City or Castle Walls Tutorial

by kittrellbj

This is a fast city walls or castle walls tutorial that I threw together in a few moments. I would like to thank Ascension for the inspiration, as you will probably see a methodology that is common in his tutorials here, but thrown about and tortured.

I wrote this tutorial after looking through the forums and seeing no real dedicated city walls tutorials. Yes, I was looking for one. So, I decided to open up Photoshop and play around with a (semi-) completed city of mine and see if I could make some city walls in less than 15 minutes that looked okay. Anyhow, let's take a look at the finished product:

City Walls : Finished Product

I only included part of the map in order to demonstrate the effect in close detail. It didn't scale very well for fitting it into a word processor.

Anyhow, let's begin with your base city map and setup Photoshop for your run through the process. First, you have a couple of decisions to make:

1. Decide if you want thick walls or thin walls. The tutorial is designed for medium-depth walls, like

seen above, so, as we go along, adjust the recipe up or down depending on your choice here.
2. Decide what kind of color scheme you want for the town. If it's dark and foreboding, you may want to use more dark or red textures for the stone. If it's a goodie-goodie place, you may want to lighten the walls up and make them “cleaner” looking.
3. If designing for a game world with specific parameters, think about the region before mapping your wall out. Decide what kinds of stone are in the area and what is available to the population from trading, quarrying the stone themselves, or perhaps the time period it was constructed in. All of these factors play in to the shape, thickness, color, completeness, and construction of city walls.

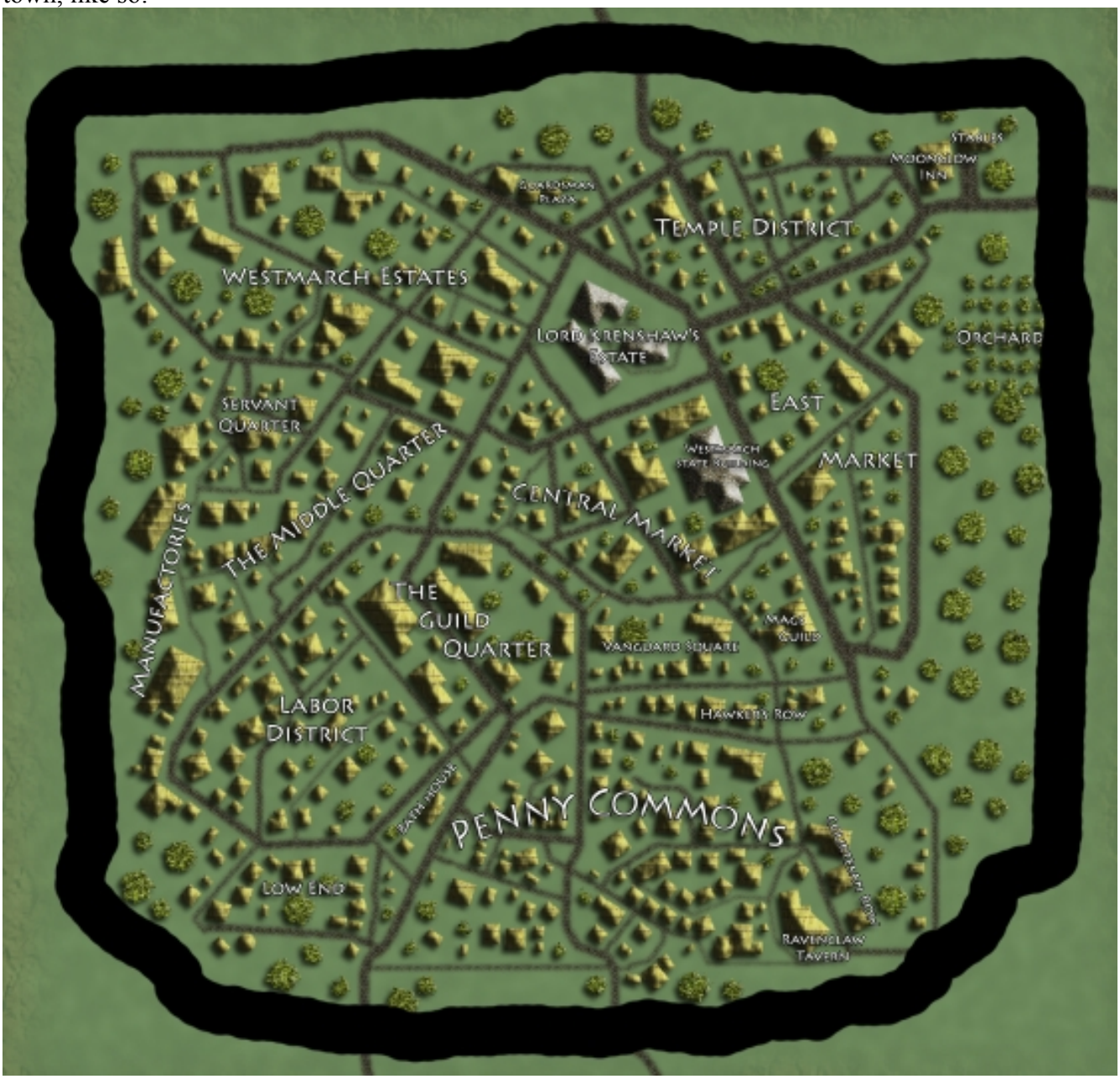
Now that we've brainstormed a little bit, let's look at our town. At this point, you should have a completed (or semi-completed) town. Perhaps you are here trying to make inner walls before you can continue working? That's fine. Perhaps you are nearly finished and can't think of a way to make walls that look okay? That's okay, too! Perhaps you are reading this to point and laugh? That's... not so okay, but at least you read it!

Let's take a look at the town:

Not a whole lot to look at right now. It looks like it is just waiting for an orc attack, a goblin raid, or a

kobold infestation! Or even a combination of the three! Never fear, we shall protect our good citizens. In the Middle Ages, the best way to do that was to make a wall around it! (Genius!)

So, we start with selecting a hard-edged brush with width about **50 pixels**, 100% flow and opacity. Create a new layer on top of everything else and name it "Wall Base". Take your 50 pixel brush (remember to increase it or decrease it based on thickness choice) and draw an enclosure around the town, like so:



When doing this, remember:
1. Keep drawing a contiguous shape; don't lift your pen or you will have unevenness. Just draw it around the entire city, over roads, rivers, lakes, or whatever. We will fix all that in a second.
2. Draw close to buildings, trees, and land features. City walls were expensive, and they normally went very close to pre-existing structures to minimize costs. (Of course, unless you have a reason to include open space inside the walls, which is fine if you have a reason.)
3. Castle walls were usually squared off, but city walls were rarely squared off. Try not to square it off

too much; architecture in the Middle Ages was not very precise on a large scale, so city walls tended to wind and meander around the place a bit. (Again, unless you have a reason for perfect architecture.)

Now, CTRL+Left Click the “Wall Base” layer. This will select the ugly black shape and allow us to start working. Goto Select->Modify-Contract. I used 10 pixels for my contract (adjust for flavor). Then, goto Select->Modify->Smooth. I used 10 pixels again on this. The idea here is to contract a little bit to get rid of the roughness, then to smooth the selection a little bit to make it nice and flow well. This makes it look like one continuous wall, rather than a piecemeal pre-manufactured building block.

When you are happy with the selected shape, goto Select->Inverse, hit Delete, and Deselect. Take a look at your city wall outline and see if anything needs to be touched up. If so, either repeat the above steps or use the Eraser tool to get rid of undesirables. Don't shave off too much of the wall, though: you will need it to be a decent thickness. Here's a picture of what it looks like:

Now, you have two options at this point. Either you can 1) leave the walls covering the roads and create gatehouses, or 2) erase where the wall touches the roads and place towers next to them. For this tutorial, I will be clearing the walls off my roads and placing towers. Also, if your city wall goes next to bodies of water, rivers, or lakes, you have to decide if they built the wall over the water, around the outside, around the inside, or even stopped the walls around the body of water (most likely in the case of rivers).

So, take the Eraser tool and erase undesirables. In my map, I will be erasing the walls from the roads so that I can put towers beside the roadways. This will double as a guardhouse and a defense turret in my city. So, grab the Eraser tool, take a liberal size (I used **20 pixels** on my Eraser), and get rid of the parts of wall that need to be taken off.

I have taken off the parts of wall that were covering my roads. Now peasants can escape from my

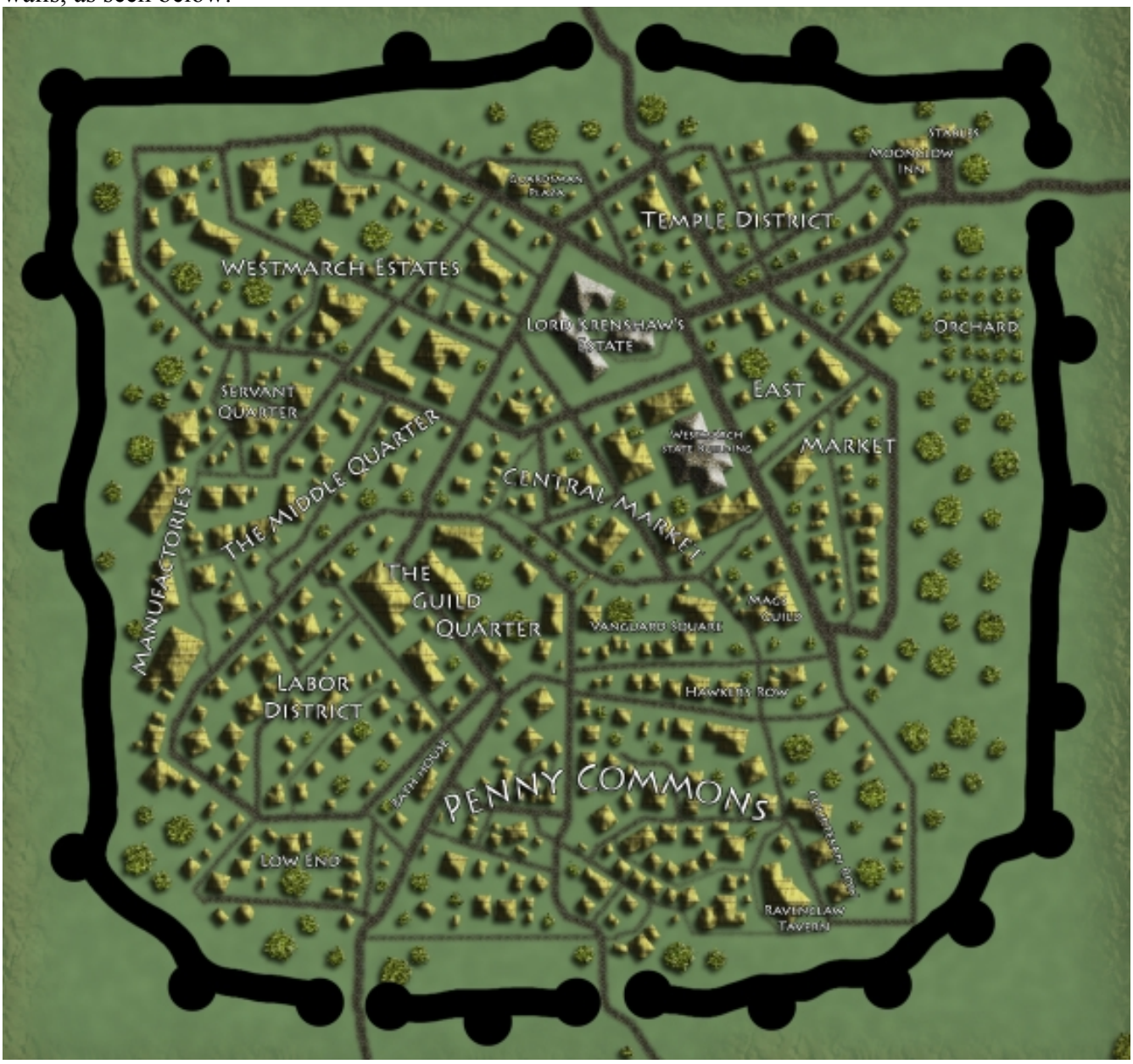
tyrannical rule once more! Liberating, no? Here's a picture of what I erased at this step:

Now is the time to add defense turrets, also known as towers. So, grab your **50 pixel** brush, 100% opacity and flow, and start adding your towers. The best thing to do is add towers at the wall breaks (where you erased for roads and rivers), as this will grant added support and logic to your wall superstructure. So, add those first, then fill in towers along the wall so that people can throw down unpleasantness and shoot projectiles at the enemy.

Also, remember a couple of tips:
1. Is your city historically loyal to the government? Or have there been rebellions in the walled-in area? If your city is generally loyal and happy, the turrets at the wall breaks will city at about center with the wall, and the turrets along the large stretches of wall will be mostly on the outside (as to make it easier to shoot at enemies all around the turret that will be outside the wall). If this town is ungreatful and unfaithful to the empire, the turrets may be more centered with the wall or even placed facing mostly inside the wall, making it easier to defeat rebels. If the turrets lie along a river, they may be

staggered, with some placed more towards the river and some placed facing outwards towards the surrounding lands (to better defend against river or ocean invasions). Your city walls give you an opportunity to further enhance its character, and you should monopolize on these opportunities as a city designer.

Anyhow, I placed my turrets. My town is nice, friendly, and eager to be taxed to death, so the turrets are placed to best defend these good people from the rampaging tax evaders that lie in wait outside the walls, as seen below:



Now, we will make it look like a wall. With your “Wall Base” layer selected, CTRL + Left Click the layer again to select the wall. Goto Select->Modify->Contract again. This time, I used **5 pixels** as my contraction amount. I want a nice amount of space on top of my wall for soldiers. Hit Edit->Copy, then Edit->Paste. This will create the smaller selection in a new layer. Rename the new layer “Wall Overlay”. It will be the same color for now, and that's fine.

To the “Wall Base” layer, goto Layer->Layer Style, and apply the following options:
1. Drop Shadow → Opacity 100%. Size: 10 px.
2. Bevel & Emboss → Style: Emboss. Technique: Chisel Hard. Depth: 100%. Size: 5 px.
3. Contour → Default.
4. Texture → A stone texture at 10% to 20%, depending on the scale of the city itself. Season to taste. (I used a Photoshop default stone texture for mine)
5. Color Overlay → Optional. I would recommend a dark grey overlay unless you have other color plans or your texture is already dark enough. I used # 555555 as my color overlay for Wall Base.

To the “Wall Overlay” layer, goto Layer->Layer Style, and apply the following options:
1. Inner Shadow → Blend Mode: Multiply. Opacity: 50%. Size: 5 px. Distance: 5 px. Choke: 0%.
2. Bevel & Emboss → Style: Pillow Emboss. Technique: Chisel Hard. Depth: 1000%. Size: 5 px. Soften: 16 px.
3. Contour → Default.
4. Texture → A stone texture at 10% to 20%, depending on the scale of the city itself. Season to taste. (I used a Photoshop default stone texture for mine)
5. Color Overlay → Optional. I would recommend a dark grey. Again, I used # 555555 as my color overlay for Wall Overlay.
6. Pattern Overlay → I used the same stone texture that I used for everything else here, the default Photoshop stone texture. Blend Mode: Hard Light. Scale: 10%. Opacity: 100%.

Your walls should now look something like this:

If they don't, something went wrong somewhere, somehow. Maybe a skipped step?

Anyhow, that basically concludes the tutorial. You can change the stone textures to get different effects or personalities out of your walls, as well as changing the turret configuration, thickness, and by adding guardhouses on top of the walls and other details.

For instance, here is a wall using a black and red texture set (also defaults from Photoshop). See the difference between this and the previous image?

A different feeling? Yes, maybe a little more evil or sinister. Perhaps so many battles were fought on these walls that they were dyed red from the blood? Maybe red bricks were used in most of the construction of the town because they were cheaper and more plentiful here? Maybe a wizard came by and changed the color of the wall magically, to mock the town? Lots of different possibilities, but that's all for you to decide!

Good luck and happy map making!