PlanSwift 3D Viewer Plugin

User Guide

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Overview

This guide will teach you how to properly use the tools and features found within the PlanSwift 3D Viewer Plugin. It is designed for use with PlanSwift® Takeoff and Estimating Software. This guide is not meant to be a step-by-step "walk through" document, although it can be used as a reference for getting the work done. If you encounter technical difficulty, consult this guide (including the FAQ section of this user manual) or contact the technical support department at:

<div align="center">

PlanSwift® Technical Support

support@PlanSwift.com

1-888-752-6794 ext. 2

</div>

PlanSwift also offers additional training. For training options, contact the training department at:

<div align="center">

PlanSwift® Training Department

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1-888-752-6794 ext. 6

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Purchasing and Installation

Purchasing Plugins

If you need to purchase PlanSwift or a plugin product, contact the Sales Department at:

PlanSwift® Sales

sales@PlanSwift.com

1-888-752-6794 Ext. 1

Installation and Uninstallation

Installing and uninstalling plugins and starter packs is simple. For installing them, click on the Import Plugin Package icon (arrow 1 in Figure 1) from the PlanSwift Main Ribbon-bar **Plugin** tab (arrow 3 of Figure 1) and follow the prompts from there. For uninstalling, click on the Uninstall Plugin (arrow 2 in Figure 1) and follow those prompts.
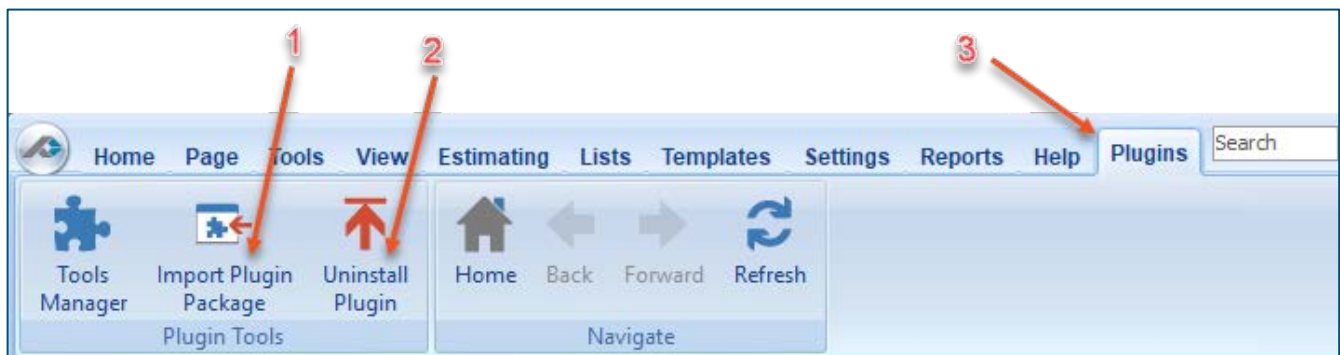

Figure 1

Features

The PlanSwift 3D Viewer Plugin installs a **3D Viewer** icon in the **Takeoff** group on the **Main** ribbon-bar menu (Figure 2). It also installs **3D Area**, **3D Linear**, **3D Segment**, and **3D Count** drop-down menu selections on the **Area Linear**, **Segment**, and **Count** drop-down menus (see arrows 1 through 4 of Figure 3). Additionally, it installs four 3D templates (**3D Segment**, **3D Count**, **3D Linear**, and **3D Area**) in the **Templates** window (Figure 4). This plugin allows you to view takeoffs in 3D. These user guide instructions

use the **A1.2 Floor Plan – Sample Plan** released with PlanSwift 10.2. We highly recommend purchasing a training package for accelerated learning and faster customization.
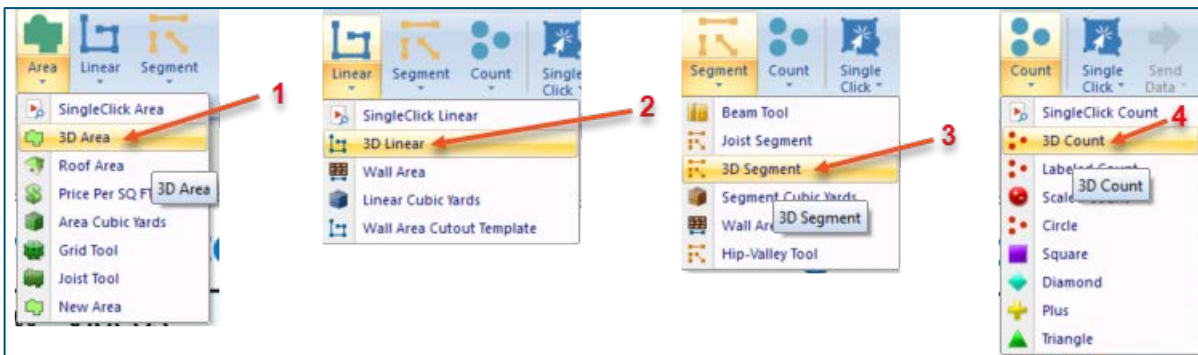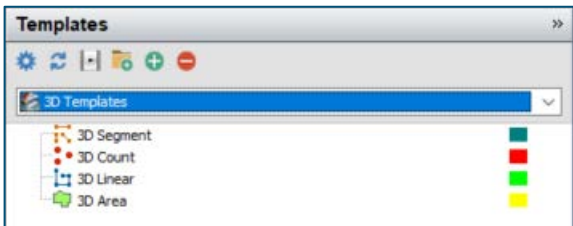

Figure 2

Figure 3

Figure 4

How To

How to: Perform 3D Takeoffs

To use the PlanSwift 3D Viewer, your takeoffs must be done using a 3D takeoff tool (**3D Area**, **3D Linear**, **3D Segment**, or **3D Count**). There are two ways to start a 3D takeoff. The first is to click on the drop-down menu in the **Takeoff** group of the **Home** ribbon-bar tab for the **Area**, **Linear**, **Segment**, or **Count**. The second way is to select the **3D**

Templates in the **Templates** window, then select the **3D Segment**, **3D Count**, **3D Linear**, or **3D Area** takeoff tool. For this exercise, we'll start with a 3D area takeoff.

Open the **A1.2 Floor Plan** sample plan (released in the PlanSwift 10.2 release and shown in Figure 5).

Figure 5

To begin the takeoff, click on the **Area** takeoff tool drop down and select **3D Area** (shown at arrow 1 of Figure 1). This displays the **Properties** window (Figure 6).
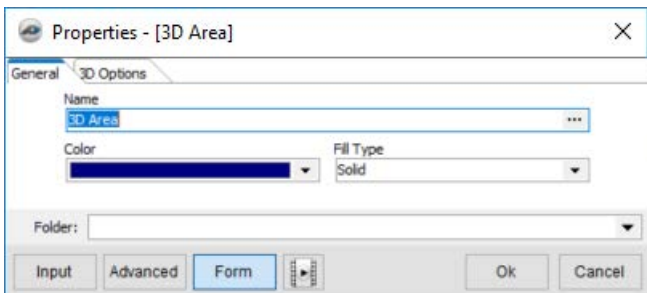

Figure 6

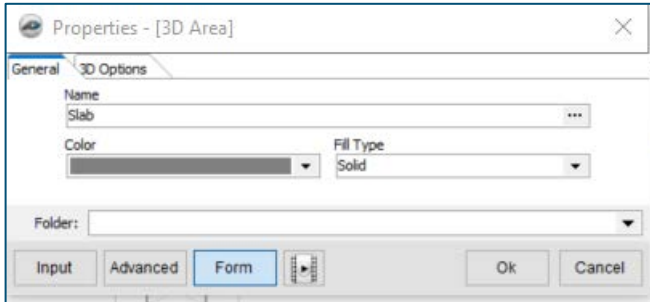In the **General Tab**, name this takeoff "Slab" and select a gray color (Figure 7).

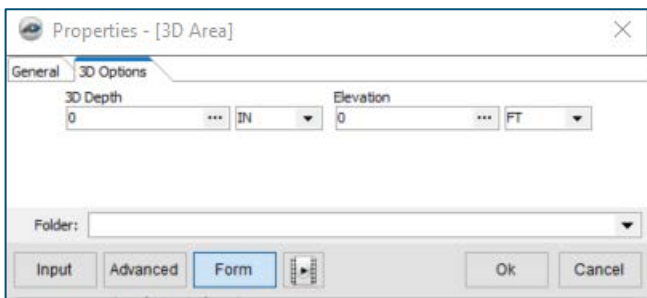**Figure 7**

Click on the **3D Options** tab.

Figure 8

Enter "**6**" in the **3D Depth** field so the slab depth is set at 6". For the elevation, enter a "**-6**" and change the elevation units from **FT** to **IN** so that the slab will lay six inches below the zero or grade (Figure 9).
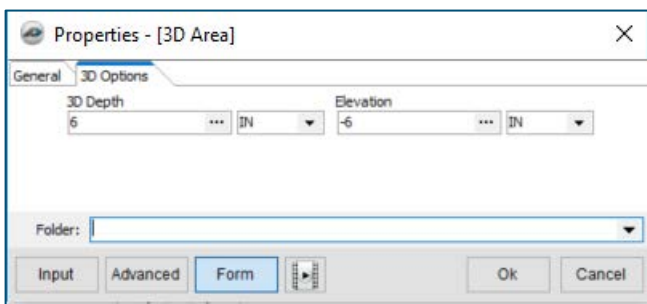

Figure 9

Note that minus values are below grade (zero) level, and plus values are above grade. If, for instance, you need a six-inch bed of gravel under the 6" slab, then the takeoff elevation for the bed of gravel would have to start at -12" and the slab would start at -6".

Click on **OK** and, with record now on (figure 10), and perform the area takeoff around the entire perimeter of the building.
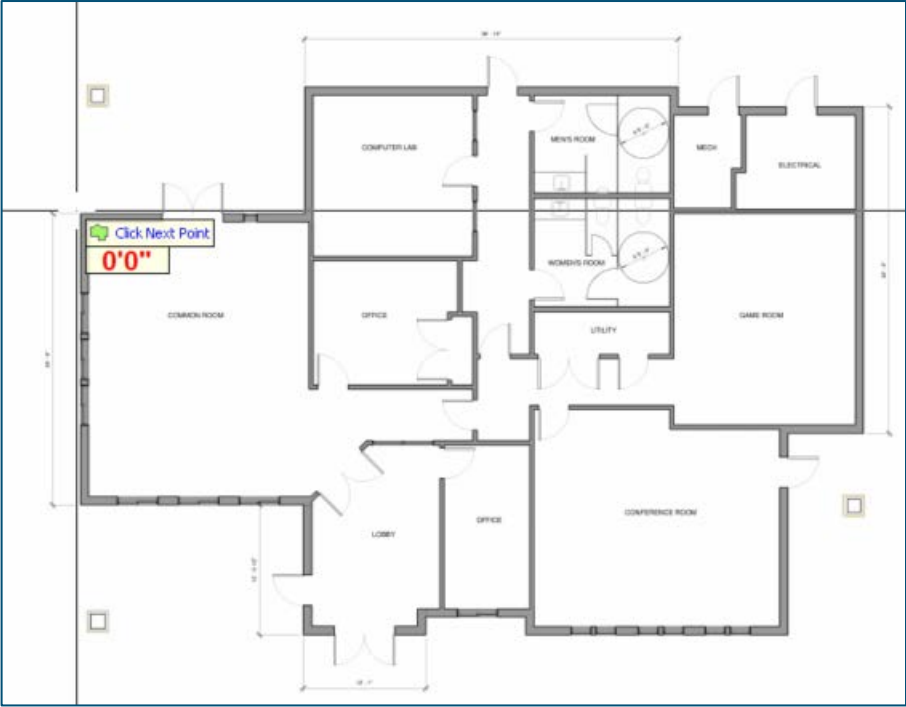

Figure 10

Figure 11 shows the completed takeoff representing the slab of concrete for the entire building.
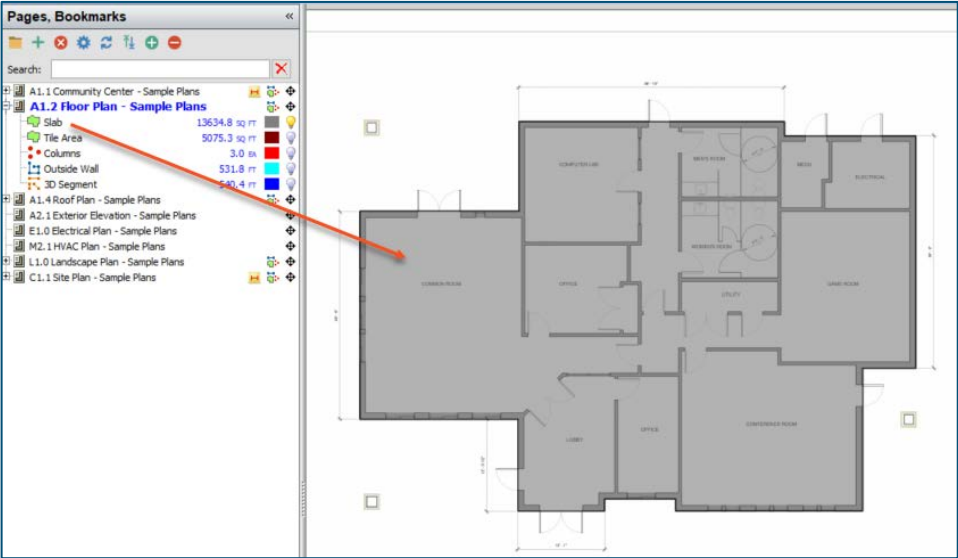

Figure 11

Next you will perform a linear for the outside wall, but this time you will launch the takeoff from the **Templates** window (Figure 12).
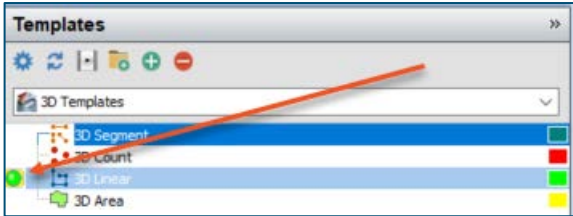

Figure 12

Click on the green launch button for **3D Linear**. This opens the **Properties – [3D Linear]** window. In the name field, enter "Outside Wall" and choose a light blue color as shown in Figure 13.
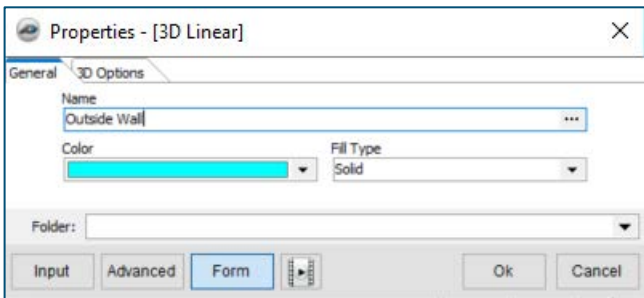

Figure 13

Click on the **3D Options** tab in the **Properties – [3D Linear]** window. Enter the **3D Height** as 8 feet and the 3D **Width** as 10 inches. Leave 0 as the **Elevation**, since this exterior wall will be sitting on top of the slab of concrete, the top of which is at grade level. Leave the **Scaled** box checked. See Figure 14.
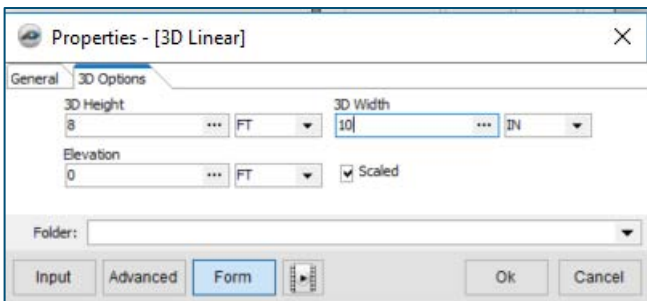

Figure 14

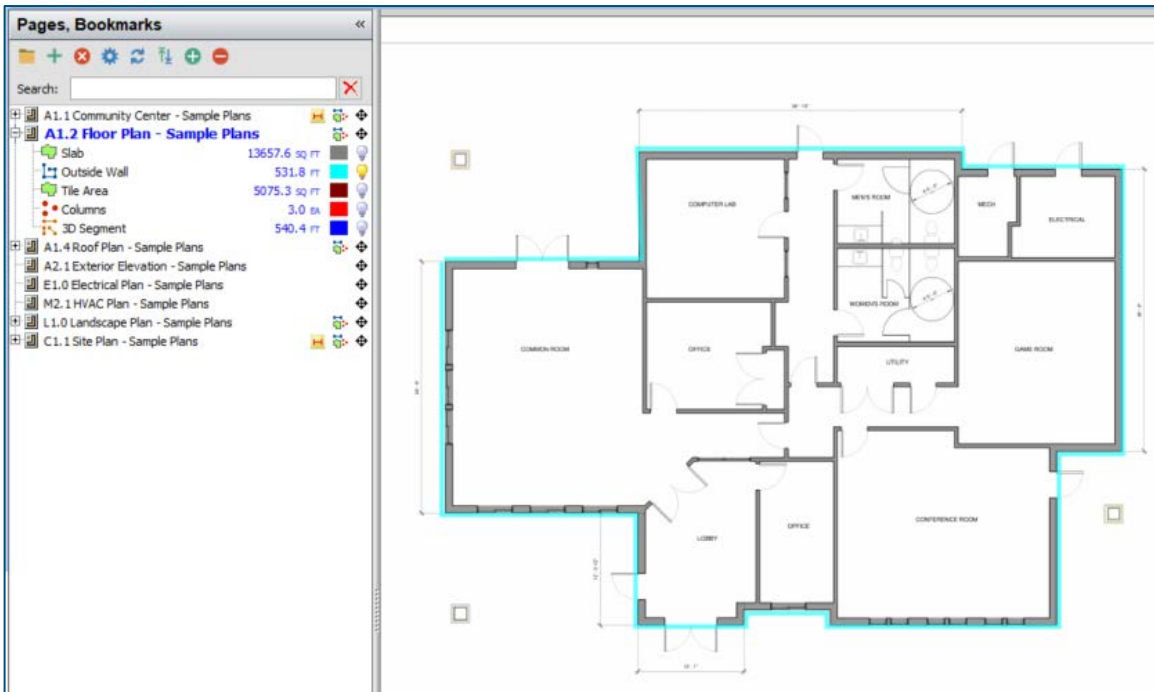Click on **OK** to start the digitizer for the **3D Linear** and digitize the perimeter as shown in Figure 15.

In this next step, you will digitize the interior walls using the **3D Segment** tool. Either click on the **Segment** drop-down menu in the **Takeoff** group on the **Home** ribbon-bar menu and select **3D Segment,** or select the **3D Segment** template from the **Templates** window to open the **Properties – 3D Segment]** window. Name this takeoff "Interior Walls" and assign a navy-blue color to it (see Figure 16).
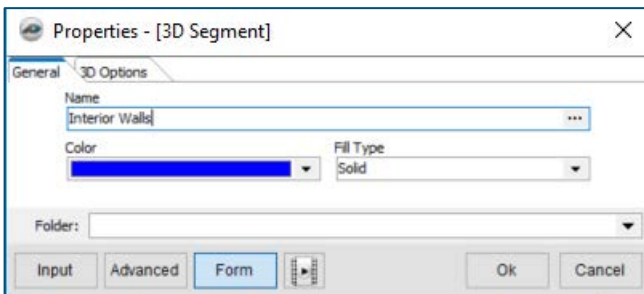

Figure 16

Click on the **3D Options** tab in the same window, enter "8" FT for the **3D Height**, "4" IN for the **3D Width**, and "0" for the elevation (since this perimeter wall will be on top of the slab). Leave the **Scaled** check box checked. See Figure 17.
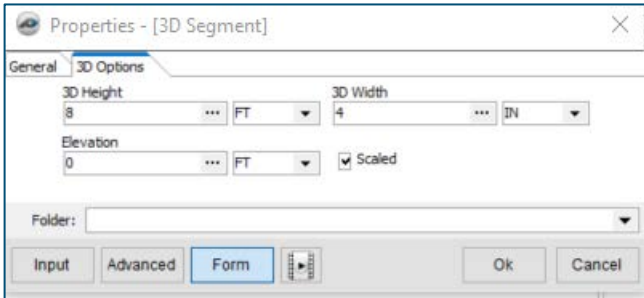

Figure 17

Click on **OK** to start the 3D segment digitizer and perform the takeoff for the interior walls as shown in Figure 18.
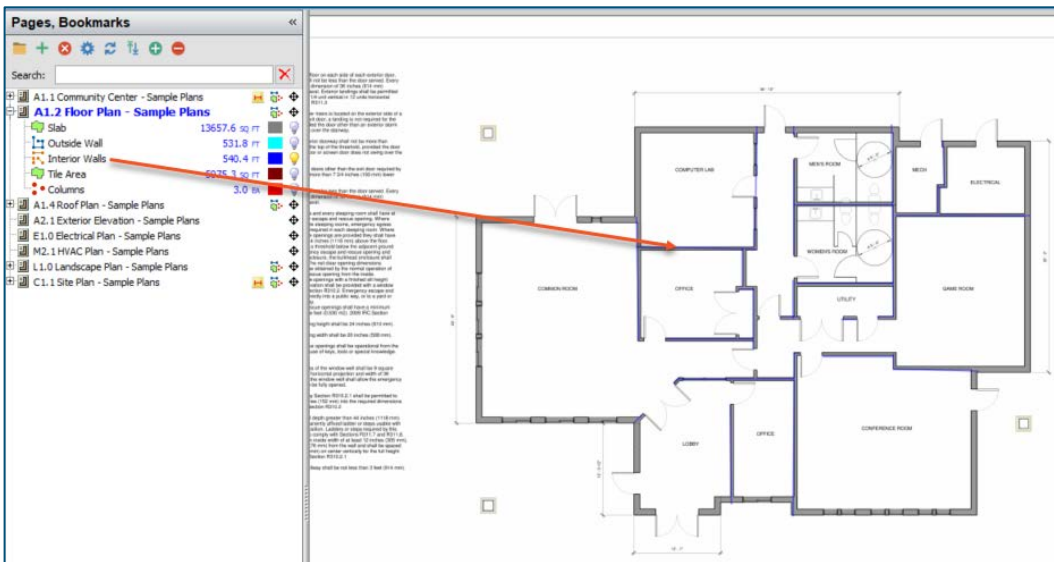

Figure 18

The last step before viewing is digitizing the three columns (using the **3D Count** template) which will be 3 feet square and 10 feet tall (see arrows 1, 2, and 3 in Figure 19).

Figure 19

Click on the **3D Count** template digitizer button in the **Templates** window to open the **Properties – [3D Count]** window (Figure 20). Enter "Columns" as the **Name** and select **Square** as the shape (note that options in the **Shape** drop-down menu are **Circle**, **Square**, **Plus**, **Triangle**, or **Diamond**). Enter "3" in both the **Length** and **Width** fields and use the default color. Again, keep the **Scaled** box checked.
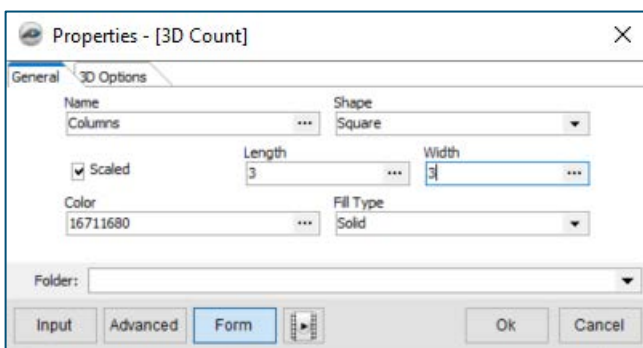

Figure 20

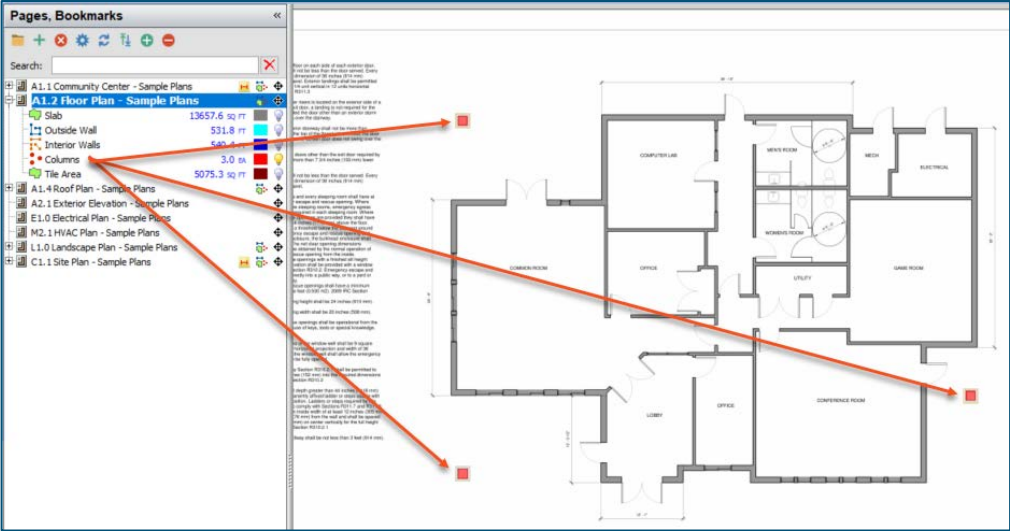Click on **OK** to start the **3D Count** digitizer, and digitize the columns as shown in Figure 21.

Figure 21

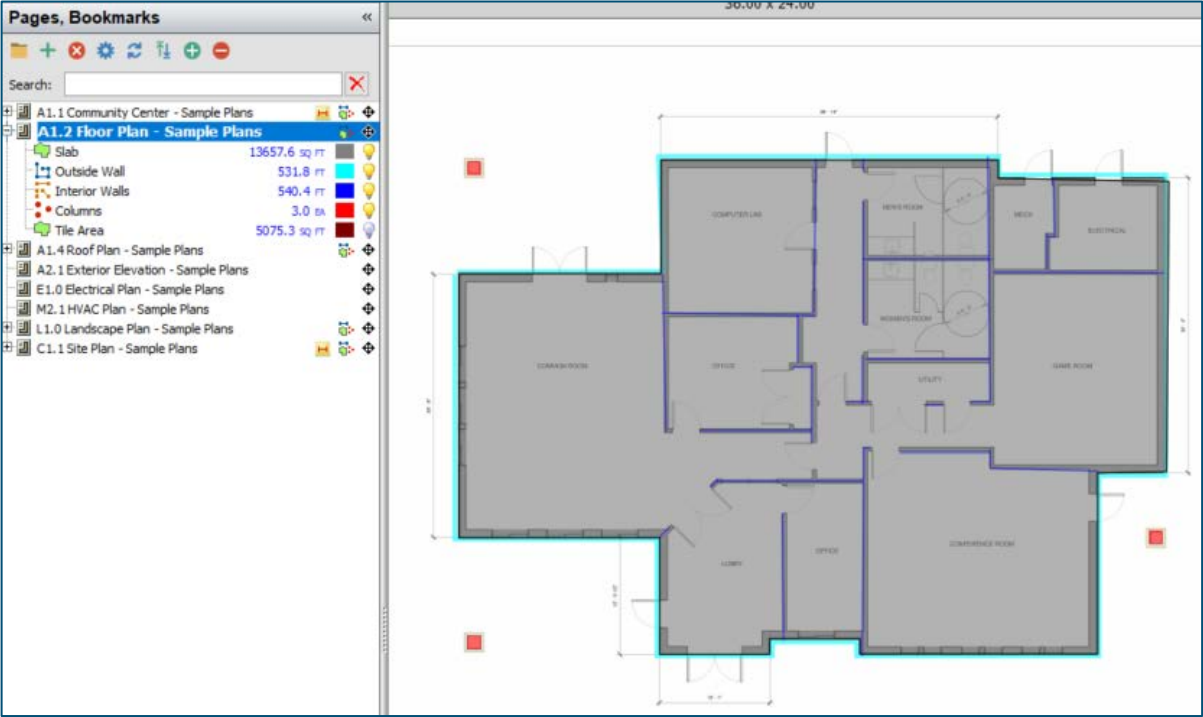Figure 22 shows all digitized items displayed simultaneously.

Figure 22

How to: View 3D Takeoffs

With the slab, exterior and interior walls, and columns now digitized, click on the **View 3D** icon in the **Takeoff** group on the **Home** ribbon-bar tab (shown in Figure 23).

Figure 23

This opens the PlanSwift 3D Viewer window, which is a top-down view of the takeoffs (Figure 24).
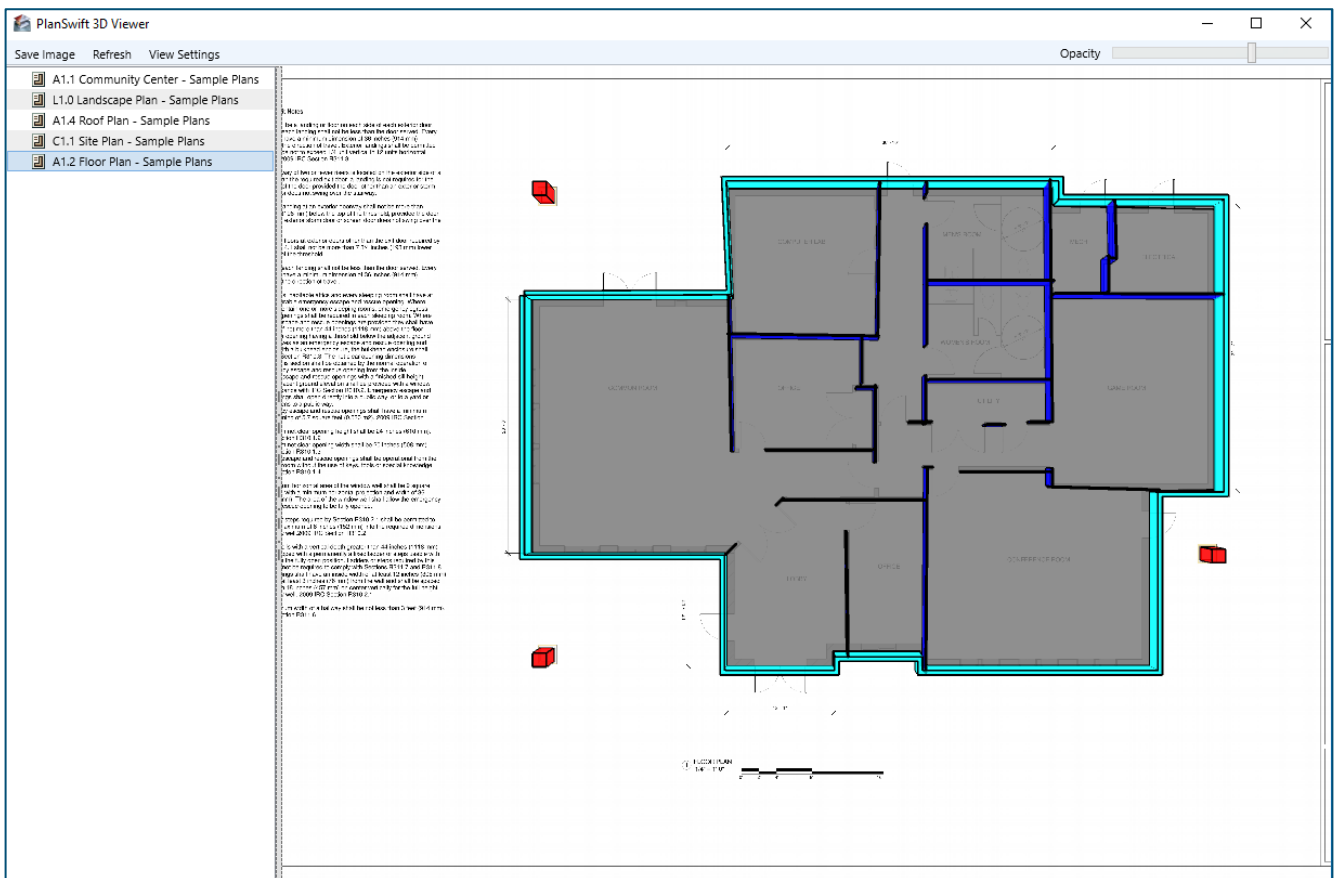

Figure 24

Moving the mouse while clicking and holding the **left** mouse button pans the image in any direction.

Clicking and holding the **right** mouse button while dragging the mouse up rotates the drawing on the X axis so you can see the 3D view of the front of the image (Figure 25). Here the eight-foot interior and exterior walls are visible, and the gray concrete slab is under the walls. The three ten-foot columns are also shown in 3D format.
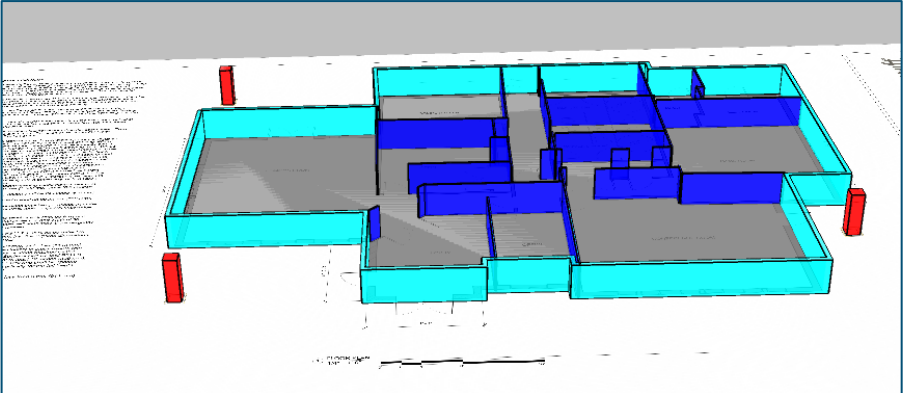

Figure 25

Dragging the mouse to the left with the **right** mouse button held down rotates the image about the Y axis (Figure 26). Dragging towards the left rotates the image the opposite way.
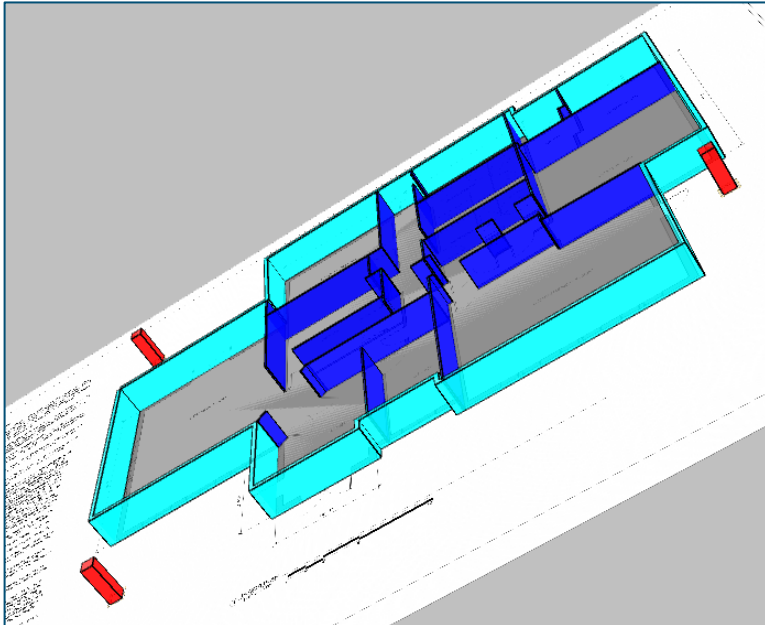

Figure 26

Holding down both **right** and **left** mouse buttons while dragging the image left rotates the image clockwise while maintaining the current 3D view (Figure 27).
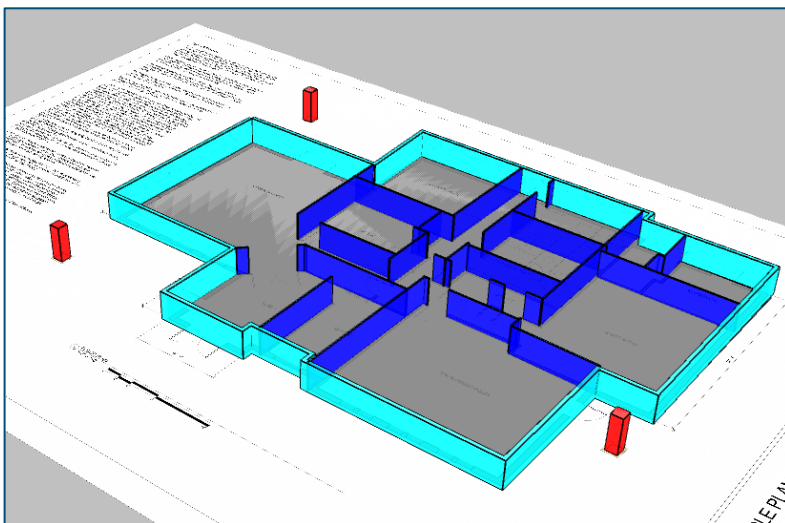

Figure 27

Holding down both **left** and **right** mouse buttons while dragging the image right rotates the image counter-clockwise while maintaining the current 3D view (Figure 28).
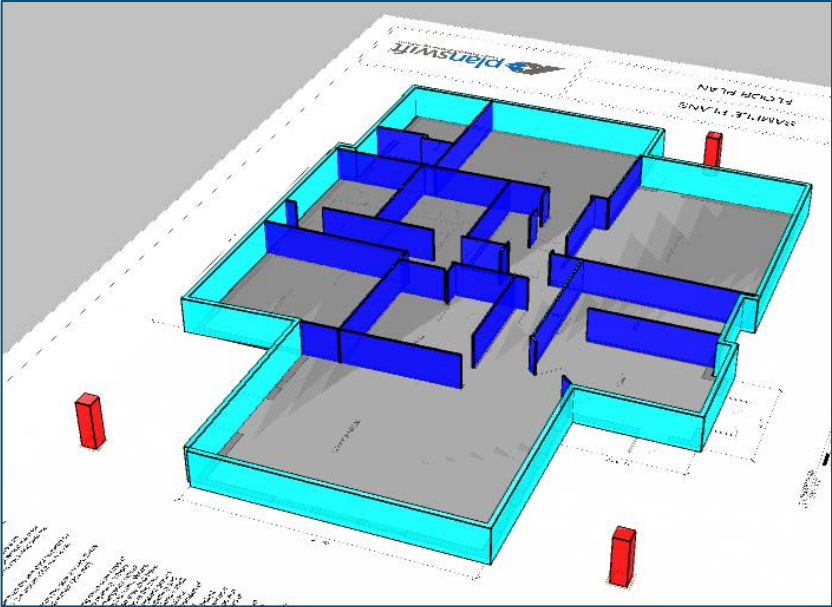

Figure 28

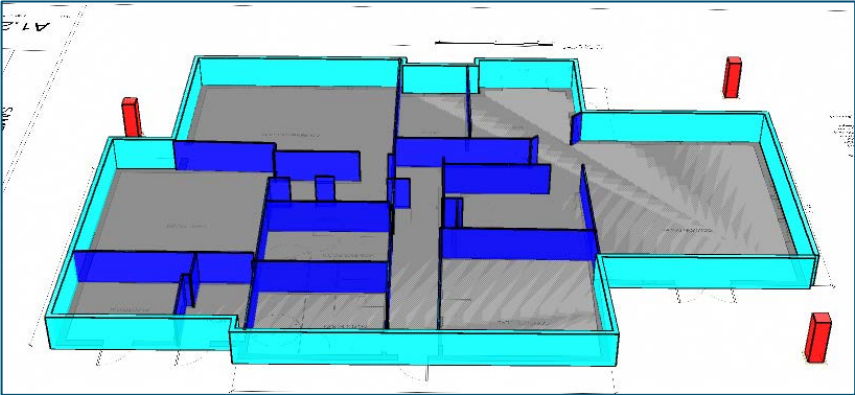A full 180-degree rotation allows you to see the back of the building (see Figure 29).

Figure 29

Other views may be quickly displayed using the **View Settings** drop-down menu (see arrow 1 on Figure 30). The **Hide below grade items** option hides all takeoffs that have a negative value (below grade). When it is checked as shown at arrow 2 in Figure 30, below grade items are hidden in all views. The **Top** option shows the top view, which is the default view when the viewer first opens. The **Front** and **Back** options show the view as if viewing the structure from the front or from the back. The **Left** and **Right** options show the view from the left or right side of the structure.
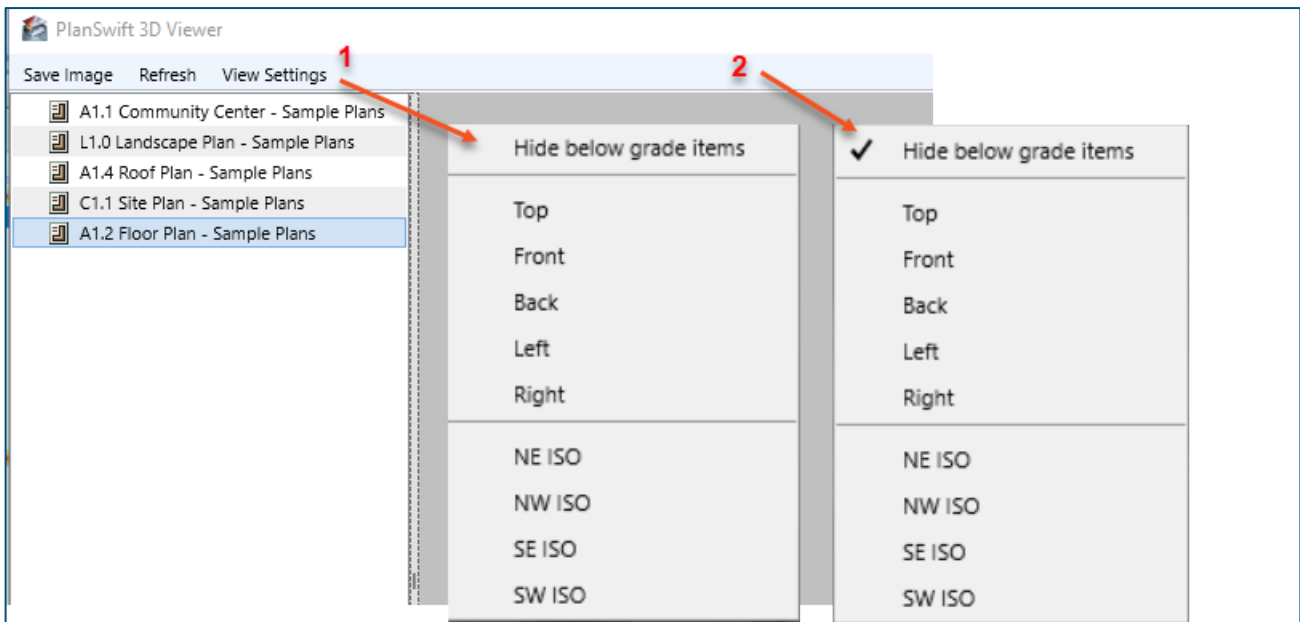

Figure 30

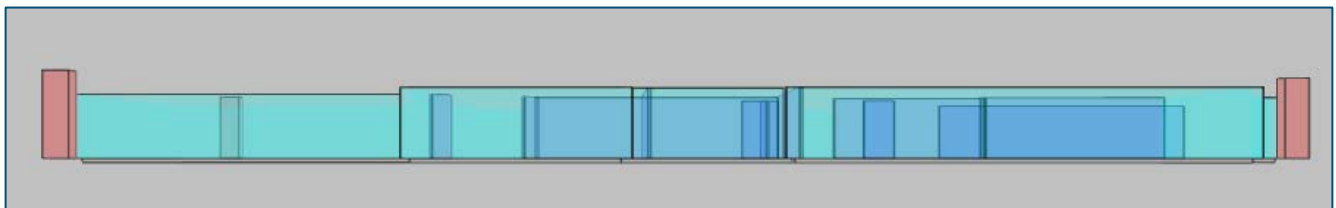Figure 31 shows the front view with the below grade items displayed.

Figure 31

The **NE ISO**, **NW ISO**, **SE ISO**, **SW ISO** shows isometric views. These views assume that the top of the diagram (back side of structure) is north, the bottom south, the right side east, and the left side west. Figure 32 shows the NE ISO view.

Figure 32

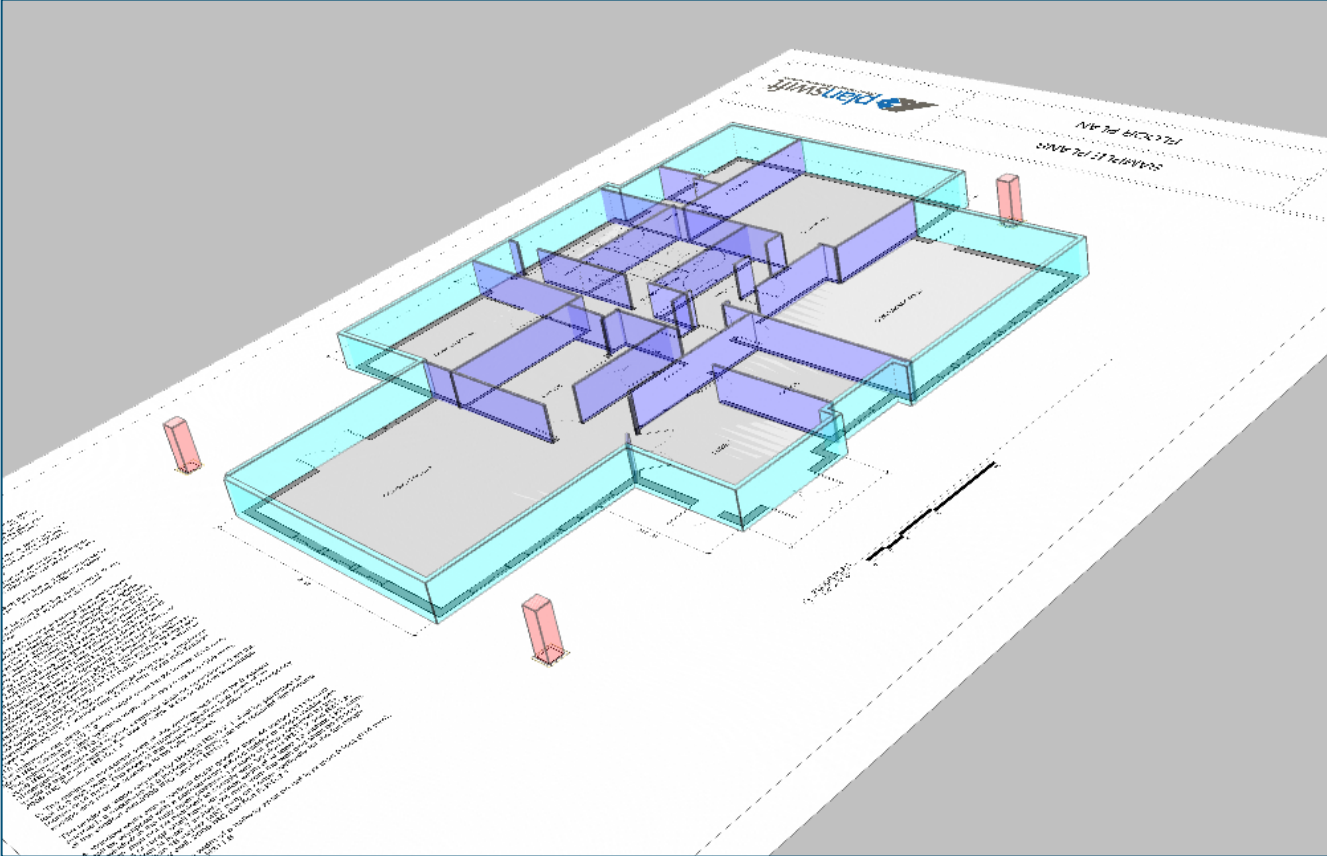Figure 33 shows the SE ISO view.

Figure 33

Any view can be saved using the **Save Image** option in the **PlanSwift 3D Viewer** menu (Figure 34).
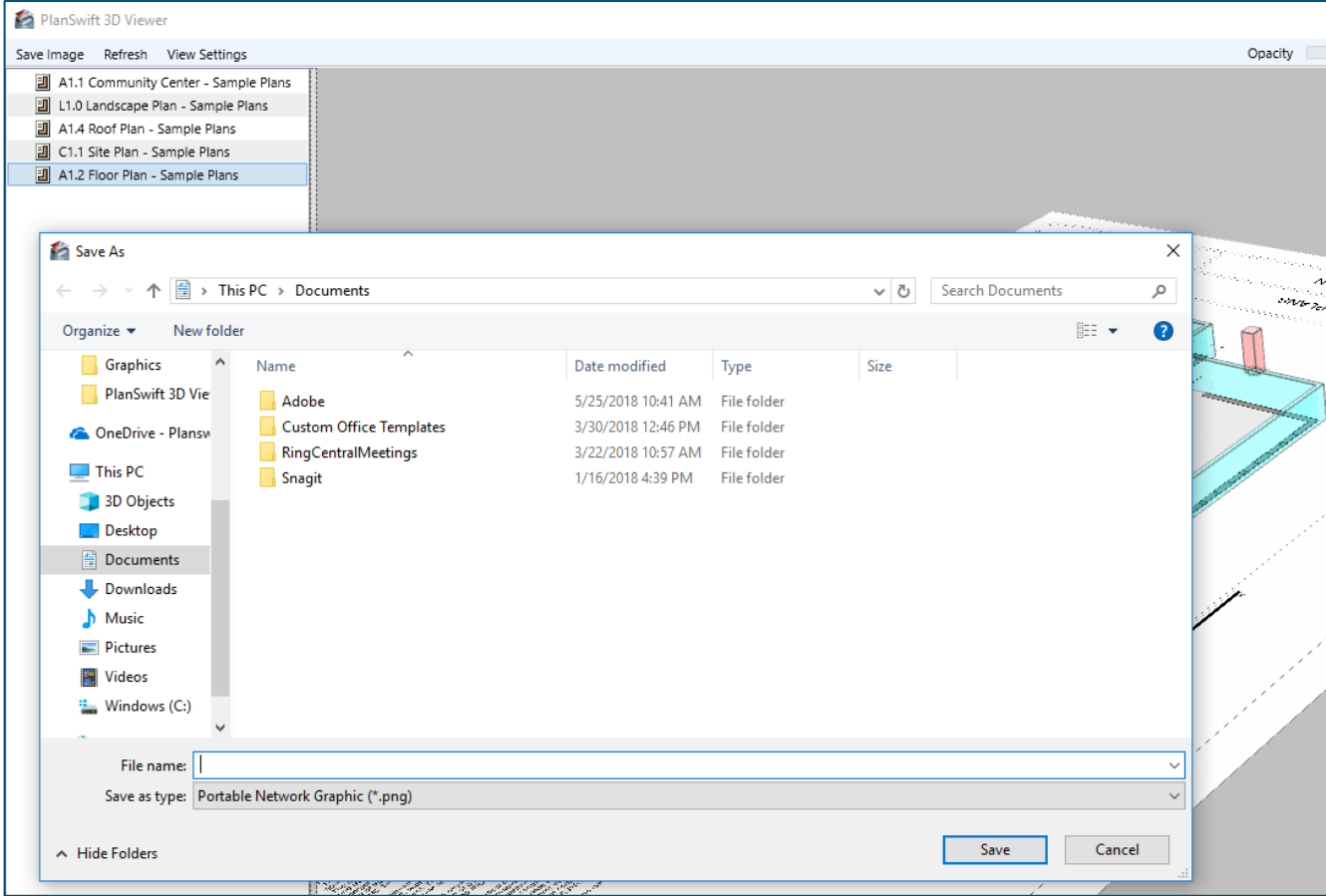

Figure 34

As you perform the 3D takeoffs in PlanSwift, you can keep the viewer window open. After making changes in PlanSwift, clicking on the **Refresh** option in the **PlanSwift 3D Viewer** window updates your latest PlanSwift changes in the viewer (Figure 35) and returns to the default top view.
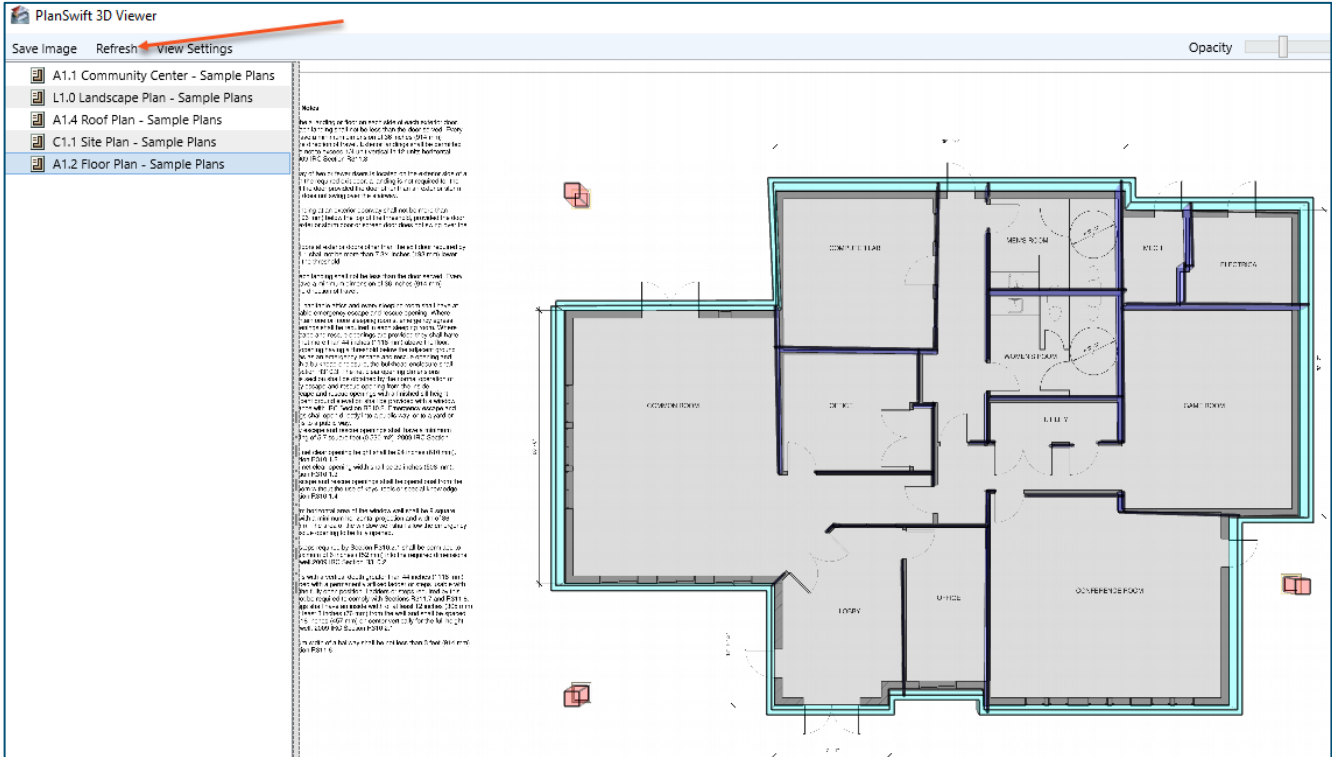

Figure 35

It is also possible to change the opacity of the 3D image with the **Opacity** slider bar (Figure 36). Sliding it to the right darkens the image, left lightens the image. Figure 35 shows the lighter opacity, Figure 36 the darker opacity.
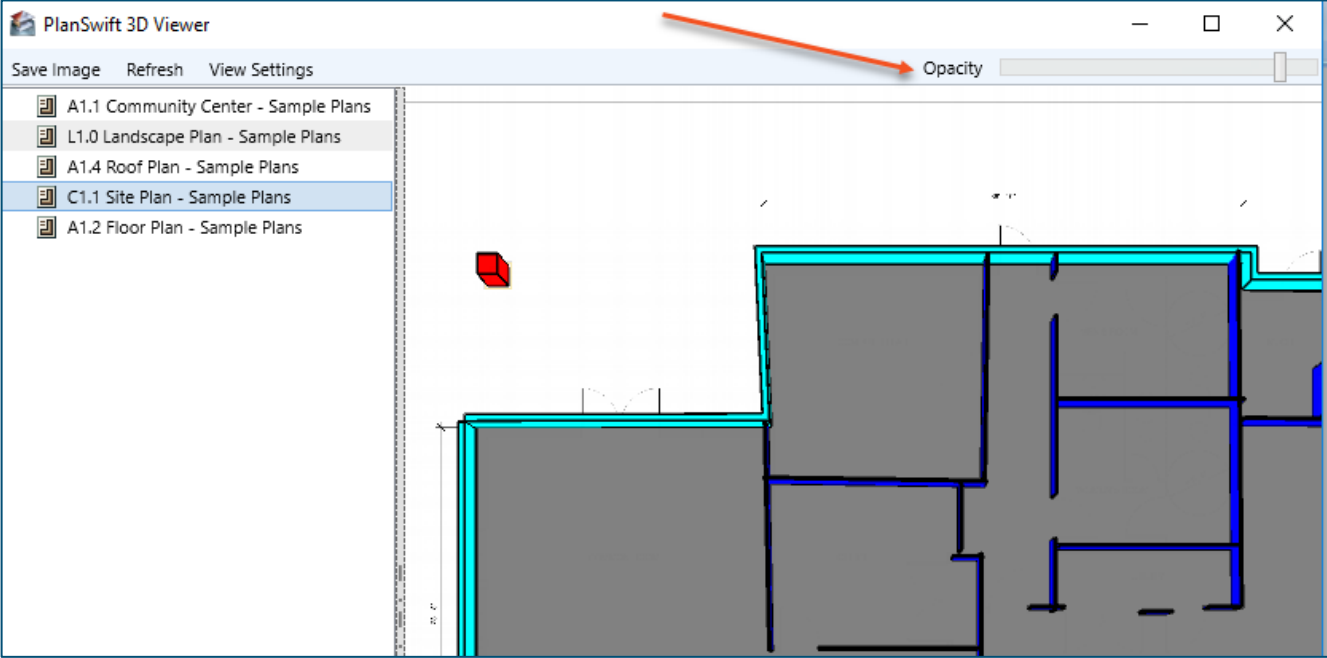

Figure 36

FAQ

Question: I've read this user guide, and I still have questions. What do I do?

Answer: PlanSwift recommends that you purchase a training package. We highly recommend new users purchase a training package, because training is customized to each user. We offer [one-on-one training](#) and [classroom training](#). Contact training@PlanSwift.com or at 1-888-752-6794 Ext. 6.

Question: Can PlanSwift 3D Viewer display sloped takeoffs?

Answer: No. PlanSwift 3D Viewer cannot display sloped takeoffs.

Question: Can PlanSwift 3D Viewer perform or display cutouts for doors or windows?

Answer: No. PlanSwift 3D Viewer cannot display door and window cutouts. It can, however, do cutouts with the 3D Area tool if you use the **Subtract from Section** option in the right-click menu. Door and window cutouts do not work for 3D Linear and 3D Segment tools.