

# CITY OF RAPID CITY

### RAPID CITY, SOUTH DAKOTA 57701-2724

#### PUBLIC WORKS DEPARTMENT

300 Sixth Street

Dirk Jablonski, Public Works Director

City web: www.rcgov.org

Phone: 605-394-4165 Fax: 605-394-6636

e-mail: dirk.jablonski@rcgov.org

#### **MEMORANDUM**

TO: Honorable Mayor and Council

FROM: Dirk Jablonski, Public Works Director

DATE: December 15, 2005

RE: Aerial Photography

Sanitary Landfill

The Solid Waste Operations Division of the Public Works Department is requesting authorization to proceed with the aerial photography of the sanitary landfill.

The landfill was last photographed eight years ago, in 1997. Typically, photos should be taken every five years in an area such as the landfill that is rapidly changing. The mapping is used for operation and planning.

The aerial photography does not just provide a picture of the site. It also includes digital contour and planimetric data.

The primary purpose of the mapping is to provide a tool for computing volumetric calculations for ongoing operations and future planning. There are two recent examples of how the existing aerial photographs have been used. The first involves using the map to assist in the determination of the source and flow of chlorides and how they may relate to the leachate in the existing cells. The second has been the use of the maps in determining where the working face may be placed relative to the highway so that the contours would hide the operation. Without the map, extensive surveying would have been required to provide the same information.

In 2006 the process of renewing the operating permit will begin. The permit will expire in April 2007. Accurate contour data is needed to complete the application. Aerial photos are generally taken in late winter or early spring due to snow cover, prior to

foliage cover, and the angle of the sun. If the photos are taken in 2007 it will be too late for use during the permitting process.

Mr. Jerry Wright and I will be available at the December 19 regular Council meeting to answer questions. In the meantime, you may contact Mr. Wright at 355-3496 or me at 394-4165.



## CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA 57701-2724

#### SOLID WASTE OPERATIONS

5555 Highway 79 South Mailing Address: 300 Sixth Street

November 21, 2005

Dirk Jablonski, Director Public Works City of Rapid City 300 6<sup>th</sup> Street Rapid City, South Dakota 5370

Subject: Aerial Mapping - Rapid City Landfill Property

Dear Dirk,

Upon solicitation for proposals to aerial map the Rapid City Landfill property, I recommend award and contract with Horizons, Inc. of Rapid City as per the attached proposal. The proposal amount is \$14,680. This item is budgeted at \$15,000 in the 2005 Landfill Budget and received Council approval to solicit proposals on January 3, 2005.

Other firms contacted by this office included Merrich, of Aurora, Colorado and Intrasearch of Denver Colorado. Merrich declined and our letter to Intrasearch was returned to this office by the U. S. Post Office.

Three original copies of Horizon's proposal are attached. Please place on the Public Works Committee agenda for November 29, 2005 for action by the City Council on December 5, 2005

If you have any questions, please let me know.

Jerry Wright, Superintendent Solid Waste Operations

with attachments
Karen Jones, Administrative Assistant, Public Works
John Leahy, Project Manager
Contract file
Public Works file 2005

ORIGINAL



Fax 605-355-3092

**RECYCLING** 605-355-3496 Fax 605-355-3092

LANDFILL 605-394-4197 Fax 605-394-6843

**COMPOSTING** 605-355-3496 Fax 605-355-3092

**YARD WASTE** 605-394-4197 Fax 605-394-6843



Cc

