



## **Staff Report**

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RESOLUTION APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH RMC WATER AND ENVIRONMENT FOR SANITARY SEWER EVALUATION AND MASTER PLANNING FOR AN AMOUNT NOT TO EXCEED \$355,140

Honorable Mayor and Council Members:

### **Summary**

City Council approval is requested to complete a professional services agreement with RMC Water and Environment for the sanitary sewer system evaluation and development of the sewer master plan. The master plan is needed to guide the next multi-year phase of sewer rehabilitation and to assure the City's compliance with the new State Sanitary Sewer Management Plan regulatory program.

### **Background**

The existing wastewater collection system of the City of Belmont ranges in age from 40 to 100 years and consists of approximately 78 miles of gravity sanitary sewers and force mains, 1500 manholes and 11 pump stations. The pipes range in size from 4 to 27 inches in diameter. The City collection area is approximately five square miles and the system serves a population of about 25,000 residents. The City pumps wastewater to the South Bayside System Authority's Water Pollution Control Plant in Redwood City for treatment and disposal. The replacement value of the City's sewer underground infrastructure exceeds \$60 million.

The City prepared three previous Sewer Master Plans to guide capital improvements through the 1960s, 1970s, and 1980s and conducted an infiltration and inflow rehabilitation study in 1991. Over the past thirteen years, the Department of Public Works conducted a rehabilitation program to systematically assess, repair, and upgrade the City's sanitary sewer system. The sewer system was divided into fifteen drainage basins and each year one or more basins have been selected for a two- to four-year rehabilitation process consisting of inspection, design, repair (pipelining or pipe bursting) or replacement construction. Approximately one third of the system has been rehabilitated within the past thirteen years at a cost of approximately \$10 million. We anticipate that about an additional third of the sewer system will need the rehabilitation within the next ten years. It is now time to reassess and analyze the sanitary sewer system in the context of current regulatory and asset management requirements. The City needs a current Sewer Master Plan to guide the Capital Improvement Program improvements and assure compliance with new State

Sanitary Sewer Management Plan requirements (See Attachment C – New Requirements for Preparing Sewer System Management Plan from California Regional Water Quality Control Board).

The California Regional Water Quality Control Board has notified the City that it must submit a Sewer System Management Plan (SSMP) for the operation and maintenance of the City's sanitary sewer collection system. The SSMP will serve as a work plan for a new sewer system regulatory program similar to the NPDES program for the municipal storm drainage system. The State has provided guidance for the plan, which must cover the City's program goals, organization, overflow emergency response; fats oils and grease control; legal authority, measures and activities; design and construction standards; capacity management; monitoring and measurements; and audits. The first third of the SSMP plan elements are due to the State in August next year, the next third in two years, and the final third in three years. In addition, beginning in December 2004, the State has required electronic reporting of sanitary sewer overflows (SSOs). The City must submit its first annual report on SSOs in March 2006.

The SSMP represents the State's assertion of its authority to regulate satellite or independent sewer collection systems as a potential threat to water quality. The practical outcome is that cities and sewer districts will need to increase their level of effort in monitoring, documenting, and reporting sewer operations and maintenance. There may also be formal standards for staff training and committee participation. Cities with defective systems will ultimately need to invest money into rehabilitation. Belmont staff are confident that our sewer system is in generally good condition and that the City's long-term investment in rehabilitation will stand it in good stead in the coming regulatory environment.

### **Discussion**

The City budgeted \$80,000 in FY05 to start the Sewer Master Planning project. In February 2005, City staff conducted a selection process to choose consultant services to update the City's Sanitary Sewer Master Plan. The request for proposals stated that consultant must provide its process to address the following areas in the Master Plan:

1. Comply with all aspects of the most recent requirements of the State Regional Water Quality Control Board (RWQCB) for Sanitary Sewer Management Planning,
2. Improve the performance and reliability of the sanitary sewer system,
3. Reduce ongoing maintenance costs and SBSA treatment costs,
4. Reduce groundwater infiltration and storm water inflow (I/I),
5. Provide adequate capacity to reduce incidents of overflow,
6. Maintain the value and extend the service life of this publicly owned asset, and
7. Comply with current and anticipated future public health and environmental regulations.

Five qualified civil/sanitary engineering consultants submitted proposals to the City:

1. BKF

2. Kennedy/Jenks
3. RMC Water and Environment
4. Brown and Caldwell
5. RBF Consulting

A city staff procurement committee consisting of the City Engineer, Senior Engineer, and Assistant Engineer/Sewer Program Manager independently screened and ranked these proposals based on the following criteria:

- Team Experience for Similar Services
- Team Members Experience
- Project Approach
- Understanding of City’s Needs
- References

After discussing the results of this screening evaluation, the procurement committee, decided to invite all five firms for a presentation and interview. At the end of this process, the committee selected RMC Water and Environment based on qualifications and experience in the Sewer Master Planning field. The selection process was according to the California Government Code Section 4526: “Notwithstanding any other provision of law, selection by a state or local agency head for professional services of private architectural, landscape architectural, engineering, environmental, land surveying, or construction project management firms shall be on the basis of demonstrated competence and on the professional qualifications necessary for the satisfactory performance of the services required.” Therefore, the committee did not use the cost estimate as direct evaluation criteria, but did consider the cost as a factor in evaluating the responsiveness of the proposal. As is the standard practice with consultant selection, staff is maintaining a complete procurement evaluation file to demonstrate that this process was conducted in an objective and systematic manner. This file is available for review by interested parties.

Staff awarded the first phase of work for \$78,785 in accordance with the City’s purchasing ordinance. The first phase of the project work started in April and involved development of the scope of work and schedule, evaluation of the current sanitary sewer system and related capital improvement projects, preliminary data collection for hydraulic modeling and infiltration and inflow analysis. The preliminary data collection consisted of extracting sewer manhole rim elevations and sewer line invert elevations from existing microfiche records, sewer paper maps and sewer AutoCAD and GIS files.

The most important components of the new Sanitary Sewer Master Plan are included in the second phase of the project and budgeted in FY 05-06. These components consist of flow monitoring; analysis of flow data; preliminary sewer system management plan (SSMP) and gap analysis; lateral analysis, and development of the sewer condition assessment and rehabilitation program (See Attachment B – Scope of Work). After Phase II of the project is completed and the first SSMP report including Goals, Organization, Emergency Response Plan and FOG Control

Program is submitted to the Regional Water Quality Control Board (report is due August 31, 2006), the City will enter into Phase III of the Sewer Master Planning Project to complete the remaining portions of the sanitary sewer evaluation based on the comments from the Regional Water Quality Control Board and to finalize the Belmont Sanitary Sewer Management Plan.

City staff requests City Council's approval to amend the Professional Services Agreement with RMC Water and Environment to increase scope of work and budget from \$78,785 to \$355,140 for this project. The detailed scope of work, budget and time schedule are attached.

**Fiscal Impact**

The value of the amended Professional Services Agreement with RMC Water and Environment is \$355,140 budgeted in FY 2004-2005 and 2005-2006, Account Number 503-4326-7058-9030.

**Public Contact**

Public contact consists of posting the City Council agenda.

**Recommendation**

It is recommended that the City Council adopt the attached resolution approving the Amendment to the Professional Services Agreement with RMC Water and Environment for the sanitary sewer system evaluation and development of the sewer master plan to comply with the State Sanitary Sewer Management Plan (SSMP) requirements.

**Alternatives**

1. Refer back to staff for additional information.
2. Deny approval.

**Attachments**

- A. Resolution
- B. Scope of Work (Council only)
- C. New Requirements for Preparing Sewer System Management Plan from California Regional Water Quality Control Board (Council only)

Respectfully submitted,

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Bozhena Palatnik  
Assistant Civil Engineer

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Raymond E. Davis III, PE, PTOE  
Director of Public Works

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Jack R. Crist  
Interim City Manager

**RESOLUTION NO.**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELMONT APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH RMC WATER AND ENVIRONMENT FOR SANITARY SEWER EVALUATION AND MASTER PLANNING FOR AN AMOUNT NOT TO EXCEED \$355,140**

**WHEREAS**, the City of Belmont had budgeted \$80,000 in FY04-05 and \$350,000 in FY05-06 to evaluate the City sewer system and create a sewer master plan; and,

**WHEREAS**, in February 2005 the City of Belmont had solicited proposals from the qualified engineering firms to evaluate the City sewer system and prepare a sewer master plan; and,

**WHEREAS**, five consultants submitted their proposals for the project; and,

**WHEREAS**, RMC Water and Environment was selected based on qualifications and experience to conduct the project; and

**WHEREAS**, RMC Water and Environment started Phase I of the project in April 2005; and,

**WHEREAS**, the City of Belmont is asking City Council's permission to start expand the scope of work and increase budget for the sewer master planning and sanitary sewer evaluation project from \$78,785 to \$355,140.

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Belmont:

- (1) Directs the City Manager to execute an Amendment to the Professional Services Agreement with RMC Water and Environment; and,
- (2) Approves the funding for the Amendment to the Professional Services Agreement in the amount of \$355,140, from the Capital Improvement Program, Account Number 503-4326-7058-9030.

\* \* \* \* \*

I hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of Belmont at a regular meeting thereof held on September 27, 2005 by the following vote:

AYES, COUNCILMEMBERS: \_\_\_\_\_

NOES, COUNCILMEMBERS: \_\_\_\_\_

ABSTAIN, COUNCILMEMBERS: \_\_\_\_\_

ABSENT, COUNCILMEMBERS: \_\_\_\_\_

\_\_\_\_\_  
CLERK of the City of Belmont

APPROVED:

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MAYOR of the City of Belmont