



Staff Report

RESOLUTION APPROVING PLANS AND SPECIFICATIONS, AUTHORIZING ADVERTISEMENT FOR SEALED BIDS, APPROVING AWARD OF CONTRACT TO THE LOWEST RESPONSIBLE BIDDER FOR AN AMOUNT NOT TO EXCEED \$905,471 APPROVING A CONSTRUCTION CONTINGENCY NOT TO EXCEED \$90,547, AND AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT FOR SANITARY SEWER REHABILITATION PIPELINING AND SPOT REPAIR PROJECT - CENTRAL, SUNNYSLOPE, STERLING DOWNS AND HOMEVIEW NEIGHBORHOODS, CITY CONTRACT NUMBER 472

Honorable Mayor and Council Members:

Summary

The Department of Public Works staff requests City Council approval for City Contract Number 472, the Sanitary Sewer Rehabilitation Pipelining and Spot Repair Project - Central, Sunnyslope, Sterling Downs and Homeview Neighborhoods plans and specifications and the authorization to advertise this project for bid. Staff also requests approval of a construction contingency equal to ten percent of the contract award. The engineer's estimate for this project is \$905,471. The proposed bid opening date is April 12, 2006. If a contract can be awarded, construction should start in May and continue through Fall 2006, depending on weather.

Public Works will be presenting a comprehensive infrastructure report over the next several months outlining all of the City's infrastructure needs including sewer, storm drains, streets and solid waste disposal. This project will be included in the overall infrastructure report.

Background

The City of Belmont, Department of Public Works is managing a citywide sanitary sewer assessment and rehabilitation program to improve the sewer system's structural integrity and capacity and reduce infiltration and inflow of stormwater. Public Works began this program in 1991 with a sewer condition assessment and over the past 15 years completed a first round of sewer improvements.

The City has been routinely video inspecting existing sewer lines to identify defects for the future rehabilitation projects to prevent sanitary sewer overflows and deterioration and to extend the service life of this publicly owned asset, as well as to comply with current and anticipated future public health and environmental regulations.

Lining original clay sewer pipe with thin PVC plastic or resin-impregnated fiber is used to rehabilitate sewer mains where the existing pipe is still holding its shape, but has cracks, open joints and root intrusion. The pipe is cleaned and televised prior to lining and any laterals protruding into the interior of the sewer main are cut off to make a smooth surface for the liner. For installation, the liner material is heated to give it sufficient flexibility and pressurized while warm to form it tightly against the existing clay pipe. Once cooled, it sets to a rigid, strong, and smooth lining that stabilizes further deterioration of the clay pipe and generally improves the flow characteristic and capacity of the sewer main. Lateral connections are reopened by grinding out the liner wall. The liner has an expected useful life of 50 years or more, so the lined sewers should not need further rehabilitation for many decades.

Sewer lines located in Central, Sunnyslope, Sterling Downs and Homeview neighborhoods are among the oldest lines built in the City of Belmont. There was a pipebursting/pipelining project conducted one year ago in Sunnyslope and Central Neighborhoods, but a number of sewer lines in need of repair were eliminated from the project due to unforeseen conditions and contractor's non-responsiveness. These omitted sewer lines are included in the current spot repair/pipelining project. The City also conducted a sewer rehabilitation project in 1993 in the Sterling Downs Neighborhood in which sewer lines located on Chesterton and residential streets adjacent to Hiller were pipe burst and replaced. The Homeview Neighborhood had a few sewer lines pipe burst and replaced in 1991.

There will also be another project in Sterling Downs neighborhood to pipeline two segments of the 27-inch reinforced concrete sanitary sewer trunk that carries half of the total flow contributed by the City of Belmont. Staff will seek City Council's permission to advertise and award this second project in Spring of 2006.

Discussion

City staff video-inspected and smoke-tested the sanitary sewers in Central, Sunnyslope, Sterling Downs and Homeview neighborhoods several years ago to identify defects requiring repair. The design engineer has analyzed the inspection results and designed two projects:

- (1) Sewer spot repair and lining of vitrified clay pipes ranging in diameter from 6" to 12" and construction of 6" and 8" sewer lines in Central, Sunnyslope, Sterling Downs and Homeview neighborhoods.
- (2) Sewer lining of two segments of 27" reinforced concrete sewer trunk on Dairy Lane.

City staff originally budgeted \$405,500 in FY 2005-2006 to do this project based on the pipe condition assessment from previous video inspection. After summarizing all the repairs needed to be done, the scope of work significantly extended. The design engineer subsequently found from a review of maintenance records that there are a substantial number of pipes in Old County Road, Wessex Way and Masonic Way that have developed sags or bellies that disrupt flow.

These require excessive cleaning and maintenance because the sags allow solids and grease to accumulate. These pipes were added to the project because rehabilitation will improve their flow characteristics and therefore reduce maintenance requirements. Approximately 10,136 linear feet of sewer main will be lined as part of City Contract Number 472. Staff prepared an engineering estimate using historical data with input from various construction companies that do lining work. The final engineering estimate is \$905,471.

City staff believes that although the construction estimate is higher than the budget estimate due to the increased quantity of work, it is in the City's best interest to complete the identified work at this time. It is preferable for the City to conduct this project without dividing it into two separate projects to minimize impact on the residents caused by contractor's staging and mobilizing. This is the first sewer rehabilitation project in the FY2005-2006. Staff has identified the following sources of additional funds in the FY2005-06 sewer capital improvement project budget:

- \$125,000 – Account #503-4326-7003-9030 Sewer Rehabilitation Annual Program. This project is budgeted to address necessary but previously unidentified sewer improvements as well as to increase the budget for other defined CIP sewer projects that are found to have insufficient budget. Staff does not foresee any needs that would draw from this account this fiscal year.
- \$125,000 – Account #503-4326-7034-9030 San Juan Boulevard Force Main Improvements. This project was budgeted to evaluate the condition of the force main and to conduct repairs as needed. The completed evaluation shows that the pipe is in good condition and will not require any rehabilitation at the present time.
- \$155,518 – Account #503-4329-7076-9030 – St. James-Waltham Cross Sewer Rehabilitation. This project was originally planned for pipe bursting, but due to distress in the pavement causing the pipe to sag, it cannot be successfully rehabilitated through pipebursting. This 6-inch in diameter sewer line needs to be replaced using open trenching method and the street will then need to be repaved. City staff is planning to combine this project with the funds for pavement rehabilitation projects for this area and, due to current limited funding, this project will be postponed until FY 2007-2008.
- \$185,000 – Account #503-4326-7074-8331 San Juan Pump Station Stabilization. Construction of this project has been delayed pending State and Federal permits to work in the creek. The budgeted construction funds can be transferred without impact to the project provided they are re-budgeted in FY06-07.

If City Council authorizes these expenditures, the funds will be transferred to the City Contract Number 472 Account #503-4326-7056-9030.

General Plan/Vision Statement

No impact.

Fiscal Impact

The engineer's estimated cost for City Contract Number 472 is \$905,471. Funding will be obtained from the CIP FY 2005/06 Project Account 503-4326-7056-9030. Another \$90,547 will be reserved as a 10 percent construction contingency to be approved for use as needed by the City Manager and Finance Director to address unforeseen conditions that would prevent contract completion.

Public Contact

Publication and posting of City Council agenda.

Recommendation

It is recommended that the City Council approve City Contract Number 472 – Sanitary Sewer Rehabilitation Pipelining and Spot Repair Project - Central, Sunnyslope, Sterling Downs and Homeview Neighborhoods contract plans and specifications. It is further recommended that the City Council authorize advertising for sealed bids from qualified construction contractors and approve award of contract to the lowest responsible bidder for an amount not to exceed \$905,471. Staff also recommends approval of a construction contingency equal to ten percent of the contract award. Assuming acceptable bids are received, it is recommended that Council authorize the City Manager to execute a contract with the lowest responsible bidder.

Alternatives

1. Take no action.
2. Refer back to staff for further information.

Attachments

- A. Resolution

Respectfully submitted,

Bozhena Palatnik
Assistant Civil Engineer
Phone: (650) 595-7463
bpalatnik@belmont.gov

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

Jack R. Crist
Interim City Manager

RESOLUTION NO. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELMONT APPROVING PLANS AND SPECIFICATIONS, AUTHORIZING ADVERTISEMENT FOR SEALED BIDS, APPROVING AWARD OF CONTRACT TO THE LOWEST RESPONSIBLE BIDDER FOR AN AMOUNT NOT TO EXCEED \$905,471, APPROVING A CONSTRUCTION CONTINGENCY NOT TO EXCEED \$90,547, AND AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT TO THE LOWEST RESPONSIBLE BIDDER FOR SANITARY SEWER REHABILITATION PIPELINING AND SPOT REPAIR PROJECT - CENTRAL, SUNNYSLOPE, STERLING DOWNS AND HOMEVIEW NEIGHBORHOODS, CITY CONTRACT NUMBER 472

WHEREAS, as part of the Citywide sanitary sewer rehabilitation program, sanitary sewers in Central, Sunnyslope, Sterling Downs and Homeview Neighborhoods are scheduled for rehabilitation; and,

WHEREAS, the Department of Public Works has prepared plans and specifications for this work; and,

WHEREAS, Sewer Enterprise Funds have been budgeted in Fiscal Year 2006 for this project.

NOW, THEREFORE, BE IT RESOLVED:

1. The City Council approves City Contract Number 472 plans and specifications.
2. The City Council authorizes advertisement for sealed bids for this work.
3. The City Council approves award of contract to the lowest responsible bidder for an amount not to exceed \$905,471, and approves a 10 percent construction contingency not to exceed \$90,547.
4. The City Council authorizes the City Manager to execute a contract with the lowest responsible bidder.
5. Funding shall be from the FY2005/06 budget, project account 503-4326-7056-9030.

* * * * *

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 March 14, 2006 by the following vote:

AYES, COUNCILMEMBERS: _____

NOES, COUNCILMEMBERS: _____

ABSTAIN, COUNCILMEMBERS: _____

ABSENT, COUNCILMEMBERS: _____

CLERK of the City of Belmont

APPROVED:

MAYOR of the City of Belmont