

AS316932

Put Your InfraWorks Model into Motion with Twinmotion

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Learning Objectives

- Identify the workflow from bringing an InfraWorks model over into Twinmotion
- Import InfraWorks model into Twinmotion and orient it so that design changes are easily implemented
- Stylize the model with materials and objects from Twinmotion for the look and feel of realism
- Render the model in several different formats, including sound effects from the model's surroundings for video production

Description

Would you like your InfraWorks model to look more realistic? Would you like your trees and grass blowing in the wind, with cars driving at night and their lights on? Then let's put your model into motion with Twinmotion. Twinmotion is designed for AEC urban planning and landscaping professionals. Twinmotion is capable of producing high quality images, panoramas, standard or 360° videos in mere seconds, allowing fully immersive 3D VR exploration. A simple interface and pictograms make Twinmotion extremely easy to learn and use, regardless of the size and complexity of your project, and your material. Bringing your InfraWorks model into Twinmotion and giving life to the model is simple, fast, and extremely easy.

Speaker(s)

Mr. Todd Rogers is a certified Partner Service Expert (P.S.E.) and certified Autodesk instructor with over 25+ years of experience in teaching, managing, and, providing hardware and software solutions for hundreds of engineering firms throughout the greater Houston, Texas area. Today, Mr. Rogers is a BIM/Graphics Manager for the Infrastructure team at Walter P Moore. Prior to that he was a valued member of the Infrastructure Support Division (ISD) for Graitec USA, Inc., formerly Total CAD Systems, Inc., where he worked as a Customer Success Manager/Technical Specialist and an Autodesk Certified Instructor. He is also a member of the Autodesk Expert Elite program and the Secretary for AUGI Board of Directors.

InfraWorks to Twinmotion

In InfraWorks

So, the first thing we are going to do is export out our InfraWorks model as an FBX file. In this presentation I am using InfraWorks 2020.1, which has a completely different interface. If you are using an earlier version, then the Export 3D Model will be located in a different place.

Click on the Present/Share tab. In the Share panel, click Export 3D Model...



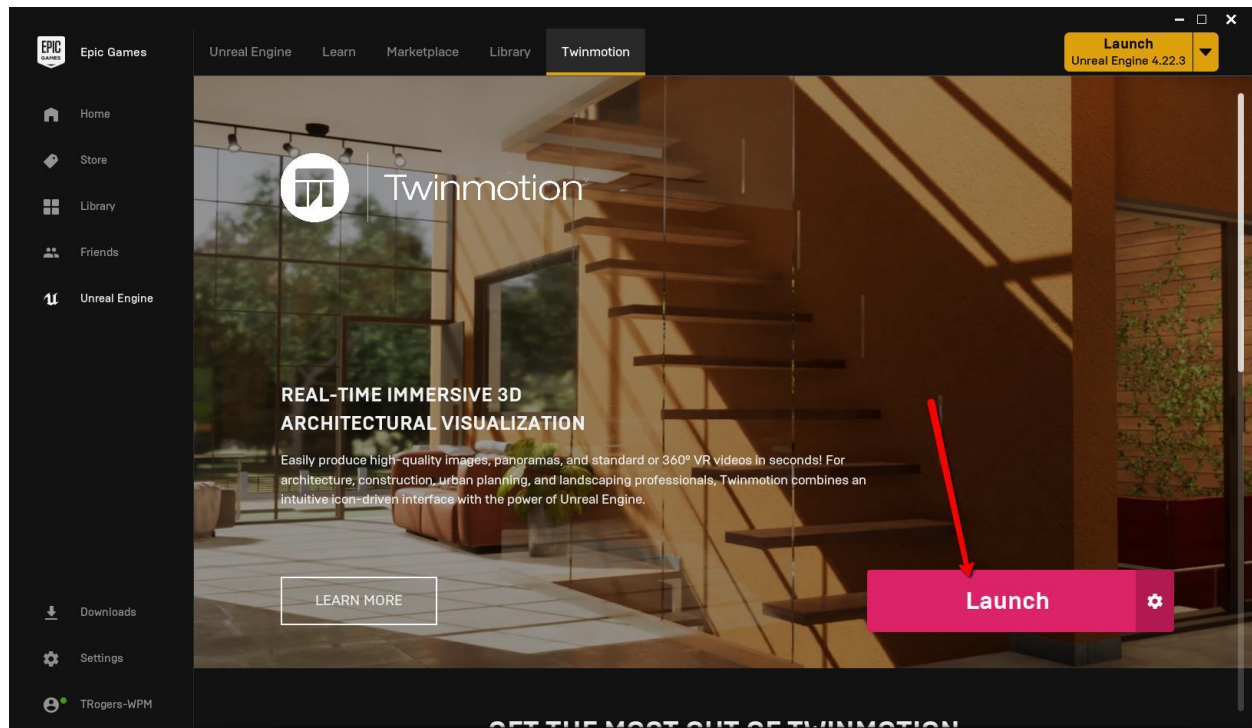
For this lesson, we are going to export a certain area out with the Polygon option...



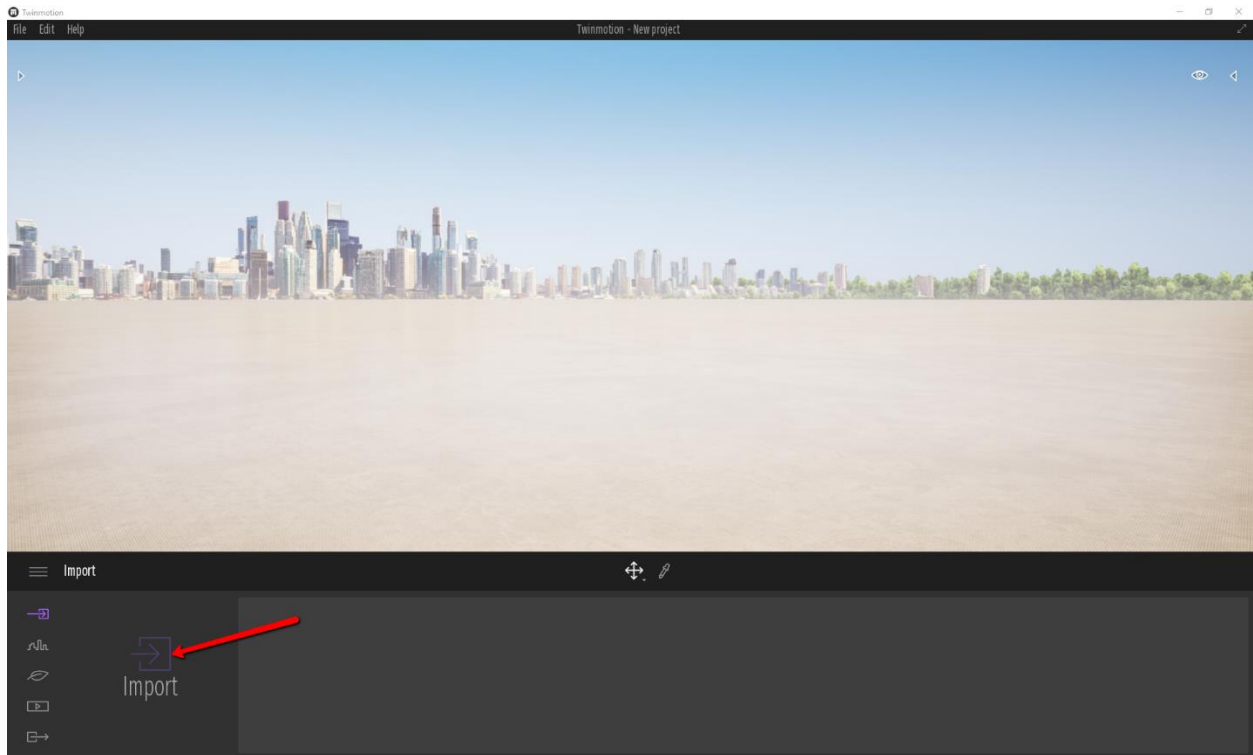
Keep the default coordinate system that is listed, and then export your model. Don't forget to place your file where you know where it is and give it a unique name. Click Export.

In Twinmotion

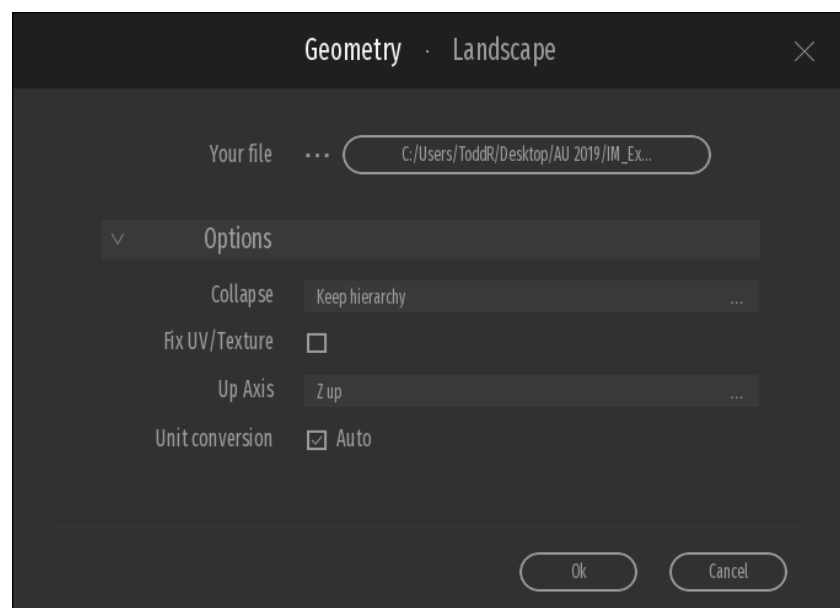
Open the Epic Games Launcher. At the top, you will see a tab for Twinmotion, click it. Now click Launch...



Below is what you will see upon entering the program. Click on Import.

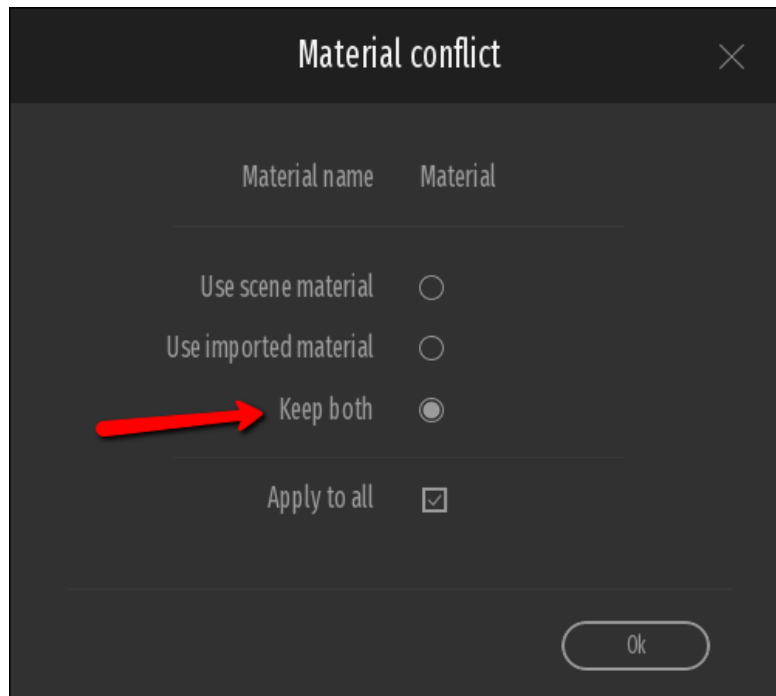


Browse to your FBX file. Then, expand Options. For Collapse, change to Keep hierarchy...



Click Ok.

A dialog box may appear that states Material Conflict. If so, toggle the radio button or Keep Both, then click Ok.

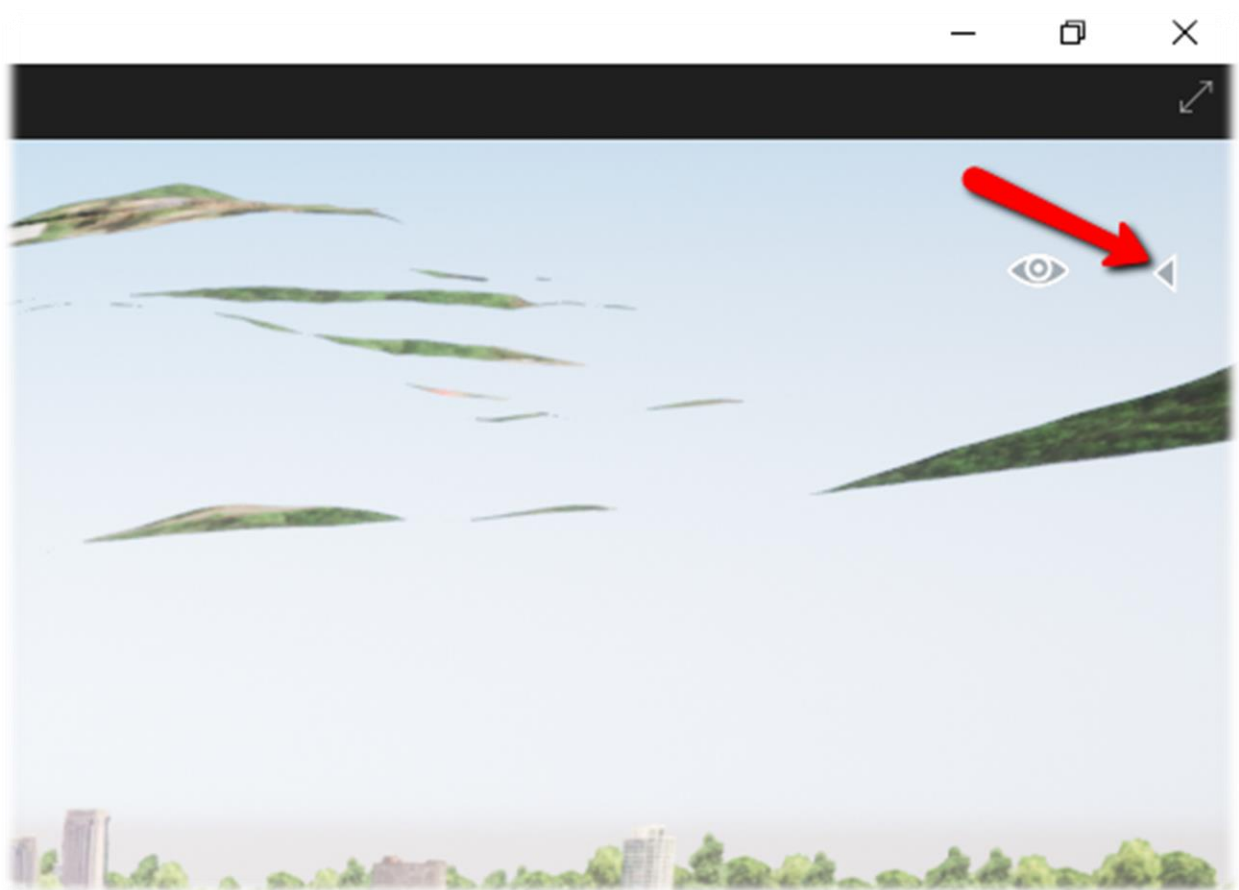


At first, you may not see your model because Twinmotion does not have or know a coordinate system. Orbit around until you see a shadow on the ground. This means that your model is directly above the shadow...

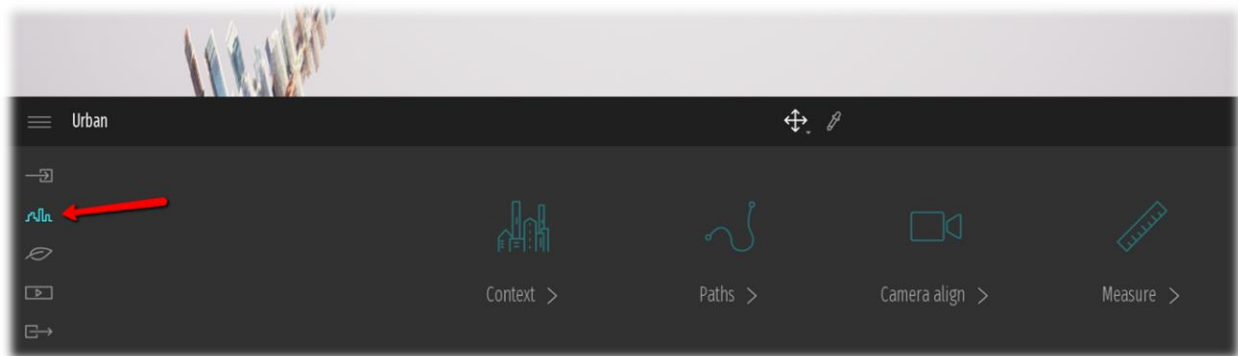


What you want to do now, is move the “scene”, and NOT your model. The reason I do this is because if you need to change something in the design in InfraWorks, it’s easier when you don’t move your model. We will see this later in the lesson.

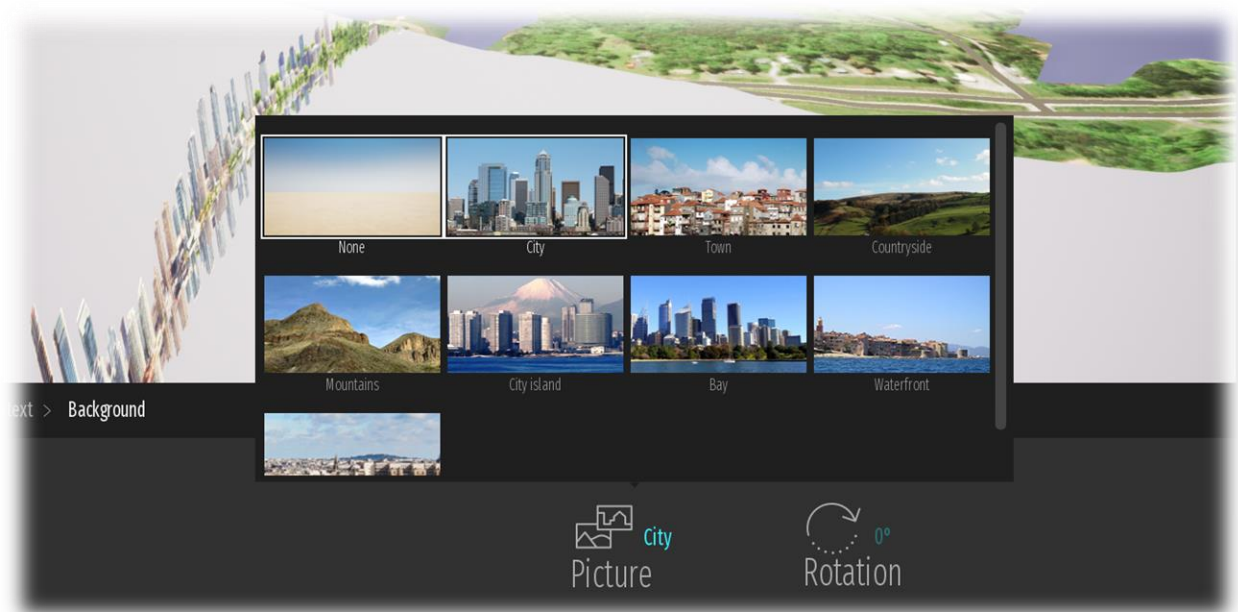
Expand the dialog box on the right-hand side of the screen as shown below:



Click on Starting Ground, right-click and choose Delete. You will then see remnants of the Cityscape still there. Let's get rid of that. At the bottom, click on the icon that looks like a city...



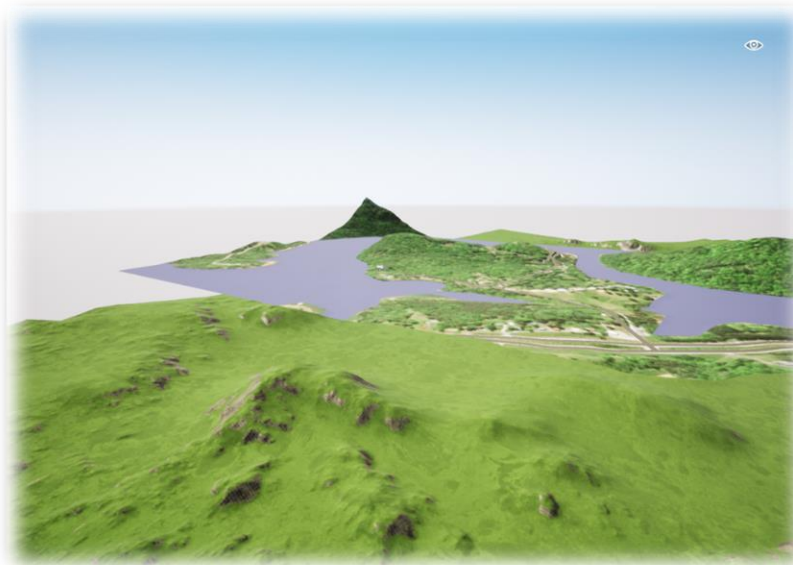
Now click Context >, then Background >, finally Picture, and select None...



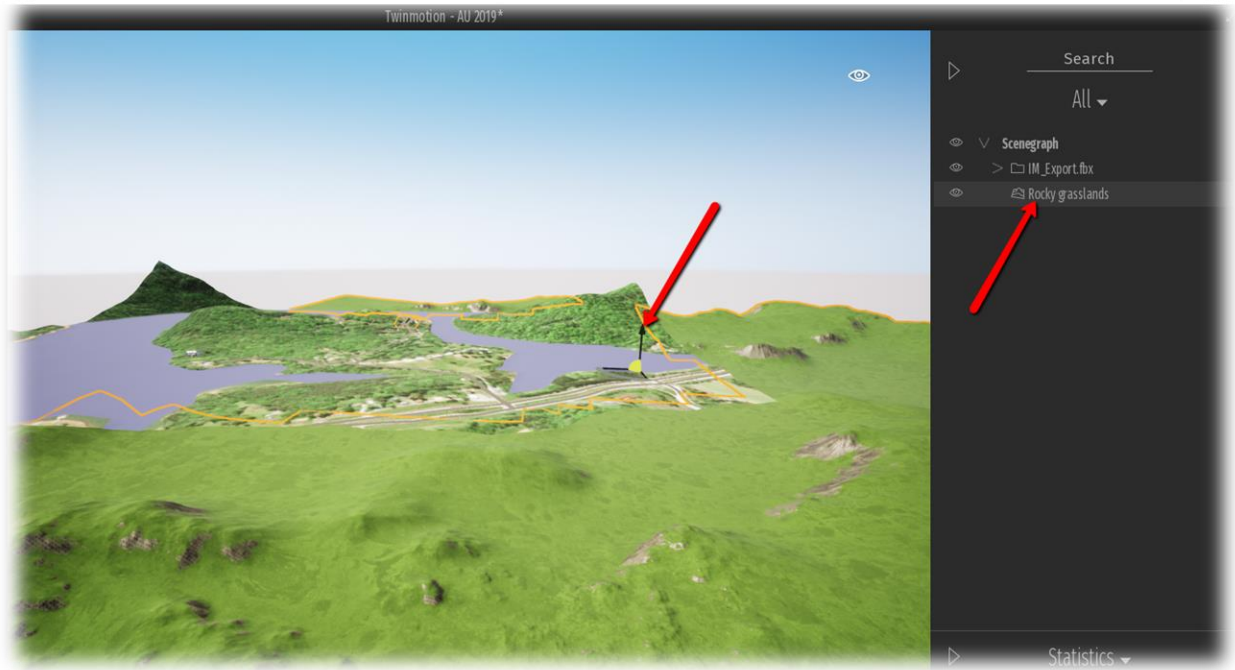
Now on the left-hand side of the screen, expand the Library by clicking the arrow...



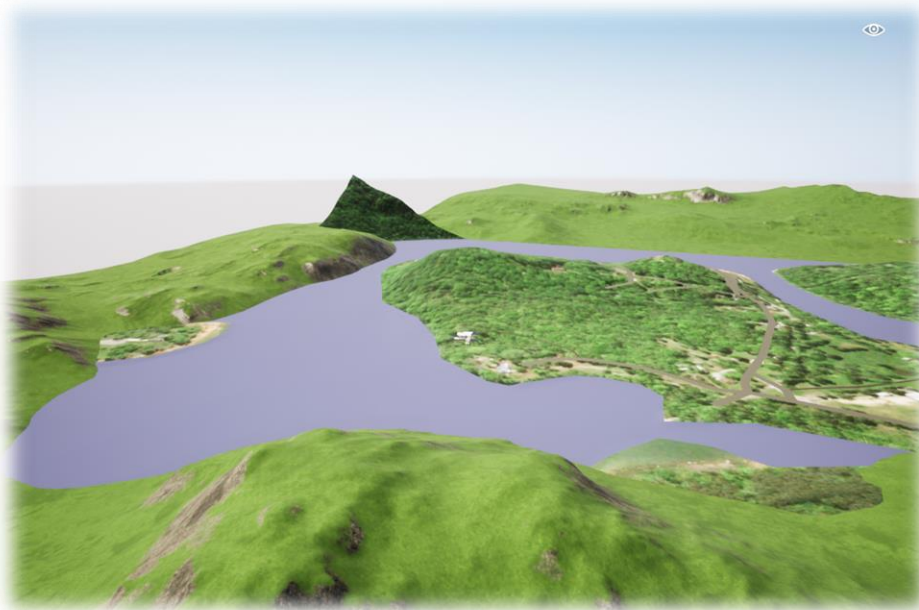
Now we can begin to assign materials to the scene. Click Vegetation and Landscape, then Landscapes. Drag the Rocky Grasslands somewhere on the outside of your InfraWorks model. It will state, Preparing terrain... This is what you should see:



Back over to the right, click on Rocky Grasslands. Orbit around until you see the Gizmo...

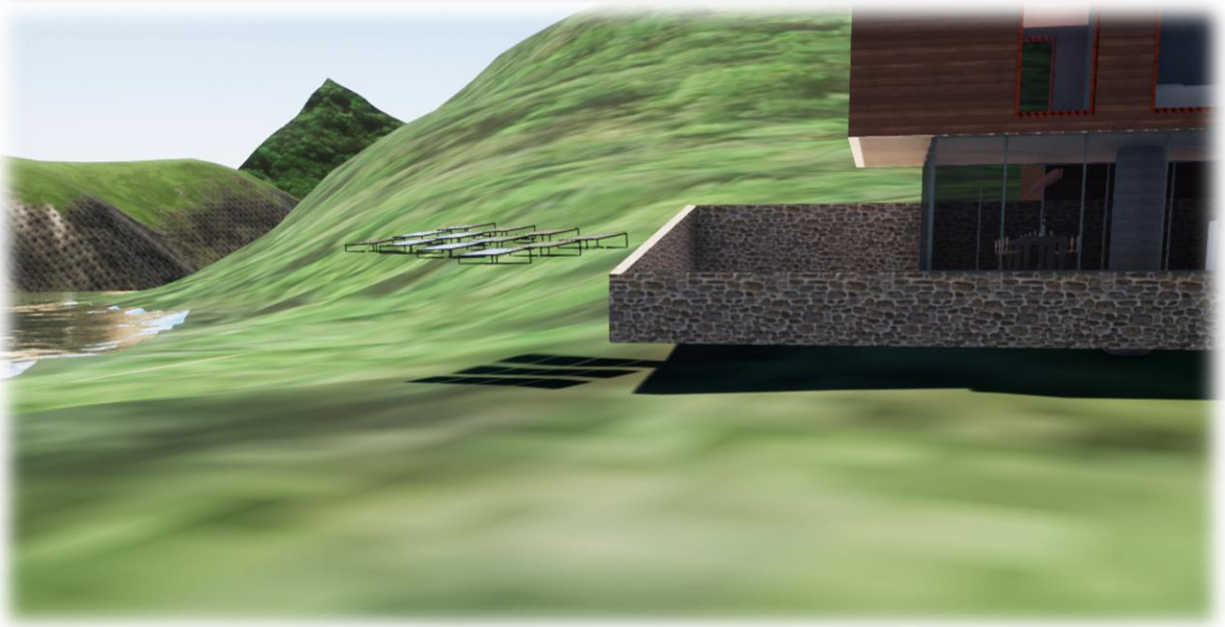


Now, move the Rocky Grasslands up next to your InfraWorks model. You should have something similar to below:



Navigate to your site. Now you can start dragging and dropping materials onto the water, the building, etc.

Now what we will do is sculpt the terrain. You can see in the picture below that the solar panels and part of the house is up in the air...



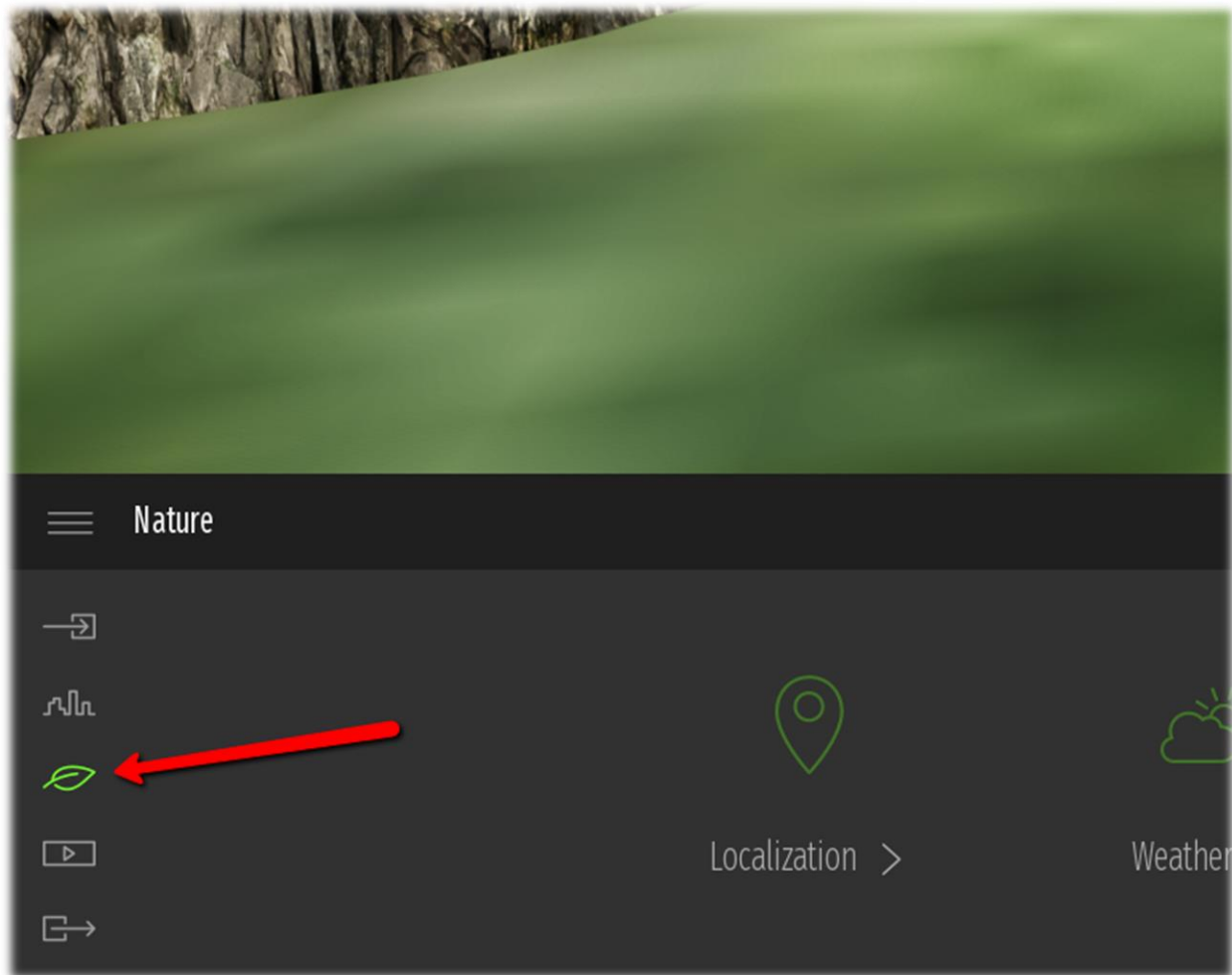
On the right, locate the Rock Grasslands and click on it. At the bottom, you should now see Sculpt and Paint. Click Sculpt. Try the different options to sculpt your landscape.



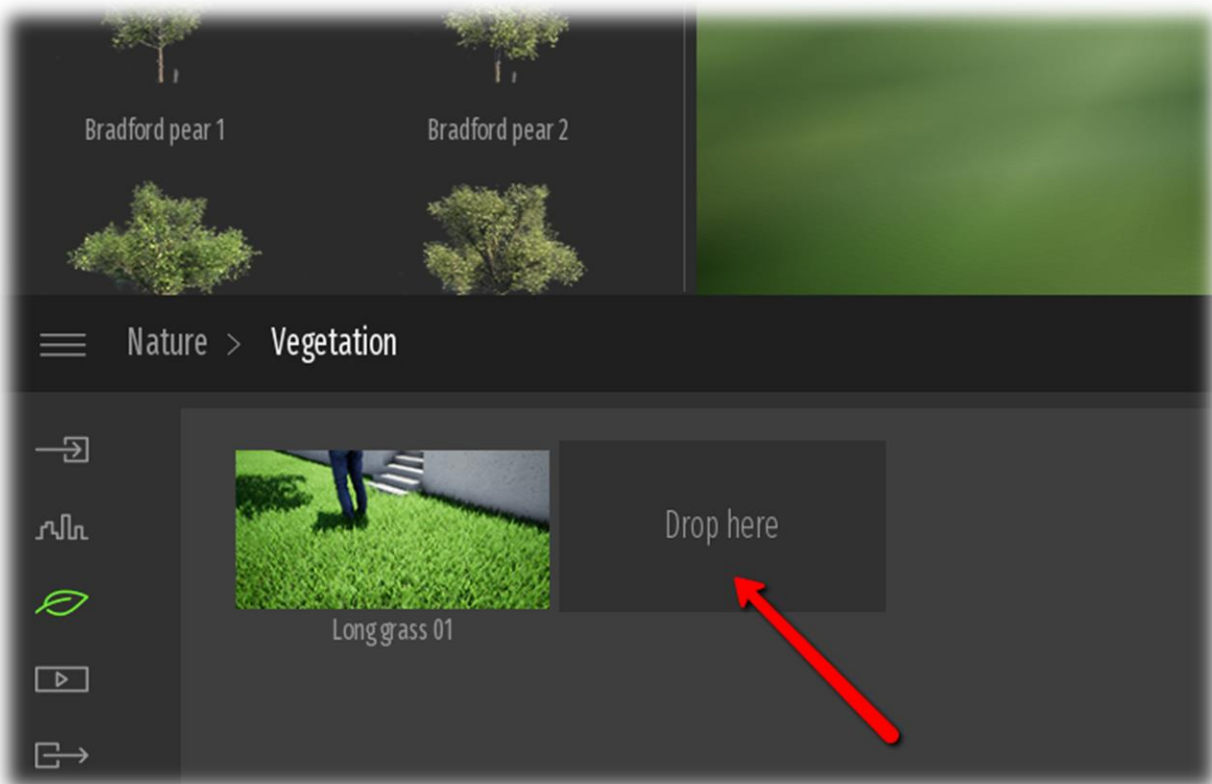
Now let's place some landscaping around the house. You have 2 options when placing landscaping:

1. You can select individual objects from the Vegetation and Landscape section, or
2. You can select multiple objects from the mentioned section and paint them onto the terrain.

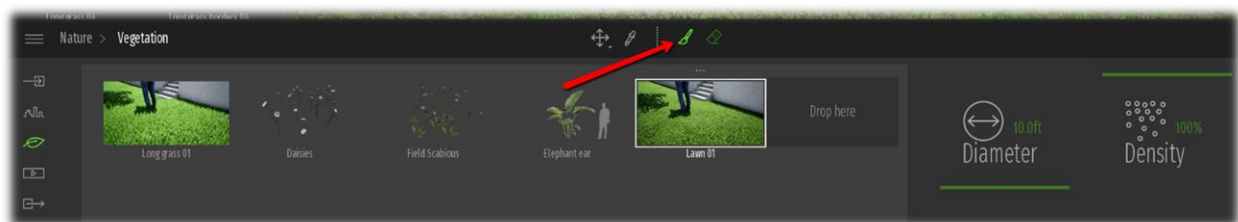
We are going to paint them. Click the leaf icon at the bottom...



Click Vegetation. Now you can drag vegetation and landscaping into the area that states “Drop here” ...



Drag and drop multiple objects into this area. Select the ones you want to paint the ground with by holding down CTRL and picking. Now select the Paint Brush. Once you select the paint brush, you can specify the area to paint, and the density...



Paint your landscape until you're happy with it...



Now place some people, or animals in the scene. You can also place cars as well. Once done, you can save your drawing. Below is my finished product...

