FlexMap Builder Quick Map Tutorial

This document outlines a very simple way of making functional, excellent looking maps. Even if you aren't particularly good at making nice maps, you can use the features of FlexMap to make one. If you already have an image of the map you'd like, such as a satellite photo, or a map from a book, you can assign terrain values to it and use it in your campaigns. You'll need a background map to use this tutorial.

Tutorial

First, you need a background image to use as your map. This should be a full map, and you need to know the dimensions of the image so you can tell FlexMap how big the map should be. For the tutorial, I grabbed a satellite image from the internet. The satellite image I used is of a North American city with about 120 pixels per mile. If you grab a map from the internet, you can usually see a scale bar on the bottom to show how many miles it is. The campaign I am making is a 28mm sci-fi small unit action game, so this scale should do well. You could definitely use this map in a 6mm game as well, with lots of fast-paced action.

Here's a scaled down version of the background map:
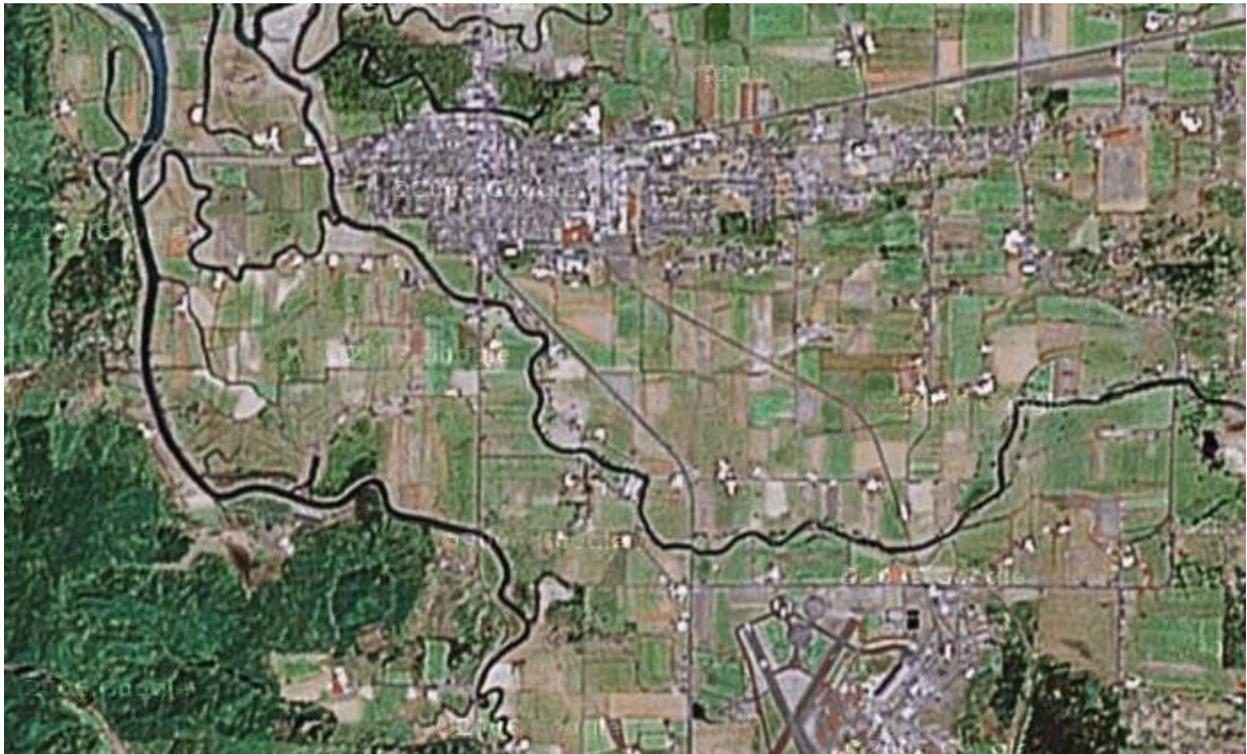
The original map is 700x425 pixels. You will need to know this so you do not tile the background image. We'll want our map to be 700x425 or less. Now that we have our background image, we can start.

Open FlexMap

Run FlexMap.exe to open the map builder and click on the "new" toolbar button. A dialog will open where we can begin to set up our map. I have set the name of the map as well as the dimensions (700x425 – the same as our background image), and clicked the "create base feature" button.

Create Base Feature
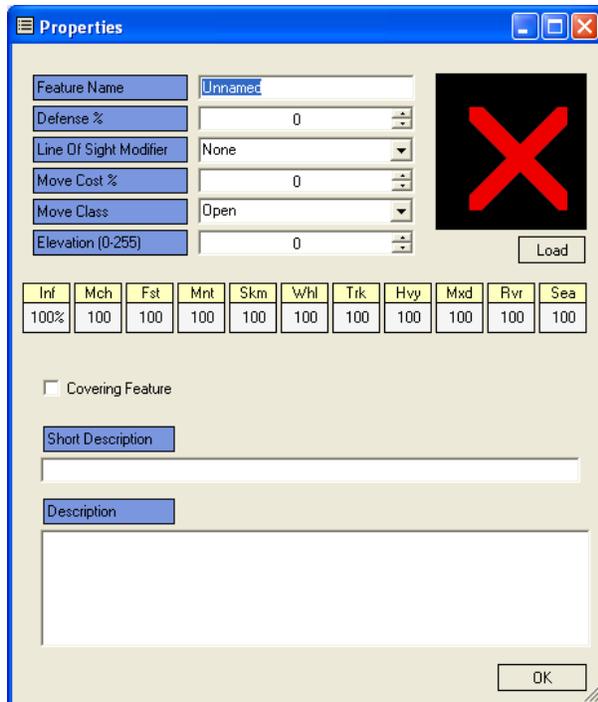
The feature properties window opens and there is a large and red 'X' where the texture will show. Since we are going to create features to cover all of the terrain, we won't have to fill much out here, so we set the name to "Land" and leave the default values. Click the **load** button to load the background image. A file dialog will open, and you can navigate to wherever you saved your background image. Once you do that, you will see a portion of the texture in the window, instead of the red 'X'. Once you see that, you can press 'OK' and it will close the Properties window.

This is what we end up with before pressing 'OK':
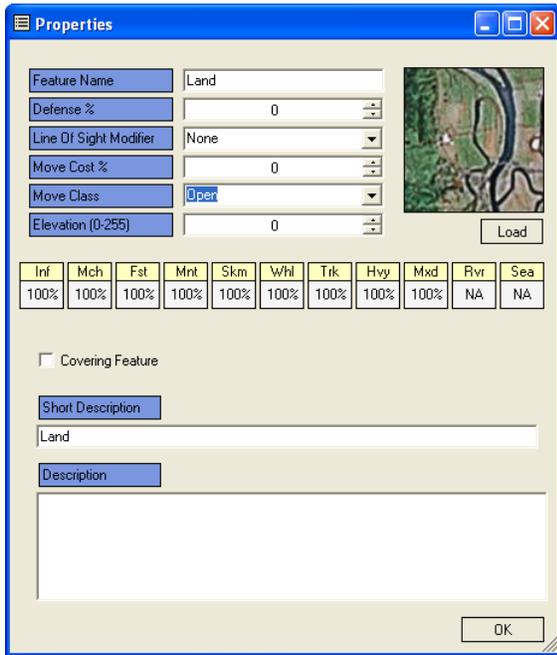
After the dialog is closed, the base feature is shown on our "New Map" dialog. I named this one Pranu City.
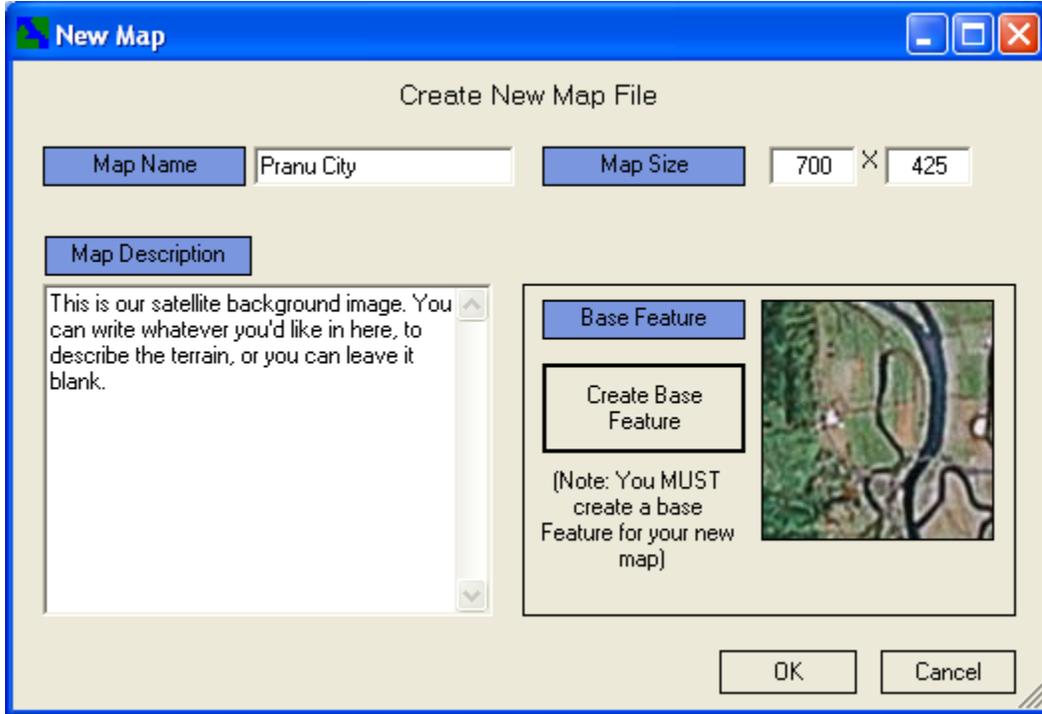

Hit 'OK' on this window and we can really get into the guts of this simple map.

Terrain

Even in a simple map, you'll want some varying terrain to bring a little flavor to your battles. Looking at the background we have, we'll see a few that just stand out. We have river, rural, urban and some forest. That makes a pretty simple map, which is what we want. So, we'll start with the river. To the right of the map, you'll see a property window like below:
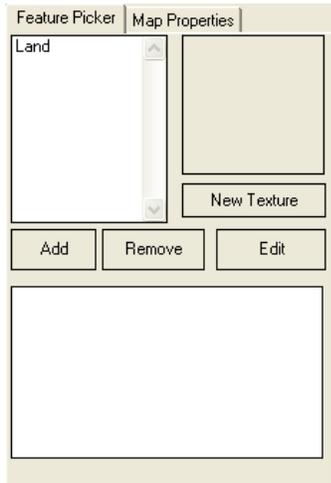
Pressing the "Add" button will open the 'Properties' window where we can set the values we need. Click the 'Load' button, on the properties window to load a new texture. We'll use magenta.bmp, since FlexMap treats it as transparent. I changed the 'Move Class' to 'Water', and you'll notice the movement value percents in the center of the window have changed. You can experiment with different movement classes to see what effect they'll have on different unit types. I used 'Water' so that units will have to use the bridges to cross (try shallow water and you'll notice infantry can cross it).
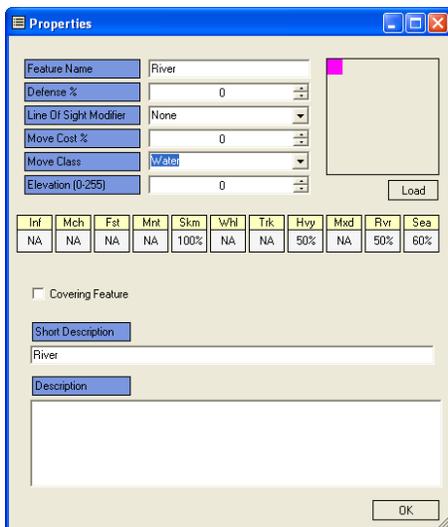

Once the river feature is created, you can begin drawing it on the map. Select the feature River on the right, and press the 'Draw' toolbar button. Click on the map until you've covered the area that

represents river. Press the 'Close' toolbar button and it will close the shape. You now have a completed river feature! When making terrain that is transparent, you can toggle the boundaries of all terrain features in the View menu. Select the option "Boundaries" and it will turn it on and off. Alternatively, you can use some other color, such as yellow or blue as the texture, and then change it to transparent when you're done. That's what I did for the rivers. I also used the 'Widen' tool a lot.

If you make a mistake, you can use the "Select" toolbar item and select the feature that needs help. You can then move the vertices or delete the feature. After I finished with the river, this is what my map looks like. You can easily see where the river is. We're going to keep it this color until we're done. We'll use a different color for the other features.

At this point, we also notice that the majority of the map is suburban. So, to save ourselves from drawing in all of the "suburban" areas, we'll edit the first terrain we created. Select "Land" from the window on the right and press the "Edit" button. You should be familiar with this page by now. Here are the changes I made to make it suburban.
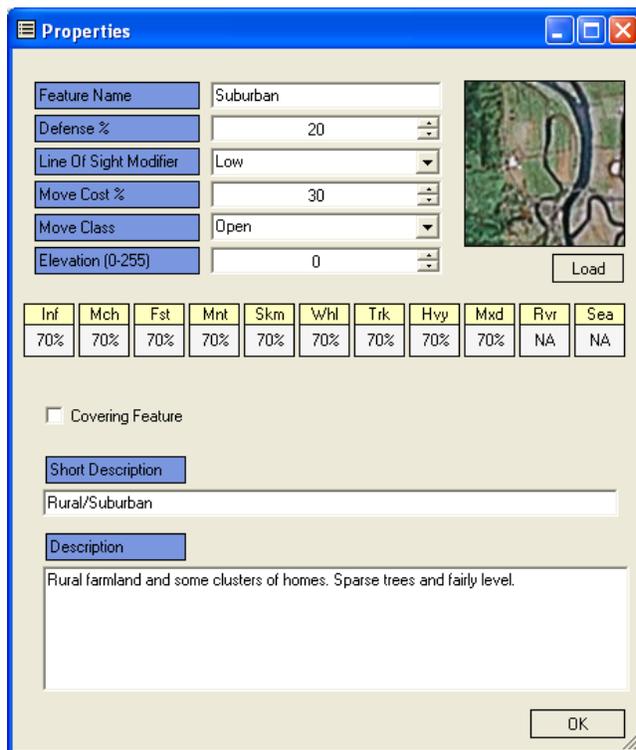
 With that change made, we're ready to move on to the next feature: urban. Press the 'New' button on the right to get our property window. Select any color for the texture, so it stands out. I'm using blue. Here's my "urban" terrain:
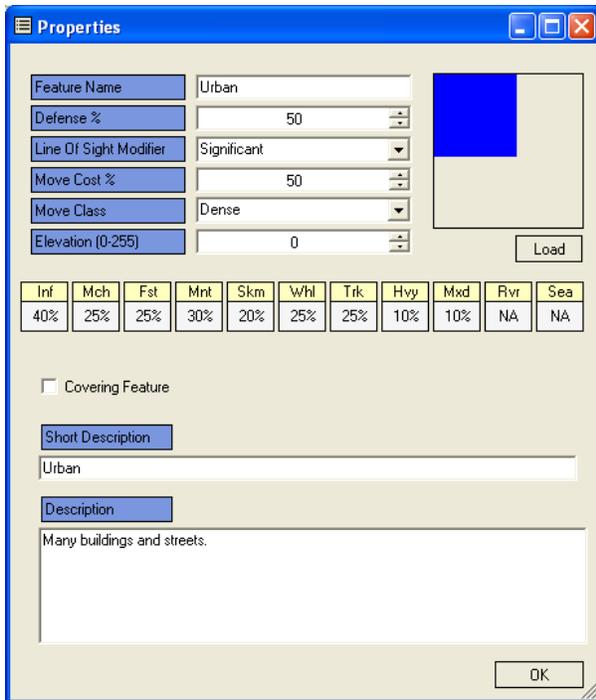
Now, use the same methodology to draw the urban areas. Really, one major one stands out, which is the main city, but we'll add some more to the south, near the airport. You might notice a problem at this point. The places where we overlapped the river are now "urban". We'll have to change the order of the features so that the water is not covered up.
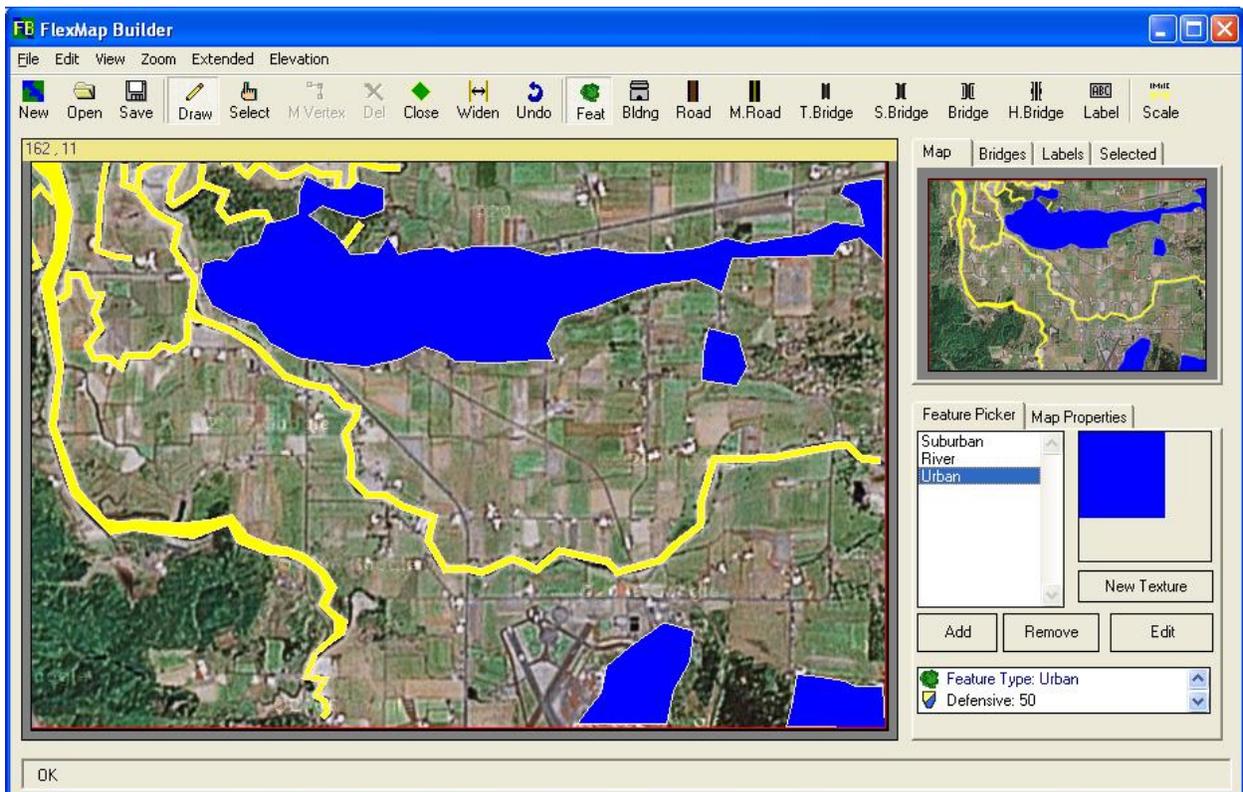
Feature Z Order

To change this, you press the "edit" menu item, and select Feature Z Order. Select "river" and press the down arrow, until it is on the bottom. When you've done that, you can press "ok". Now, the river will be "on top" of the urban feature, just like it should be.
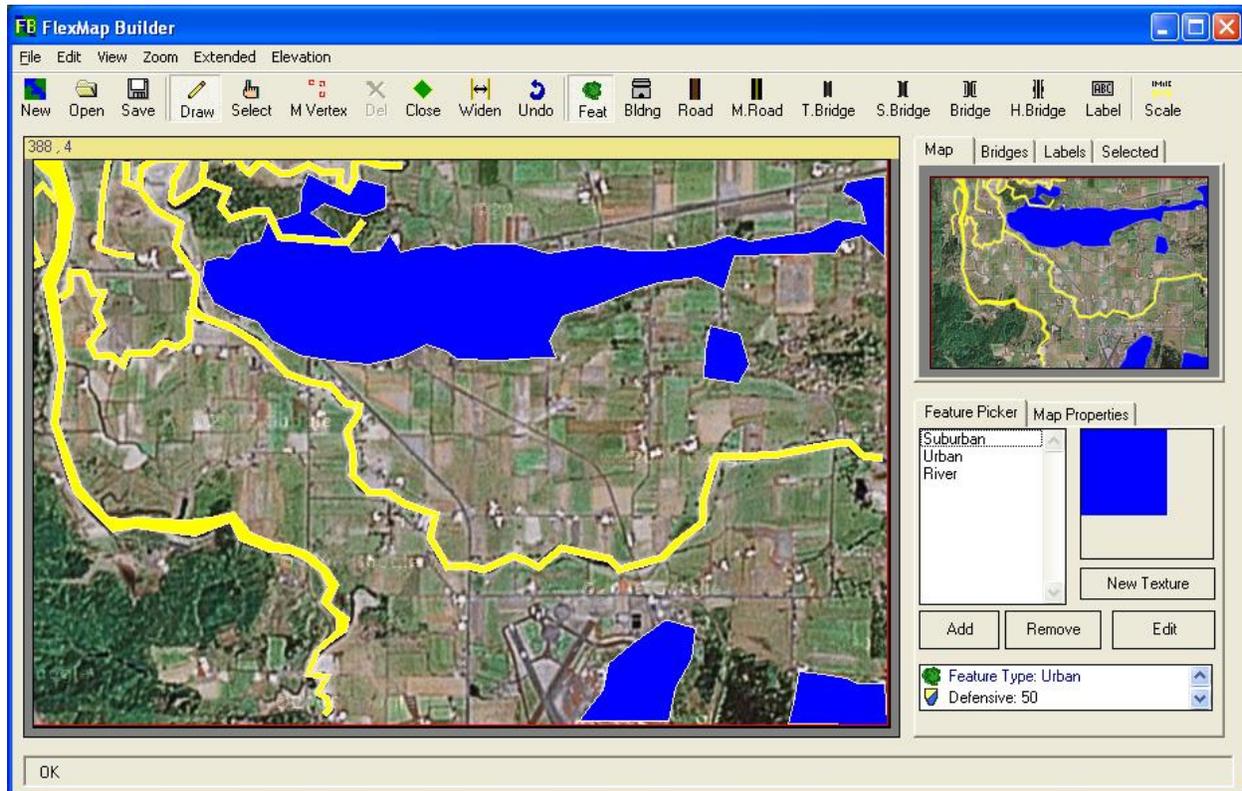
We have one more terrain type to add: Forest. Follow the same procedure as before and this time I'll use green:
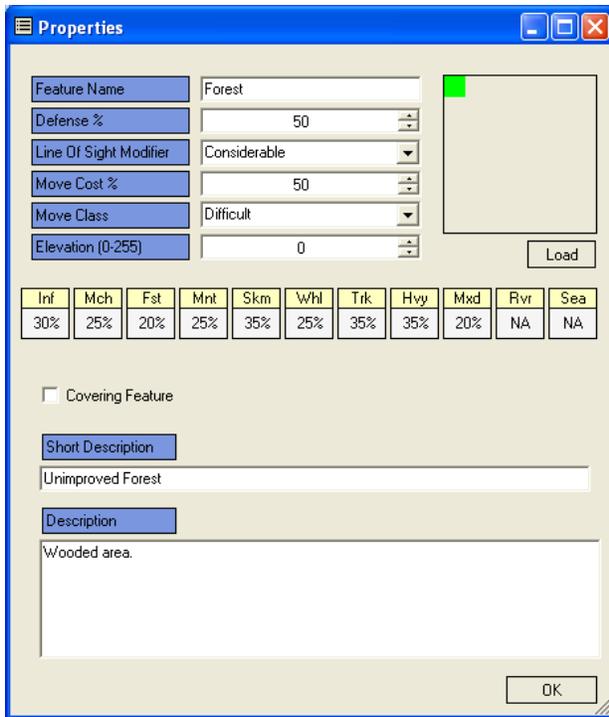
Now, draw the areas that are forested. You'll have the same problem with the river being covered, so fix the Z order and make the river be drawn last again. Once that's done, we are almost finished.
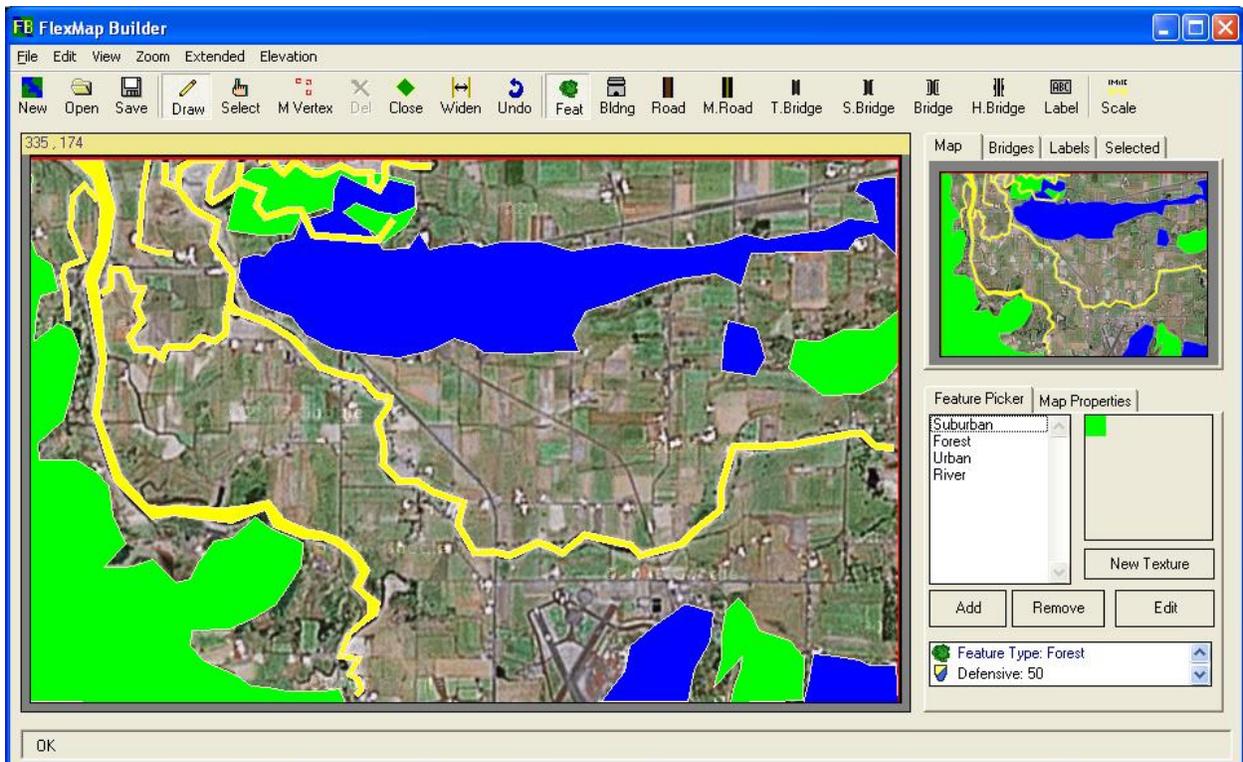
Bridges and Roads

Infantry will need bridges to cross the water, and roads help move them along much faster. We can see some of the major roads on the map, so we'll use that as our template on where they should be placed. The same applies to Bridges. At this point, you can set all of the textures back to magenta so the colors are no longer showing.

Scale

Before we're finished, we need to set the scale. For this, we've already determined that the scale will be 120 pixels per mile (gathered from the satellite image data). So, on the toolbar click "draw" and then select "scale" on the right. A window pops up asking how many pixels per mile. The miles and pixels can be changed, so if you want 231 pixels per 3 miles, that's acceptable. This map turns out to be 6 miles wide by 4 miles. 24 square miles is a lot of space for maneuvering with our squads.
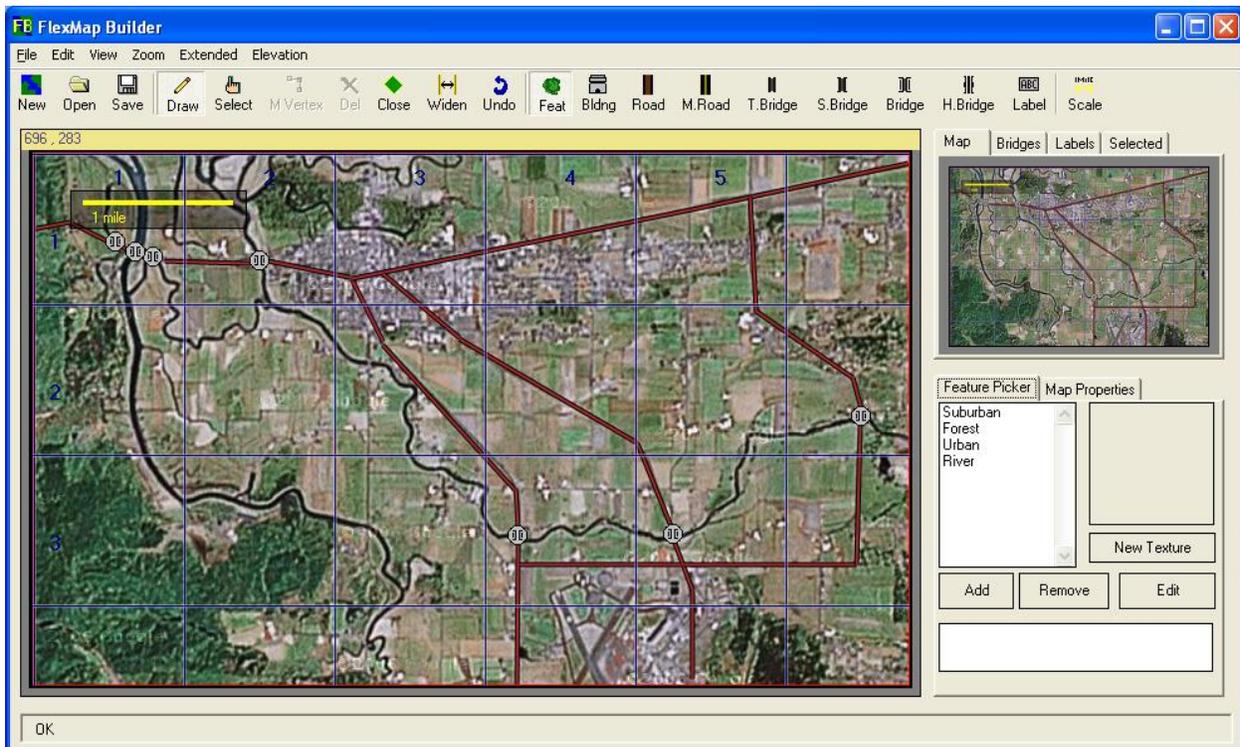
Finished

Here is the map with roads and bridges and all features set to be transparent: