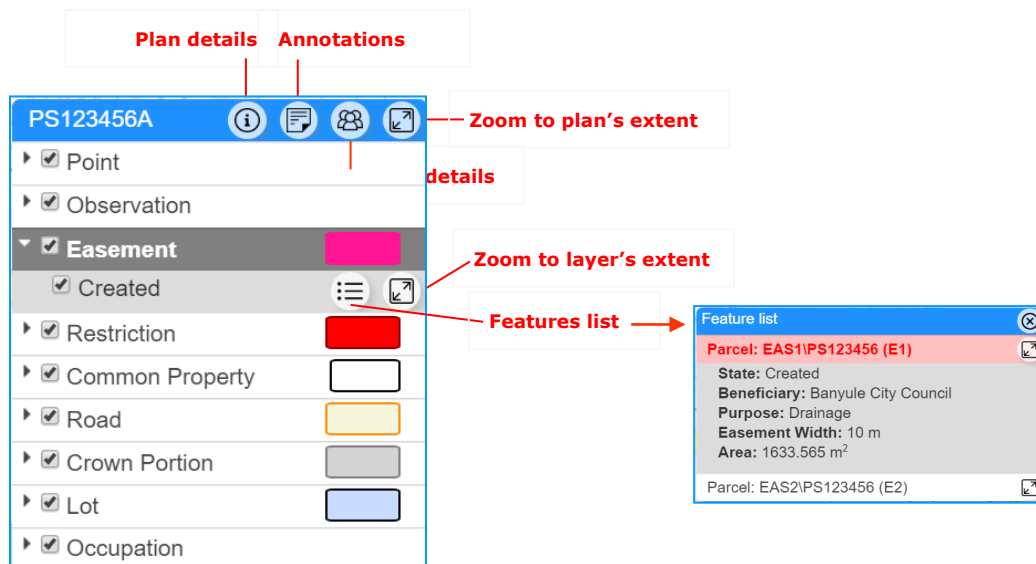The ePlan Data Viewer supports the following layers:

- Vicmap map

- Vicmap satellite imagery

- SMES

The above layers can be controlled using the buttons available at the bottom left of the application.

NOTE 1: **If the coordinate system of ePlan file is 'Local', the Vicmap and SMES layers as well as search tool will be deactivated in the Data Viewer.**

NOTE 2: **When a white background is desirable, map opacity control tool** ⬜ **, available at the bottom left corner, can be used to change the map opacity.**

Once an ePlan is uploaded to Data Viewer, its layers get listed in the layers panel. The order of layers can be changed by the user through 'drag and drop'. The buttons at the top of layers panel provide access to plan, annotations and Owners Corporation details.

The ePlan Data Viewer toolbar is explained in the following table:

Tool	Description
⬆	This tool uploads an ePlan LandXML file to Data Viewer. Alternatively, ePlan LandXML files can be imported by 'drag and drop'.
⬙	This tool displays/hides the ePlan layers panel.
⟑	This tool displays the ePlan features attributes in an information panel.
⬒	This tool searches a keyword within the ePlan file and displays results in an interactive way. The geometrical objects within results can be zoomed to by clicking on the 'zoom to extent' button next to them.

	This tool generates a PDF plan from the ePlan file.
	This tool validates the ePlan file and generates an interactive Validation Report. The ePlan geometrical and textual features causing the errors or warnings can be highlighted on the screen for better interpretation.
	This tool displays the Vicmap parcels location details, e.g. Address, LGA, Parish, Township as well as properties list.
	This tool displays the SMES points information, e.g. name, 9 figure number, datum, Northing, Easting and Height in an information panel.
	This tool measures bearing and distance between two points. If the start or end point is an ePlan point, the tool snaps to it.
	This tool clears all highlighted objects on the map, e.g. selected ePlan features, measured dimensions, etc.
	This tool zooms the map to user's location.

Search tool allows the user to search Vicmap parcels based on SPI or address. The parcel resultant from the search will get highlighted on the map base.

The ePlan Data Viewer is accessible through the following views:

Document Details View

From the Details screen of the application, click on the Plan of Subdivision document link and then in the Current Document details page click the blue 'DV' icon.

Public View

By accessing the ePlan Services, see 'What are the ePlan Services?' section of this guide.

52.010. What is the ePlan Visualisation Enhancement Tool and how does it work?

The ePlan Visualisation Enhancement Tool enables Applicant Contacts to enhance the Plan PDF using the following main functions:

• editing labels

• editing arrows

• defining sheets

• creating enlargement diagrams

• exaggerating features

- Adjusting title connections.

Figure below illustrates the ePlan Visualisation Enhancement Tool user interface.

The ePlan Visualisation Enhancement Tool is accessible through the following views:

Document Details View

From the Details screen of the application, click on the <u>Plan of Subdivision</u> document link and then in the Current Document details page click 'ET'. Alternatively, access the Enhancement tool by selecting 'Enhance Diagram' option from the drop-down list next to Plan of Subdivision and click 'go'.
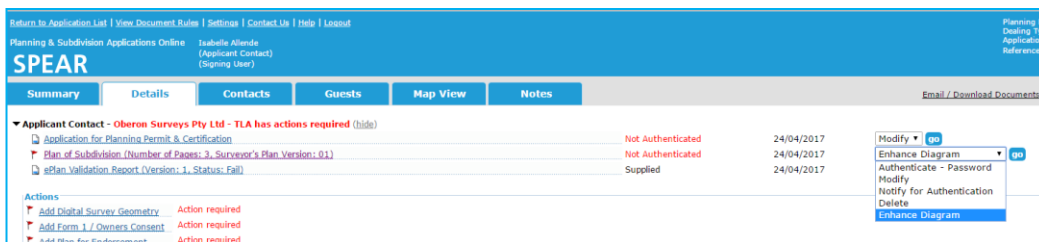
If you need to download the enhanced diagram file, in the Current Document details page click 'ED'.

Public View

By accessing the ePlan Services, see 'What are the ePlan Services?' section of this guide.

NOTE: For more information about this tool, refer to 'User Guide 57 – ePlan Visualisation Enhancement Tool'.

Need more information?

Further information on this topic can be found by:

- Visiting the SPEAR website www.spear.land.vic.gov.au/SPEAR.

- Contacting the SPEAR Service Desk on 9194 0612 or email spear.info@delwp.vic.gov.au