



# CITY OF RAPID CITY

## Engineering Division

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**No. PW071304-11**

To: Public Works Committee

From: Dan Coon  
Acting Engineering Division Manager

Ref: Pavement Management System

Per your request at the June 29, 2004 Public Works Committee Meeting the following is an update on the Pavement Management System.

### History and Status

- The software was purchased from Cartegraph for infrastructure management. The original software was purchased on October 20, 1999. The program license was reinstated on October 28, 2003. The software maintenance agreement will expire on October 28, 2004. The cost for the annual maintenance agreement is \_\_\_\_\_.
- The total cost for the infrastructure management software over the last five years has been \$27,760.00. Of this total \$9,660.00 is related to the pavement management portion of the package. The \$9,660.00 is broken down as follows: \$3,005 for the software, \$3,995.00 for consulting services for staff training, and \$2,660.00 for annual technical support to date.
- The remainder of the \$27,760.00, or \$18,100.00, was for software and annual support for: 1) three seats of software for work order generation and inventory management, 2) software to "connect" the GIS software with the Cartegraph software, and 3) three separate inventory and management software modules for signs, storm water, and sanitary sewer.
- The software portion of the Pavement Management system has not been used since November 2003 due to Engineering work load. The focus has been shifted to management of individual projects. Curt Huus was assigned management of the Pavement Management System. In January 2004 Curt was transferred to the Growth Management Department and therefore is not available to resume these duties. The estimated cost to train a new individual on this system is \$2,000.00 to \$4,000.00.



**EQUAL OPPORTUNITY EMPLOYER**

- The Pavement Management System portion of the program is current and ready for someone to use.
- The sewer and storm water modules are mostly complete and ready to be hooked to GIS. However, manpower is needed to accomplish this task.
- Other modules for water, bridges, customer service, etc. are available but have not been purchased by the City.

### Proposal for Reimplementation

During a May 24, 2004 budget hearing I distributed a memorandum on the Engineering Division functions and future direction. Part of that memorandum addressed the need for additional staffing. A staff level engineer was included as part of that request. It is identified that a staff level engineer would, among other things, manage the Pavement Management System. The following is an excerpt from that memorandum.

#### *Staff Engineer*

This position is proposed to provide the following basic services.

- Provide first contact/front line customer service
- Maintain sewer master plan model.
- Maintain water master plan model
- Implement and maintain pavement management system

The City's current engineering staff consists of seasoned and experienced individuals. The majority of the engineers are registered professionals. However, many of the staff are called upon to perform tasks that can be performed by a less experienced engineer. This position would perform some of these functions thus freeing up the senior engineers to focus on the major function of the Engineering Division, project management.

For example, in the customer service function the staff engineer would provide customers with information on items such as shared sewer service lines and how to implement assessment projects. These functions, while important, are very time consuming and pull the senior engineers away from their main functions. Under the guidance of a senior staff person these task can be accomplished by a staff level engineer with less interruption and better service for the customer.

Development and maintenance of the utility master plan models and the pavement management system are computer oriented tasks, which with proper training do not require the time of a seasoned professional. Under the guidance of a senior engineer a staff level engineer can perform this function. In fact many of the young engineers probably have better computer skills than most senior level engineers.

Please note, the position of staff engineer does not currently exist within the City. I propose to create this position with the basic requirements being an engineering degree, Engineer in

Training status, and 0 to 3 years of experience. The proposed starting (level A) salary would be \$40,700.00, which is consistent with the starting salary for a Project Administrator. In the long term I believe creation of this position will benefit the City by allowing us to dip into the vast pool of young talent available in this area.