Introduction:

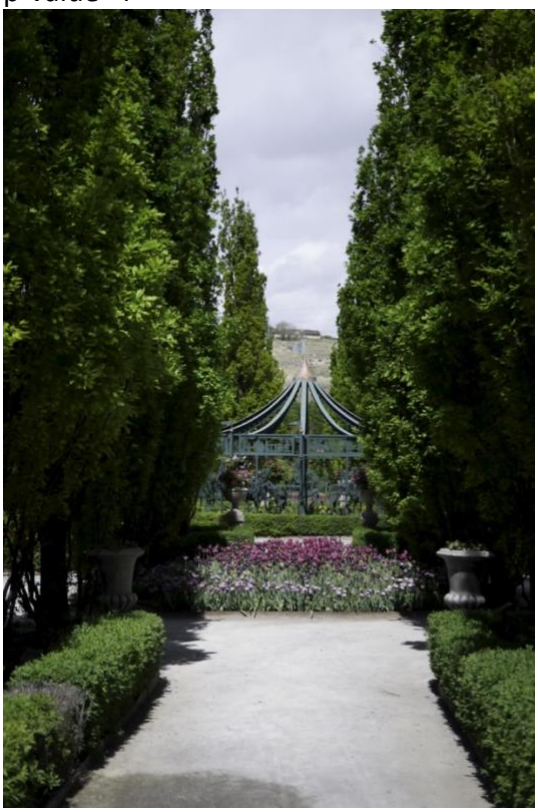
I determined that a *good* photograph would be defined as an image under 1MB with little to no visual errors when the image is scaled to roughly 800x800px-sized square. Or if at default size—it may have some pixelized squares but only on small details. Most importantly, the viewer should be able to identify all objects in the photograph. I found that I could achieve this goal by setting my p-value to 7.

So, then I determined that a *usable* photograph would be defined as an image under 1MB with few visual errors when the image is scaled to fit in the same 800x800px-sized square. Or if at default size, it has a few pixelized squares but most importantly, the viewer should be able to identify most objects. Through my experiments, I found that I could achieve this goal by setting my p-value to 19.

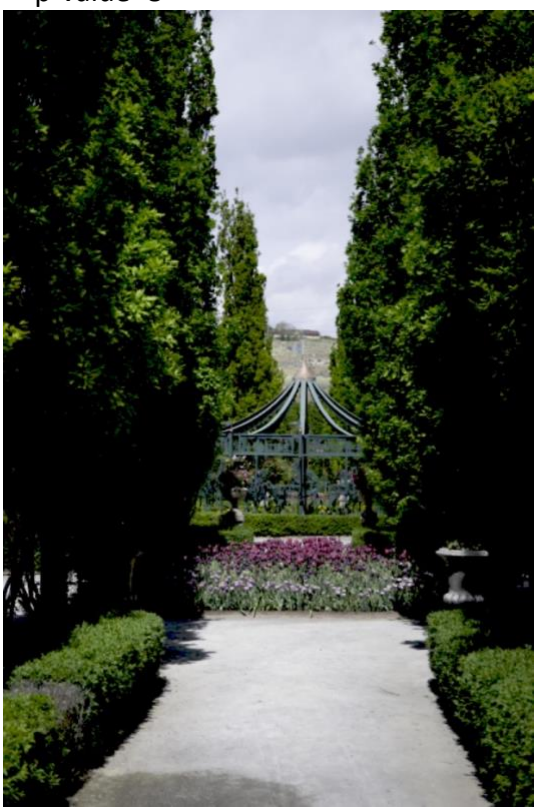
Impact of p-value on your photographs:

I found that with Image *DSC_1903a.tiff* I could get the best quality under 1MB by setting my p-value to 4. The largest digit I could set my p-value to was 7 because when I set my p-value to a number larger than 7, I started noticing a significant decline in the quality of the photograph. The brighter parts of the image began to get flushed out, while the dark parts started losing all detail and turning black.

p-value=4



p-value=8



I was receiving slightly different results when I was working with image DSC_1696a.tif. Since this image had some really dark spots, I noticed some issues while compressing. Instead of converting the 8x8 sections to black, it would convert to either all red, green, or blue. With that being said, my best quality p-value was 3 and the highest p-value was 9.

p-value=3

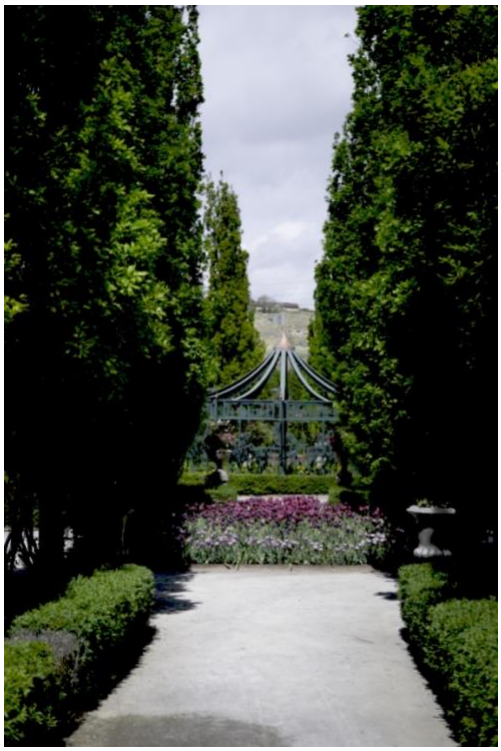
p-value=9

Results:

Image DSC_1903a.tiff

Good

Usable



Original

Image DSC_1903a.tiff

Good

Usable

Original