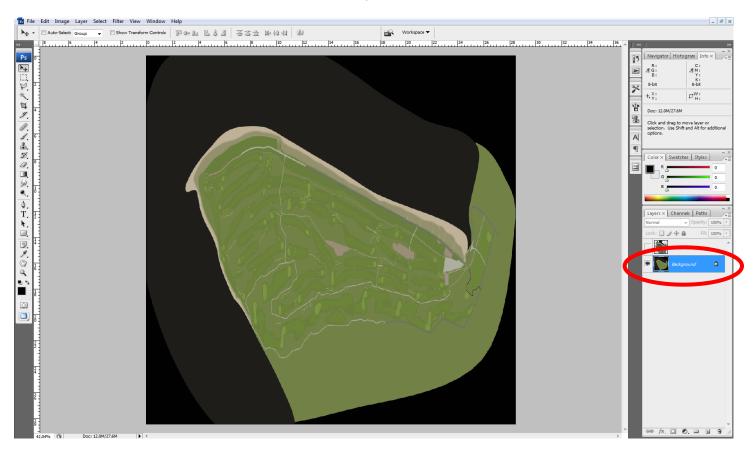
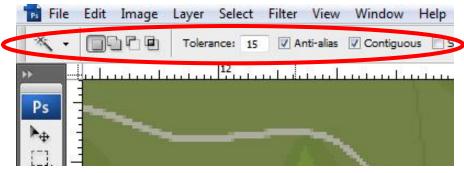
## **Using Alpha Channels with Course Overlays**

by Brian Silvernail

When using an overlay in CPG2010, one of the challenges is that the overlay often makes bunkers look like they are glowing. This is due to the bright color of the bunkers. You can use alpha channels to mask out the bunkers from your overlay to help eliminate this problem. For this tutorial, I use Adobe Photoshop CS3 for the image editing. The process should be similar with older or newer versions of Photoshop.

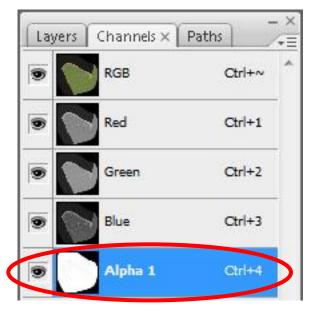


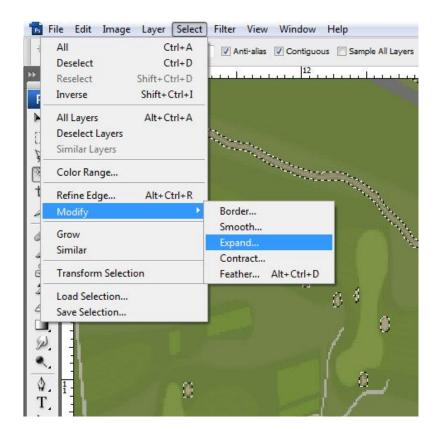
- 1. Open your base overlay BMP image file you exported from CPG2010.
- 2. I have created a new layer above the base layer that contains an aerial image that I'm going to use for my overlay. Make sure that layer is currently turned off.
  - 3. Select the Magic Wand tool from the toolbar.
  - In the tool options along the bar near the main menu, make sure the Tolerance is set to around 15. Also make sure Anti-alias is checked.
  - In the layer tab, be sure to select the *Background* layer.
  - Go to your image and with the Magic Wand tool, select one of your bunkers.



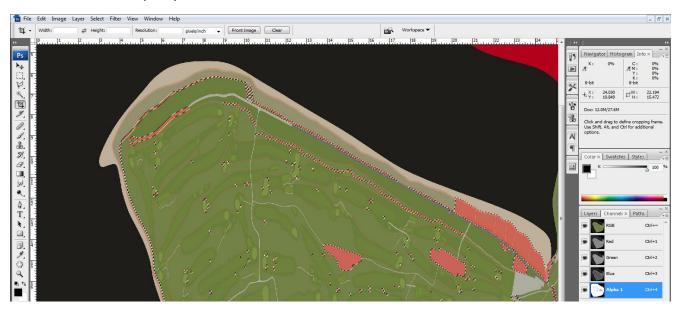
7. Now, go to the **Select** menu and choose **Similar**. (NOTE: Depending on the color of your bunkers, this may select other sections of your overlay.)

- 8. Go back to **Select** menu and choose **Modify** and then **Expand**.
- In the Expand Selection dialog box that appears, enter 1 as the number of pixels to expand. What this does is make certain the entire bunker will be masked out.



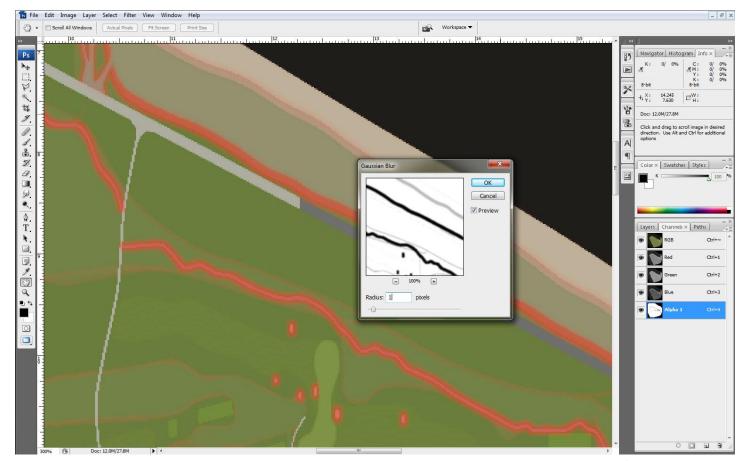


- 10. Go to the Channels tab. If you don't see the Channels tab, you can select it from the Windows menu. Your file may already have an alpha channel named Alpha 1. You can use this channel by selecting it, or create a new one.
- 11. Now that you have the alpha channel selected, make sure black is set as your foreground color. This is located at the bottom of the main toolbar.
- 12. Now, go to the Edit menu and choose Fill...
- 13. For the Fill dialog box that appears, make sure that it is using the **Foreground Color**, the mode is set for **Normal** and that the opacity is set for **100%**. Click OK.



14. After the fill, you should now see red sections section in your overlay. This is normal and only represents the areas where the alpha channel is located.

- 15. You can repeat the steps above to mask out other sections of your overlay, such as cart paths.
- 16. Once everything is masked, go to the Select menu and choose Deselect.
- 17. Select the alpha channel again (see step 10.)



- 18. Go to **Filter** and choose **Gaussian Blur**. When the Gaussian Blur dialog appears, choose a pixel radius of **1**. This will help smooth the transition between the masked and unmasked sections of your overlay.
- 19. Now, in your Layers menu, turn back on your main layer image. In my case, this is the aerial photo.
- 20. Go to the **File** menu and choose **Save As...** and save a copy of your overlay in the Photoshop PSD format. This will preserve your layers and the alpha channel.
- 21. Next, go to the Layer menu and choose Flatten Image.
- 22. Finally, go back to the **File** menu and choose **Save As...** and save a copy of the overlay in the Targa (TGA) format. In the Targa Option dialog box that appears, choose **32 bits/pixel** and click OK.
- 23. You will want to save a copy of the file in the following folder so that CPG2010 has access to the TGA file: \ProgramData\CustomPortal\Resources\TEXTURES\

You should now be set to use the overlay in CPG2010. The blend opacity setting in CPG2010 still works with the overlay and the sections we have masked out will remain so no matter what opacity you use. Best of luck and have fun experimenting with the alpha channels. There are a number of advanced things you can do with alpha channels and overlays once you get the hang of it.