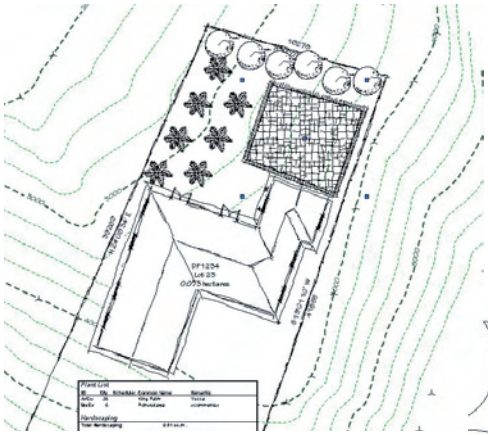
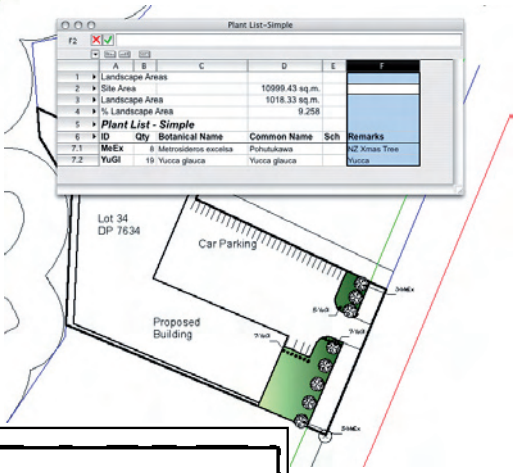
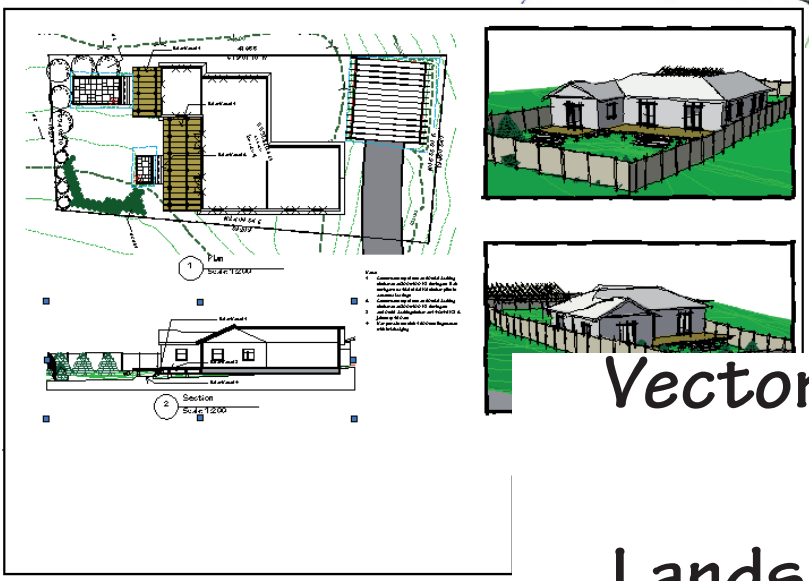
archoncad







VectorWorks for Landscapers

Version 12.0

By Jonathan Pickup

making VectorWorks easy!

Contact details of the Author:
Architecture on CAD Ltd.
10 Laws Place,
Napier,
New Zealand
Phone : +64 21 743 470
Fax : +64 6 843 7760
Email : jon@archoncad.co.nz

Thanks to Allan Johnston and Dave Best for helping to proof read these notes.
Jonathan Pickup May 2005

Contents

Introduction

This manual builds on the VectorWorks Essential manual. The Essential manual is designed to show you basic concepts of VectorWorks such as 2D drafting, simple 3D modelling and basic file organisation. If you are unfamiliar with these concepts then you should get the Essential manual and complete it before you go any further.

In this manual we will be working through a few of projects:

- the first project will work through a quick domestic project where we have a sketch plan and we want to add some plants and hard landscaping to the plan;
- the second project is similar to the first project but we will start with a blank file and work right though the process from importing the scanned image to putting the title block on the drawing;
- a small commercial project that needs planting quickly added to the developer's site plan;
- a full domestic project for a client, the Smith Family, where we will plan a garden that will include planting, irrigation, hardscaping and an outdoor structure. This project will be in 2D and 3D.

In Project 1 we will open a file that has a sketch already in it. Then we'll draw a landscape plan on top of the sketch, add some hard landscaping and some notes to finish the drawing. The aim of this exercise is to show you how quick and easy it is to create your landscape plans and then show you how easy it is to count the plants and quantify the hard landscaping.

Project 2 is similar to Project 1 but we will go into more detail. We will start with a blank file and then we will import the scanned image of the site, add the trees and hard landscaping. Along the way we will edit the plants to suit us, and we will add a tile block to the drawing so that so can start to use this method to

For the commercial project we will import the developers plan, add the planting to suit the council requirements, tag the plants so that the council knows what plants we have in mind and quantify the area of landscaping so that we can show that we are in accordance with the council requirements.

In the last project we will design a landscape for a young family. Gina and Dave Smith live in a 1970's 3 bedroom timber frame house on a concrete block basement garage. The house is facing north on a gently sloping 1/4 acre section. The house is located in Auckland, New Zealand, so the north sloping site is ideal for this house. The client has been living in the house for 5 years. They now have two children, one boy, 11 years old and his sister 8 years old. The children are wanting more separation from their parents, and in the future they will want to be more independent. An Architect is remodelling the house and we have to base our landscape on the architect's proposals. We will import the plan from the architect, draw the house from our site measurements, create the 3D terrain and modify it, create and place our own plants and create some landscape structures.

How to Use this Manual

Here are some things that will help you to use this manual better:

- Spend the time to work through the manual. The information in this manual will not find it's way into your head if you don't complete the exercises. Reading the manual is good, reading the manual and watching the movies is better, reading the manual, watching the movies and completing the exercises has the best results. Watch the movies, try the exercise and then play the movie again.

- Instructions for you to complete are shown like this.

Tips:
Useful tips are shown like this

Measurements for you to use are shown in both Metric and Imperial. Metric measurements are shown first, Imperial measurements are show second in brackets. If you are using metric, don't type in the imperial measurements; if you are using imperial, don't type in the metric measurements, just type in the measurements inside the brackets.

This manual comes as a hard copy with 1 CD.

There are two exercise folders on the CD. One is called "Imperial Landmark Exercises", the other is called "Metric Landmark Exercises". Copy the exercise folder that you want to use to your computer. Place the exercise folder in a location to make it easy to open the files, such as "My Documents".

Save any training files that you work on to your exercise folder.

When you want to play a movie that is shown in the printed manual, insert the VectorWorks Landmark CD into your computer's CD player and double click on the file on the CD called "Landmark Manual.pdf". This is your electronic copy of the manual and it contains links to all the movies. To play a movie from the electronic copy of the manual, move your cursor over the movie icon (the cursor changes shape) and click once. When the movie is finished it will automatically close.

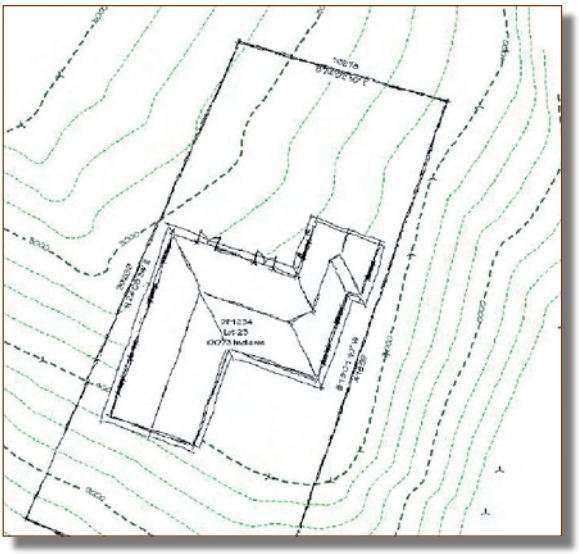
Use Adobe Arcobat Reader to read the manual and play the movies, use VectorWorks to do the exercises.

Project 1 Domestic Project

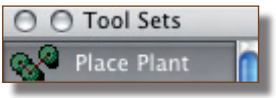
Movie
movie001.mov

This project is designed to show you how quick it can be to draw the plants and hard landscaping once you have all the information that you need.

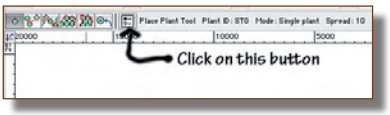
- Open the file **Project_1.sta** from the exercise folder. This file has a scanned image of our landscape plan already imported into it. All we have to do is to add the plants and hardscape.



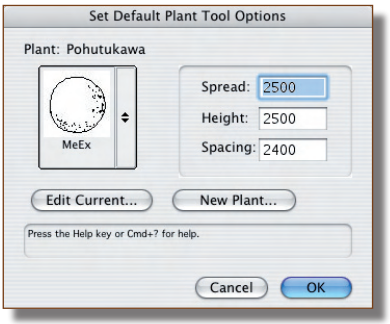
- Choose the **Place Plant** tool from the Site Planning Tool set.



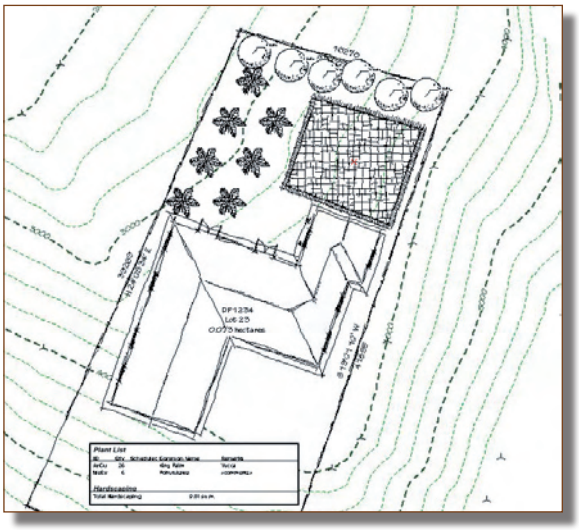
- Click on the **Plant Tool Settings** button.



- This opens the dialog box where we choose the plant that we want to place. You can set the size of the plant, the type of plant, spacing and height.



- Close the worksheet.
- The worksheet shows on the drawing.



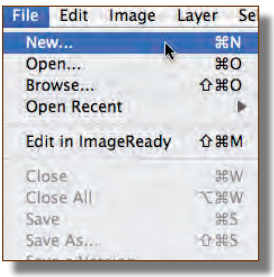
Project 2 Domestic Project

Step 1 Layer and Model Setup

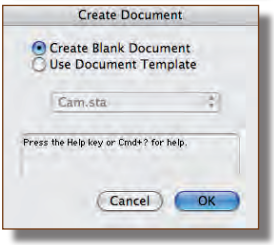
movie002.mov

Document Setup

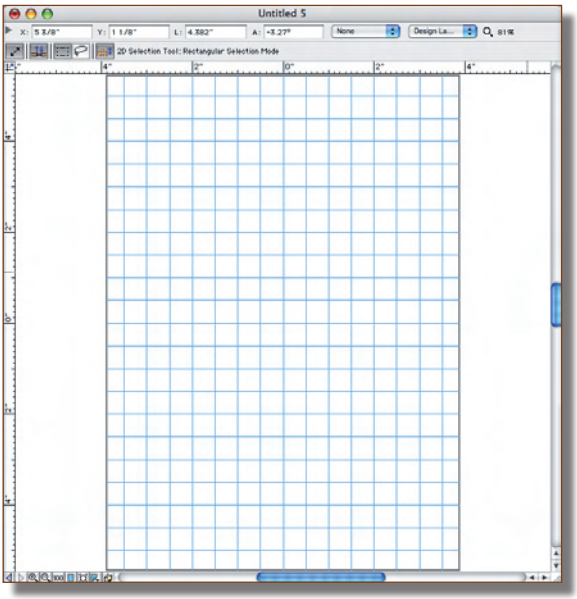
We will set up the file from the beginning, from a blank document, import the scan of the site, add the trees and draw the hard landscaping. We will work through to getting the drawing ready to print. VectorWorks has setting up commands to make it easier to set up the file. When you have set up the file it can become a template file that you can use to start every new job, saving you a lot of time in setting up...



- From the Menu Bar choose **File > New...**



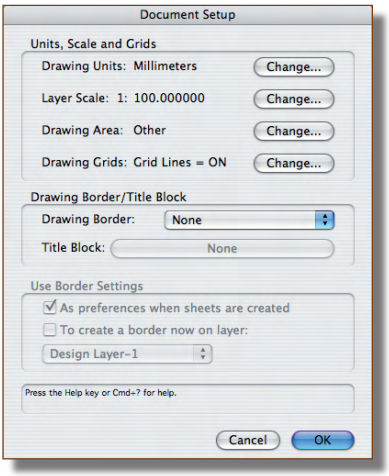
- This opens a dialog box for you to choose **Blank Document**



- A blank file opens with a layer scale of 1:1 and a letter size page. If you are using the Australia/NZ version of VectorWorks then a metric file opens.

- Let's set up our page first...

- The Document Setup dialog box now shows you your settings...
- Click on the **OK** button.

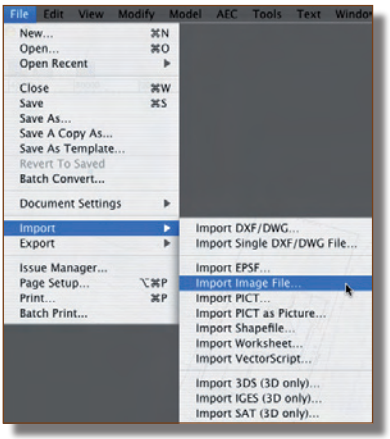


Step 3 Import a Scanned Image.

In this project we will import a scanned image. Then we'll use the scanned image to add the plants and hard landscaping. This is very similar to the 1st project but we will go into more detail for this project.

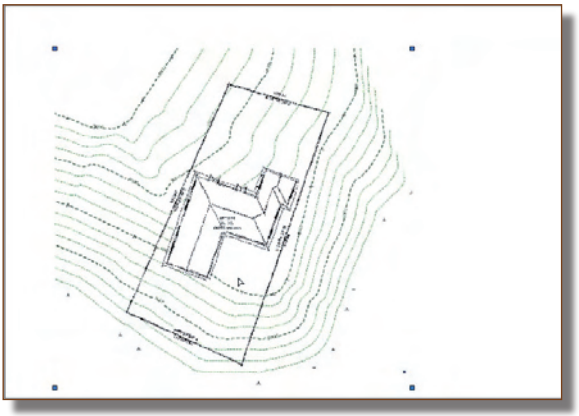
Movie
movie004.mov

- From the Menu bar choose **File > Import > Import Image File...**

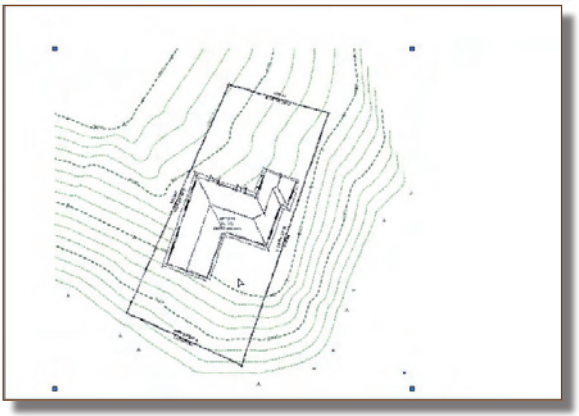


- Import the **Project 2.jpg** file from the exercise folder.

- The scanned image is about 1:200 scale so we don't need to do anything else to this image.



- Drag the site scan so that it's in the middle of the drawing.



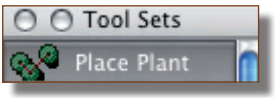
Step 4 Placing Standard Plants

This is where we put plants on the drawing.

movie005.mov

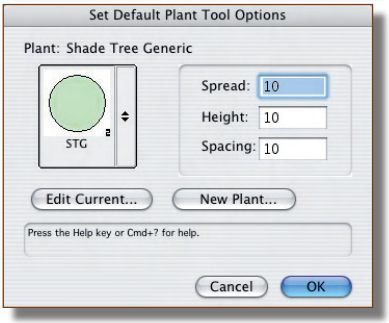
- Change Layers to **planting** (ie. Make **planting** the active layer).

- Choose the **Place Plant tool** from the Site Planning Tool set.

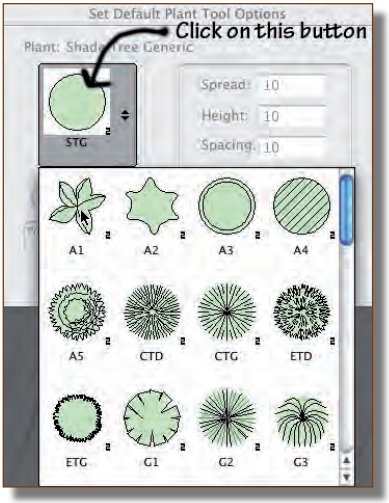


- Click on the **Plant Tool Settings** button.

- This opens the dialog box where we choose the plant that we want to place. You can set the size of the plant, the type of plant, spacing and height.

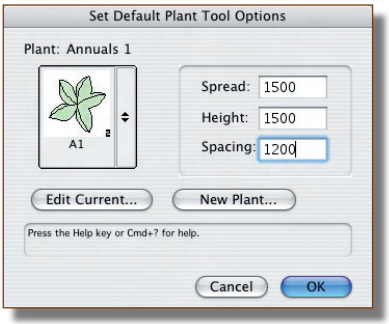


- Click on the plant and a series of plants appears. Choose the one of the plants. You might not see the same plants as I have in this picture. The plants shown are saved in a file in the Libraries folder. You can edit this file to speed up placing plants.



- Change the Spread, Height and Spacing.

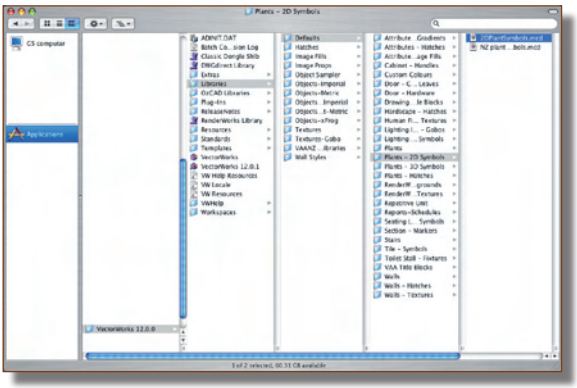
- Click on the **OK** button to close the dialog box.



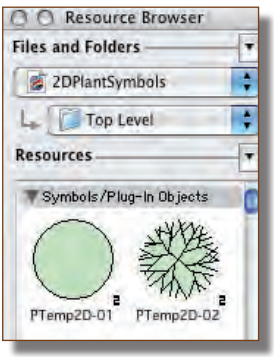
Step 5 Editing Plants

Using the standard plants is all very well, but the graphic style may not suit you. We can edit the plan shape of the plants. If we edit the plants in the right place you will change the plants for every project from then on.

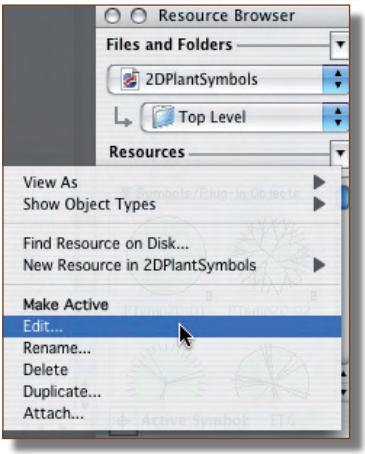
- Open the file:
  VectorWorks 12.0.0/Libraries/Defaults/Plants - 2D Symbols/ 2DPlantSymbols.mcd



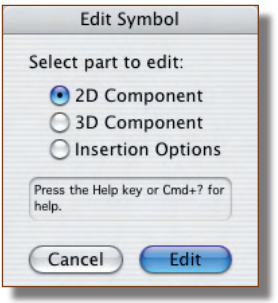
- When this file opens, point the Resource Browser to look at this file.



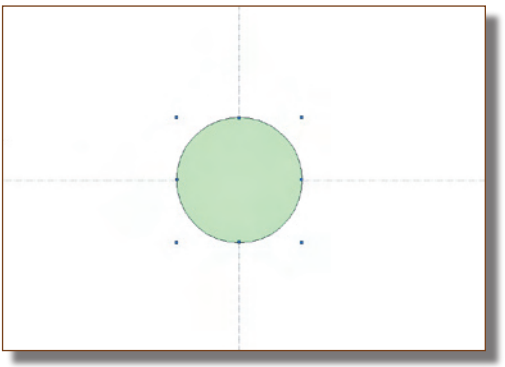
- Right Mouse click (ctrl-Click on a one button mouse) on the first symbol, **PTemp2D-01.**
- Choose **Edit** from the pop-up menu.



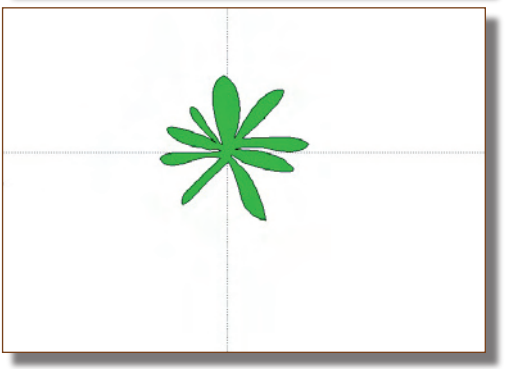
- Choose to edit the **2D Component.**
- Click on the **OK** Button.



- Now you can see the part that will define your plant.
- Delete the parts that you don't want.

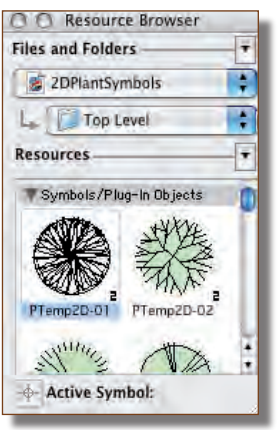


- Draw the shape that you want. From now on every new project will be able to use this shape to make plants.



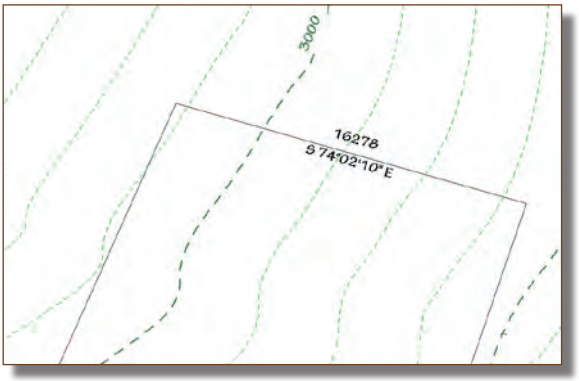
Beware of making your 2D shape too complex as it will slow down your drawing.

- Click on the **Exit Symbol** button at the top right hand corner of the screen.
- Save your file.
- You can see the new plant in the Resource Browser. You don't use it from here, but you can see it.
- If you edit each plant you can set up a whole file that has just the plants that you want.

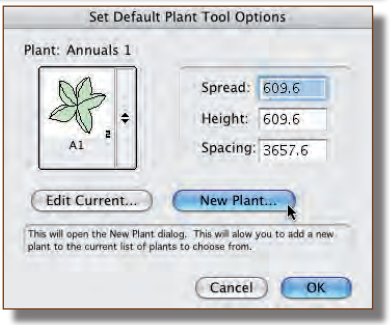


Step 6 Editing Plant Data

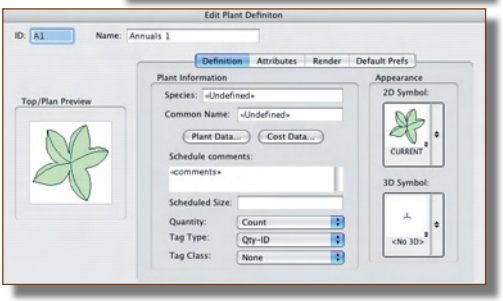
Editing plant data can be done in two ways; one inside of VectorWorks and the other way is to edit the plant data outside of VectorWorks using excel to edit the spreadsheet. We will look only at the first method, as the second method has to be tackled very carefully.



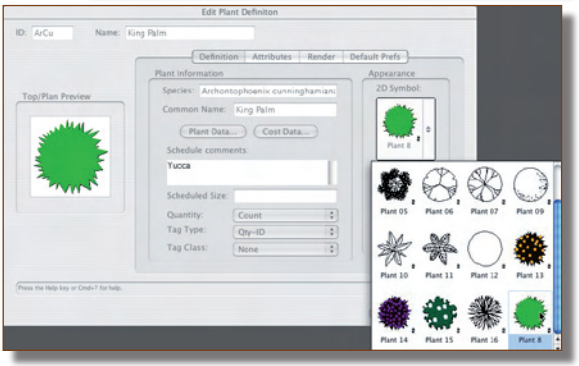
- Delete the plants that we placed earlier.
- Select the **Place Plant** tool from the Site Planning Tool set.
- Click on the **Settings Button**, the last button on the Mode Bar so that we can set up our plants.



- Click on the **New Plant...** button.



- This takes use to a dialog box where we can set up and edit our plants.

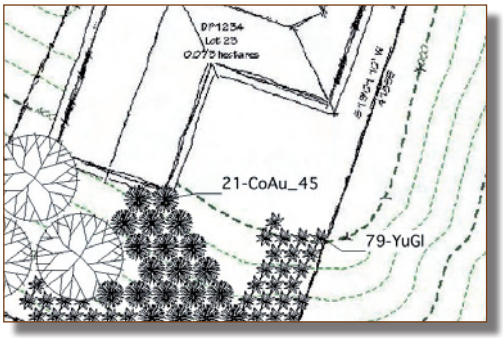


- Click on the **2D Symbol** button to choose the plant symbol that you want. If you have edited all the plants as I suggested in the last step, you will have your plants to choose from.

Step 7 Hardscape

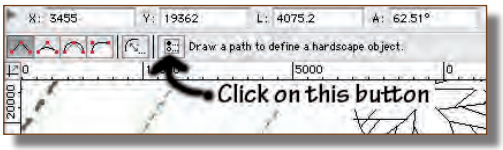
Hardscape is a special tool that makes it easy to draw areas of paving. This hardscape can be 2d only, or it can be 2D and 3D. If you make it 3D, then it can be a site modifier and can affect the site model.

- Zoom in to the south area of the house.

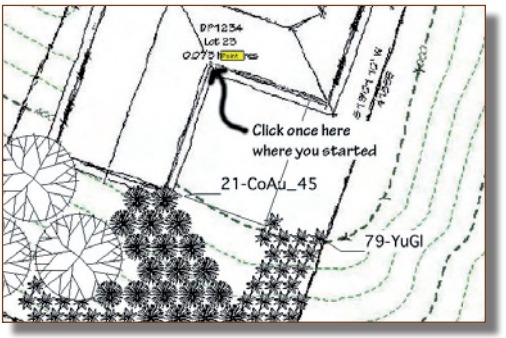


- Choose the **Hardscape** tool from the Site Planning Tool Set. With this tool you draw a shape for the hard landscaping and VectorWorks fills in the hardscape using the details that you enter.

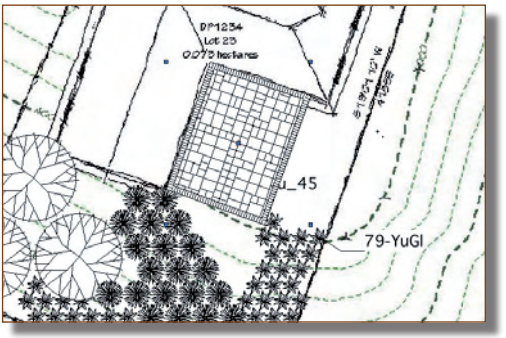
- Click on the **Hardscape** tool Preferences... (the last button on the Mode Bar).



- Click once where you started the hardscape. This should complete the polygon.

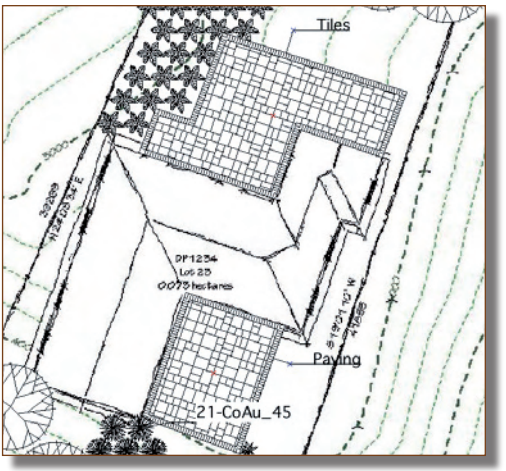


- VectorWorks fills in the hard landscaping.



- If the hardscape obscures the planting, right mouse click (control- click on a one button mouse) on the hardscape and choose:
Send > Send to Back.

- Create more hardscaping. Turn on the tags and change the Hardscape name to something that will be descriptive.

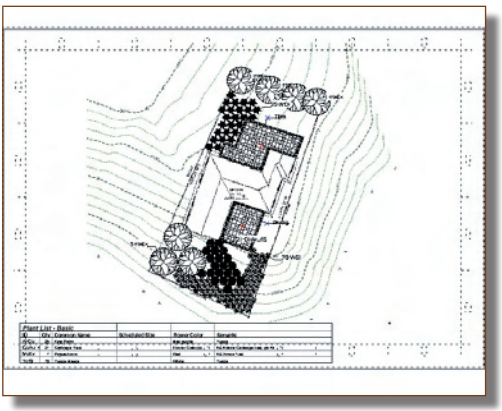


Step 8 Drawings and Annotation

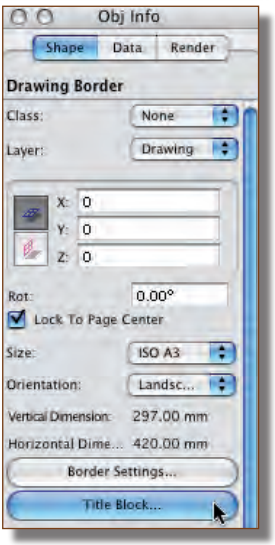
Drawings without annotation are incomplete. This section shows you how to add a title block.

Standard Title Blocks (Drawing Border)

- Click once on the **Drawing Border** tool from the **Dims/Notes** Tool Set.

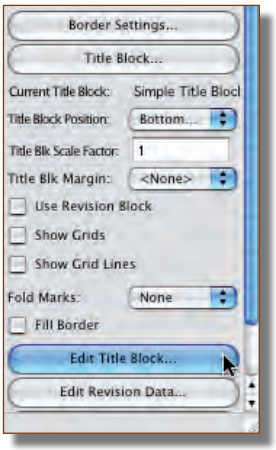


- When you move your cursor into the drawing area you will notice a ghost image of a title block on your cursor.
- Double click to place the drawing border (title block). Don't worry about lining up with the drawing area.

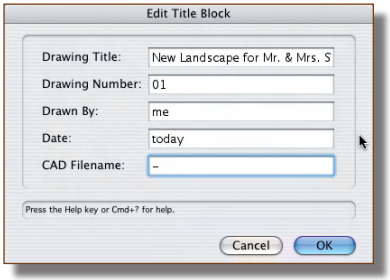


- Click on the option for **Lock to Page Centre**.
  This means that you don't have to be careful where you put the title block.
- On the Object Info Palette click on the **Title Block...** button. This allows you to choose a sample title block to use as the basis of your title block.

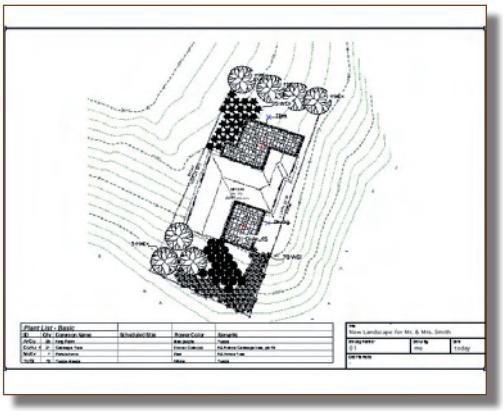
- Click on the **Edit Title Block...** button on the Object Info Palette.



- Fill in the drawing name, drawing number and so on.
- Click on the **OK** button.



- Notice that the information is added to the drawing border.
- Now you can see that our title block is in conflict with the sections, so they have to be moved.
- If you don't want the revision information, turn it off on the Object Info Palette.



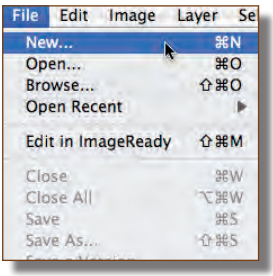
Project 3 Commercial Project

In this project we will import a drawing from a consultant that shows the existing site and proposed new development. Your job is to quickly show that there is enough landscaping on the project and provide a price for the planting.

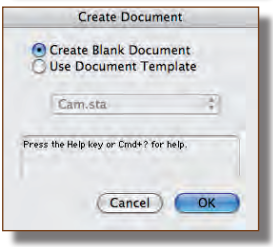
Step 1 Layer and Model Setup

Document Setup

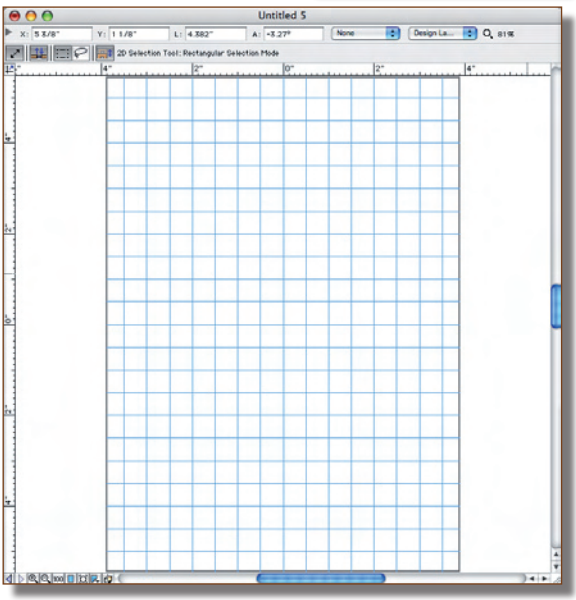
We will set up the file from the beginning, from a blank document. VectorWorks has setting up commands to make it easier to set up the file. When you have set up the file it can become a template file that you can use to start every new job, saving you a lot of time in setting up...



- From the Menu Bar choose **File > New...**



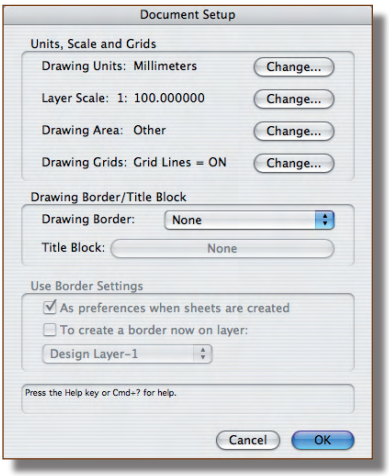
- This opens a dialog box for you to choose **Blank Document**



- A blank file opens with a layer scale of 1:1 and a letter size page. If you are using the Australia/NZ version of VectorWorks then a metric file opens.

- Let's set up our page first...

- The Document Setup dialog box now shows you your settings...
- Click on the **OK** button.



There are often times when you need to import a file from a consultant. A site survey, road layout, etc that you need to work on top of. Exchanging digital information between consultants is becoming common. Chances are that your consultants will be using a program other than VectorWorks and you will have to share information in a form that both your CAD program and your consultant's program understands. Sharing information will involve translating your VectorWorks files into a format that your consultant's program can understand and translating your consultant's files into a format that VectorWorks can understand, this file format is called DXF or DWG.

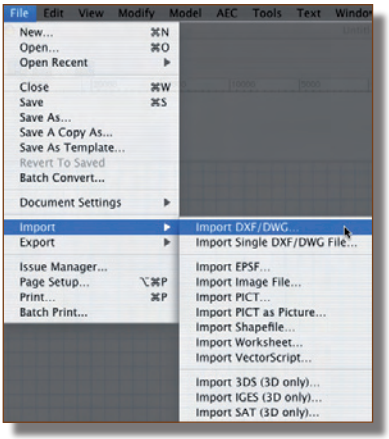
Often this file translation is easy but sometimes it still causes some confusion. The aim of this exercise is to explain the options available to make these translations as straightforward as possible, in other words how to keep the translations as consistent as possible.

Importing

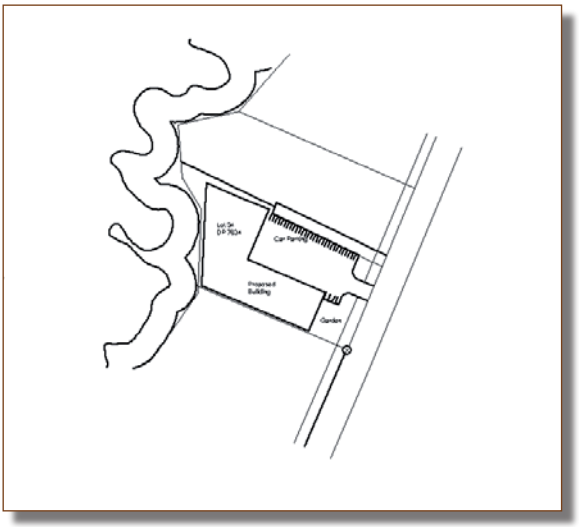
Never, never, never, import the DXF/DWG file into your existing project file. It may seem that we are doing just that, but remember that we only started the file in the last step, so it is still a new file.

I know that it seems a good idea to import the DXF/DWG file into your existing file, but don't do it. The imported file can change all your dashed line styles...

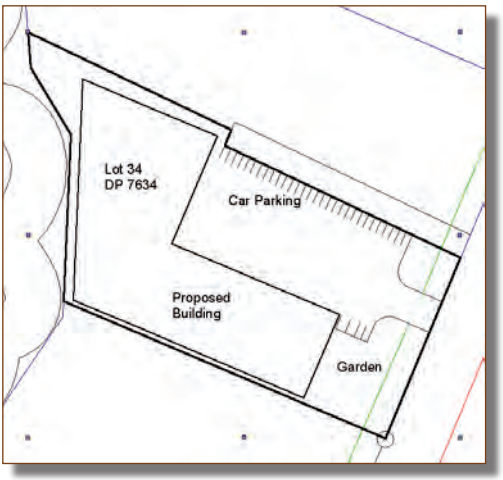
- From the Menu Bar choose
  File > Import > Import DXF/DWG...



We have our plan imported and it's time to plant our plants and landscape areas. If you place the plants first and the coloured landscape areas later, then the landscape areas would cover all the plants. It's easier and quicker to place the landscape areas first. We can assign the landscape areas to a class and then count the areas to show the council that we have the right area of planting and trees.

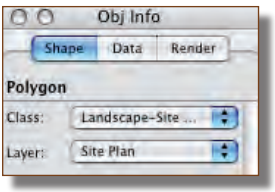


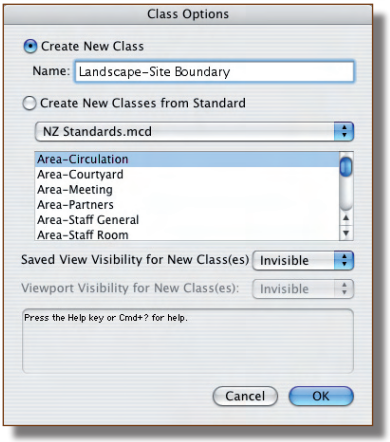
- Use the 2D Polygon tool to trace around the whole site. The we need to put the boundary on a class to control the graphics and to allow us to count the site area with a worksheet.



- You will need to create a new class for this, name the class **Landscape-Site Boundary**.

- Then assign the boundary to the **Landscape-Site Boundary** class using the Object Info Palette .





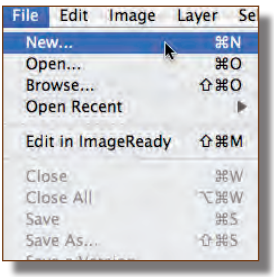
Project 4 Full Domestic Project

Step 1 Layer and Model Setup

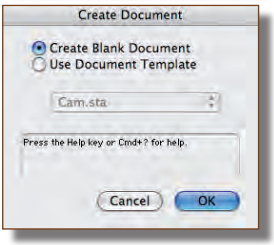
Document Setup

We will set up the file from the beginning, from a blank document. VectorWorks has setting up commands to make it easier to set up the file. When you have set up the file it can become a template file that you can use to start every new job, saving you a lot of time in setting up...

- From the Menu Bar choose **File > New...**

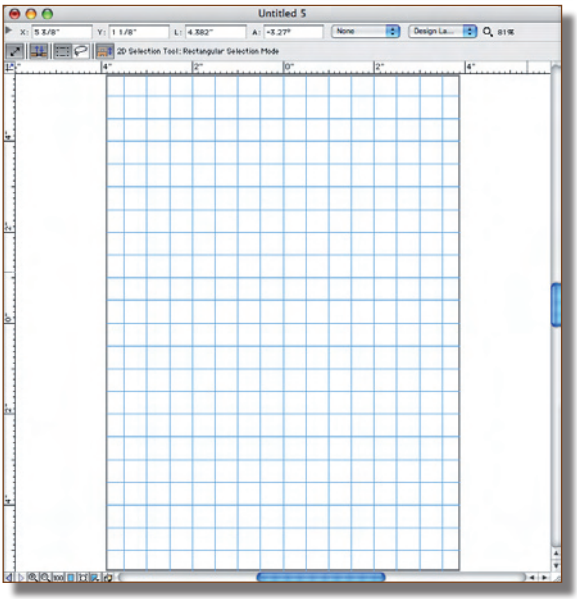


- This opens a dialog box for you to choose **Blank Document**

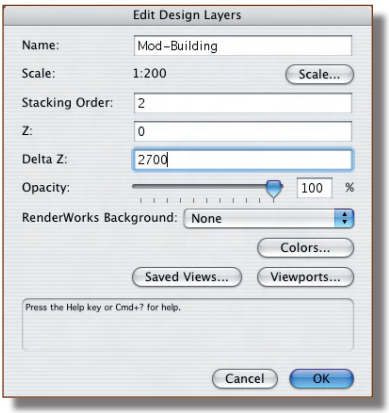


- A blank file opens with a layer scale of 1:1 and a letter size page. If you are using the Australia/NZ version of VectorWorks then a metric file opens.

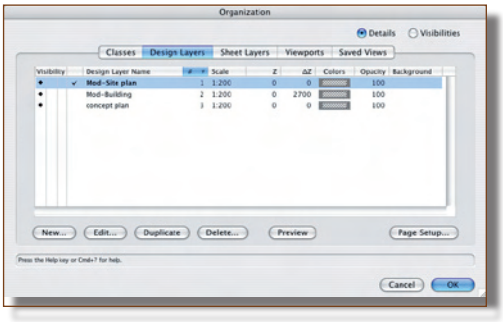
- Let's set up our page first...



- Double click on the **Mod-Building** layer, the one we'll use to build the house.
- Change the **Delta Z** to the height of the walls that you measured on site, from the Floor to the ceiling.
- Click on the **OK** button



- This takes you back to the Organization Palette, where you can see the changes to the layer heights.
- Click on the **OK** button
- If you haven't saved your file save it now.



Step 4 Create the Site Model

Creating a 3D site model and a 3D building is an area of VectorWorks that really shows the advantage of working in 3D. With the site model we can visualize the site, the height to boundary or recession line constraints, the sun position relative the site and the shading that other buildings, trees and parts of the site will have on your building.

Building a site model gives the ability to see on the screen what the constraints on your site are. You can use the site model to help sort out the bulk and location on the site, which is what we will be doing with our project.

Think of it this way. You have a tricky site with tight height to boundary problems. You build a Site Model you can quantify the constraints. You can build a mass block model and sort out exactly how much you can build and where you can build it. Using a Site Model can help you to resolve the levels on the site as well as resolving the area that you can build. When you have sorted out the bulk and location you can refine the design and use the recession planes when you submit your drawings to the council.

What is a Site Model

A site model is a way of looking at 3D data (spot levels or contours) in a way that allows you to see complex 3D models and 2D representations. VectorWorks uses the 3D information to create the models based on the data to help you understand the 2D and 3D nature of your site.

How Does It Work?

First you have to put in some 3D data, such as spot levels, contours or surveyor's data file. Then you ask VectorWorks to create a site model from this data. VectorWorks uses a set of algorithms to analyse the information and then creates the 2D and 3D representations. The algorithms can be thought of as a set of mathematical assumptions that are used to calculate the 2D contours and 3D model. Because of these assumptions you may get some odd shaped contours, or 3D models that don't look as you expected. A Site Model is not reality, it's a mathematical model of the data you give VectorWorks. Better data - better Site Model.

When you create a Site model VectorWorks will make a Plug-In Object that can show one type of information in a 2D view (2D contours) and a different type on information if you are in 3D view (3D contours or extruded contours etc.). Using this hybrid object is a good way of combining the 2D contours and the 3D site model into one object. If you are used to earlier versions of VectorWorks then this will be a very different way of working). The Plug-In Object allows you to turn on or off the existing and proposed site models.

- This is a common way to create a site model, but it's not the only way. Another common method is where you have a surveyor measure the site for you and send you a file that contains all the site information and 3D contours, refer to **Appendix 3 - More Site Modelling**.

- If you haven't saved your file save it now.

Step 5 Create The Walls

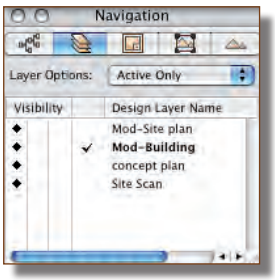
Now that we have the site drawn, or (modelled), we need to draw the building so that we can make sure that our landscape is appropriate to the house. That's what this section is about, how to make the building.

We will draw the building using walls. Why use walls? First, most of you are drawing buildings and so need to show walls in plan. There are 2 ways to do this, either by drawing 2 lines to represent the wall, or use the wall tool that will draw all the lines and cavities on the wall that you specify. The wall tool makes it fast to draw a plan of a building.

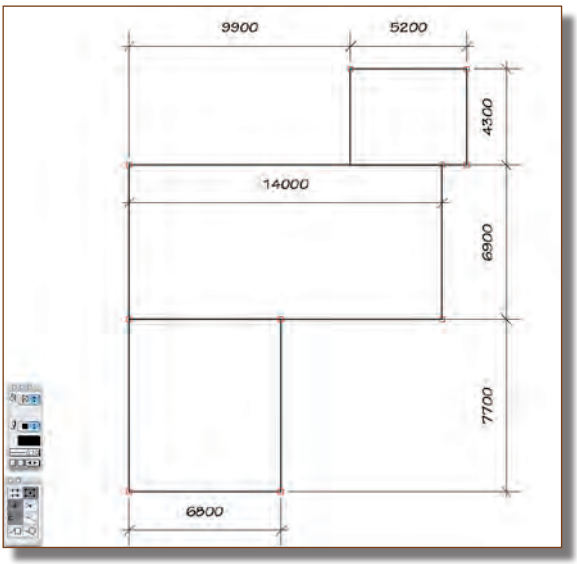
For most Landscapers and Designers the wall tool is fundamental to 3D work. Mainly you will be drawing plans to describe the work to be carried out. The wall tool not only draws the 2D portions of the walls with cavities, but also uses the layer heights to extrude the walls in 3D for you. This is why it's important to set up the layers first.

If you need more information on joining walls, healing walls and creating walls refer to the **Appendix 3 - Dealing With Walls**.

Create The Walls



- Change layers to **Mod-Building**.
- Change the layer options to **Active Only**.
- Use the **Navigation Palette** for this. It's quick!



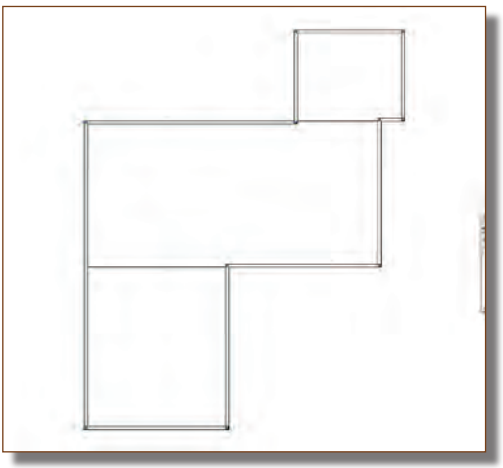
- Use the Rectangle too to draw the rectangles to the dimensions shown in this picture. Don't draw the dimensions, they are just there to show you how big to make the rectangles.
- If you are struggling with this part, go back to the Essential Manual to learn how to draw simple shapes.

Step 6 Creating The Roof

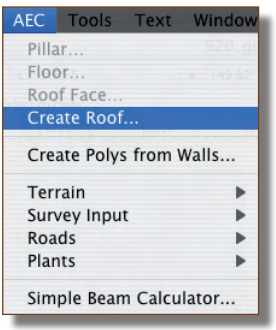
We need to create a roof for for the house so that it reflects the existing house. That way, when we create a 3D view of our landscape the client can see that you took notice of the existing house in your design.

Create the Roof

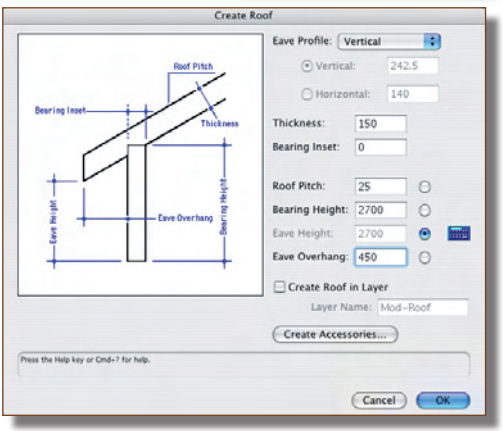
- All your existing walls should be selected. If they walls are not selected, select them using the 2D Selection Tool.



- From the Menu bar choose **AEC > Create Roof...**



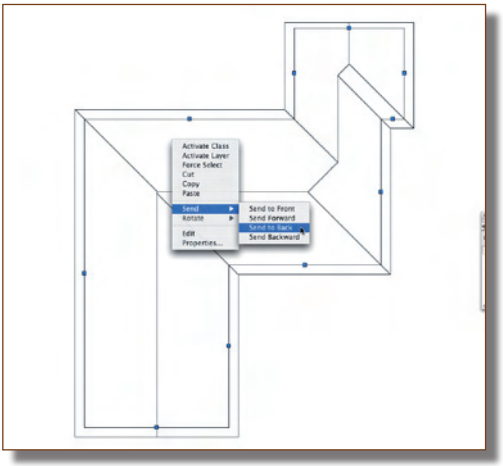
- Put in the settings for the roof.
- Click on the **OK** button.



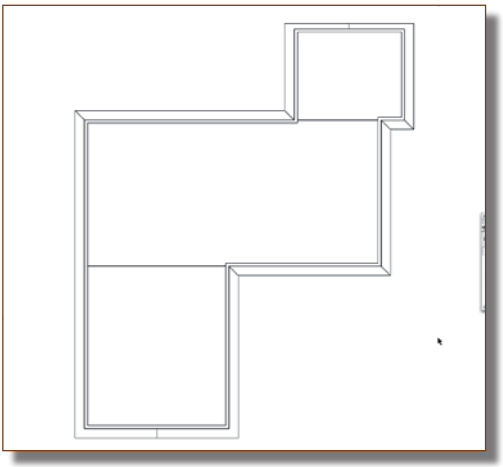
Step 7 Doors and Windows

VectorWorks doors and windows are created using the Door or Window object. When you create a door or window you are making both the 2D portion and the 3D portion.

- At the moment we can't see our walls, all we can see is the roof.
- Right mouse click (ctrl-click on a one button mouse) on the roof.
- Choose **Send > Send to Back** from the contexural menu.

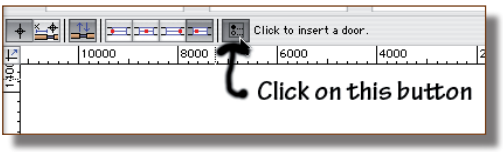


- Now you can see the walls.

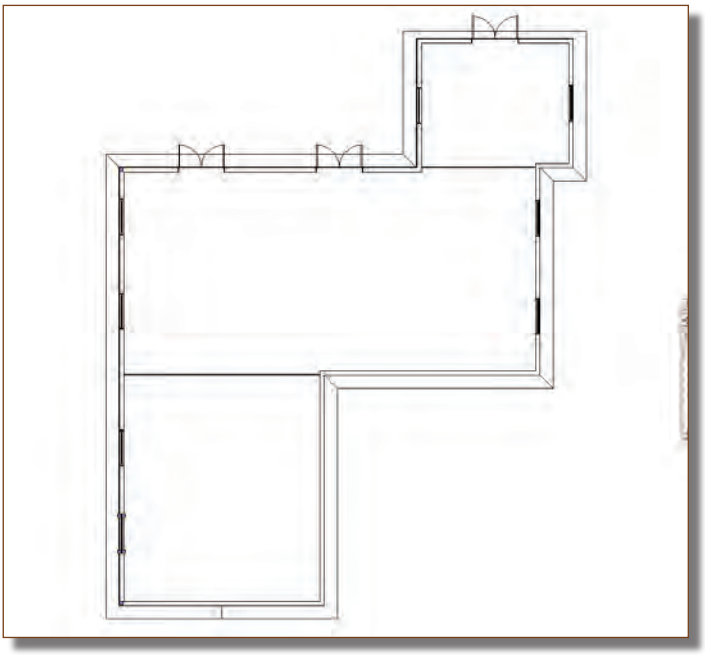


- From the Building Shell tool set choose the Door object.

- Click on the **Door Preferences**, the last button on the mode bar.



For a real project you would place as many of the doors and windows as you need to show the existing building. For a quick project I only show the doors and windows that open out to the garden.

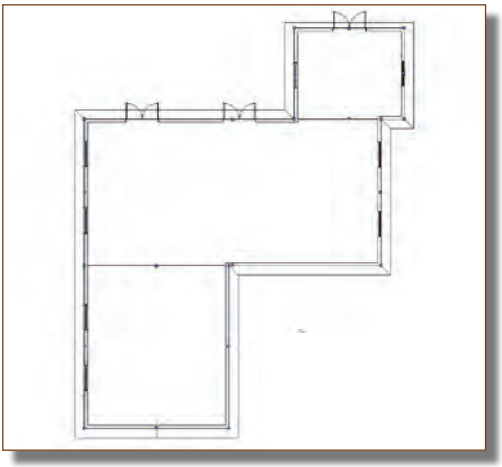


Step 8 Floors

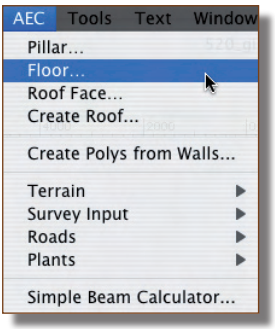
A floor in VectorWorks is a hybrid object. This means that there is a 2D portion and a 3D portion. The Floor command takes a user defined 2D shape (polygon, rectangle, oval etc.) and creates a 3D Component based on this. You have the option of defining the height in the current layer to the bottom of the floor and the thickness of the floor.

In our file we have 3 rectangles that we used to create our building outline. We can use these to create floors.

- Select the 3 rectangles that we drew at the start of drawing the house. If you have deleted them or can't find them, draw 3 new rectangles.

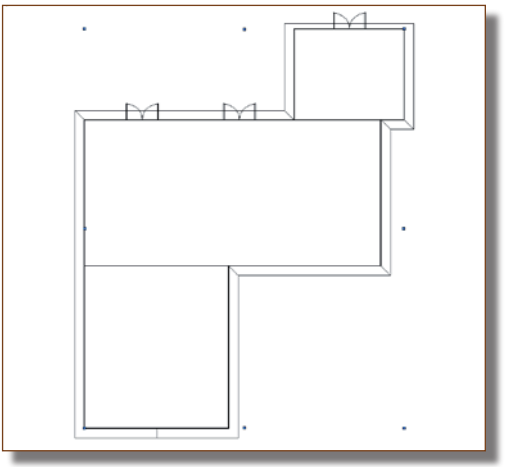


- From the Menu Bar choose **AEC > Floor...**

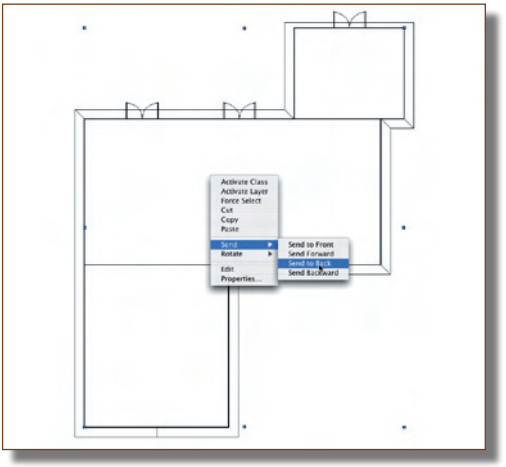


- Set the **Bottom Z** (the underside of the floor) to **600mm** (**2ft.**)
- Click on the **OK** button.

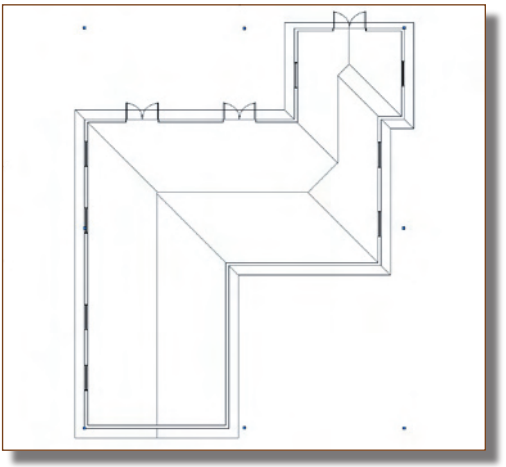
- The new floor objects come to the front (all new objects come the front).



- Right mouse click (ctrl-Click if you have a one button mouse) and from the context menu choose: **Send > Send to Back**.



- Now you can see the walls and roof correctly.

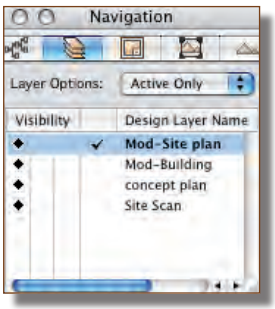


You can use this floor concept to create any slab type object, such as floors, benches and so on.

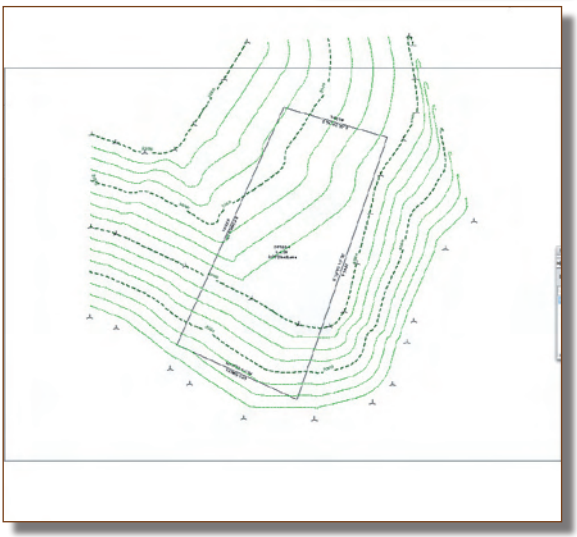
Step 9 Link House to Site

Now that we have the building we need to link it to the site plan. If you copy and paste the house onto the site plan, it will not update if you make any changes to the house. Layer linking allows you to update the house and have the site plan automatically update.

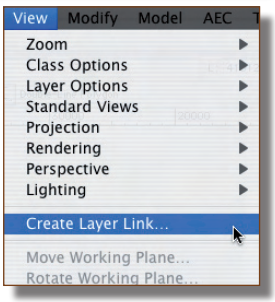
- Change layers to the **Mod-Site Plan** layer. The Navigation Palette make this really easy.



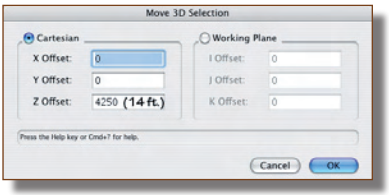
- You can see the site plan and the site model, but our house is not here yet. Layer linking will bring our house into our site plan.



- From the Menu Bar choose **View > Create Layer Link...**



- Move the house in the **Z** direction only. Move the house up **4250mm** (**14 ft.**)



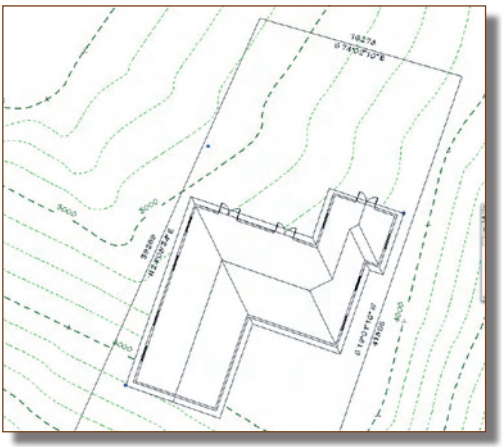
- Now that looks better.

- If you haven't saved you file lately save it now.

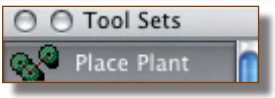
Step 10 Placing Standard Plants

All our work so far has been to get the plan of our existing house set up. Now we can start to get the plants on the drawing. We will go into some detail about this so that I can teach you how to make your own 2D plant graphics, how to make your own 3D plant symbols and where to store them. If you want to use the standard plant symbols that's OK, just ignore what I say about editing the plants.

- Change the view to a **Top/Plan** view. You can use the Menu bar to change the view, or you can use the **0** key on the numeric keypad.

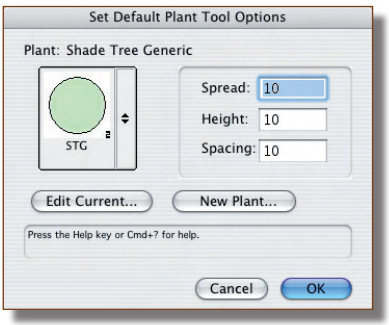


- Choose the **Place Plant** tool from the Site Planning Tool set.



- Click on the **Plant Tool Settings** button, the last button on the mode bar.

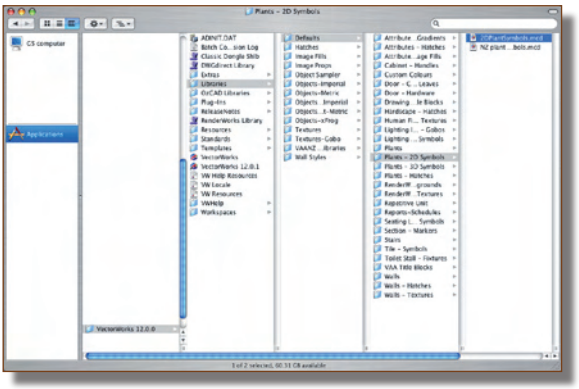
- This opens the dialog box where we choose the plant that we want to place. You can set the size of the plant, the type of plant, spacing and height.



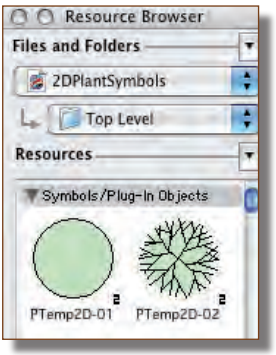
Step 11 Editing Plants

Using the standard plants is all very well, but the graphic style may not suit you. We can edit the plan shape of the plants, we can edit the classes in the plant symbol (which would help when you want to move from concept drawings to working drawings. If we edit the plants in the right place you will change the plants for every project from then on.

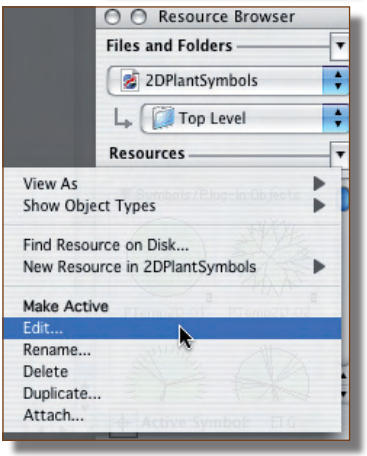
- Open the file:
  VectorWorks 12.0.0/Libraries/Defaults/Plants - 2D Symbols/ 2DPlantSymbols.mcd



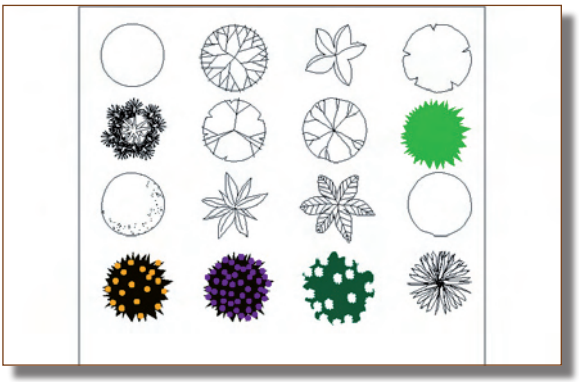
- When this file opens, point the Resource Browser to look at this file.



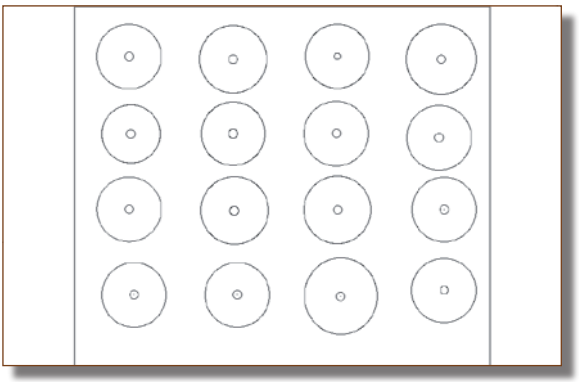
- Right Mouse click (ctrl-Click on a one button mouse) on the first symbol, **PTemp2D-01.**
- Choose **Edit** from the pop-up menu.



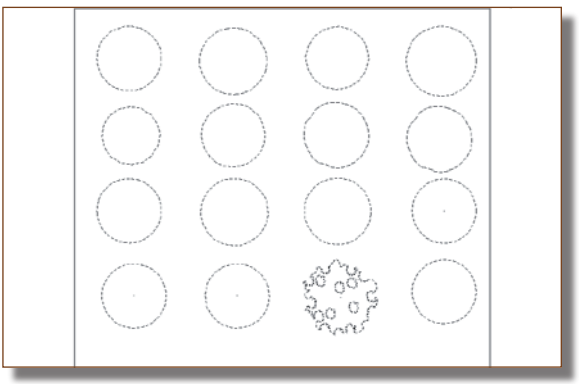
- If you edit each plant you can set up a whole file that has just the plants that you want.
- This is the Concept view. I've turned off the construction and canopy above classes.



- This is the Construction view.



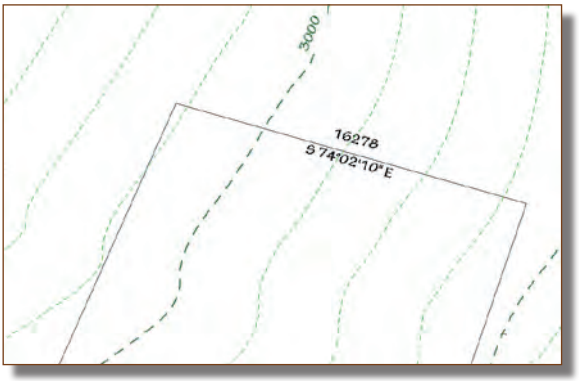
- This is the Canopy Above view.



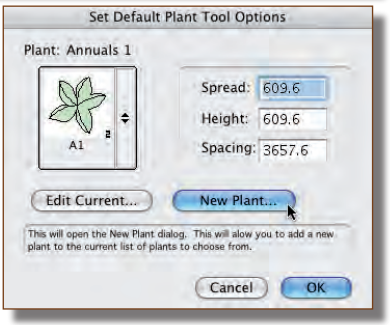
- Now that we have our plant graphic in a way that suits us, we can go back to our project and add some real plants, with real plant data.

Step 12 Editing Plant Data

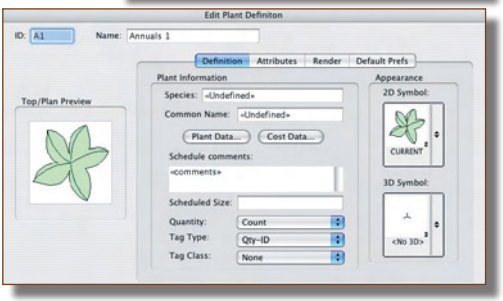
Editing plant data can be done in two ways; one inside of VectorWorks and the other way is to edit the plant data outside of VectorWorks using excel to edit the spreadsheet. We will look only at the first method, as the second method has to be tackled very carefully.



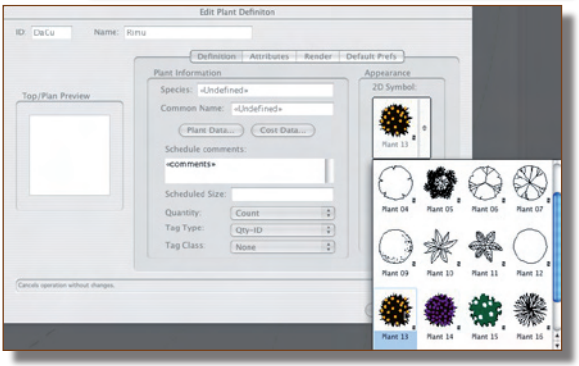
- Delete the plants that we placed earlier.
- Select the **Place Plant** tool from the Site Planning Tool set.
- Click on the **Settings Button**, the last button on the Mode Bar so that we can set up our plants.



- Click on the **New Plant...** button.



- This takes use to a dialog box where we can set up and edit our plants.



- Click on the **2D Symbol** button to choose the plant symbol that you want. If you have edited all the plants as I suggested in the last step, you will have your plants to choose from.

Appendix 1 Layer and Class Standards

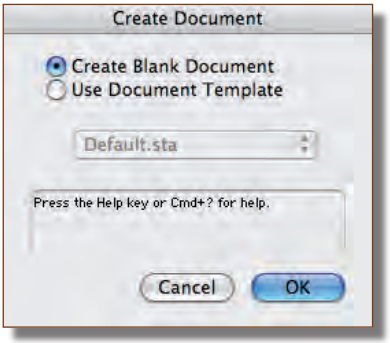
When you create a lot of drawings it's essential that your drawings are similar to each other in the way they are set up. The best way to ensure that the drawings are consistent is to use a layer and class standard to make sure that you are using the same layer names, the same class names and the same class settings in each project.

VectorWorks comes with a layer and class standard concept and you can use this to set up your own layer and class standards. You do this by creating a file with all your standard layer names and class names with the attributes in it and saving it in the Standards folder.

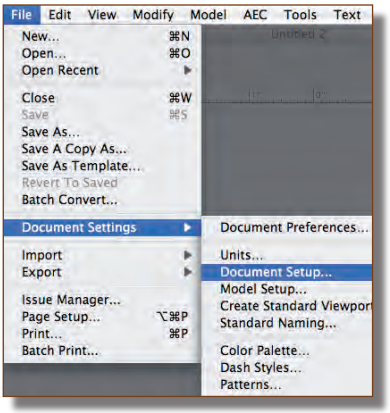
When you create a new class you will be able to choose new classes that match your office standards and when you create a new layer you will be able to choose new layers that match your office standards.

Let's make a sample standard file to see how it works. Then as we develop our house project we can use our layer and class standards to create our layers and classes for our project.

- Create a new file, using the blank document.



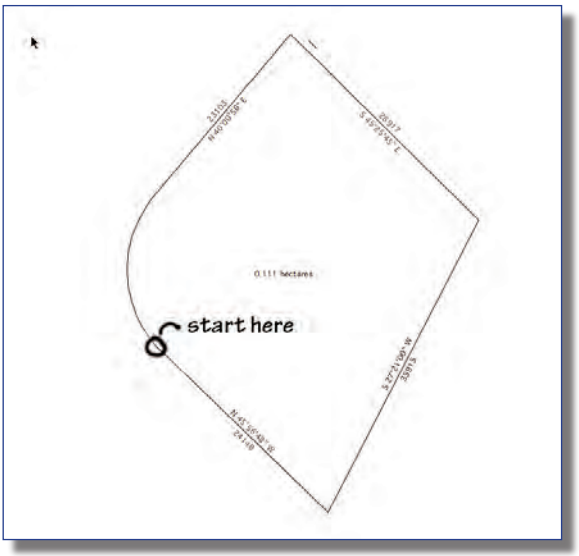
- From the Menu Bar choose **File > Document Settings > Document Setup...**
- Set up the as we did earlier in the manual.



Appendix 2 - Drawing Complex Site Plans

Open a new file so that we can draw the site boundaries or property lines. Generally when you start a new project you would get the site information that you have. This could be a certificate of title, surveyor's drawing or measurements that you have taken on site. We have a plan of the site to work from.

- Change the layer scale to **1:250**.
- Select the **Property Line** tool to draw the site.

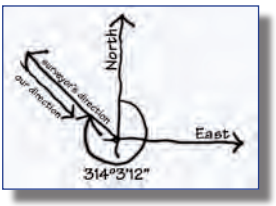


- Click on the Preferences Button on the Mode Bar to set the preferences to Bearings, and turn off the simple dialog.

- Click once on the screen to start and the Define Property Line dialog box opens. I always start at the end of the arch segment, so that if I mess up, at least I have most of the site, and I only have to tidy up the arc segment.

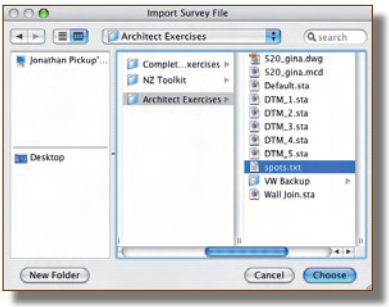
- You type in the distance and use the surveyors bearings as they are shown on the information that you have. If the bearing is going the same direction as the surveyor measured type in the bearing.

- If the bearing is going opposite to the direction surveyor measured type in the bearing but enter the length as a negative. Where to start is always important. I always start at the end of an arc. That way, if I mess up the arc, it is the last segment and could be finished manually.



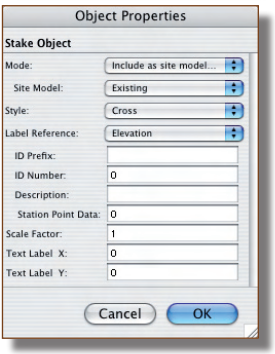
- We will start at the bottom end of the arc. Click in the drawing area to start.

- For this example choose the file **spots.txt** from the Architect Exercise Folder.



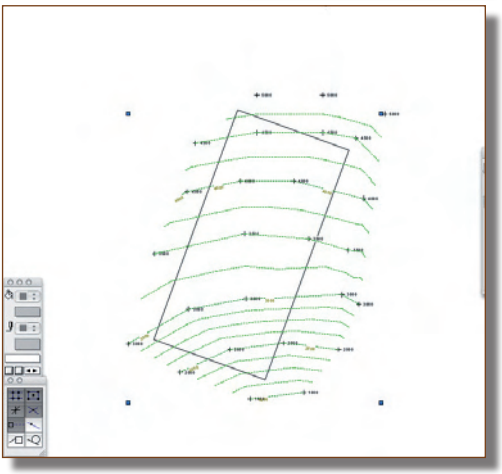
- VectorWorks then shows you the first line of the selected file so that you can check the file. This text file is set up to use X,Y,Z coordinates.
- Check to make sure that you have Easting, Northing, Elevation chosen.
- The text file uses mm for the coordinates. You should check the file format and coordinates when you ask the surveyor to give you this type of text file.
- VectorWorks will check the text file that you are importing and report any errors.

- If you haven't used this file for importing survey data, VectorWorks will show you the preferences for the Stake Object.
- The Stake Object is an object that represents a spot level, and it displays its vertical height. If you move the object up or down in 3D, the text on the stake object changes accordingly.
- Click on the **OK** button.



Now that you have imported the survey data you can make the site model. You make the site model the same way that we made the last one.

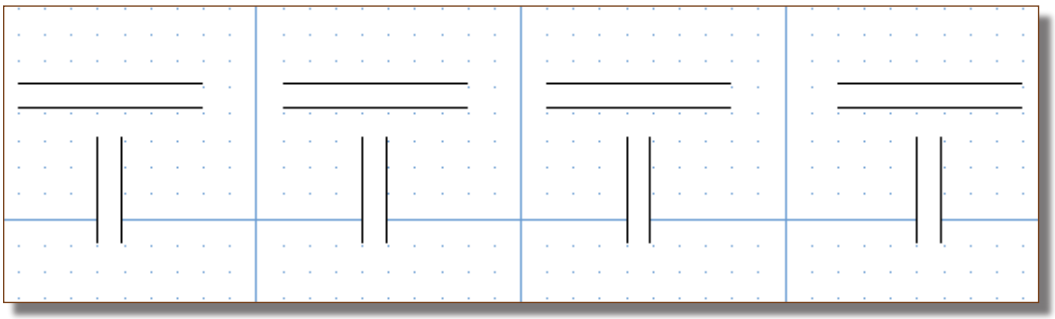
- From the Menu Bar choose **AEC > Terrain > Site Model...**
- Make the site model as we did in the last exercise, setting the properties as we did in the last exercise.

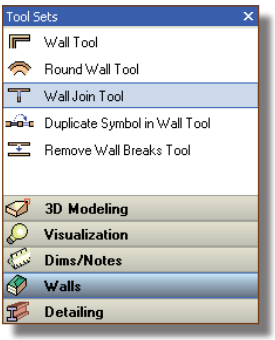


Appendix 5 - Dealing With Walls

Joining Walls

- Open the file **Wall_1.sta** from the exercises folder.
  There are 4 groups of walls similar to the picture.





- Select the **Wall Join Tool**.

- There are 3 modes for the join wall tool and 2 options for the cap on the end of the walls that you join.

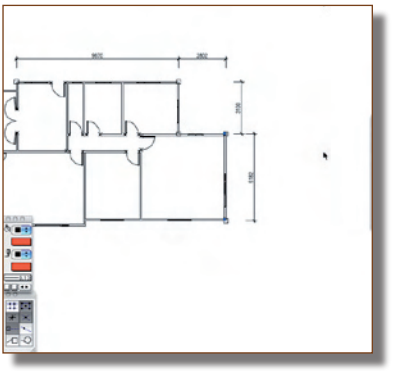
- The first mode is for **T** joining walls, the second mode is for corner joining walls and the third mode is for joining walls that cross each other.

- When you select a mode from the first group you then need to select a mode from the second group to tell VectorWorks whether the walls are butt joined (with caps) or mitre joined (without caps).
- To use any of the wall joining modes click on the first wall to join then click on the second wall to join. When clicking on the walls it doesn't matter where on the wall you click, you don't have to click on the point that you want to join. Avoid clicking on a point where two walls come together, you will not know which wall VectorWorks will choose.

- On the first group of walls we will use the first mode. The first mode is for **T** joining walls. If one of the walls pass beyond the other (even by a small amount) then the join will be a **T** joint.

- Select the first mode then select the uncapped mode (the first mode in the second group). This will create a seamless joint in the two walls.

- This technique has a similar result as the first method, but it is quicker.



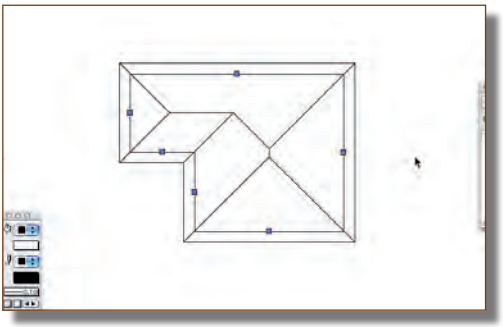
Appendix 6 - Dealing With Roofs

Editing Roofs

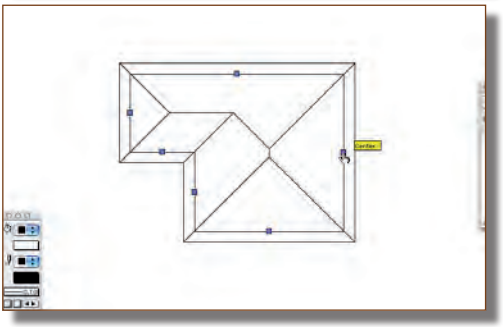
Split Gable Roof

Once a roof is created you can edit parameters of the roof, roof plane by roof plane if you want, or the entire roof. We are going to create a split gable roof using the standard roof command, and some simple editing.

- Open the file **Roof_01.sta** from the exercises folder.
- Select the roof using the 2D Selection tool.
- When you create a roof the result is always a hip roof but we want a split gable.



- With the 2D Selection tool move the cursor over the handle at the right hand side of the roof.
- When you do, the cursor will change into a hand.
- Click on the handle to open the Edit Roof dialog box.



- Click on the **Gable** radio button.
- Click on the **OK** button.