



Lesson 5: Initiating the Site Modeler

WELCOME!

PowerCivil has many features to offer, but by far the most impressive is that of the Site Modeler. This lesson is about getting started with the Modeler and creating a project that will store all of the grading objects for the site. Until now, we have seen how to access the CAD data, how to work with DWG files and how to build a surface DTM from graphical contours. Now we will pull it all together and begin designing our proposed surface.

LESSON OBJECTIVES

In this lesson, a single topic will be covered:

- Topic 1 PowerCivil Project Wizard – initiating the Site Modeler

Be sure to have a look at the context sensitive help for PowerCivil. Either while using the tutorial or in general practice with the software, you will find the help system not only includes program documentation but it also is equipped with links to online video clips (internet connection is required). Access the help from the menu bar under *Help>Civil Help*.

INTRODUCTION

This Lesson will show you how to set up a Site Modeler Project. In the tutorial you will utilize the Project Wizard which guides you through the set up. Every project has at least one Site Model as well as one or many Site Objects. As you initiate the modeler, you will import the surface model “BASE.TIN” as the first object. It will also be considered the “base” object as all subsequent Site Objects will be merged into the base. Remember, the base information can come from a wide variety of sources including XYZ data, XML surfaces, 2D and 3D graphical data and others.

PROJECT WIZARD

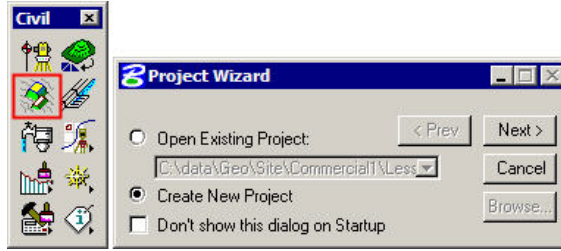
To initiate the Site Modeler, from the desktop launch PowerCivil using the program icon, navigate to the folder for lesson 5 and open the file “LAYOUT.DGN”. This is where the design elements reside and you will use these elements to form the objects within the site model.

To view this portion of the lesson, press the play button.

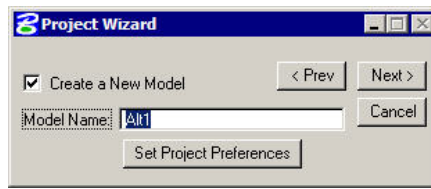


Once in the file, you will want to follow these steps:

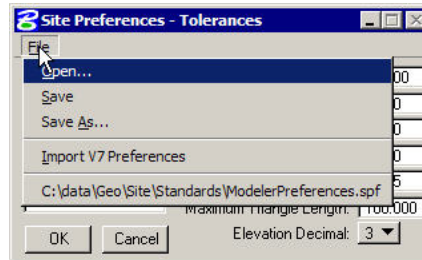
1. Activate the Modeler (*Civil>Modeler*). This will invoke the Project Wizard.



2. Choose the option to “Create New Project” and press the “Next” button.
3. Select a name for the project, by default, this name is the same as the DGN file but with the GSF extension – in this case it is “LAYOUT.GSF”. Press the “Next” button.
4. Dock the “Active Site Object Control” bar and then toggle on the option to “Create a New Model” in the wizard – give the model the name “Alt 1”.

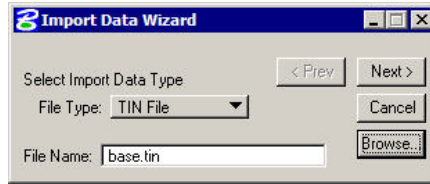


5. Press the “Set Project Preferences” button. Use the File menu to open the preference file “C:\data\geo\site\standards\ModelPreferences.SPF”

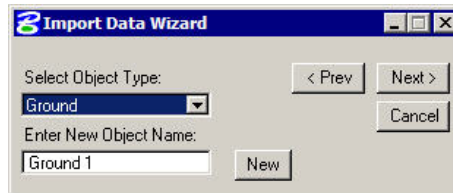


6. Explore the different settings in the Site Preferences dialog. Press the “OK” button to close the Site Preferences dialog. Press the “Next” button to advance the wizard.
7. Toggle on the option to “Open Object Import Wizard” and press the “OK” button.

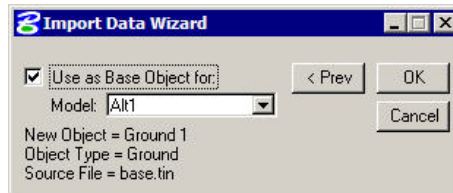
- In the “Import Data Wizard” choose the file type as “TIN” and browse to the file “BASE.TIN” in the folder “C:\data\Geo\Site\Commercial1\Lesson_05-Initiating the Site Modeler\”. This TIN was created in Lesson 3. Press the “Next” button.



- Select the Object Type, which will be “Ground” and allow the name to be “Ground 1”. Press the “Next” button.



- Toggle on the option to “Use as Base Object for” and press the “OK” button.



- Save the Project by using the Modeler menu and select *Modeler>Project>Save*.
- Exit PowerCivil and ignore the prompt to save the project.

SUMMARY

The main points to remember are:

- The Site Modeler is one of the most impressive tools in PowerCivil.
- The Project Wizard is used to initiate the Modeler.
- The Project File or GSF is typically named the same as the design file.
- The TIN file created during the graphic extraction process becomes the base object for the modeling process.

For more video instruction please visit the following web page...

<http://65.217.17.142/downloads/sitemodeler/GEOPAK%20Site%20Modeler%20Training%20Videos.htm>

