Palm Beach County Digital Orthophoto Specification

May 15th, 2008

Specifications

All photogrammetric mapping products are to meet National Map Accuracy Standards (NMAS).

The United States Army Corps of Engineers' interpretation is as follows;

"For NMAS orthophotos, 90 percent of all photographic details on the orthophotography shall be accurate to within at least 1/30 in. of true position, as determined by test surveys, and none of the photographic details shall be displaced by more than 1/15 in. from true coordinate position. Since the orthophoto process rectifies images at the ground elevation of a DTM scan, accuracy standards must exclude objects above and below the scan elevation, such as tops of buildings, poles, trees, and other like objects."

Publication scale: 1"=100'
Pixel Resolution: ½ foot
Photo type: Color

Therefore, for this project, 1/30 of an inch at publication scale equates to +/-3.33' for the 1"=100' maps.

We believe that our DEM surface, provided to you for this project, will support this accuracy. This DEM in combination with your survey control plan must meet the above stated NMAS accuracy.

Use of digital camera for data collection will be preferred. The project area to be mapped is shown in Exhibit A.

Aerial Photography (Color)

- Finalize the flight line and control layout maps and submit to the County for approval.
- Photography parameters include 60% Forward Overlap and 30% Sidelap; crab shall not exceed 5%; climatic conditions will be free of clouds and haze
- Aerial Photography will be acquired when the sun angle is at least 30% to minimize shadowing effects.
- Extend all photography two full exposures, beyond the project limits.
- 1 set of contact prints to be delivered to Palm Beach County
- Prepare and submit the final flight line and control location maps in ArcInfo format.

Survey Control

 All control will be referenced horizontally to the Florida State Plane Coordinate System (East Zone) in NAD83/90, vertically to the NGVD29 datum, and performed by a Florida Registered Professional Land Surveyor.

Fully Analytical Aerial Triangulation (FAAT)

• The FAAT shall meet all requirements for final products to meet NMAS specifications.

Digital Orthophotography

- All tiles will be delivered in World TIFF format and delivered on external harddrive.
- All tiles will be delivered in MRSID format at 30x compression
- The County will provide the tile layout with tile names in an ArcInfo format (.shp)
- Provide additional MRSID files based on the County's existing 8 tile layout at a 30x compression, tiles will be provided by PBC.
- Metadata incorporated into each TIFF World file as per PBC Specification. An example .tfw will be provided (Exhibit B)