



# State of Utah


DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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October 8, 1992

TO: DAS, PURCHASING

FROM: J. Randall Harden, P.E., Sr. Reclamation Engineer 

RE: Requisition for Procurement of Aerial Photography and Mapping Services for two Abandoned Mine Sites in Summit County, Utah

Aerial Photography and mapping services are requested for two abandoned coal mine sites in Summit County, Utah. The Division is requesting that a request for proposal be sent for these services and that the RFP's be returned within 10 days of their request. Due to problems in obtaining accurate mapping results as the sun angle decreases this fall and the possibility that snow may cover the site and prevent accurate mapping, the Division has requested that the RFP be sent out and returned in as timely a manner as is practicable but still in concert with normal purchasing procedures.

The preliminary estimate for the services requested is approximately \$3,000.000, based on the Scope of Work included with this requisition.

The format of the Scope of the Work and other Attachments included in this requisition is hopefully such that they may be incorporated into an RFP and the Contract for these services. Should you need to alter or revise these proposed attachment or have any other questions, please contact Randy Harden at DOGM so he may assist you as needed. Should you need these Attachments on disk for your preparation of the RFP and the Contract, they can be readily sent to you as WordPerfect documents.

## SUGGESTED SOURCES FOR SERVICES

Mr. Brad Marz Aero-Graphics Inc. 2930 South West Temple Salt Lake City, Utah 84115-3599	Mr. Glen Crosby Olympus Aerial Surveys Inc. 50 West 2950 South Salt Lake City, Utah 84115
Ms. Barbara Woolf Intermountain Aerial Surveys 2078 West 2300 South Salt Lake City, Utah 84119	Mr. Dick Juntunen Helena Airphoto Box 174 Claney, Montana 59634

cc: C. Roberts  
L. Braxton

## ATTACHMENT B SCOPE OF WORK

1. **GENERAL:** The Division of Oil, Gas and Mining (STATE) intends to have aerial photography and mapping services performed in the state of Utah for two mine sites in Summit County. Contour maps derived from this work will be used by the Division in the design for reclamation construction of these mine sites which will include demolition of structures on the sites, backfilling and grading, drainage reconstruction, resoiling and revegetation. The intent of this WORK is to provide suitable photographs and maps so that these designs can be accomplished.
2. **SCOPE OF WORK:** The work consist of providing aerial photography and mapping of two mine sites in Summit County. The location of the two adjacent sites includes portions of T3N R6E; NE Sec 36, S2 S2 SE Sec 25, and, T3N R7E; W2 W2 NW SEC 31, SW SW SW SEC 30.
3. The mine site located to the north of State Highway 133 is referred to as the Boyer Mine and the site located to the south of the highway is referred to as the Summit #1 Mine. Figure 1 - Mapping Locations shows the location and the extent of the photography and mapping required. While Figure 1 shows approximate locations of the map coverage for the sites, more detailed drawings and information are available at the Division to further refine and clarify the scope of the work and establish suitable field control. (See also, ATTACHMENT D)
4. The following services are requested:
  - a. **FIELD CONTROL AND SURVEYING:** Field control and surveying at third order accuracy horizontally and within 0.2' vertically, to be established and targeted for aerial photography.
  - b. **AERIAL PHOTOGRAPHY:** Aerial photography WORK shall consist of a series of aerial vertical photography negatives taken from an aircraft equipped with a precision-type aerial camera covering specified areas. All photos shall be of a quality appropriate for generating maps to National Map Accuracy Standards. The camera shall be a calibrated mapping camera with a current USGS calibration report. The negatives shall be suitable for printing photographs and transparencies of such clarity and precision in quality for mapping economically by stereo-photogrammetric methods.

New black and white aerial photography covering the entire area as outlined on Exhibit A. Negative size, scale and overlap is to be determined by the required map scale and contour accuracy requirements for producing maps at 1 inch = 50 feet with a contour interval of 1 foot in accordance with National Map Accuracy Standards. Stereo photo coverage shall be a minimum of 300 feet outside of the map areas. Flight lines for the photography are left to the contractor to utilize for maximum coverage and benefit. One complete set of photos are to be provided.
  - c. **MAPS:** One set of maps each for the Boyer Mine Site and the Summit #1 Mine site as indicated on Figure. Maps shall be provided on suitable reproducible mylar measuring 24 inches by 36 inches. Map scale and map accuracy at 1 inch = 50 feet with 1 foot contour intervals where appropriate. Map accuracy and topographic features on the drawings shall be provided on the drawings in accordance with National Map Accuracy Standards for the above map scale and contour interval. Coordinates shall be based on the State Plane Coordinate system. Grid lines showing the State Plane Coordinates shall provided on the maps at a minimum of 500 feet intervals. Control points, section markers and other monuments used for control shall be posted on the drawings with appropriate coordinates and elevations. The map areas delineated on Figure 1 represent the extent of coverage for maps made on 24"x36" size drawings with 1" margins (ie. 1,100' by 1,700' coverage). Contour area overlap between Map A and Map B for the Summit #1 Mine shall be a minimum of ½ inch or 25 feet at map scale. The reproducible mylar maps shall be half-toned.
  - d. **DISK DATA:** Digitized data of the edited and corrected manuscripts is to be provided on 3 ½" or 5 ¼" high density diskettes in an AutoCad compatible format (\*.DXF or \*.DWG files).

5. **PHOTO NEGATIVES:** Negatives of the aerial photographs shall be retained by the CONTRACTOR and maintained in good condition and shall be made available for use by STATE for the CONTRACTOR. STATE requests that all surplus prints, plates, manuscripts, etc., derived from the aerial negatives be offered to STATE prior to their disposal. In the event that the CONTRACTOR can no longer retain the aerial negatives, the CONTRACTOR shall submit the negatives to STATE and shall in no manner dispose of the negatives without written authorization from STATE.
  
6. **ALTERNATE PROPOSALS:** Alternate proposals are encouraged and should be provided where the CONTRACTOR can provide services requested that meet or exceed the specifications and requirements listed in the above Scope of Work. Alternate proposals could include, but not be limited to: variation of time to complete the WORK, alternate specifications for photography, map size, map scales, or disk data. Alternate proposals which are considered to meet the intent of the requirements of the Scope of Work provided herein may be used to determine the selection of the most qualified bid proposal.

End of Attachment B

2,078,000

2,079,000

2,080,000

2,081,000

R 6 E R 7 E

228,000  
227,000  
226,000  
225,000

Photo Area

Map A - Boyer Mine

Map A - Summit #1 Mine

Map B - Summit #1 Mine

State Highway 133

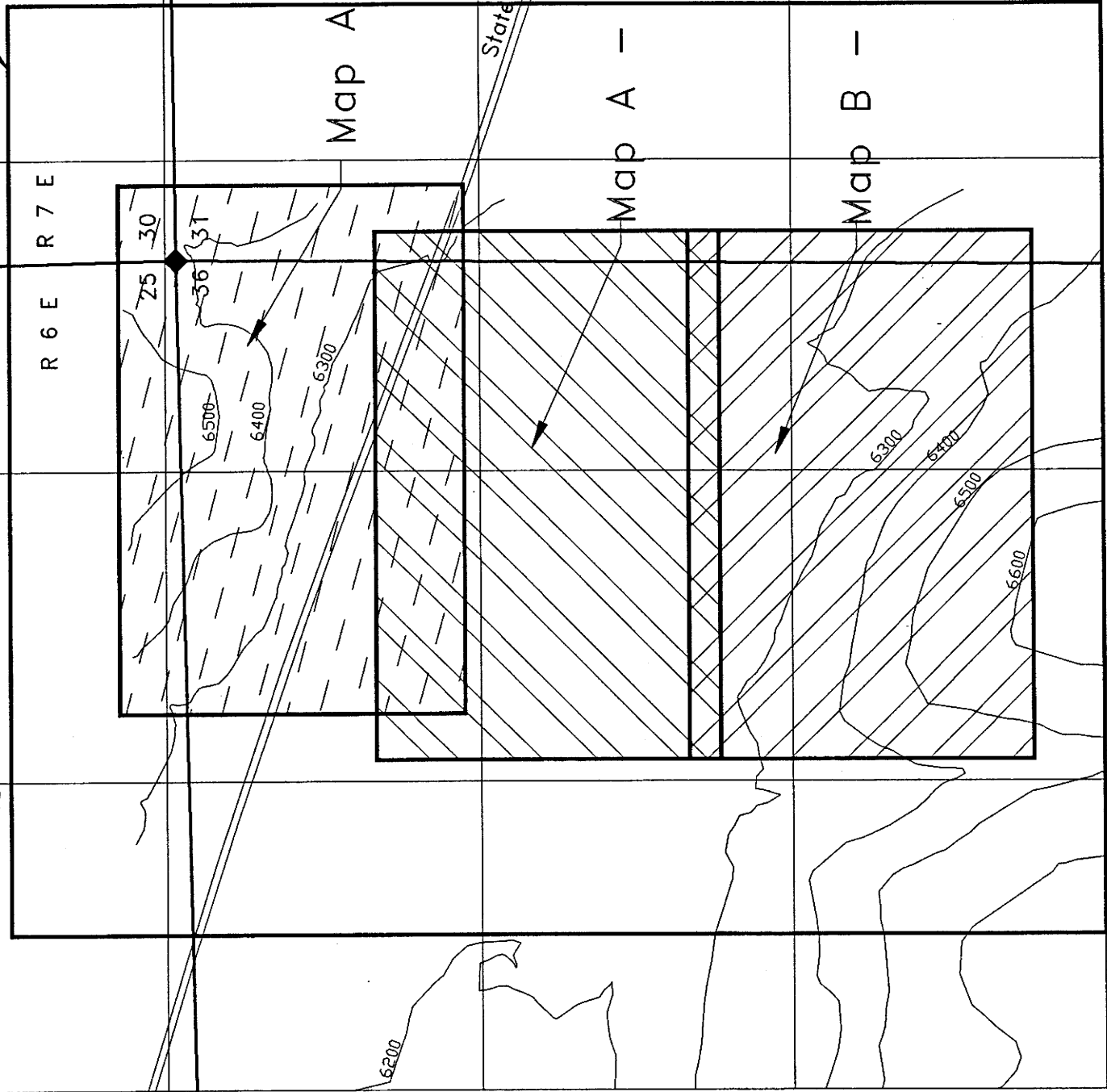


FIGURE 1 -- MAPPING LOCATIONS  
Scale Approx. 1"=500'

**ATTACHMENT C  
COST SCHEDULE**

1. **FIXED - PRICE AMOUNT:** The CONTRACTOR agrees to perform the WORK as described in this Agreement and shall be paid by STATE for said WORK for the Fixed-Price amount of:

DOLLARS

2. **COST SCHEDULE:** The CONTRACTOR agrees to perform the WORK as described in this agreement as broken down in the following Cost Schedule:

SUMMIT COUNTY AERIAL PHOTOGRAPHY AND MAPS		
ITEM OF WORK	AMOUNT	CALENDAR DAYS
From Attachment B - Scope of Work		
4. The following services:		
a. FIELD CONTROL AND SURVEYING		
b. AERIAL PHOTOGRAPHY		
c. MAPS		
d. DISK DATA		
<b>TOTAL FIXED PRICE AMOUNT</b>		

3. **ALTERNATE PROPOSALS:** Provide any alternate proposals below or attach to this Bid Schedule. For each alternative, list the change in the Total Fixed Price Amount, the change in Calendar Days for the date of notice to proceed, the line item cost(s) of work items proposed, and, a sufficient description of the changes in the specifications or materials used in the alternate proposal.

Alternate Proposal(s) Offered?  Yes  No

Firm: \_\_\_\_\_

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_

**ATTACHMENT D**  
**SERVICES AND FACILITIES PROVIDED BY STATE**

1. STATE shall provide the following services for the CONTRACTOR with respect to the WORK required:
2. Any site-specific information that the STATE has that would be helpful to the CONTRACTOR in accomplishing the WORK.
3. STATE'S representative will be available to accompany the CONTRACTOR to facilitate location of the site features and respond to questions.
4. Access to resources in the STATE's possession that may aid in the completion of the WORK, such as:
  - a) Mine plans, maps, project correspondence and files, slides, photographs, and any aerial photographs relating to the project area.