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Vectorworks Landmark

Tutorial Manual





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For more Vectorworks training information, or to purchase more copies of this book, please visit www.vectorworks.net/training, or call us at (410) 290-5114.

There are several people I would like to thank: Steve Scaysbrook, Roger Williams, Bill Vincent, and my good friend Allan Baggett. Without them, none of my manuals would be as good as they are.

A big thank you to my wife, Marie, and my kids. I need your support and understanding to spend the hours needed to create these manuals.

Jonathan Pickup, January 2012.

Table of Contents

Introduction.....	iii
Project 1: Landscape Area Analysis	1
Project 2: Quick Domestic Project	15
Project 3: Domestic Project	33
Step 1 Document Setup.....	33
Step 2 Layer Setup	41
Step 3 Importing a Scanned Image	44
Step 4 Planting	46
Step 5 Hardscape	61
Step 6 Plant Counting.....	65
Step 7 Drawings and Annotation	69
Step 8 Editing Plant Placement	72
Step 9 Editing Plant Graphics	75
Step 10 Change Plant Grouping.....	85
Project 4: Simple Commercial Project	89
Step 1 Document Setup.....	89
Step 2 Importing DXF/DWG File (Architect's Plan).....	91
Step 3 Placing the Landscape Areas	96
Step 4 Vectorworks Plant Database	112
Project 5: Simple Park Drawing.....	125
Step 1 Importing a Survey Drawing	125
Step 2 Checking the Imported Drawing	128
Step 3 Creating the Landscape Layer	130
Step 4 Edit the Imported Drawing	131
Step 5 Drawing the Paths	135
Step 6 Adding the Lawn.....	142
Step 7 Car Parking	145
Step 8 Placing Plants.....	149
Step 9 Counting Plants	153
Step 10 Creating a Drawing.....	155

Project 6: Commercial Park Drawing.....	165
Create a New File.....	165
Importing a Survey Drawing	165
Check the Imported Drawing.....	167
Create the Landscape Information	173
Create Car Parking.....	173
Count the Car Parking.....	179
Scheduling the Planting.....	189
Scheduling Hardscape Areas	191
Exporting the Drawing.....	202
Revisions from the Consultant.....	203

Introduction

0.1 How to Use this Manual

This manual builds on the Vectorworks® Essentials manual. The Essentials manual is designed to show you basic concepts of Vectorworks such as drawing, modeling, and basic file organization. If you are unfamiliar with these concepts, then you should get the Essential manual and complete it before you go any further.

Here are some ideas to help you to use this manual better:

Spend the time to work through the manual. The information in this manual will not find its 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 brings the best results. Watch the movies, try the exercise, and then play the movie again.

Measurements for you to use are shown in both metric and imperial. Metric measurements are shown first, followed by imperial measurements 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.

This manual comes as a hard copy with a CD-ROM.

There are two exercise folders on the CD. One is called "Imperial Modeling Exercises," and the other is called "Metric Modeling 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 find later, such as in "My Documents."

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

When you want to play a movie that is shown in the printed manual, insert the Landmark tutorial manual CD into your computer's CD player. Right-click on the file on the CD called **Landmark Tutorial Manual.pdf**, choose **Open with....**, and choose Acrobat Reader®. 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 will change shape), and click once. When the movie is finished, it will automatically close. If you are using a Macintosh, make sure the manual opens with Adobe Acrobat Reader, not Preview. Preview will not display the movie icons. When the movie is finished it will automatically close. Use Adobe Acrobat Reader to read the manual and play the movies; use Vectorworks software to do the exercises.

0.2 What's in this Manual

In this manual we will be working through a series of projects. The projects start out using simple concepts and then gradually get more complex.

Project 1 starts with some information already in the file. We will use this information to create a landscape area analysis. We can use this to create a budget price and to make sure that we have kept our work within the client's budget.

Project 2 uses a file that has a sketch already in it. We will 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 count the plants and quantify the hard landscaping.

Project 3 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 and add the trees and hard landscaping. Along the way we will edit the plants to suit us, and we will add a title block to the drawing so you can start to use this method to create your own drawings.

Project 4 is a commercial project. We will import the developer's plan, add the planting to suit the council requirements, and tag the plants.

Project 5 is a small park that we will import from a survey file. It needs paths, planting, a fountain, and parking space, all in 2D for a concept plan.

Project 6 is a commercial project. In this exercise, you will look at a larger project, importing a file from a consultant. After completing your work and exporting it, you will learn how to deal with changes from the consultant.

0.3 New Ways of Drawing

When you are drawing in Vectorworks, draw the objects to the correct real-world sizes regardless of the scale of the layer that you are working on.

It is much easier to maximize the potential of Vectorworks software by using objects to draw with, as they can be easily edited (for example, doors, windows, rectangles, etc.). You could say that Vectorworks is designed to draw with objects.

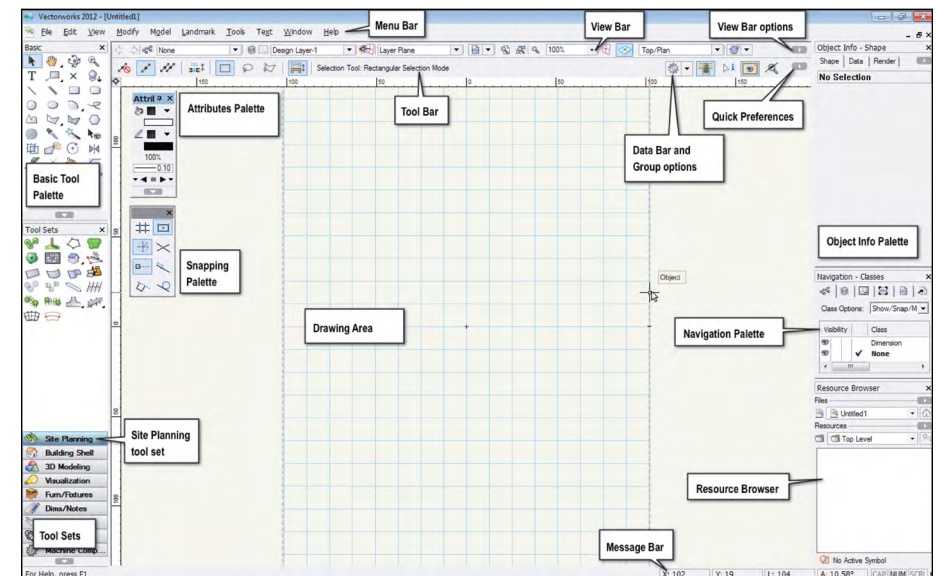
When you want to draw shapes, you may be tempted to use lines and arcs to draw the shape. Always try to draw with solid shapes, rectangles, and polygons. I have created a series of exercises that show you how to make complex shapes out of simple shapes by adding the shapes together or by clipping a portion of a simple shape away to make a complex shape.

It's very important that you use these new drawing methods to draw your buildings, landscapes, or models.

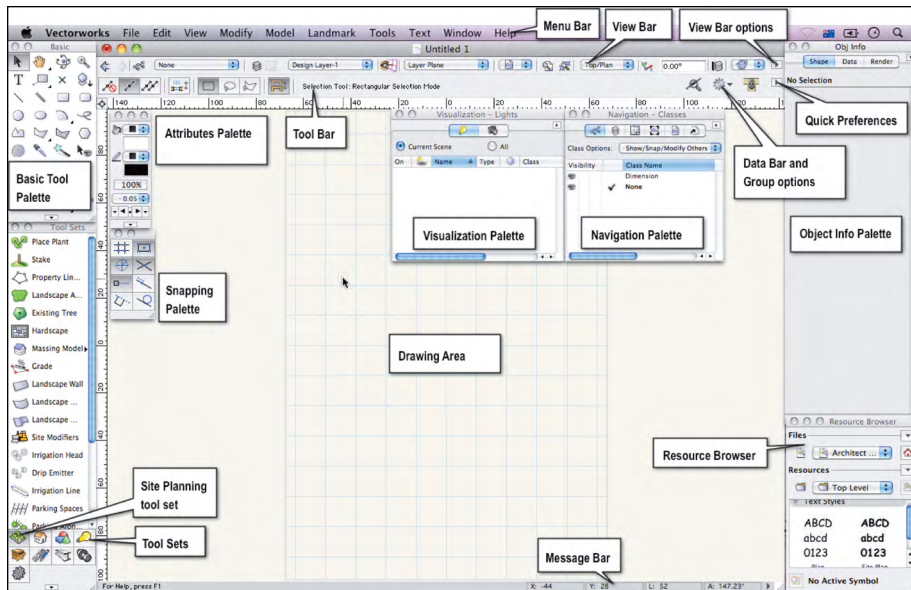
This manual is intended to be used with the standard Vectorworks workspace. After you have completed this manual, you can change back to your normal workspace and carry out the 3D modeling you want.

- Go to the **Menu bar**.
- Choose **Tools > Workspaces > Landmark**.

When you start Vectorworks 2012 Landmark, it looks like this on a Windows machine.



When you start Vectorworks 2012 Landmark it looks like this on a Macintosh:



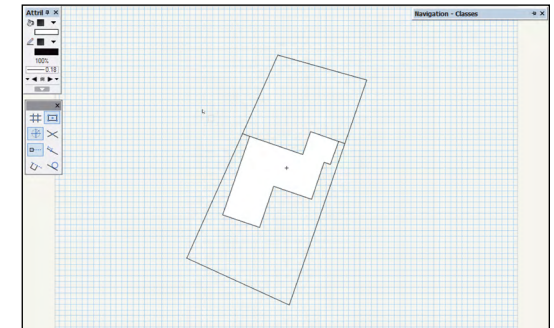
Project 1: Landscape Area Analysis

We can use one of the Landmark tools (Landscape Area) to analyze the landscape areas and to provide a budget price. This has a couple of advantages: it is quick, and you can make sure you are within the budget.

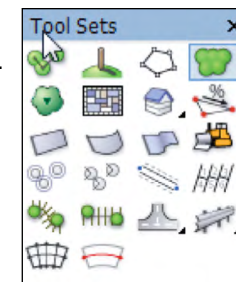
At the very early stage of a project, the client may not want to pay you for a lot of work they cannot afford. Creating a quick concept with a budget figure will let you know in a few minutes if the client can afford your design.



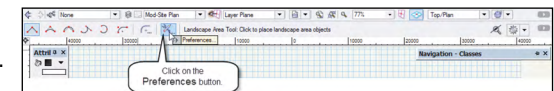
- Open the file **Project_1.sta** from the exercise folder. This file is a Vectorworks template file. It has some drawn information already on it, so all we have to do is add the areas we want to the plan.



- Go to the **Site Planning** tool set.
- Choose the **Landscape Area** tool.



- Go to the **Tool bar**
- Click on the **Preferences...** button.



- Click on cell **D2**.
- Type in an equals sign (=).
- Click on cell **B2**.

	A	B	C	D
1	Name	Area	Unit Price	
2		3	2554.429	160
2.1	Trees		491.976	65
2.2	Border Planting		578.971	75
2.3	Lawn		1483.481	20
3				
4				
5				

- Type in a times sign (*).
- Click on cell **C2**.

	A	B	C	D
1	Name	Area	Unit Price	
2		3	2554.429	160
2.1	Trees		491.976	65
2.2	Border Planting		578.971	75
2.3	Lawn		1483.481	20
3				
4				
5				

- Click on the green tick to complete this formula.

	A	B	C	D
1	Name	Area	Unit Price	
2		3	2554.429	160
2.1	Trees		491.976	65
2.2	Border Planting		578.971	75
2.3	Lawn		1483.481	20
3				
4				
5				

Vectorworks calculates the cost of each area based on the areas you drew and the unit price of each area.

The total price is shown in cell D2. If this is more than your client wants to spend, you will have to adjust your design by changing the areas or the prices.

There is a lot more we could do with this worksheet, but as this is the first exercise, I wanted to keep it simple.

For example, the worksheet could be added to the drawing, and the unit prices could be amended directly on the worksheet to get the project within budget.

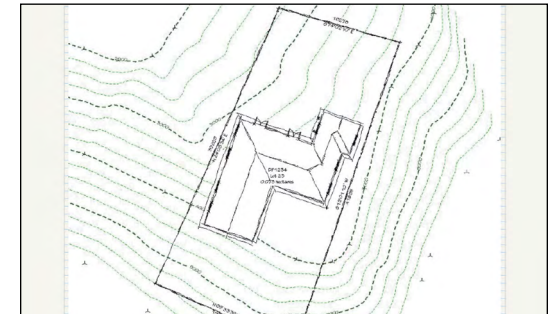
	A	B	C	D
1	Name	Area	Unit Price	
2		3	2554.429	105078.919
2.1	Trees		491.976	31978.448
2.2	Border Planting		578.971	43422.845
2.3	Lawn		1483.481	29669.625
3				
4				
5				

Project 2: Quick Domestic Project

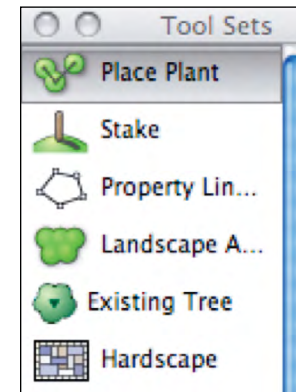
This project is designed to show you how quick it can be to draw plants and hard landscaping once you have all the information you need.



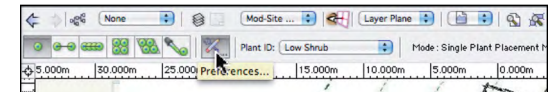
- Open the file **Project_2.sta** from the exercise folder. This file is a Vectorworks template file. It has a scanned image of our house plan and the plants already imported into it. All we have to do is add the plants and hardscape to the plan.



- Go to the **Site Planning** tool set.
- Choose the **Place Plant** tool.
- Go to the **Tool** bar.



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



Project 3: Domestic Project

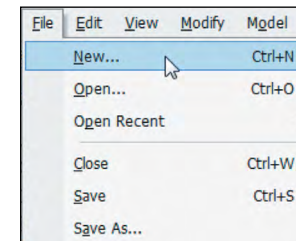
Step 1 Document Setup

The purpose of this exercise is to learn how to set up a project from the beginning, including the page size, units, plants, hardscapes, title blocks, and so on.

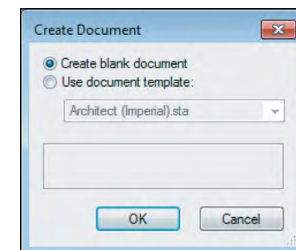
This project builds on Project 2, but it starts with a blank document. The Vectorworks software has setup commands to make setting up the file easier. When you set up the file to suit your drawing style, it can become a template file that you can use to start every new job, which will save you a lot of time.



- Go to the Menu bar.
- Choose **File > New...**



- Choose **Create blank document**.
- Click on the **OK** button.



Project 4: Simple Commercial Project

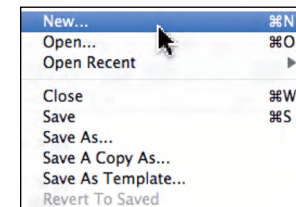
In this project we will import from a consultant a drawing that shows the existing site and proposed new development. Your job is to quickly show that there is enough landscaping on the project and to provide a price for the planting.

Step 1 Document Setup

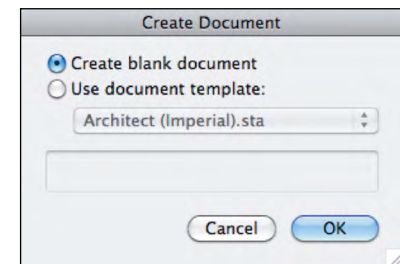
You will set up the file from a blank document. Vectorworks has commands that make it easier to set up the file. When you have set up the file, it can become a template file that you can use to start every new job, which saves you a lot of time.



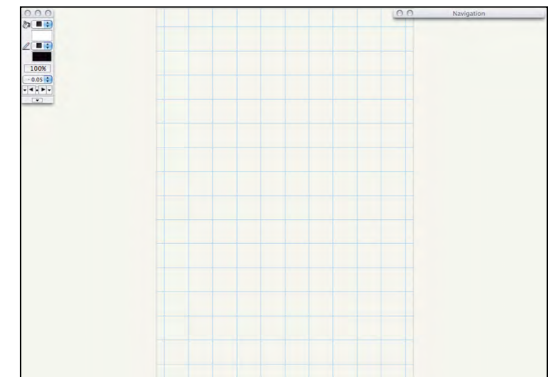
- Go to the Menu bar.
- Choose **File > New...**



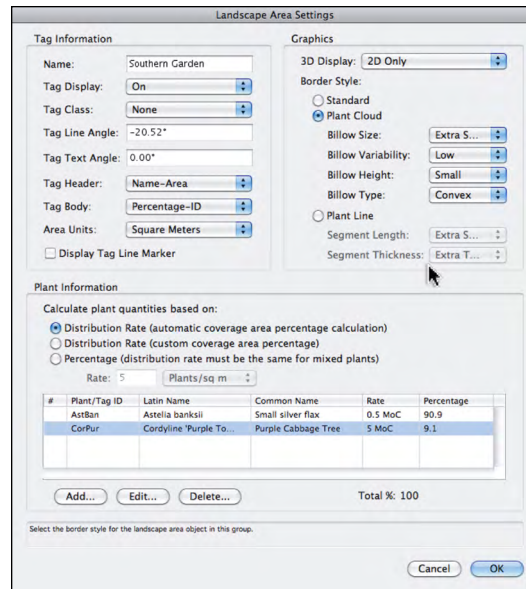
- This opens a dialog box for you.
- Choose **Create blank document**.
- Click on the **OK** button.



- 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.

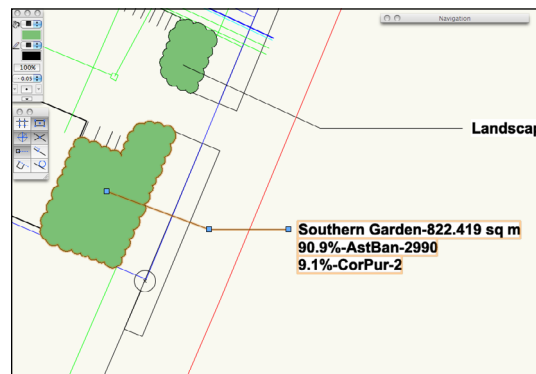


- You can see the list of plants in your landscape area.
- Click on the **OK** button to close the Landscape Area Settings.

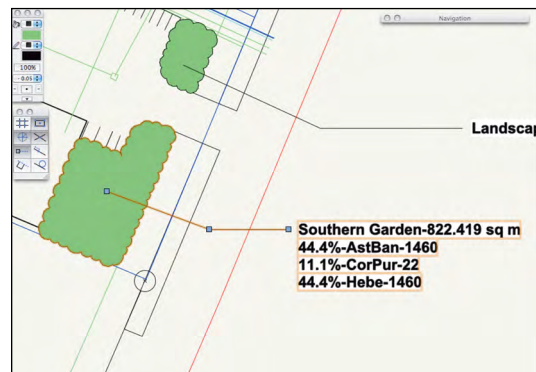


Your landscape area is updated. If you set the tag options to show the number of plants, this will update.

As with the normal plant object, you can move the plant tag around using the **Selection** tool.



You can add more plants to the garden, using these techniques.



Project 5: Simple Park Drawing

In this exercise you will be setting up a landscape plan from the beginning, by importing a survey plan. We will learn about importing a drawing again, and we will divide up our work. We will have a base plan on one layer and all our planting work on a separate layer.

Remember to always import your survey drawings into a new file. Never import the survey into an existing project.

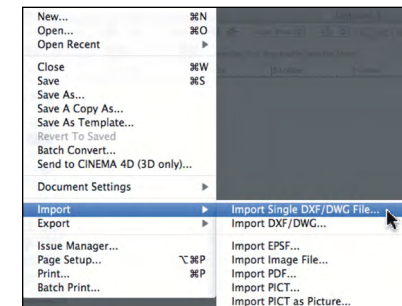
Step 1 Importing a Survey Drawing

Importing a survey plan seems easy, and it is. If you make the right choices at this point, your import should go well, but if you let Vectorworks make all the choices for you, then it becomes a lottery.

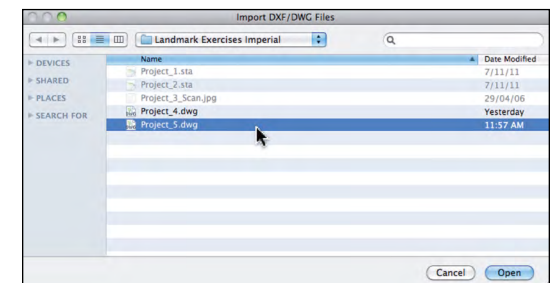


- Create a new blank document.
- Go to the Menu bar.
- Choose **File > Import > Import Single DXF/DWG**.

It doesn't matter if you import a DXF file or a DWG file. The Vectorworks program deals with these file types the same way.

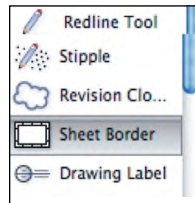


- Choose **Project_5.dwg** from the exercise folder.

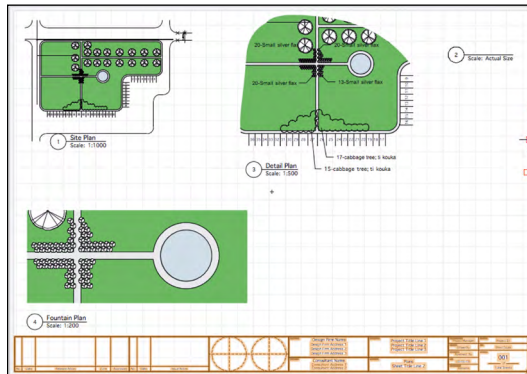




- Go to the **Dims/Notes** tool set.
- Click on the **Sheet Border** tool.



- Place a sheet border on the sheet layer. If you need to refresh your memory on sheet borders, refer to pages 69–72.



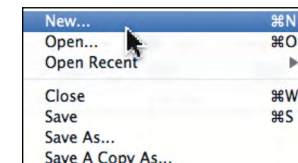
Project 6: Commercial Park Drawing

In this exercise you will be importing a consultant's file of the project. Remember to always import your survey drawings into a new file. Never import the survey into an existing project.

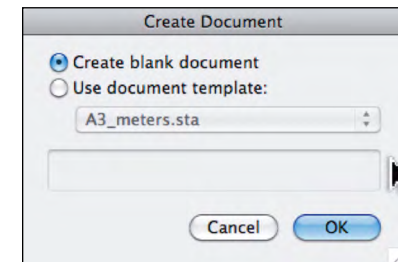
Create a New File



- Go to the Menu bar.
- Choose **File > New...**



- This opens a dialog box for you.
- Choose **Blank Document**.
- Click on the **OK** button.
- Set up your page and change all the settings to suit your drawing area, units, grids, and so on. Refer to pages 33–40 if you need more information on controlling these settings.



Importing a Survey Drawing

- Go to the Menu bar.
- Choose **File > Import > Import Single DXF/DWG File...**

It doesn't matter if you import a DXF file or a DWG file. Vectorworks deals with both of these file types the same way.

