I-Form Digital Imagery Standards

The State Historic Preservation Office has compiled a set of standards for submission of digital imagery within the I-Form application. Following these standards will result in an acceptable level of image quality. Submissions that do not meet these standards will be returned. Keep in mind that submission of digital imagery to the State Historic Preservation Office does not replace any client and/or agency imposed photographic requirements.

- **Digital Images**
  Images submitted in the I-Form application must be at the recommended size (see Table 1) and in either bitmap (BMP) or jpeg (JPG) format.

- **Unacceptable Property Images**
  - Please use original photographic images for historic properties. Do not use images from Auditor websites, real estate sites, Google Street View, or similar online sources.
  - Do not use panoramic images.

- **Scanned Images**
  If you are scanning an image to upload into I-Form, remember the quality of the original image will determine the success of any attempts to enhance it. Just as finer-grained films yield better photographs, digital scans of photographs obtained with a fine-grained film yield better digital images. You cannot take an out-of-focus, grainy photograph and transform it into an acceptable digital image. Nor should you expect to obtain satisfactory enhancements from scans of secondary images.

  Consider scanning images at higher level resolutions to assure maximum use in the future. We recommend 600 to 800 pixels per inch and then create a copy of the image derived from the digital master image. Keep in mind that higher resolution images will be more successfully enhanced and will produce sharper images than will lower resolution images.
Create appropriate image size from digital master copies

The table below lists the maximum dimensions for images uploaded into the I-Form application and are listed as a general guideline. The aspect ratio of your image will determine the precise height and width pixel dimensions.

<table>
<thead>
<tr>
<th>Image</th>
<th>Max Pixel Dimensions (H) x (W)</th>
<th>Max Dimensions in Inches (H) x (W)</th>
<th>Resolution</th>
<th>Approximate Image Size (KB)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>OHI Site Plan</td>
<td>250 x 250</td>
<td>2.6 x 2.6</td>
<td>96</td>
<td>62</td>
</tr>
<tr>
<td>OHI Farmstead</td>
<td>250 x 250</td>
<td>2.6 x 2.6</td>
<td>96</td>
<td>62</td>
</tr>
<tr>
<td>OHI Photo**</td>
<td>450 x 650-675</td>
<td>2.7 x 4.5</td>
<td>150</td>
<td>332</td>
</tr>
<tr>
<td>OHI Photo2**</td>
<td>450 x 650-675</td>
<td>2.7 x 4.5</td>
<td>150</td>
<td>332</td>
</tr>
</tbody>
</table>

*8/256 color depth

**Height of 450 pixels is most important dimension to follow. Width can vary slightly.

What is the aspect ratio?

On the most basic level, it is the ratio of the width of your image to its height. Usually it is expressed as one number followed by a colon and then followed by another number. The most common aspect ratio is 4:3, but most DSLR cameras use 3:2. As all cameras do not have a consistent aspect ratio, please use the following as a guideline for using image software to resize OHI Photo 1 and 2 for I-Form use:

- Lock image aspect ratio
- Set resolution to 150 ppi
- Set height to 450 pixels and allow aspect ratio to determine the width.

Convert maps to grayscale

Greyscale maps are required for electronic inventory submission of location maps; however, color may be used for photographs.

Conduct quality control throughout all phases of your project.

Inspection of final digital image files should be incorporated into your project workflow. Quality is evaluated through visual inspection (view the form as a pdf) and by double checking that your images conform to the Table 1 standards listed above.

Things to look for during visual inspection may include:

- Image not the correct size or resolution (see Table 1)
- File format incorrect (we require either bitmap or jpeg images for electronic submissions)
- Loss of detail in highlight or shadows
- Excessive noise (small, randomly scattered, defects) especially in dark areas or shadows
- Overall too light or too dark
- Lack of sharpness/excessive sharpening
- Pixilated (resolution too low)
- Presence of digital artifacts (such as very regular, straight lines across picture)
- Moiré patterns (wavy lines or swirls, found in areas where patterns repeat, such as vinyl siding)
- Image not cropped appropriately
- Image backwards or not rotated

➢ Enhance digital images using imaging software

Once your image has been formatted to the correct size, try the following enhancement suggestions using your imaging software. For best results, follow in the order provided.

1. Try to make general image adjustments to color depth, balance, and contrast.
2. If using a scanned image, correct any defects caused by the scanner, such as artifact removal.
3. Correct defects on the actual image, such as small scratches, noise, and blur.
4. Adjust for clarity using enhancement features, such as clarify, sharpen, and edge.

➢ Use high quality photo printers for better output of your draft Inventory Forms

Your final output can vary considerably, so choose a printer capable of printing digital images.