



## **Staff Report**

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RESOLUTION APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH COTTON, SHIRES & ASSOCIATES, INC., TO PROVIDE ENGINEERING DESIGN SERVICES FOR AN AMOUNT NOT TO EXCEED \$35,000 FOR THE EAST LAUREL CREEK STABILIZATION PROJECT, CITY CONTRACT NUMBER 475

Honorable Mayor and Council Members:

### **Summary**

Staff has requested proposals for the design of City Contract Number 475 - East Laurel Creek Stabilization Project. Staff recommends that the Council approve a resolution authorizing the City Manager to execute a professional services agreement with Cotton, Shires & Associates, Inc., for a total amount not to exceed \$35,000.

### **Background**

On January 2, 2006, staff was notified of a landslide developed along a creek embankment at the end of San Juan Boulevard. Part of the sackcrete retaining wall next to an existing corrugated metal pipe culvert collapsed due to excessive rain water draining from the roadway. Public Works maintenance workers covered the exposed slope with plastic and installed an asphalt berm to redirect the street water away from the embankment.

Staff also re-inspected the culvert and found its condition remained the same as several months ago. The base of the culvert pipe has rusted out. The upper half of the culvert seems to be intact, and there is no sign that it is affecting the stability of the roadway above. However, Public Works plans to repair the culvert this summer pending the State's issuance of the required creek permits, which is a lengthy and complicated process.

In January 2006, staff solicited a geotechnical engineer to perform the soils investigation. A preliminary soils report was completed in late February. Staff had also contracted with an environmental consultant to facilitate the process of obtaining the required creek permits.

In late February 2006, staff requested proposals from the following civil/structural engineers for preparing the slide repair and stilling pond design drawings:

1. BKF Engineers, Inc.
2. Wilsey Ham, Inc.
3. Mark Thomas & Company, Inc.
4. RBF Consulting
5. Biggs & Cardoso
6. Cotton Shires & Associates, Inc.

After review of the proposals, Cotton Shires & Associates, Inc., was selected based on qualifications and experience in the design of similar projects.

### **Discussion**

The geotechnical engineer provided several design options for the slide repair. These include the following:

- 1) Re-grade the slope with riprap or soil to create a gentler slope from the roadway.
- 2) Construct a soil nail and shotcrete wall along the vertical embankment.
- 3) Install a gabion wall along the slope.

The first option, to re-grade the slope, is the most economical solution. However, the Department of Fish & Game's policy does not allow rip rap or soil backfill in the creek area. The recent slope stabilization project at 1133 Alameda de las Pulgas (CCN 419B) is an example. A soldier pile wall was constructed because soil backfill was not allowed. Staff will discuss the other two options with the contracted design engineer and Department of Fish and Game to select the most economical and feasible solution.

Work in and about creeks requires approval or permits from these agencies: California Fish and Game, California Regional Water Quality Control Board, and U.S. Army Corp of Engineers. These agencies require that the applicant submit construction plans, which requires a completed design, and that the applicant has recorded the appropriate CEQA notice which requires completion of biological and archeological resources assessments. Staffs had previously applied for aquatic permits for work on the culvert and the nearby San Jaun pump stations and were denied due to incomplete culvert restoration plans and CEQA biological-archeological resource assessments.

Staff's experience has been that it takes four months to process for the State to approve a simple creek permit provided that the application is found to be complete and compliant. Creek work is allowed only during a four-month window between June 15 and October 15 each year. The slide repair work for this project complicates the process. The environmental consultant indicates that

the Department of Fish and Game may require a full project agreement, which can delay the approval for several months. This will push the process towards the end of the year when no creek work is allowed. The environmental consultant and staff are currently working with the agencies to resolve these issues. However, staff anticipates that this process will be complicated and slow.

Staff has also investigated other options such as closing the roadway to through traffic without repairing the slide. However, this option will allow the slope embankment to deteriorate further, which could jeopardize the surrounding roadway and buildings. It would also inconvenience residents on the east side of the culvert since their only remaining access would be via the steep Haskins Road.

Another alternative is to use city maintenance crews to perform the work. After discussion with Public Works Maintenance Supervisor, it seems feasible to repair the rusted culvert by sealing the bottom of the culvert with slurry. However, the slide repair is specialized work that will require contractors with appropriate equipments and skilled labors. The option to utilize the maintenance crews to perform some of the work will be discussed further after the design is completed.

Staff also recommends closure of one lane of the roadway for safety reasons until the slope embankment is repaired. Residents on East Laurel Creek Road can utilize Cipriani Avenue, Monserat Avenue, Sequoia Way and Haskins Drive as an alternate route. The project is anticipated to be completed in October 2006.

### **General Plan/Vision Statement**

No impact.

### **Fiscal Impact**

The value of the Professional Services Agreement with Cotton Shires & Associates, Inc., is \$35,000 with \$3,500 contingency from account number 310-4196-6116-9030 which is funded by the Unanticipated Infrastructure Repair Project Fund.

Staff has submitted an application to FEMA Office of Emergency Services requesting funding for this slide repair project. Project is subject to FEMA's review for eligibility for funding.

### **Public Contact**

Posting of City Council agenda.

**Recommendation**

It is recommended that Council authorize the City Manager to execute professional service contracts for the East Laurel Creek Repair Project for a total amount not to exceed \$35,000 with a \$3,500 contingency to Cotton Shires & Associates, Inc., and authorize the closure of the one lane of roadway adjacent to the failed slope embankment.

**Alternatives**

1. Refer to staff for more information.
2. Delay the project and close the roadway.

**Attachments**

- A. Resolution
- B. Road map

Respectfully submitted,

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Gilbert Yau, P.E.  
Senior 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

**Staff Contact:**

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**RESOLUTION NO. \_\_\_\_\_**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELMONT APPROVING A PROFESSIONAL SERVICES AGREEMENT WITH COTTON SHIRES & ASSOCIATES, INC., TO PROVIDE ENGINEERING DESIGN SERVICES FOR AN AMOUNT NOT TO EXCEED \$35,000 FOR THE EAST LAUREL CREEK STABILIZATION PROJECT, CITY CONTRACT NUMBER 475**

**WHEREAS**, the City has solicited proposals from qualified engineering firms to design the slide repair and stilling pond project at East Laurel Creek; and,

**WHEREAS**, Cotton Shires & Associates, Inc., was selected based on qualifications and experience to conduct the design of the project; and,

**WHEREAS**, the City Council wants to enter into a professional services agreement with Cotton Shires & Associates, Inc., for an amount not to exceed \$35,000, for design of the East Laurel Creek Stabilization Project.

**WHEREAS**, for safety reasons staff recommends the closure of one lane of the roadway adjacent to the failed slope embankment.

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

- (1) Authorizes the City Manager to execute a professional services agreement with COTTON, SHIRES & ASSOCIATES, INC., for an amount not to exceed \$35,000 for the East Laurel Creek Stabilization Project Design CCN475.
- (2) Approves a contingency of \$3,500 for the design consultant services.
- (3) Approves funding for these services in the amount of \$38,500 from the Unanticipated Infrastructure Repair Project Fund, Account Number 310-4196-6116-9030.
- (4) Authorize closure of the one lane of roadway adjacent to the failed slope embankment until the reconstruction is completed.

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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 28, 2006 by the following vote:

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

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

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

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

APPROVED:

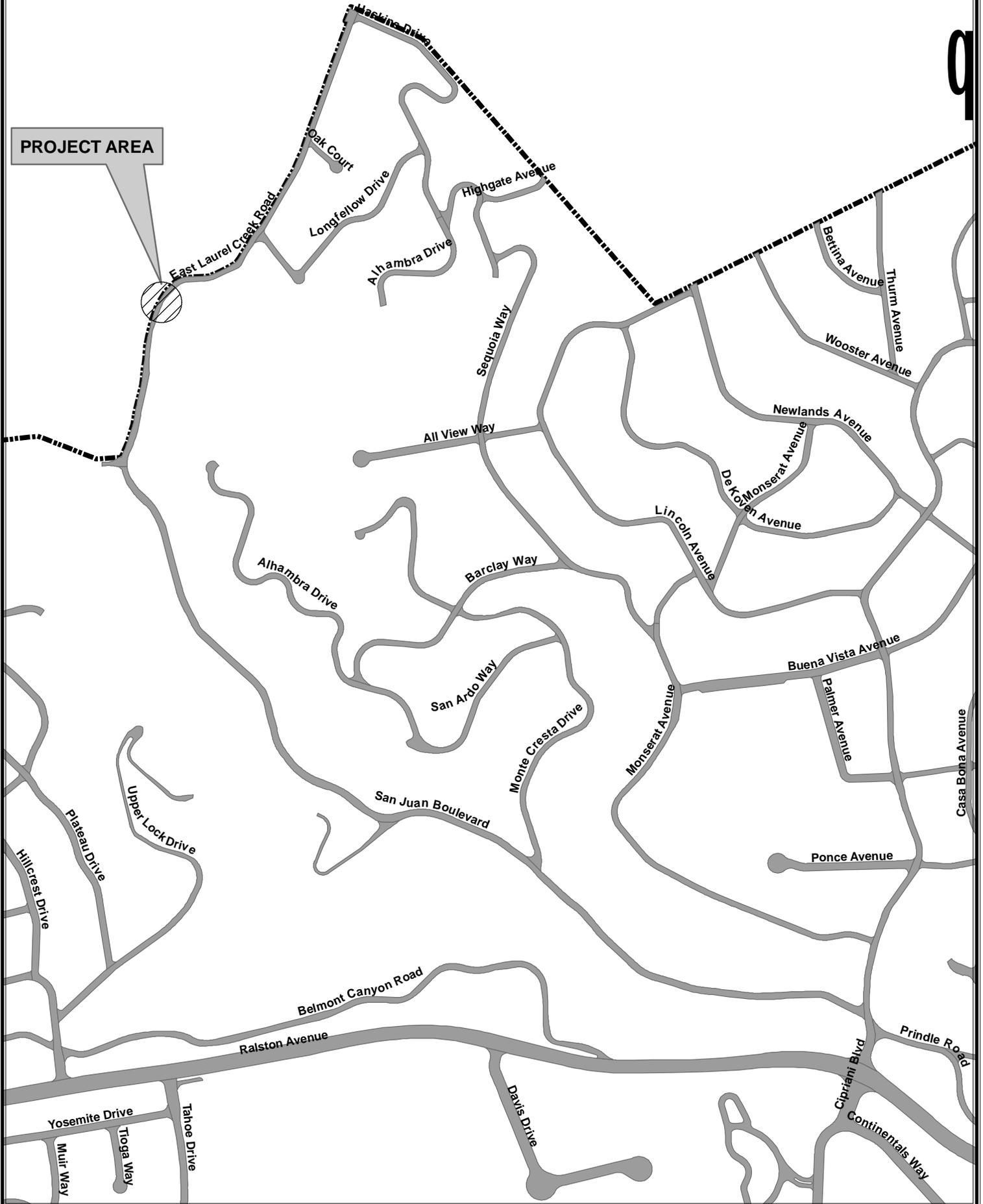
\_\_\_\_\_  
CLERK of the City of Belmont

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MAYOR of the City of Belmont



# ROAD MAP FOR EAST LAUREL CREEK STABILIZATION PROJECT

PROJECT AREA



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