



CITY OF RAPID CITY

Engineering Services

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Public Works Committee/Common Council

RE: Request Authorization to Seek Proposals for Engineering Services for a Multi-Area Sanitary Sewer Inflow and Infiltration Study
Project No SS10-1919 CIP # 50849

This project is needed to investigate sources of infiltration and inflow (I & I) in specific areas of the City and identify areas where reconstruction or repair of existing sanitary sewer infrastructure would reduce the I & I within the sanitary sewer system.

The I & I that flows into the system is unnecessarily treated at the Water Reclamation Facility increasing the cost of treatment. In addition, excess inflow and infiltration can lead to sanitary sewer backups during high periods of rain.

The City previously conducted two I & I Studies, one by Cetec Engineering Services Inc. in 1997 and one by The Alliance of Architects and Engineers in 1994. The majority of the areas identified in these studies have been addressed either by reconstruction or by a determination that repairs were not cost-effective. As a part of the Utility System Master Plan, Burns & McDonnell prioritized areas that should be further investigated for sources of I & I. A total of six basins have been selected for this project.

Staff proposes to hire a Consultant to provide monitoring and data collection of various areas of the City, analyze the collected data, and provide recommendations and rankings for areas that need to sanitary sewer reconstruction and/or rehabilitation. The recommendation will include a list of prioritized capital improvement projects with preliminary cost estimates for each project. The project areas will be prioritized by the best value (the greatest reduction of I & I for the lowest cost).

The project is funded from the Wastewater Enterprise fund. The project budget is \$225,000. Staff proposes to award the project in 2011.

Dale Tech, PE
City Engineer

Cc: Robert Ellis, Public Works Director

DT/ms

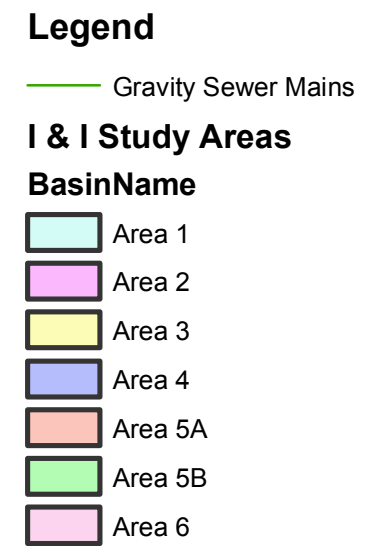


EQUAL HOUSING
OPPORTUNITY

EQUAL OPPORTUNITY EMPLOYER

Item #19

PW110910-16



1 inch = 4,000 feet