IDS 4687 Games Engines – UnrealEd Tutorial 2

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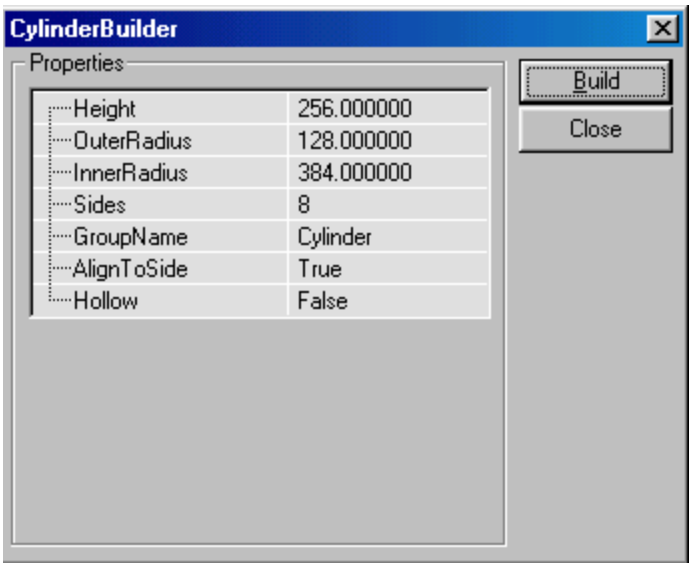
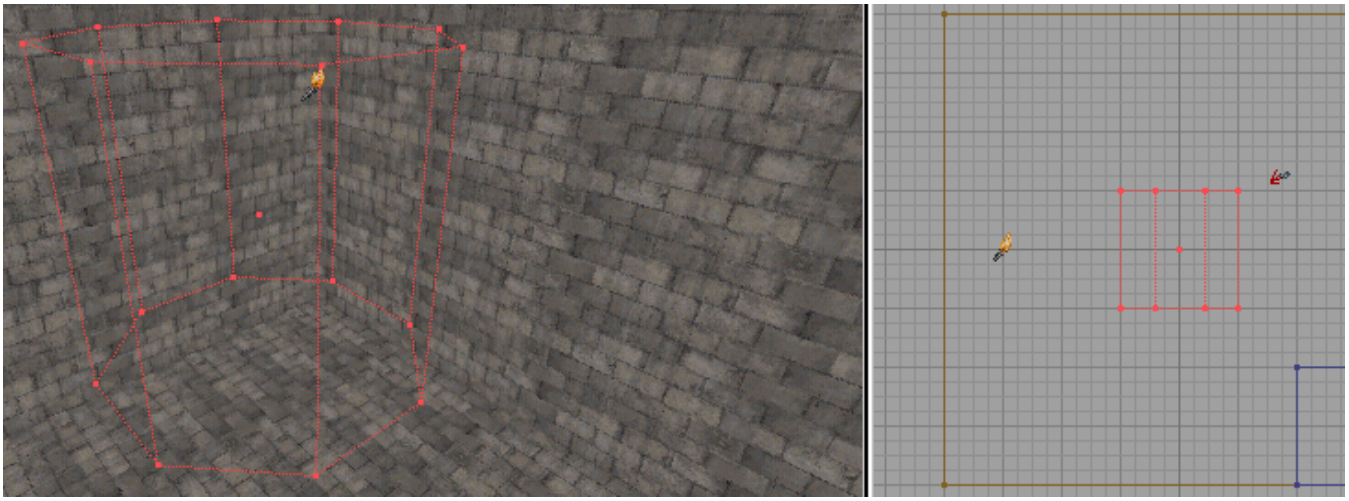
This document can be downloaded at: www.planetunreal.com/squacky/UnrealEd-Tutorial2.doc

Tutorial 2 – Making Water

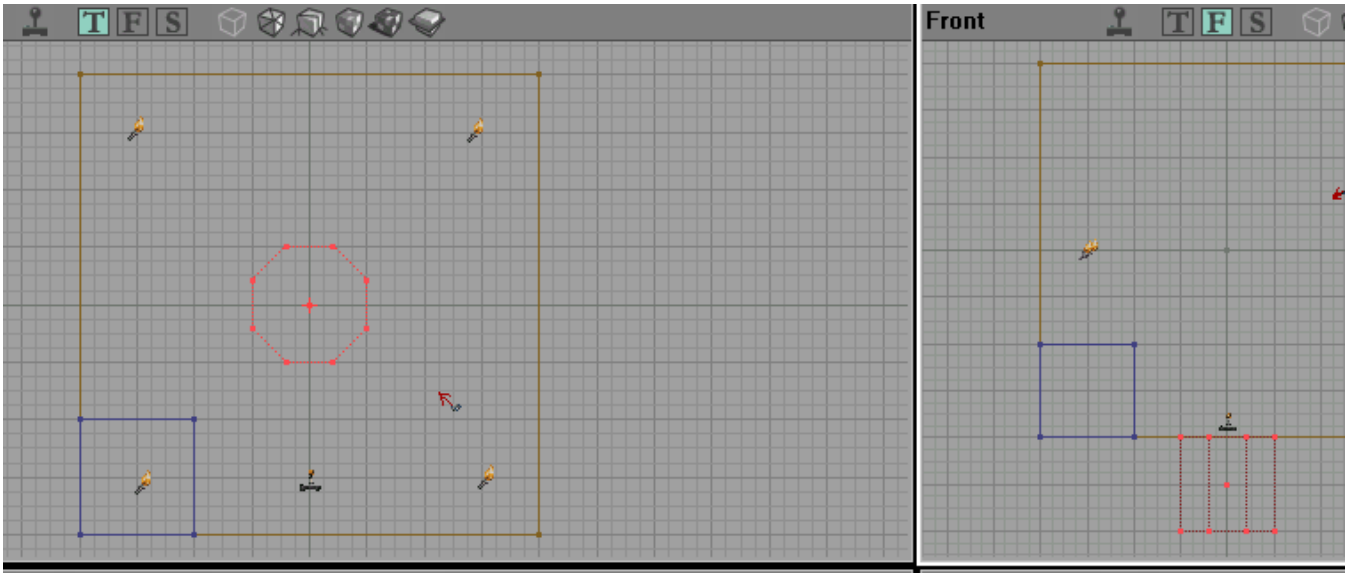
This tutorial is based on the room made in Tutorial 1. We will now add water to our map. First we must make a small "pool" where the water will be. Let's use the CYLINDER BUILDER to make a nice round pool. Right click the CYLINDER BUILDER and build a cyclinder with radius 128.



After you hit build, your BUILDING BRUSH will take the shape of a cylinder.

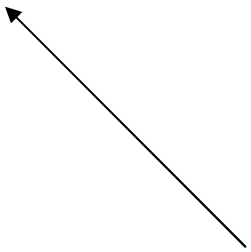


We want our pool of water in the center of the floor. Line up the top of the cylinder with the floor of the main room as shown below.

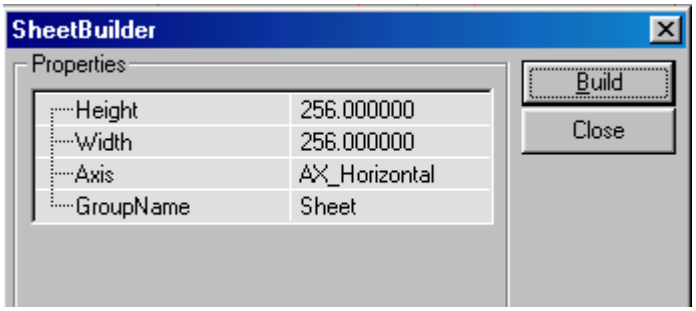


Now hit SUBTRACT to carve out your water pool. One thing to note here is that SUBRACTED brushes are yellow and ADDED brushes are blue. You can center your BUILDING BRUSH if you wish by right clicking it and selecting RESET>>RESETALL. This is useful to keep it out of your way.

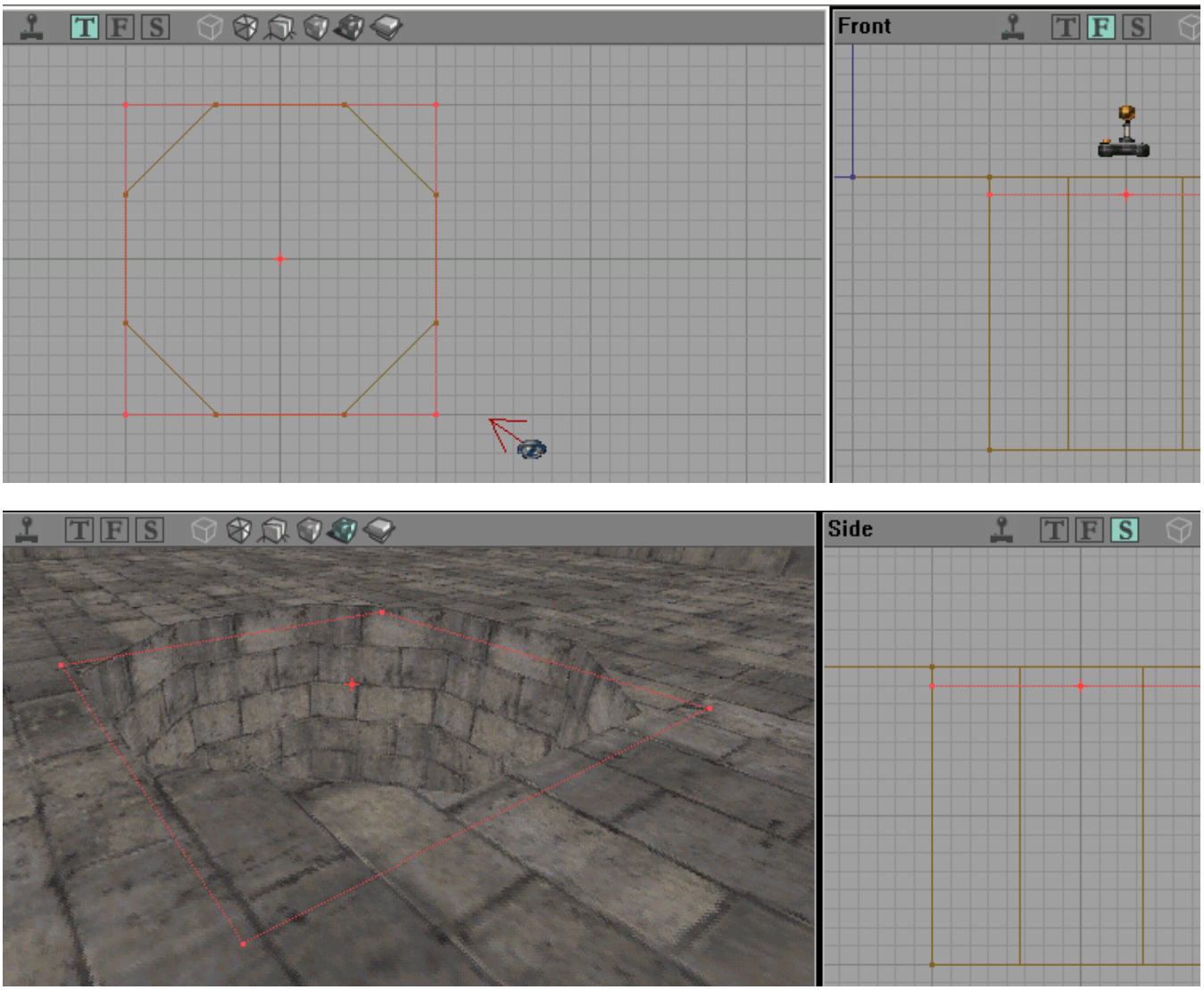
Now it is time to add the water surface. To do this we must use the SHEET BUILDER. Notice that our pool is 256 units wide. Right click the SHEET BUILDER, make a 256*256 sheet, and hit "Build".



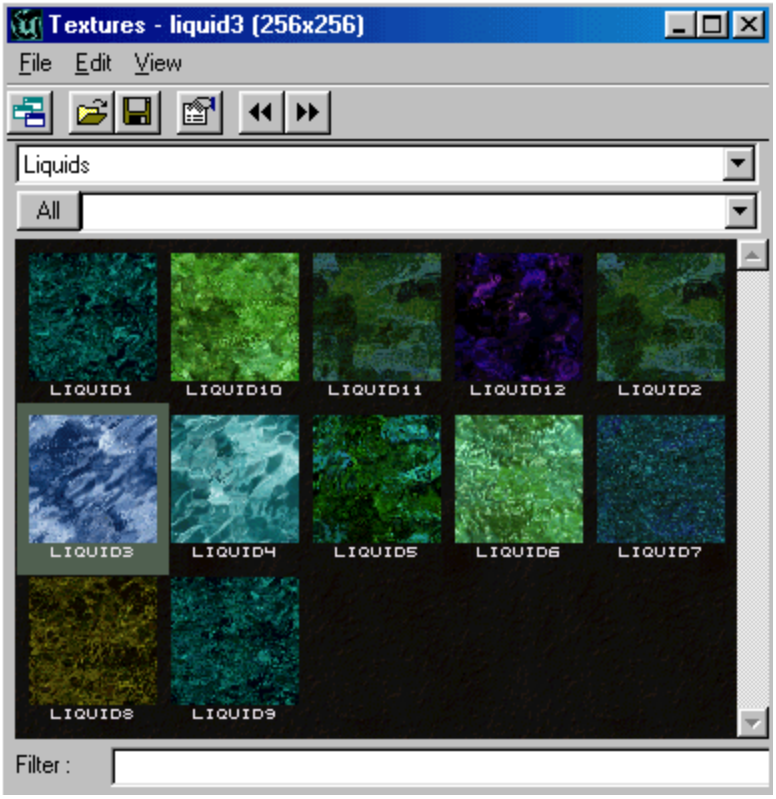
Sheet Builder



Your BUILDING BRUSH will take the shape of a sheet. We must now line up our sheet as if it were the surface of the water. Line the sheet exactly across the mouth of the cylinder and make it 16 units (1 grid square) below the floor of the main room. When properly aligned it will look like the following.

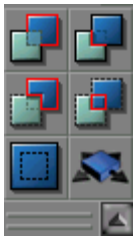


Before we ADD our sheet we want to choose an animated water texture. Open the TEXTURE BROWSER, open the package “Liquids”, and select a water texture you like.

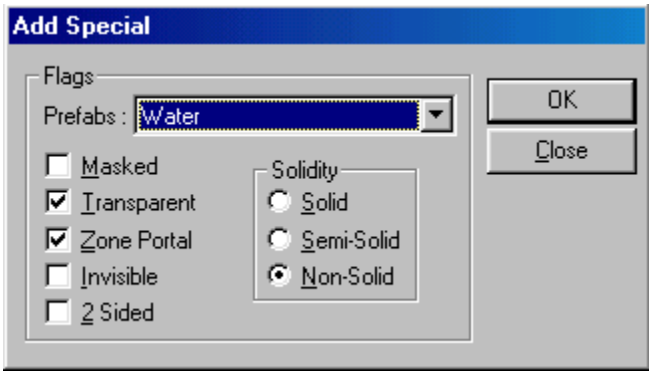


Water is considered a “Special Brush” so in order to ADD it we must use ADD SPECIAL BRUSH.

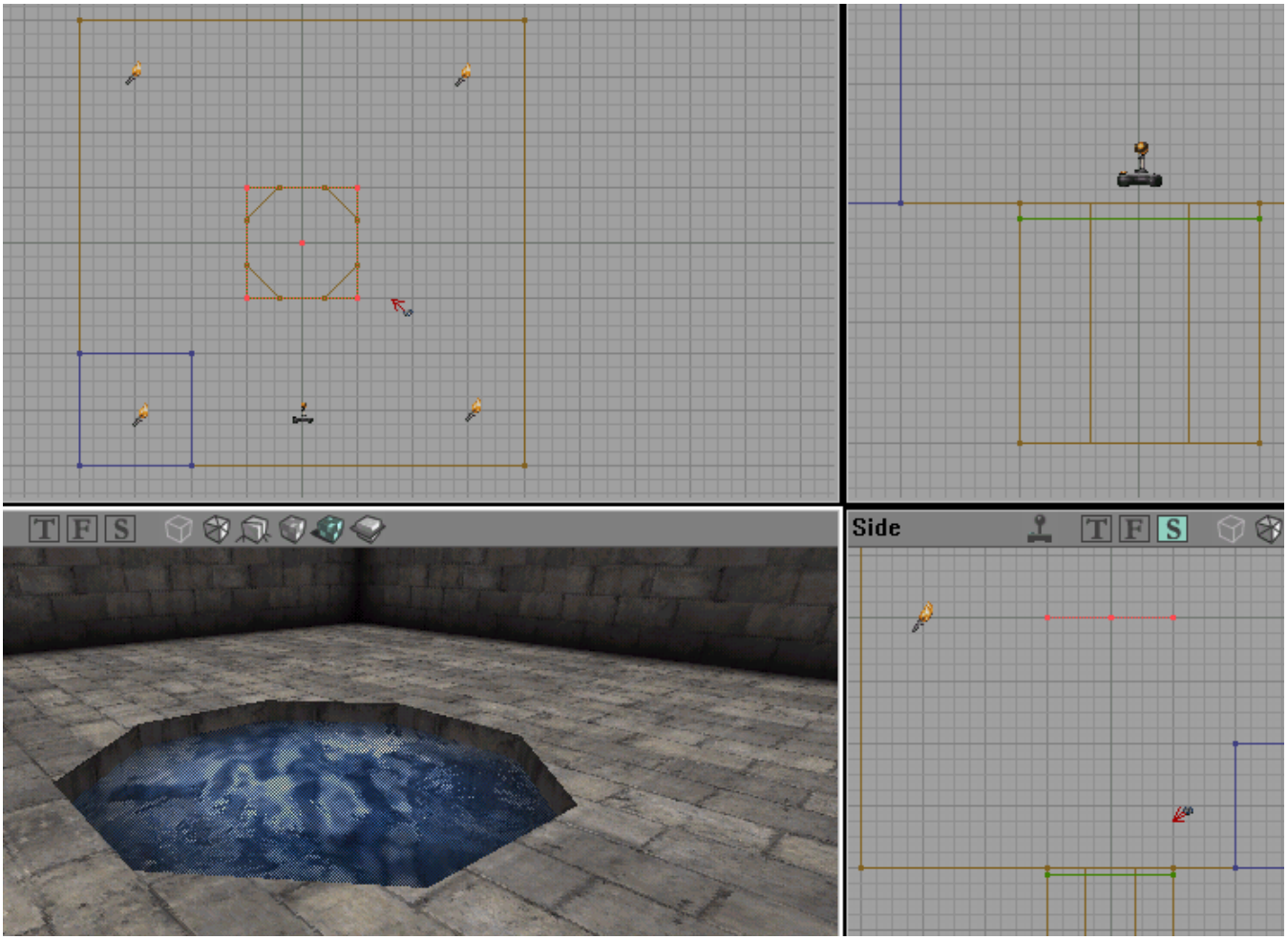
ADD SPECIAL BRUSH



When you left click ADD SPECIAL BRUSH you will get an options menu. From the “Prefab” menu choose “Water” and then click “OK”.



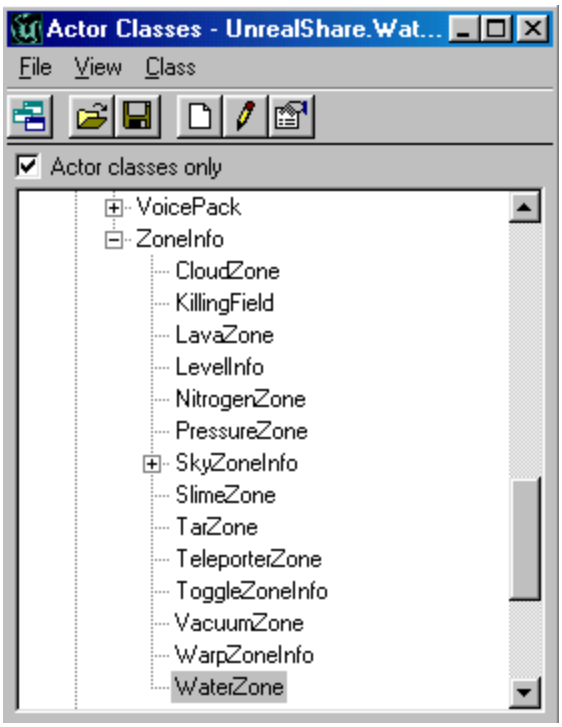
Your water sheet will now be added to the map. You may not see the water until you do a REBUILD ALL so do that now. Next move your BUILDING BRUSH back to the center of the map by right clicking it and selecting RESET>RESETALL. Your map should look something like this now.



Notice that your water sheet is green in all the 2DWINDOWS. Brushes that are not solid (a player may pass through) are colored green in the 2d window.

Our pool is almost done! We must now designate the area inside our cylinder, below the water sheet, as a WATER ZONE. This will make players “swim” when they jump in.

To do this, open the ACTOR CLASS BROWSER again and select INFO>>ZONEINFO>>WATERZONE.

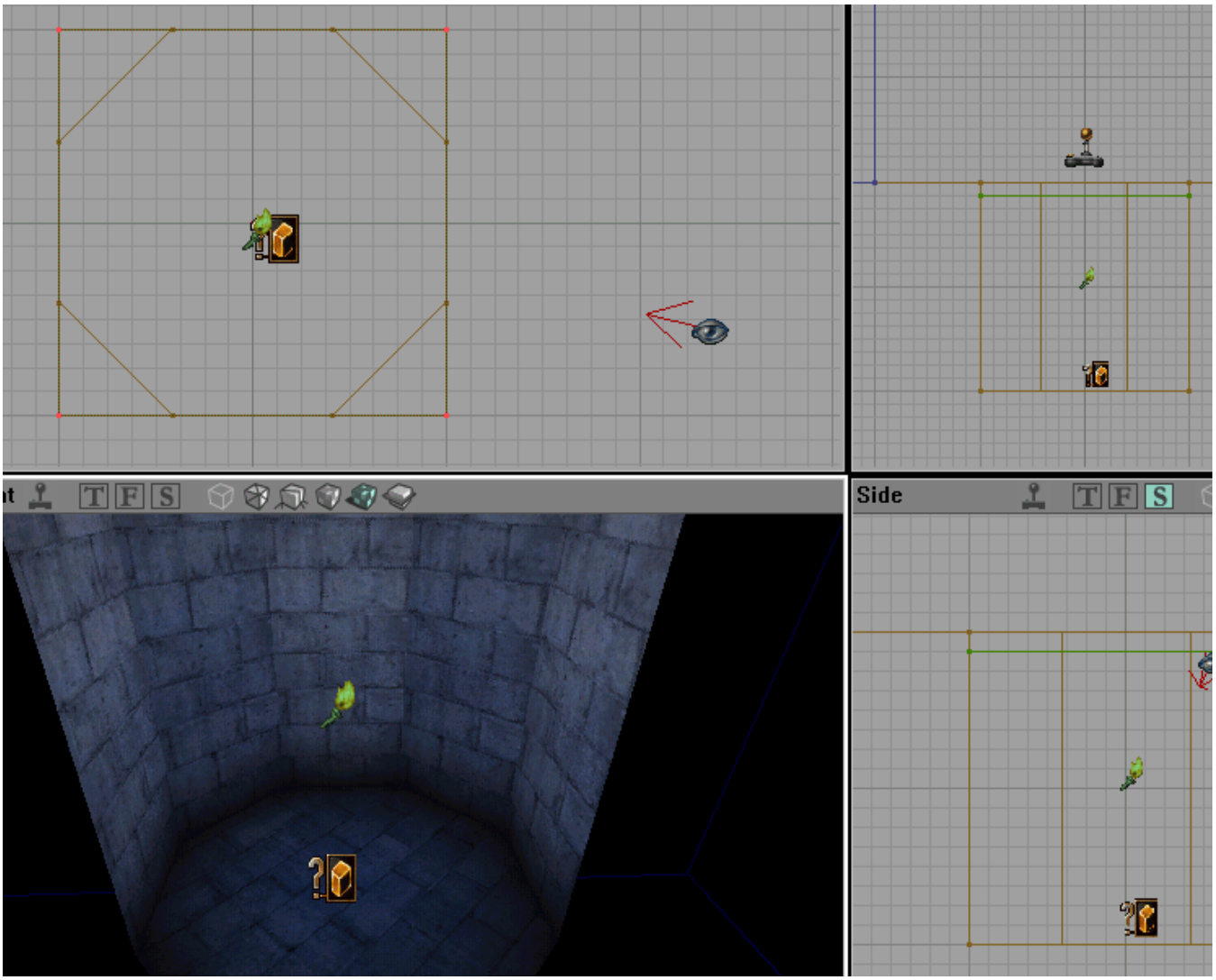


Using the 3DWINDOW, move inside your cylinder and place the WATERZONE by right clicking on the bottom of the pool and selecting “ADD WATER ZONE HERE”. But…it might be very dark inside your pool in the 3DWINDOW. Use the icons above the 3DWINDOW and change the view from DYNAMIC LIGHTING to TEXTURED. TEXTURED shows only the basic textures and is an easy mode to work in because everything is much more clear. The shots below show the difference.

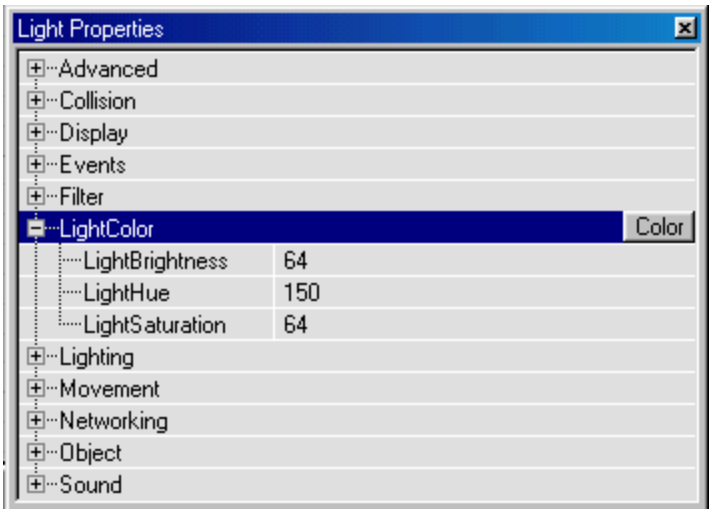
Textured Mode:

Dynamic Lighting Mode:

To make your pool look nice you can also add a LIGHT in the bottom of the pool (right click and choose “ADD LIGHT HERE”). Try to center the LIGHT in the pool using the 2DWINDOWS. It should look something like this.



Notice that the light in the pool is a nice shade of blue to match the color of the water texture. Changing light color is simple. Just right click the light and select LIGHT PROPERTIES. The following options were used in the shot above. Basic lighting options are covered in Tutorial 1.



We are done with our water zone now. Just hit REBUILD ALL, save your map, and go swimming.