

# **Intro to Adobe Photoshop**

Created for DUSPViz by Mike Foster & Luke Mich | Fall 2016



25  
Years of  
PHOTOSHOP

Ps

Adobe Creative Cloud  
Photoshop CC  
2015 Release

Scanning for presets...

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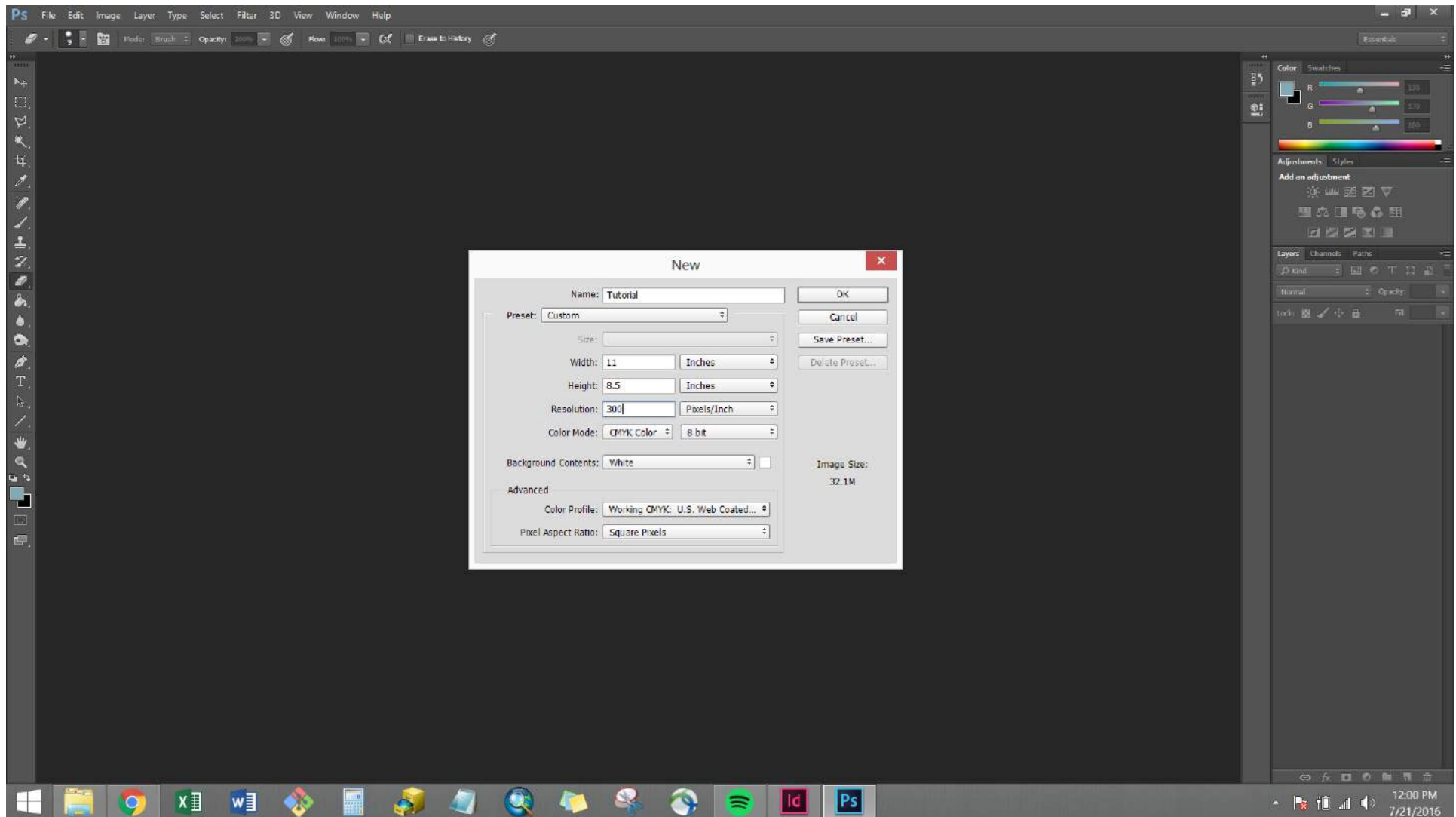
Artwork by Alberto Seveso  
See the About screen for details

Thomas and John Knoll, Seetharaman Narayanan, Russell Williams, Judy Lee, David Hackel, Shrab Amirhoda, Jackie Lincoln-Owyang, Rachel Magnus, Tom McRae, Christopher Butler, Alan Erickson, Ivy Mak, Sarah Kong, Chris Cox, Jerry Harris, Mike Shaw, Thomas Ruark, Domnita Petri, David Mohr, Jonathan Lo, Betty Leong, John Worthington, Kevin Hopps, Tim Wright, Jeff Sass, Maria Yap, Yukio Takahashi, David Dobish, Jesper Storm Bach, Barry Young, John Townsend, Steven Eric Snyder, Judy Severance, Eric Floch, Allen Jeho, Meredith Payne Stotzner, Kiyotaka Taki, Tom Burbage, John Peterson, Kellisa Sandoval, Daniel Presedo, Inna Satanovskaya, Kaori Mikawa, Zorana Gee, Adam Jerugim, Tom Attia, John E. Hanson, B. Winston Hendrickson, Yuko Kapita, Mark Maquire, Foster Brareton, Tai Loxton, Vinod Balakrishnan, Ram Narain Yadav, Pete Falco, Steve Guilhamet, Paul Ferguson, David Tristram, Pam Clark, John Fitzerald, Teruko Kobayashi, Dave Polaschak, Kyoko Ito, Charles F. Rose III, Sarah Stuckey, Jeffrey Cohen, Yuvan Sood, Barkin Avoun, Jeanne Rubbo, Braden Evans, Anirudh Singh,



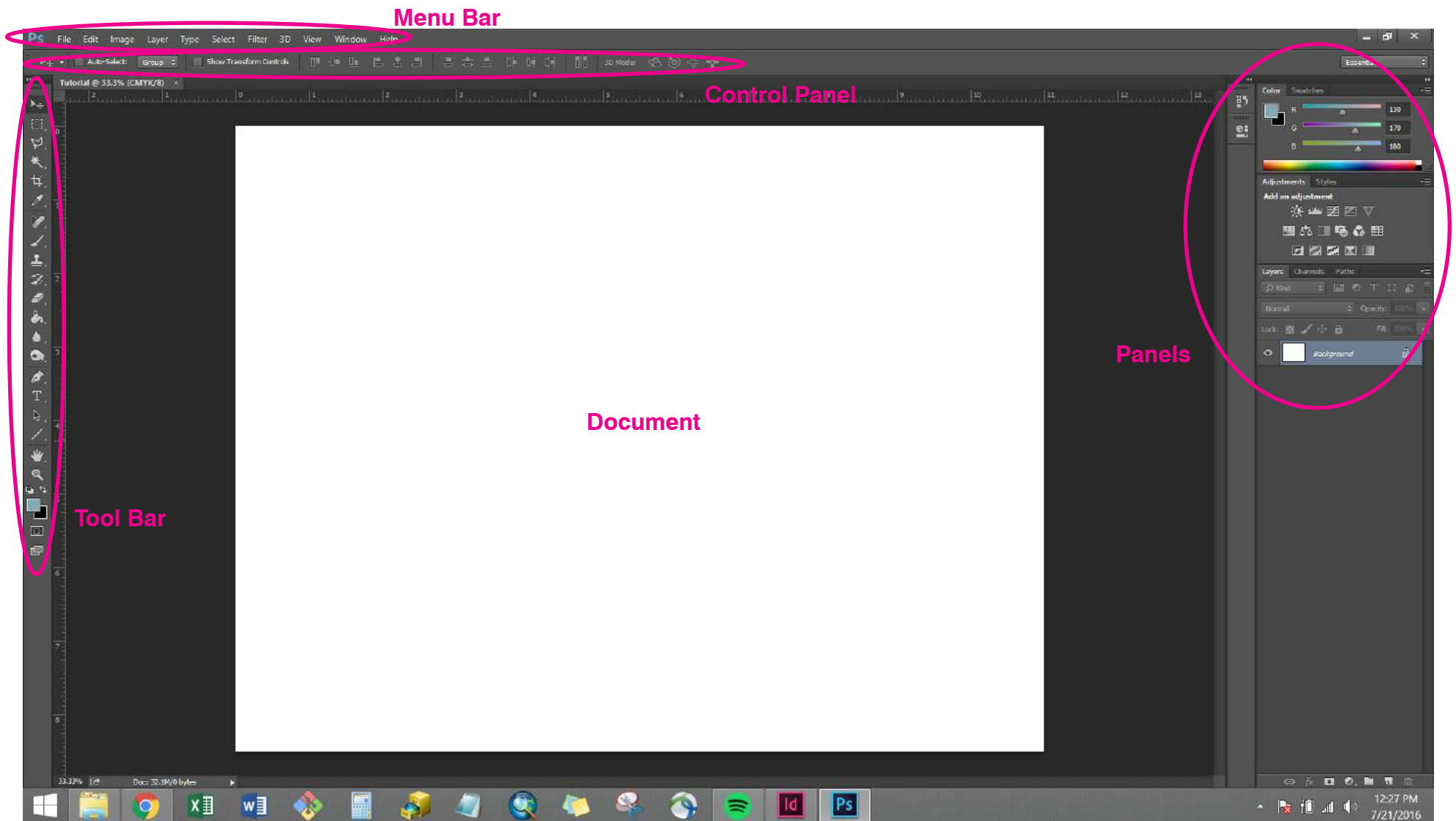
## What is Adobe Photoshop?

Photoshop is part of the Adobe Creative Cloud graphic software suite. Artwork created and manipulated in Photoshop is raster-based, meaning it operates by assigning colors and properties to the individual pixels of the document. This makes Photoshop great for projects like photo editing, architectural rendering, and painting-like digital artwork. In this tutorial, we'll learn how to use Photoshop to create a photo-collaged rendering - a quick way to illustrate potential future development without the need for time-consuming 3D modeling.



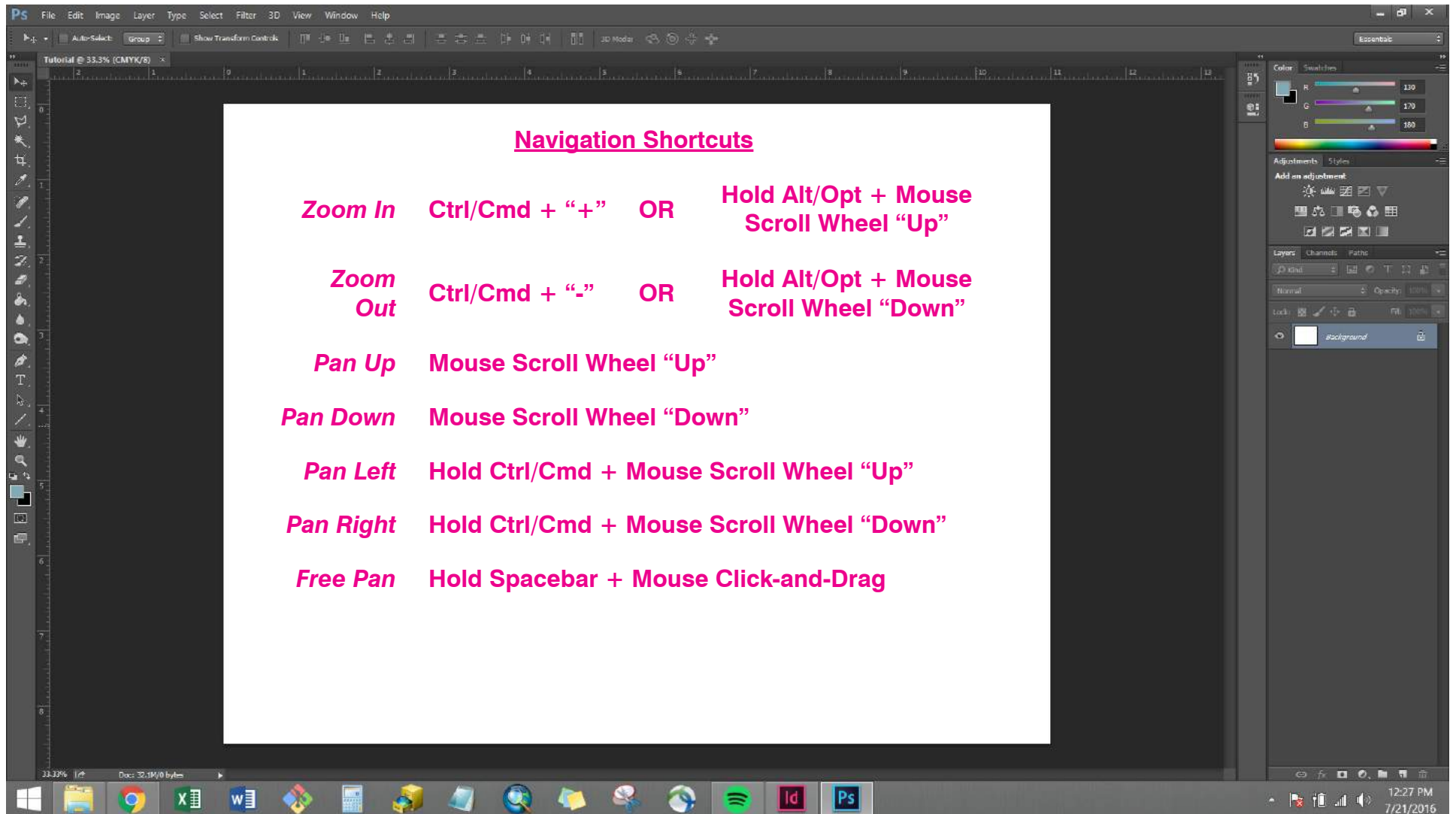
## Getting Started - Creating a New Document

Open Photoshop, go to **File>New...** and name our document "Tutorial." We'll give it a width of 11 inches (change the "Pixels" drop down menu to "Inches") and a height of 8.5 inches. The Resolution will set the "Pixels/Inch" which determines how crisp the image will be. While 72 ppi is usually sufficient for web-based graphics, and 220 ppi is good enough for most prints, let's go with 300 ppi which is commonly required in professional settings. Let's set the Color Mode to CMYK Color, which is appropriate for print (RGB is for web). Click "OK."



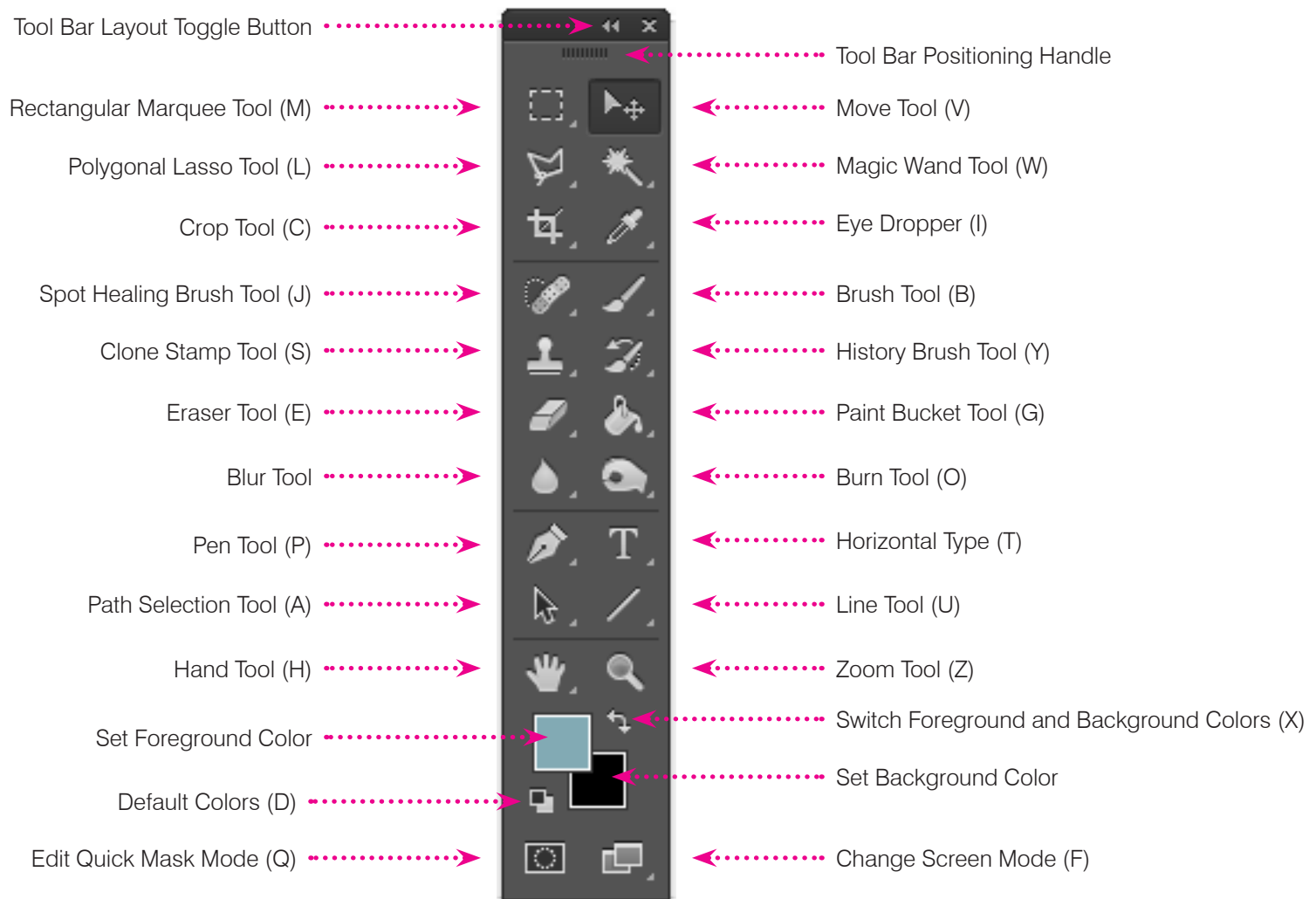
## Getting Started - Exploring the Interface

Let's get a lay of the land. Across the top of the program, we've got the Menu Bar which allows you to access many tools. Below the Menu Bar is the Control Panel which allows for tweaking settings of whichever tools or objects are selected. The Tool Bar rests along the left side and contains the major tools needed to create artwork. Along the right side are the Panels, which allow for the modification of artwork. The Document we created is the white page in the middle which will contain our artwork, though the gray surroundings can hold artwork drafts.



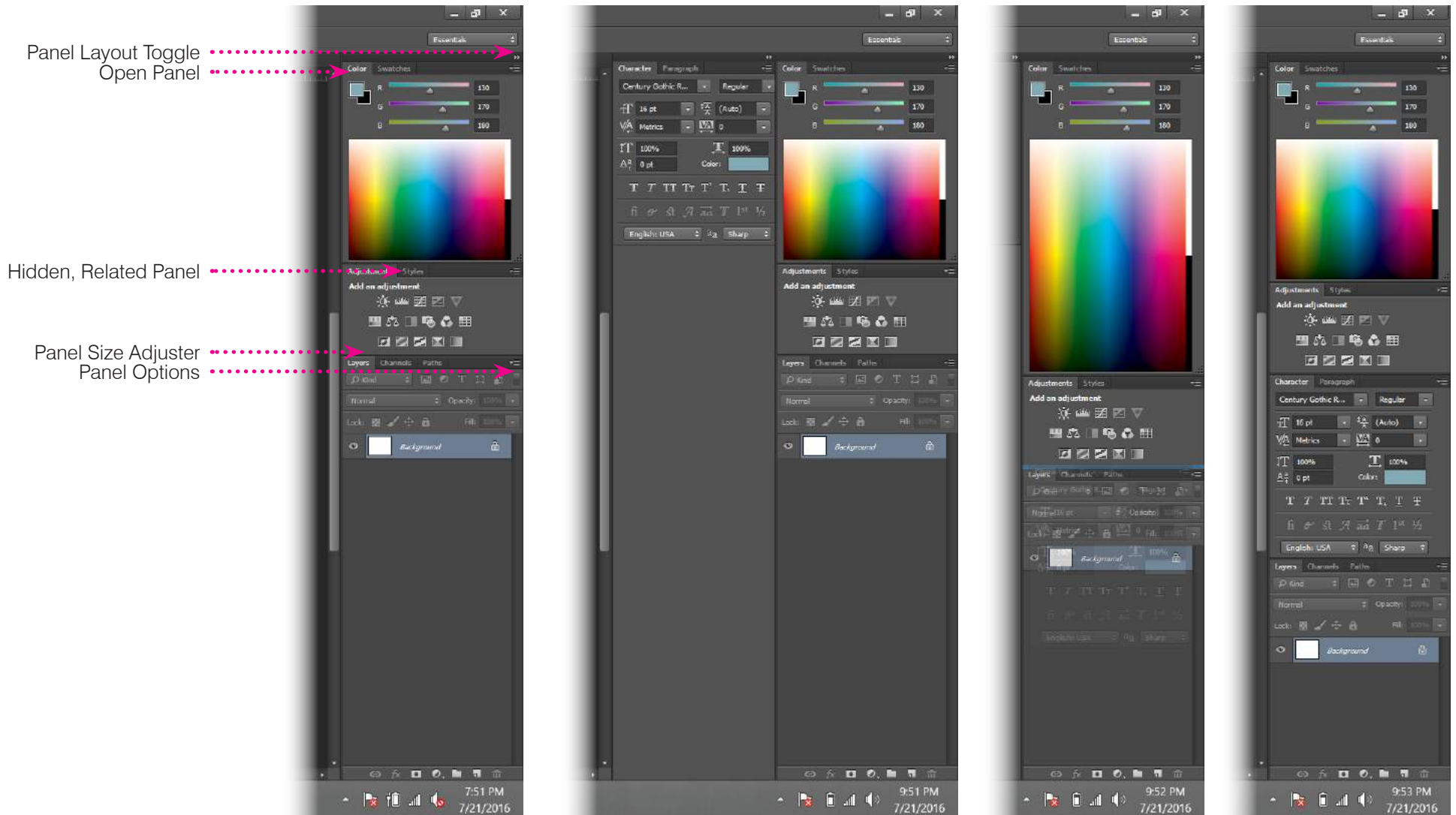
## Getting Started - Navigating the Document

The easiest way to navigate your document is through keyboard and mouse shortcuts. For zooming, simply hold **Alt/Option** while using the scroll wheel on your mouse. Or press **Ctrl/Cmd** and “-” or “+” on the keyboard. The scroll wheel on the mouse will pan vertically while holding **Ctrl/Cmd** and using the scroll wheel will pan horizontally. For an unconstrained, or “free” pan, simply hold Spacebar on the keyboard and click-and-drag with your mouse. When you release the Spacebar, you’ll return to your previously selected tool/action.



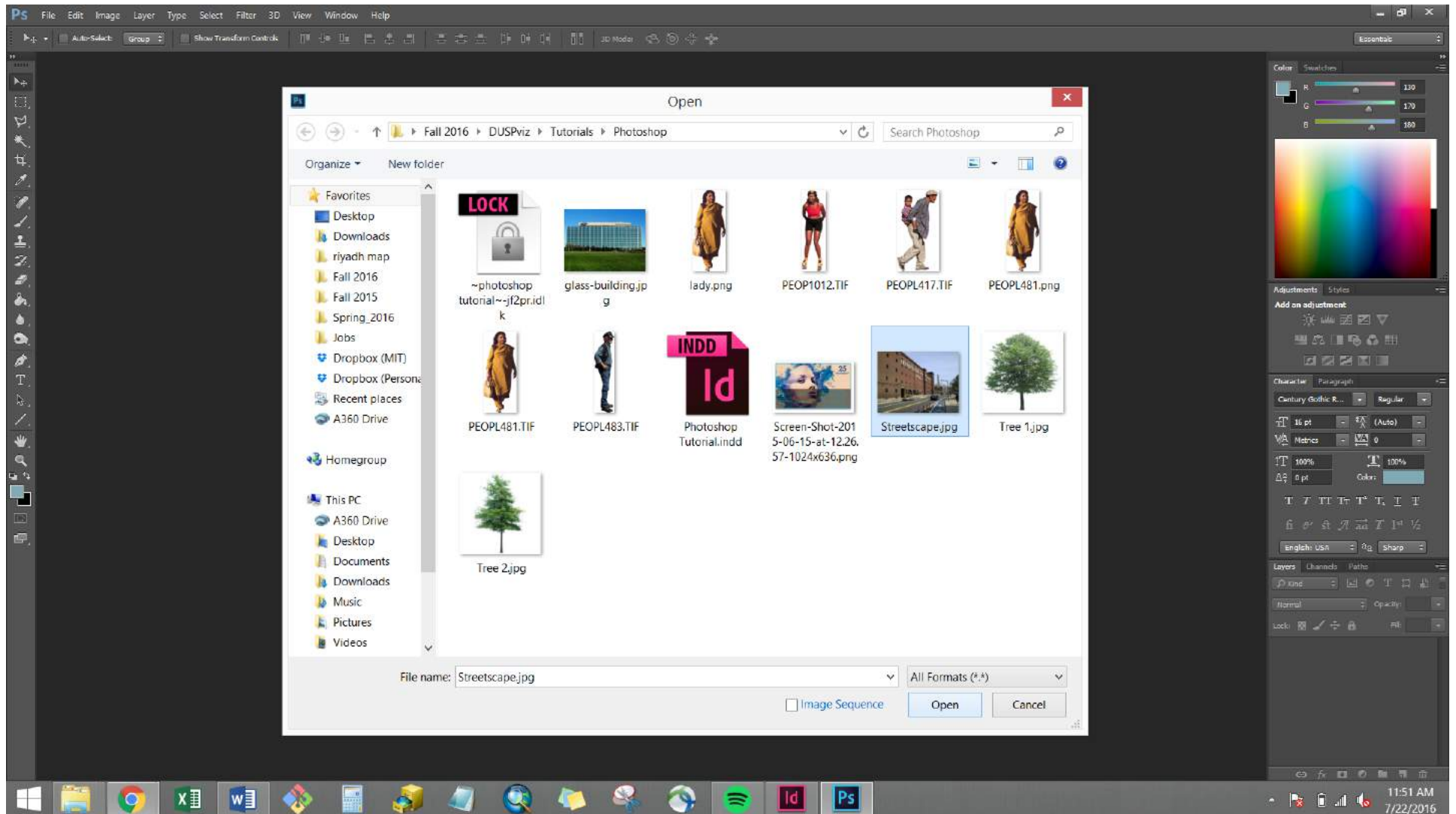
## Introducing the Tools

Let's introduce the major tools. Use this page as a reference when we introduce tools throughout the tutorial (keyboard shortcuts in parentheses). Also, you'll notice many tools have a small white triangle in their lower right corners. This indicates that other similar tools are hiding behind the one displayed. To access these tools, simply click and hold on the displayed tool and select the tool you want to bring forward. Keep in mind your tools might not be exactly where mine are if your workspace is set up differently.



## Introducing the Panels

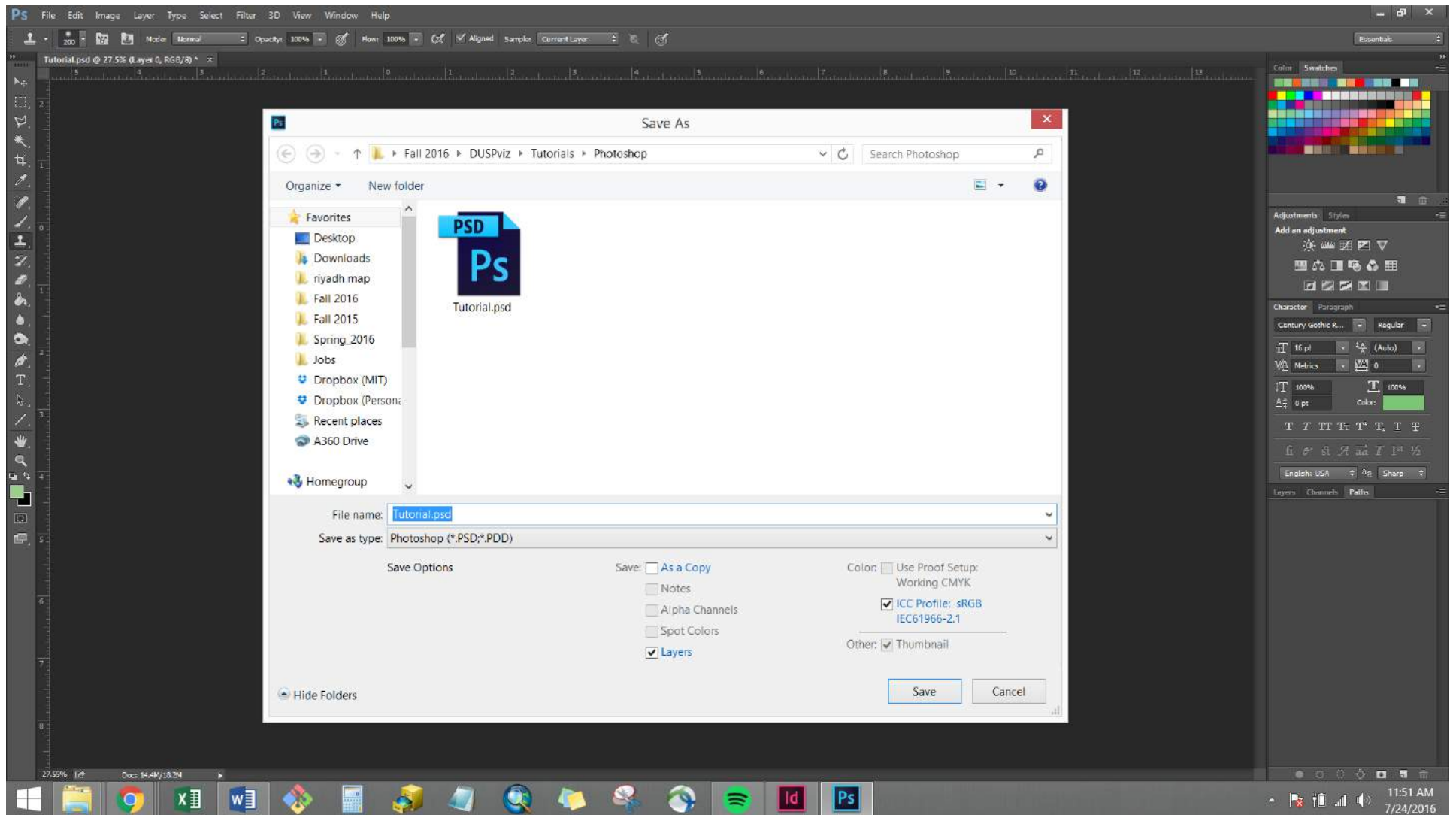
Panels, located along the right side of the interface, allow you to modify and adjust the artwork you create with tools. Above are the panels open by default. I've annotated them with some of the standard panel components. To add additional panels, simply go to **Window** in the Menu Bar and select the Panel you would like to add. For example, I've selected the Character Panel, which opened adjacent to the existing panels. To dock it below the other panels, simply click and drag the Character Panel's frame and hover it until a blue line appears.



## Opening a File

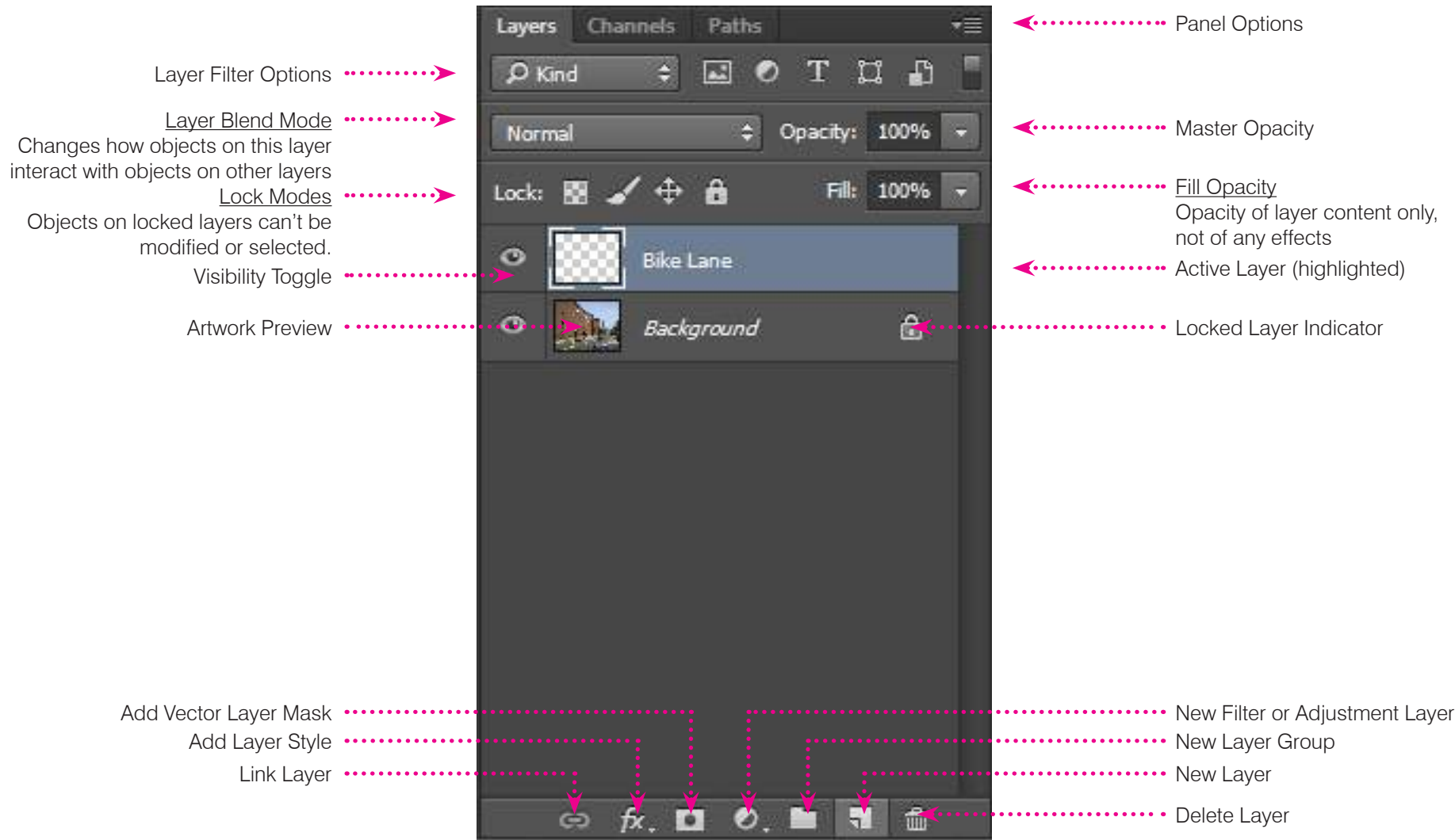
Let's close (**File>Close**) our Tutorial.psd file; there's no need to save the changes. Instead of working with a blank file, let's open an existing image file. Go to **File>Open...** and select "Streetscape.jpg" - then click Open. Opening an image, rather than Placing an image into a new document (we'll go over Placing shortly) ensures that the Photoshop document is the same size and resolution as the desired image without any stretching or quality loss.





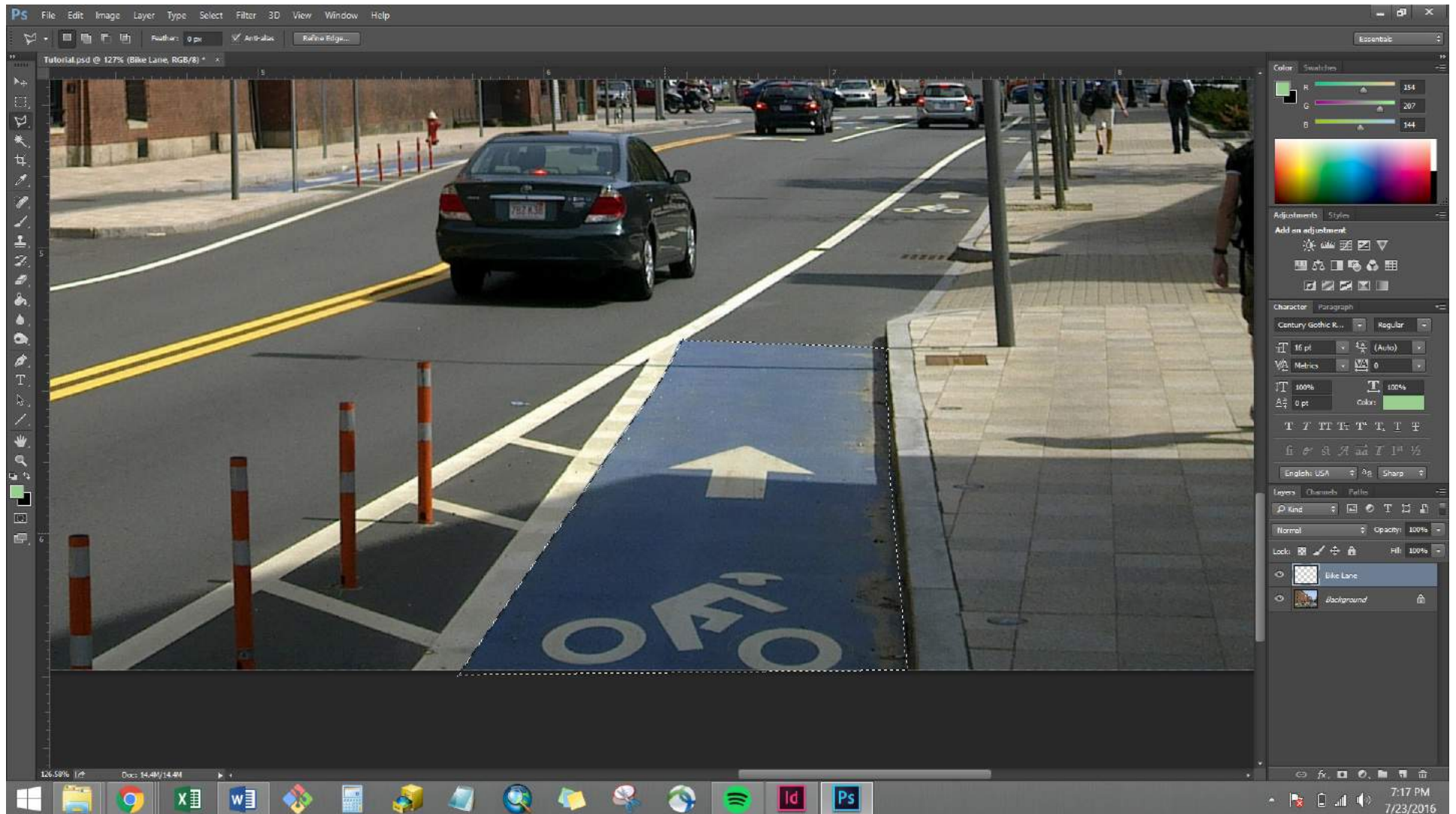
## Saving as a Photoshop File

Though opening a background image is often preferred to placing that image in a new document, it is imperative that we save our document as a new file before making any changes. Otherwise we risk overwriting the original background image. Go to **File>Save As...**, navigate to the Photoshop Tutorial folder, and name it Tutorial. Be sure to select “Photoshop (\*.PSD;\*.PDD)” from the dropdown menu. Click “Save.”



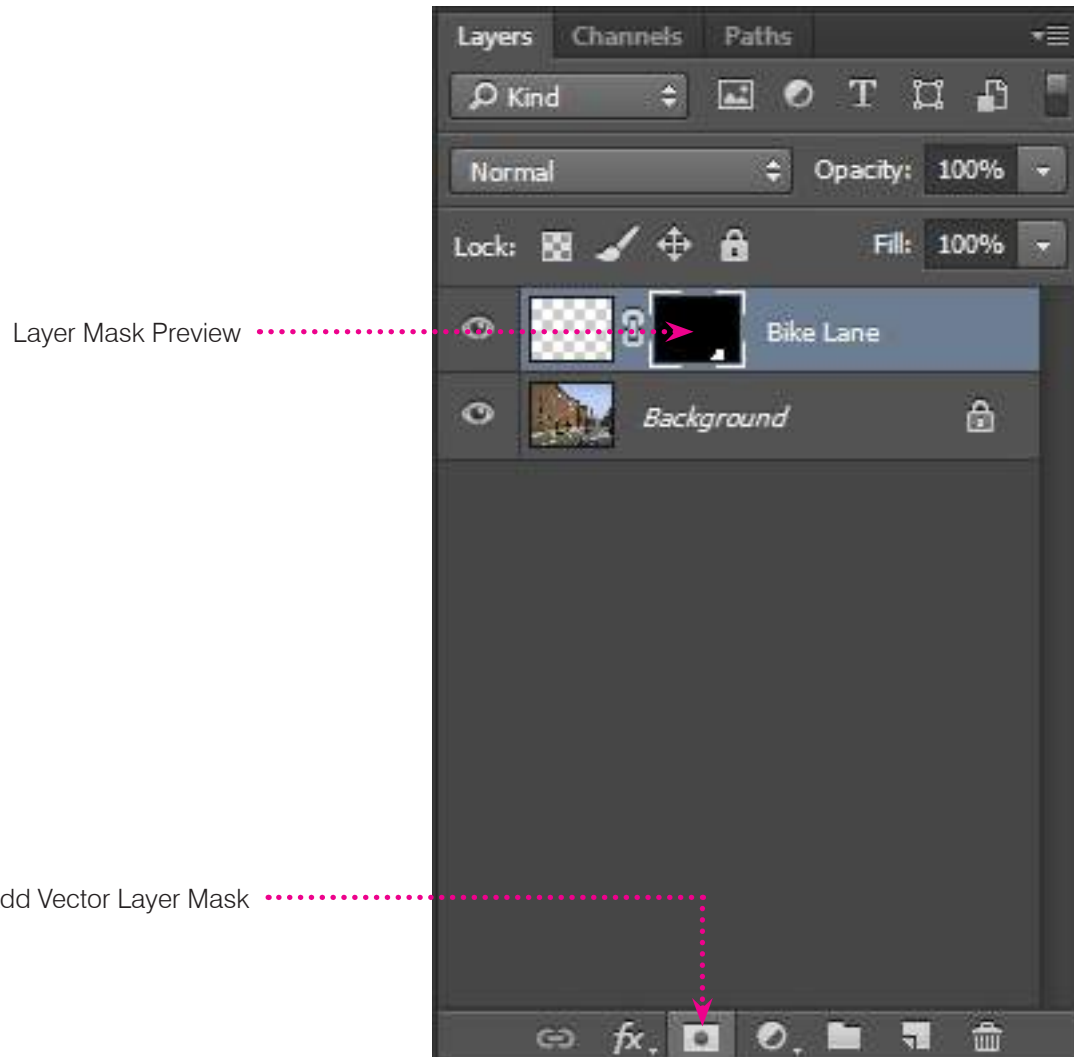
## Exploring the Layers Panel

Layers allow for the grouping of similar artwork in order to modify, move, or show/hide it. Also, the artwork of higher layers will rest atop artwork of lower layers. Open the Layers Panel and add a new layer to the document using the New Layer Button. Then double-click on the layer name to rename it Bike Lane. To create artwork on a particular layer, ensure that the desired layer is selected (by clicking once on the title) in the Layers Panel. See above for other layer actions.



## Using the Lasso Tool

The Lasso Tool allows you to select pixels in order to manipulate them. Let's change the bike lane to a green color. Start by selecting the Lasso Tool from the Tool Bar. Click the mouse in one corner of the bike lane and release. Continue working your way around the bike lane, clicking the mouse at each pivot point. When you return to the beginning, you should see a small open circle appear on your cursor; click to close the shape.



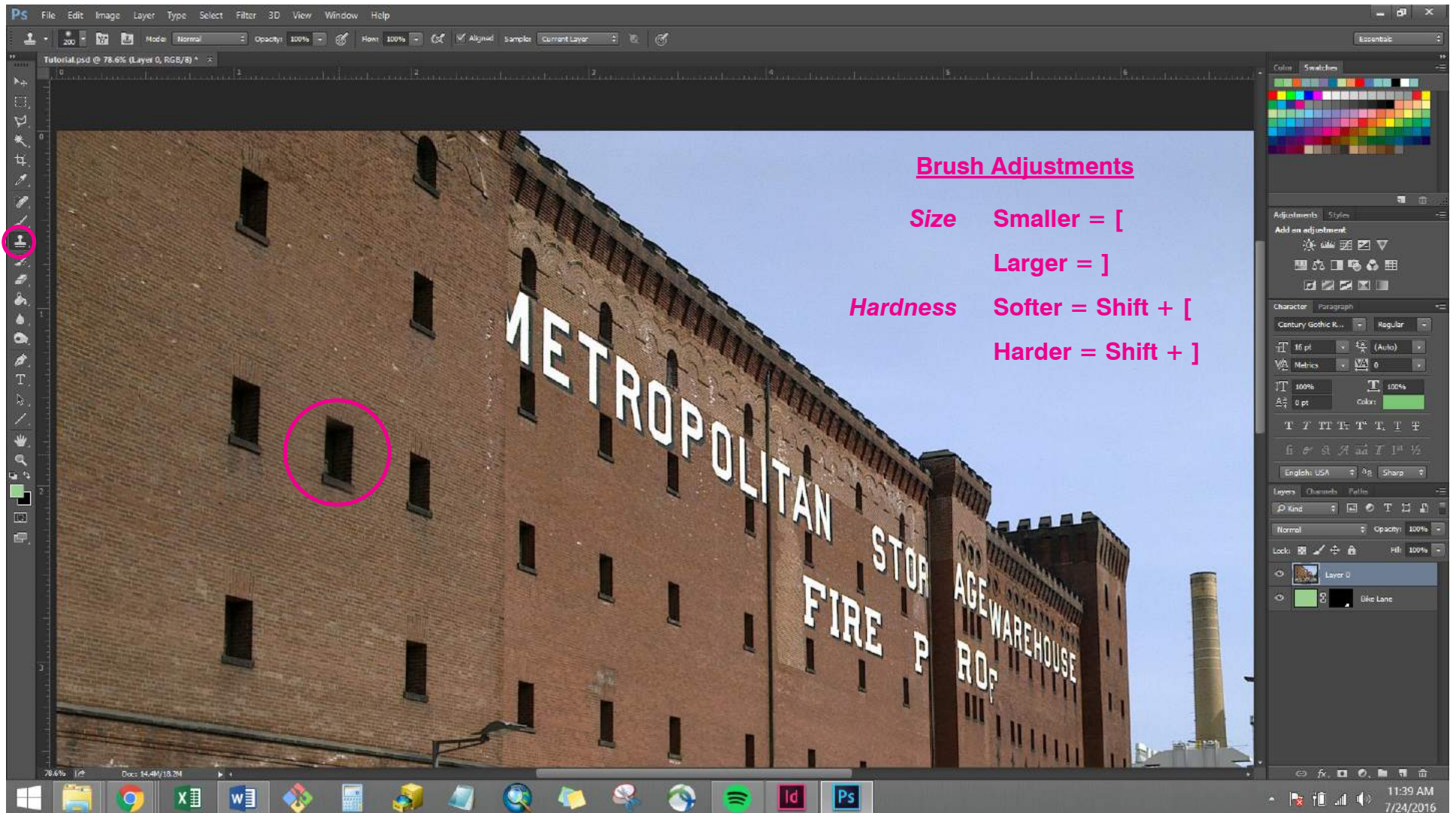
## Adding a Vector Layer Mask

There are many ways to manipulate portions of an image. We could have simply filled our newly-highlighted bike path after using the Lasso Tool. However, by using a vector mask, we can create a resolution-independent selection, meaning that it is more accurate. With the bike line still highlighted and the “Bike Lane” layer activated, choose the “Create Vector Mask” in the Layers Panel. This will create a mask preview next to the layer preview. The black portions of the preview illustrate what will be masked, or hidden.



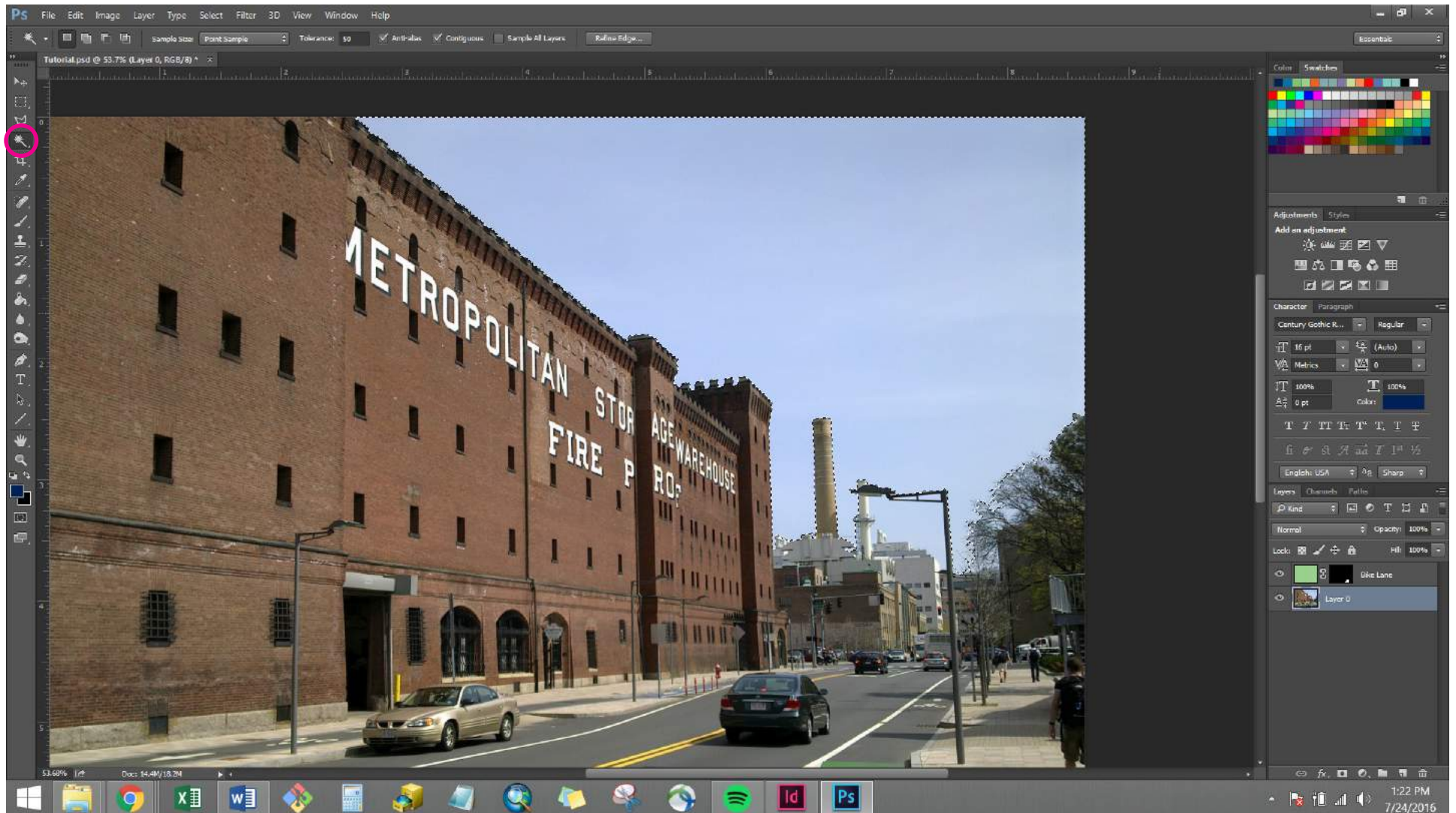
## Using the Paint Bucket Tool

To paint the bike lane green, open the Paint Bucket Tool from the Tool Bar. Click on the artwork preview thumbnail of the Bike Lane layer (not the Vector Mask preview) to activate it. Open the Swatches Pane. Select a green swatch, and click anywhere on the image to paint the entire Bike Path layer green. Only the white portion of the vector mask will allow the green layer to be visible - the rest will be masked. Also, select "Hue" from the blending modes dropdown menu in the Layers Panel to let the colors blend more smoothly.



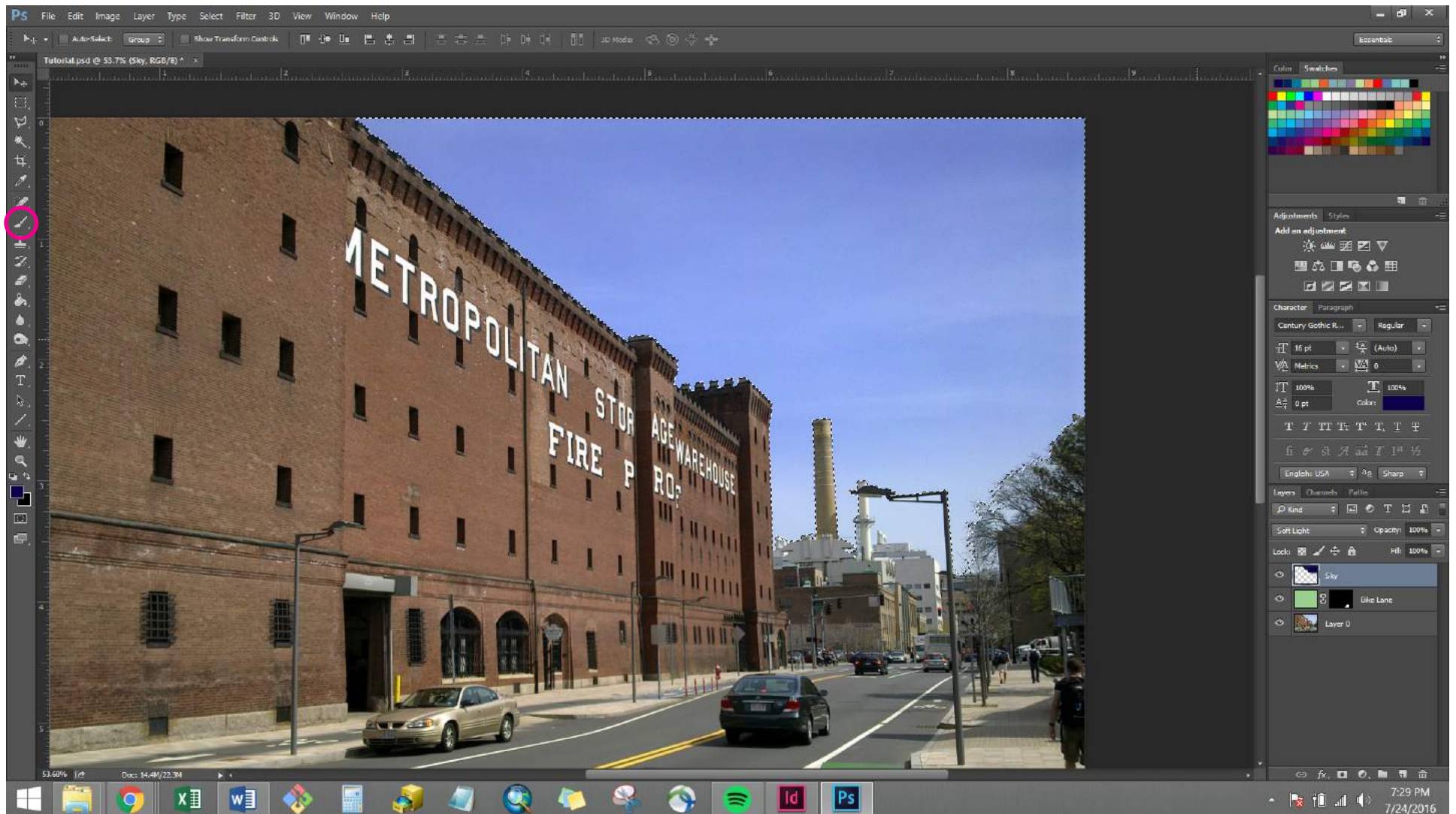
## Using the Clone Stamp Tool

The Clone Stamp Tool works by first targeting and “storing” an area of an image. As you paint the image with the stamp’s brush, you copy the image from the targeted point outward. Click the lock icon on the Background layer to unlock it. Select the Clone Stamp Tool from the Tool Bar. Increase the brush size and adjust the brush hardness (see above) to encapsulate one of the building’s windows and target the window by holding Alt/Opt and clicking on the window. Then click (without Alt/Opt) elsewhere on the building to copy the window.



## Using the Magic Wand Tool

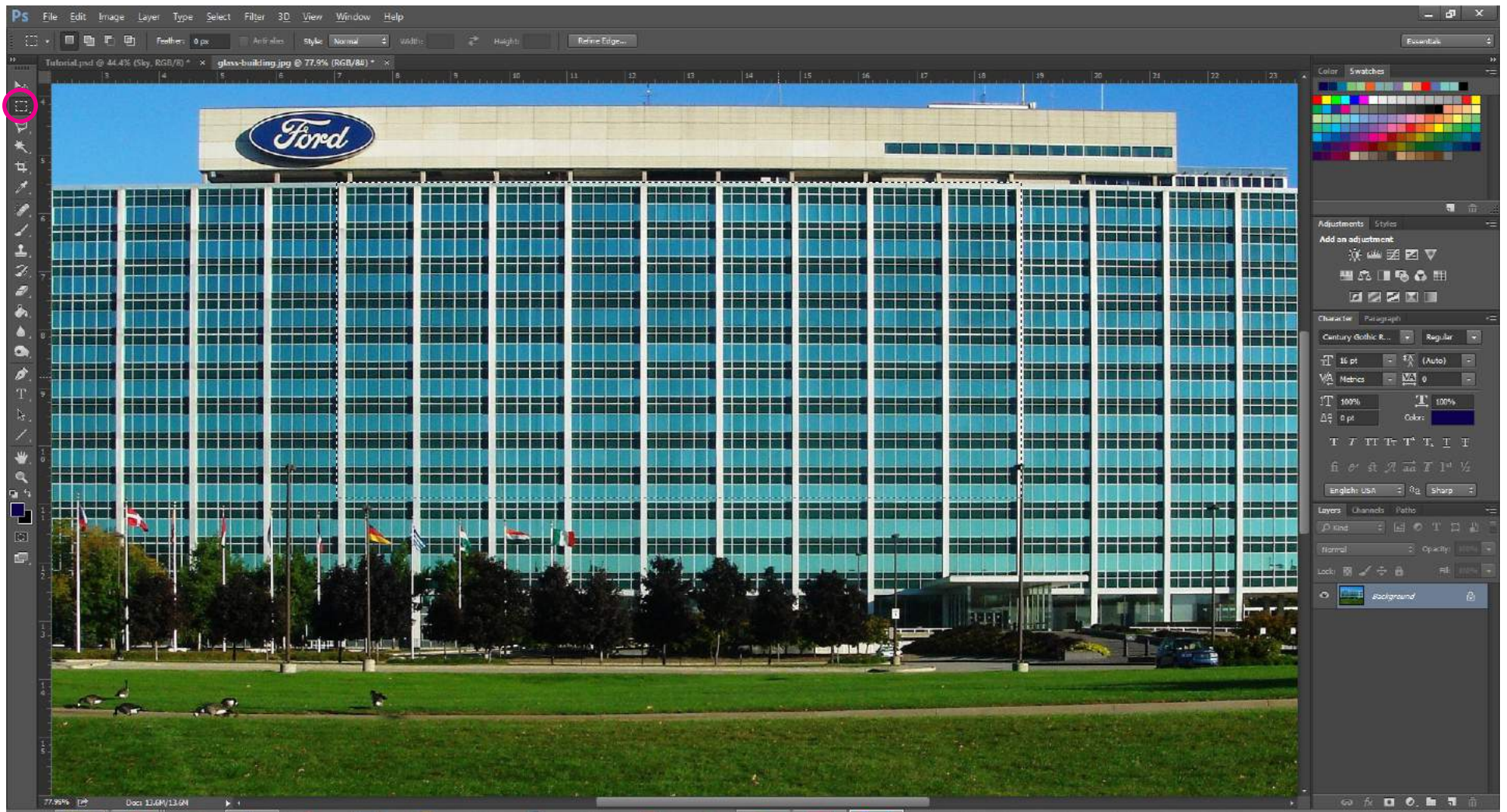
The Magic Wand selects pixels with the same color as the one you click. Select the Magic Wand while Layer 0 is activated. In the Control Panel, adjust the Tolerance to about 50 in order to expand the definition of “same color” and check the Contiguous box to only select connected pixels. Click the wand in the sky to select all connected blue pixels.



## Using the Paintbrush Tool

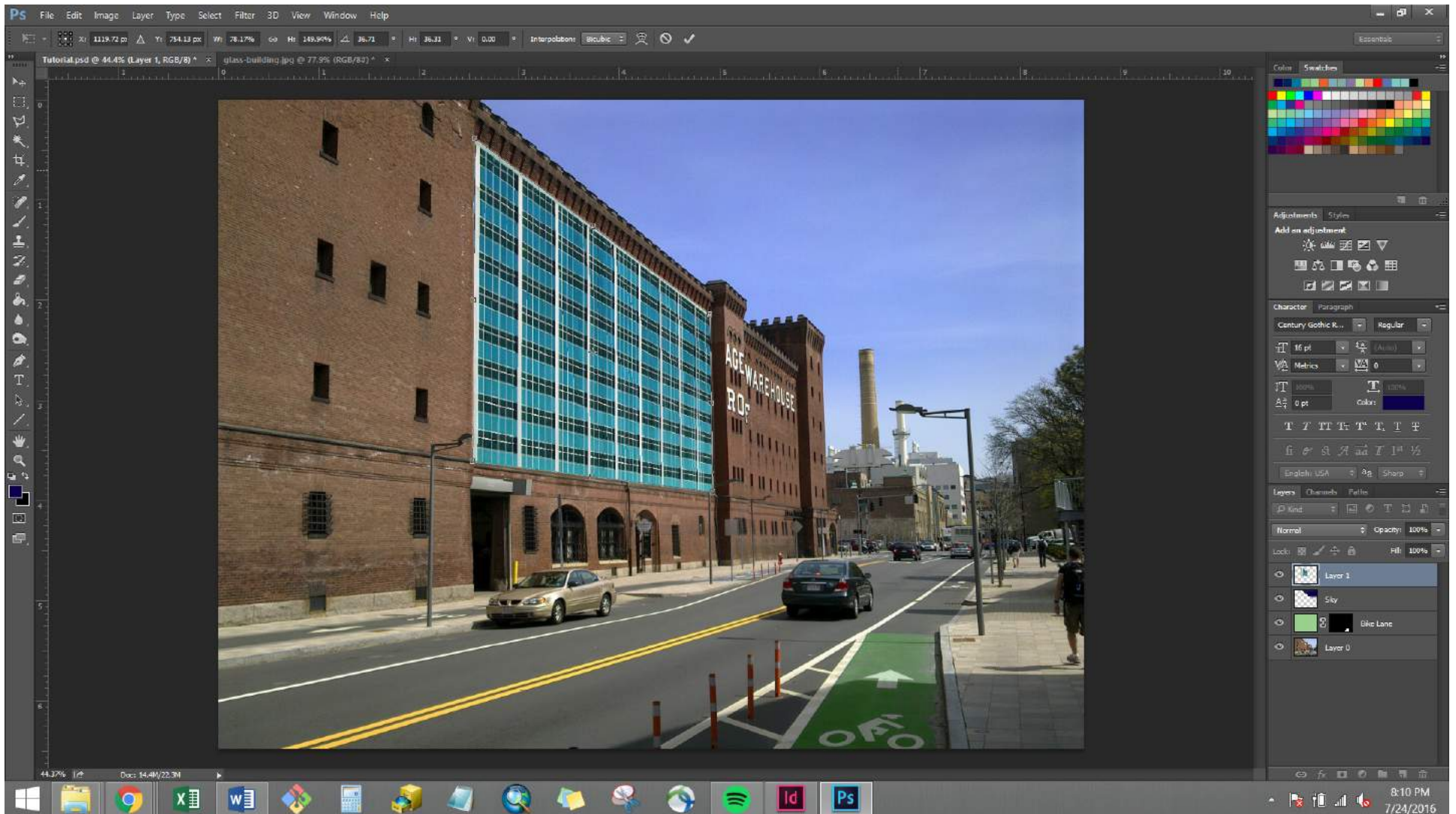
Create a new layer called "Sky" and activate it. Set the layer blend mode to "Soft Light" to create a more blended effect. Open the Paintbrush Tool and select a dark blue color from the Swatches Panel. Enlarge and soften the brush using the same commands described on Page 14. Click and drag to paint the top of the sky (you can hold Shift to keep your brush line horizontal). The highlighted area will only allow you to paint "in the lines" so you don't accidentally cover up the building.





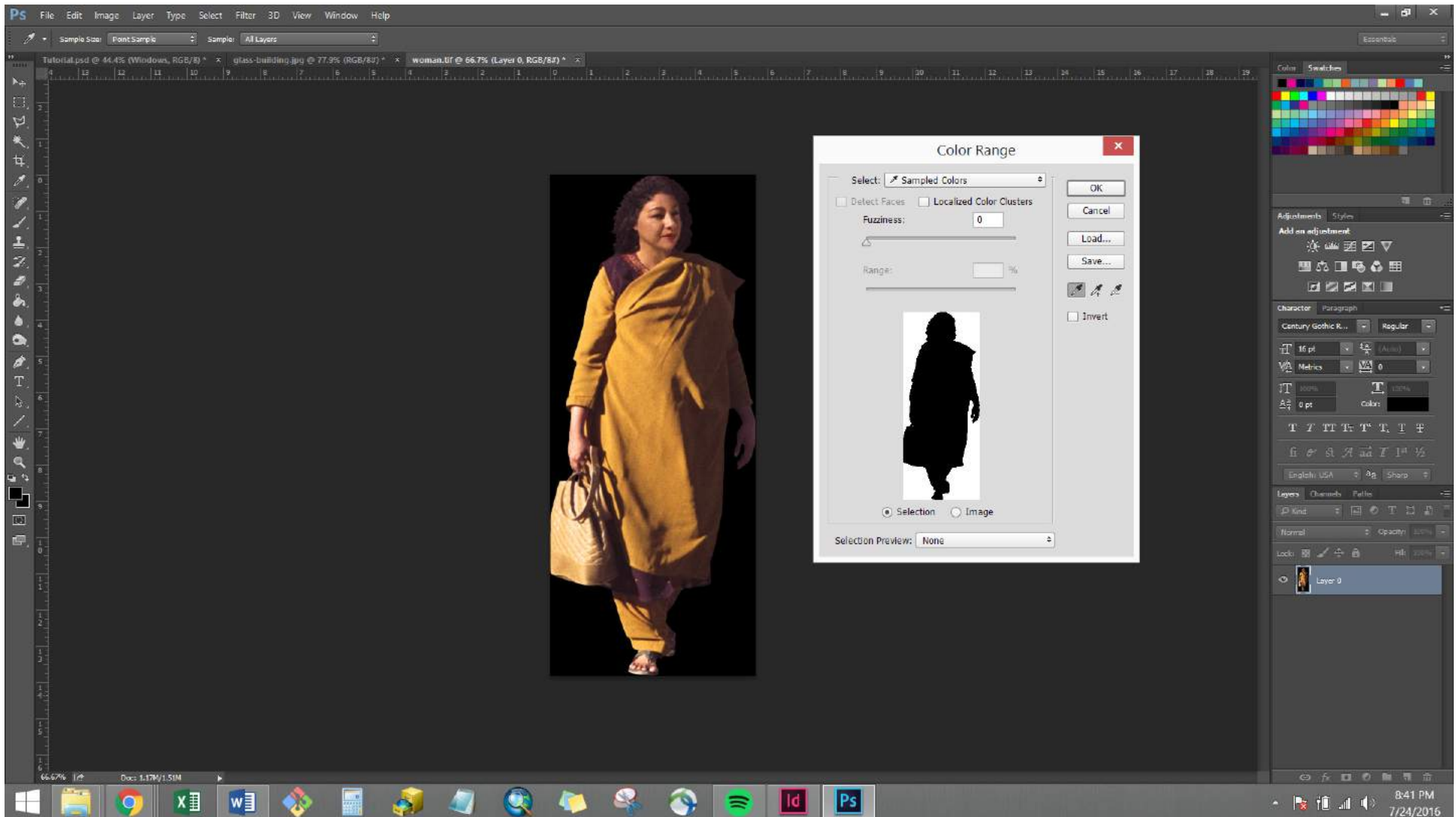
## Using the Marquee Tool

Open the “glass-building.jpg” file in another window of Photoshop (**File>Open...**). Use the Rectangular Marquee Tool by clicking and dragging a rectangle around a sizable grouping of the building’s windows. Type **Ctrl/Cmd + C** to copy this selection to the clipboard. Return to the Tutorial.psd tab.



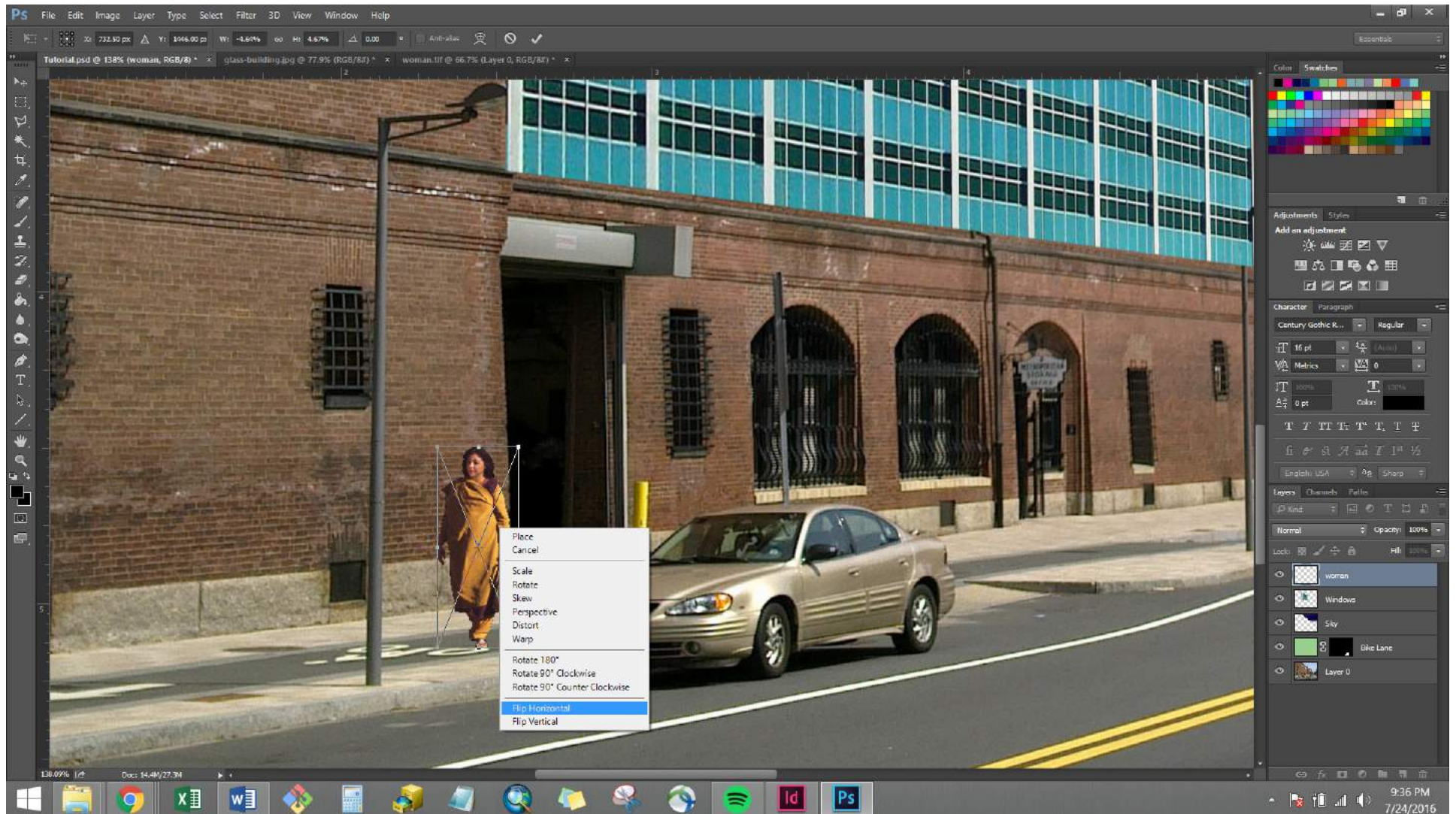
## Transforming a Selection

Type **Ctrl/Cmd + V** to paste the selection (it will automatically create a new layer). Use the Move Tool to slide the windows over the existing building in the photo. Type **Ctrl/Cmd + T** to enter Free Transform Mode. This mode allows you to manipulate the size, rotation, and skew of your selection. Click and drag the corners of the selection to enlarge the windows as necessary. Then, hold **Ctrl/Cmd** while moving the corners of the selection to “skew” the image to fit the corners of the building’s facade. Hit **Enter** to accept the changes.



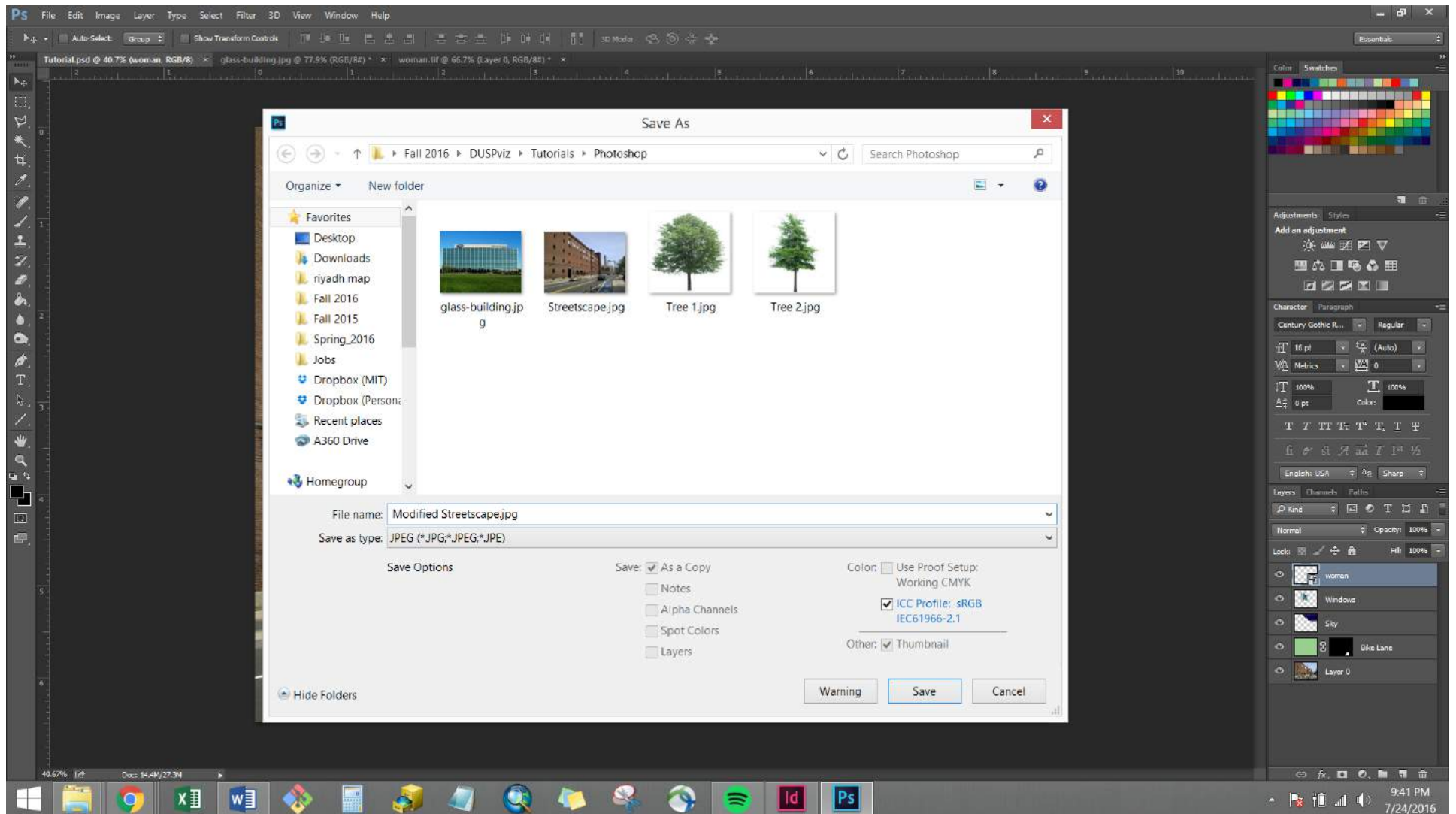
## Using Color Range

Open the “woman.tif” file. Click the lock symbol on the background layer to unlock it. Go to **Select>Color Range** to open the dialog box. Using the default eyedropper tool built into Color Range, select the black background on the image. Ensure the “Fuzziness” is set to “0” and click “OK” to select the entirety of the black background. Hit **Delete** to remove the black background. Save the document as a PNG and name it “woman.png.”



## Placing an Image

Photoshop gives you the option of placing the image as either an “Embedded” or “Linked” file. Linked files will update automatically within your Photoshop document if the original was modified independently; Embedded files will not. For our purposes, let’s choose **File>Place Embedded...** and select “woman.png.” Press “Place.” Scale the woman down by holding Shift and dragging one corner of the Free Transform Box towards the other. Right-click and select “Flip Horizontal” to turn her direction. Hit “Enter” to accept.



## Saving as an Image

Be sure to save the final PSD final to keep all of our changes. To use this image later, we may want it in a more widely accessible format than a Photoshop document. Let's choose **File>Save As...** and select JPEG from the dropdown menu. We'll name it "Modified Streetscape.jpg" and click "Save." And there you have it, an introduction to Adobe Photoshop. Be sure to check out Adobe.com and Lynda.com for more in-depth tutorials on the many Photoshop tools and techniques we didn't get a chance to cover here.