

SPECIFICATIONS FOR DIGITAL ORTHOPHOTO MOSAICS

This document is a reference guide for providing digital orthophoto mosaics and related products to the Central Federal Lands Highway Division (CFLHD) of the Federal Highway Administration (FHWA), Lakewood, Colorado.

A. GENERAL DESCRIPTION

This service will involve the creation of digitally ortho-rectified mosaics of a corridor of road(s) outlined in the Scope of Work. These mosaics are to be derived from digital aerial photography described in the MS Word file **CFLHD-Specifications-for-Co-Located-Digital-Aerial-Photography-k.doc** using the Triangular Irregular Network (TIN) derived from LiDAR data as described in **CFLHD-Specifications-for-LiDAR-Services-k.doc**

B. TECHNICAL REQUIREMENTS

- A. The interpretation method is to be bilinear.
- B. There will be no grid lines shown on the orthophoto.
- C. The background color will be white.
- D. If feathering is used, the width should be between 50 and 150 feet.
- E. The Ground Sample Distance (GSD) for the mosaics will not be greater than 0.20 foot unless otherwise specified in the Scope of Work.
- F. Orthophoto mosaics will be based on the bald earth LiDAR tin if lying within 300 feet of the existing road or proposed mapping corridor. If the mosaic is to extend beyond the LiDAR tin coverage, photogrammetrically derived terrain data may be used.
- G. Radiometric dodging to produce overall color and brightness balance will be kept to the minimum needed to allow the clearest viewing of detail possible.
- H. Orthophoto mosaic images will be in TIFF format with the appropriate TIFF World File (TFW) attached and in Microstation HMR format. The maximum size of each TIFF image will not exceed 2 gigabytes (GB). These image files are to be placed on DVD+R disks in ¼” jewel cases with disk labels and jewel case inserts stating the creator’s name, date of photography and names and sizes of the files therein.