

**SPECIFICATIONS  
FOR  
AERIAL PHOTOGRAPHY OF ALABAMA  
GULF COASTLINE**

Listed below are the specifications for providing “Aerial Photography for Alabama’s Coastline in Baldwin and Mobile Counties for Coastal Erosion Monitoring.”

Proposals **MUST** include the total amount for deliverables.

Proposals **MUST** include a statement of aerial camera specifications and proof of calibration.

All re-flights for unacceptable work will be at the contractor’s expense.

Proposals **MUST** include a timeline for project completion. Award of this contract is contingent upon approval date and amount of approved project funding received by Geological Survey of Alabama (GSA) from Alabama Department of Conservation and Natural Resources (ADCNR)—Coastal Section.

**SPECIFICATIONS**

1. Photography must be **DIGITAL** and meet the specifications outlined (as specified below).
2. Flight must cover the entire Gulf of Mexico beach of the State of Alabama extending from the Florida State Line at Perdido Key to the west end of Fort Morgan Peninsula in Baldwin County and the entire length of Dauphin Island in Mobile County. In addition, photography should include the complete western and eastern ends of Fort Morgan and Dauphin Island, respectively. Alongshore bar and dry beach features must be clearly visible.
3. Cloud cover should not exceed 2% of area and may not cover or obscure the area of the photograph containing the shoreline.
4. The flight must be flown at or within two hours of the low tide for the day. Should low tides occur during dark or unsuitable conditions, data acquisition may take place during a neap tide.
5. Sun altitude should be  $> 15^\circ$  and  $< 45^\circ$ .
6. The shoreline must be within the middle one-third of all photographs and, preferably, at the top of the southern one-third.
7. If uncompensated, neither tilt nor crab should exceed 3%.

SPECIFICATIONS FOR AERIAL PHOTOGRAPHY  
GEOLOGICAL SURVEY OF ALABAMA  
PAGE 2 OF 3

8. Digital photography must meet the following minimum specifications:
  - a. Digital resolution: 1 pixel = 1 foot (or better).
  - b. Horizontal accuracy should be  $\pm 3$  feet (or better).
  - c. Orthophotographs should be provided in uncompressed tagged image file format (.tiff) or other format as agreed to in consultation with the GSA.
  - d. All photographs should be color matched, clipped, and edge matched for continuous display.
  - e. All photographs should have horizontal accuracy as stated above, and have the following coordinate system: UTM Zone 16 N, NAD 83 (meters).
9. All flights will be made within 30 days of receiving notice to proceed from the GSA or its designee. Exceptions to this schedule will be at the discretion of the GSA.
10. Work must be billed by December 31, 2010.
11. All finished items of work furnished by the contractor to the GSA shall be delivered directly by UPS, FedEx, or First Class U.S. Mail.
12. Any and all flights must be coordinated through Steve Darby with the GSA (Tuscaloosa, Alabama) before flying. His contact information is provided below.

Steve Darby  
Geological Survey of Alabama  
420 Hackberry Lane  
Tuscaloosa, Alabama 35486-6999

Telephone No.: (205) 247-3611  
Fax No.: (205) 349-2861  
E-mail: [sdarby@gsa.state.al.us](mailto:sdarby@gsa.state.al.us)

SPECIFICATIONS FOR AERIAL PHOTOGRAPHY  
GEOLOGICAL SURVEY OF ALABAMA  
PAGE 3 OF 3

**DELIVERABLES**

In accordance with the above specifications, and at the discretion of the GSA, one (1) flight will be conducted in EITHER August, September, OR October of 2010. Dates and times of flight must be established in consultation with the GSA.

Deliverable requirements:

Vendor will provide one (1) external hard drive (ESATA or USB interface) containing:

1. Complete set of orthophotography as specified in item #8 above.
2. Tile scheme denoting the position, extent, and coverage of each photo in the series. Shapefile format (polygon) is preferable, but a graphical index map is acceptable.
3. Full documentation including mission data and Federal Geographic Data Committee (FGDC) compliant metadata.

Any questions regarding technical specifications of the digital processing should be directed to Steve Darby of the GSA (see contact information on previous page).