

# **REQUEST FOR BOARD ACTION**

## **HENDERSON COUNTY BOARD OF COMMISSIONERS**

**MEETING DATE:** April 20, 2005

**SUBJECT:** Preliminary Engineering Report

**ATTACHMENTS:** Yes

### **SUMMARY OF REQUEST:**

Staff is requesting approval to execute an agreement with Camp Dresser & McKee (CDM) for a Preliminary Engineering Report (PER) for the Mud Creek Sanitary Sewer Project. As the Board is aware, we hope to have the Mills River Sewer Project completed this fall. According to your adopted Master Sewer Interceptor Plan, the next project to be considered would be the Mud Creek Sewer Project. This PER will provide us with recommendations concerning the route, cost, and project phasing. The cost of the PER is \$6,900 and will be funded out of the Cane Creek Water and Sewer District Fund.

### **COUNTY MANAGER'S RECOMMENDATION/BOARD ACTION REQUIRED:**

Staff recommends that the Board authorize the development of a PER by CDM.

**EXHIBIT A TO AGREEMENT  
BETWEEN  
OWNER AND ENGINEER  
FOR  
STUDY AND REPORT  
PROFESSIONAL SERVICES**

**FURTHER DESCRIPTION OF ENGINEERING SERVICES AND RELATED MATTERS**

This is an exhibit attached to and made a part of the Agreement dated \_\_\_\_\_, 2005, between Henderson County (OWNER) and Camp Dresser & McKee (ENGINEER) for study and report professional services.

1. The Basic Services of ENGINEER as described in Article 2 of said Agreement are amended and supplemented as follows:

This Exhibit addresses the scope of services for developing a Preliminary Engineering Report for the Mud Creek Sanitary Sewer and Lift Station project. Henderson County is planning to implement a 24-inch gravity sewer system located along Mud Creek. The system is approximately 23,000 feet long and would feed the Mills River Interceptor which is currently under construction. Tying into the Cane Creek Water and Sewer District System will require incorporation of a lift station or a siphon under the river. The system will also include relatively short runs of 8-inch, 10-inch, and 12-inch sewers that will serve customers along the Mud Creek sanitary sewer route. Existing lift stations will be eliminated by the proposed gravity sewer system.

CDM developed flow projections for this area as part of a study titled North Henderson County Wastewater Flow Projections and Hydraulic Impacts (CDM, May 2001). Henderson County has developed preliminary sizing for the system based on these flow projections. The County has also chosen the route for the gravity sewer system. The proposed system is illustrated in a preliminary drawing prepared by Gary T. Tweed titled Mud Creek Sanitary Lift Station and Interceptor and dated March 23, 2005.

The County requests that a preliminary engineering report (PER) be prepared for the proposed system incorporating the flow projections performed by CDM and the preliminary work performed by the County. Special attention is to be given to the connection to the downstream system.

**Project Scope**

CDM has received drawings of the proposed route, drainage maps, and back-up data for the proposed system. CDM will visit the project site and meet with County representatives to discuss the project and clarify system needs and constraints.

CDM will provide an evaluation of the proposed system using the flow projections from previous CDM report and the layout of the gravity system and will evaluate the feasibility of incorporating a siphon to connect the proposed system to the downstream interceptor. CDM will compare this alternative to implementing a pump station and force main to cross the river. CDM will prepare a cost estimate for the entire Mud Creek sewer system as well as a cost evaluation of the two alternatives for connecting to the downstream sewer.

CDM will prepare a PER summarizing the existing conditions, proposed system, and alternative evaluations. The report will include a planning level cost estimate for the system and will include maps and figures as appropriate to define the project. One copy of a draft report will be provided to the County for review and comment. Upon receipt of comments, five copies of the final report will be provided to the County.

Project Fee and Schedule

2. The responsibilities of OWNER as described in Article 4 of said Agreement are amended and supplemented as follows:

- provide electronic files of sewer pipe routing;
- provide review deliverables in a timely manner;
- provide information to CDM as requested in a timely manner;

3. The time periods for the performance of ENGINEER's services as set forth in Article 5 of said Agreement are amended and supplemented as follows:

The draft PER will be completed within three weeks of Notice to Proceed. The final report will be provided within one week of receipt of the County's review comments.

4. The method of payment for services rendered by ENGINEER shall be as set forth below:

For the Basic Services performed by the Engineer under Section 1 of this Amendment, OWNER agrees to pay Engineer the lump sum fee of \$6,900. Partial payment for all services are to be made monthly by OWNER in accordance with the percentage of work completed that month.

5. OWNER has established the following special provisions and/or other considerations or requirements in respect of the Assignment: