



Midpeninsula Regional
Open Space District

R-17-102
Meeting 17-18
August 9, 2017

AGENDA ITEM 5

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Contract Amendment with Lettis Consultants International, Inc. (LCI) for Geological Services for the Alma College Cultural Landscape Rehabilitation Project at Bear Creek Redwoods Open Space Preserve

GENERAL MANAGER'S RECOMMENDATION

Authorize the General Manager to execute a contract amendment with LCI to complete geotechnical analysis at the former Alma College site at Bear Creek Redwoods, in an amount of \$25,000 (which includes an allowance of \$10,000 for unanticipated services), for a total not-to-exceed contract amount of \$74,990.

SUMMARY

The General Manager entered into a contract under his purchasing authority with LCI in April 2017 to perform an earthquake fault rupture hazard study at the former Alma College site. Subsurface geological testing located a fault trace which likely extends through the footprint of the 1909 Chapel, indicating that re-use of the building is infeasible. Given the proximity of the fault trace to the site's large northern retaining wall, additional geotechnical review is necessary to determine the feasibility and costs of stabilizing the wall.

DISCUSSION

Potential partner re-use of the 1909 Chapel at the former Alma College site is under consideration as part of the Board-approved Alma College Cultural Landscape Rehabilitation Project (Rehabilitation Project). Because the site is located within close proximity of the main trace of the San Andreas Fault, future site development is regulated by state law and county ordinance, including California's Alquist-Priolo Earthquake Fault Zoning Act (AP Act). The AP Act precludes the placement of new structures for human occupancy within 50 feet of an active fault. Although the Chapel predates passage of the AP Act, the extensive renovations necessary to facilitate re-use of the building by a partner organization would likely trigger the regulation.

To determine whether an active fault trace occurs within 50 feet of the Chapel, an earthquake fault rupture hazard study was required. A Request for Proposals to perform the study was direct mailed to five geological consulting firms in March 2017, and posted on the District website. Six proposals were received. Lettis Consultants International (LCI) was determined to be the most qualified firm, and was contracted under the General Manager's purchasing authority for an amount not to exceed \$49,990. The study consisted of a review of existing geological data for the site, and excavation of a trench that shadowed the Chapel footprint. The trench excavation resulted in conclusive evidence of a subsidiary fault trace trending in a southwesterly direction

through the Chapel, which was confirmed in the field by the Santa Clara County geologist. The presence of a fault trace in this location has several important implications for future use of the site, described below.

First and most importantly, the study findings indicate that renovations to the Chapel to allow it to be re-used regularly, if the renovations total greater than 50% of its current value, must include seismic retrofit. Although the Chapel is subject to the historic building code, which is somewhat less stringent than modern code requirements, this retrofit would likely be very costly, if it is possible at all. Stabilization/mothballing of the Chapel would not require seismic retrofit since there would not be any occupancy. In this case, the building could be used occasionally (less than 2,000 person-hours per year), or maintained as habitat for bats.

Second, the study indicated that the northern site retaining wall, which is planned to be extensively repaired as part of the Rehabilitation Project, is much closer to an active fault than was previously thought. A thorough risk analysis is therefore necessary to determine how and where to stabilize the wall to maximize public safety. Other alternatives, including removal of the wall and slope restoration, and excluding public access within the failure zone of the wall, must also be considered. The current cost estimate for stabilizing the northern retaining wall with tiebacks is \$1 million. At this time, a cost-benefit analysis is necessary to ensure that treatment of the wall maximizes public safety while minimizing cost to the District, with the goal of reducing this cost.

At this time, the General Manager recommends amending the contract with LCI to include geotechnical consulting services under a phased approach. In Phase 1, sections of the site retaining walls will be grouped and prioritized based on factors such as height, type, architectural significance, level of hazard and ease/difficulty of mitigation. A range of risk reduction scenarios including avoidance (such as setbacks or warnings) as well as hazard mitigation projects (such as wall removal, reinforcement, or buttressing) will then be evaluated, with a consideration of relative costs. Phase 2, if authorized, would include providing geotechnical input for the preparation of bid package documents for a future risk mitigation project. The total Phase 1 and 2 cost is \$15,000. A separate, supplemental services fee in the amount of \$10,000 is also recommended at this time to cover unforeseen geotechnical needs for the Rehabilitation Project, including, potentially, geotechnical testing during the construction phase.

The additional services will be performed by A3Geo, a geotechnical consulting firm included on the LCI team. A3GEO's primary area of expertise involves geotechnical and earthquake engineering for a variety of Bay Area public-sector clients including the East Bay Regional Park District, the Santa Clara Valley Water District, the SLAC National Accelerator Laboratory, the Lawrence Berkeley National Laboratory and the University of California.

FISCAL IMPACT

The recommended total contract amendment amount is \$25,000 (\$15,000 base fee and a \$10,000 supplemental services budget, and the original contract in the amount of \$49,990) for a total not-to-exceed new contract amount of \$74,990. The FY2017-18 budget includes \$575,600 for the Alma College Cultural Landscape Rehabilitation Project (Project #MAA21-006), and includes sufficient funding for the recommended contract amendment.

	FY2017-18
MAA 21-006 Budget:	\$575,600
Spent to Date (as of 06/30/2017):	182,627
Encumbrances:	\$8,804
LCI Contract Amendment Proposed Amount:	25,000
Budget Remaining (Proposed):	\$359,169

The following table outlines the Measure AA Portfolio budget, costs to date, and the fiscal impact related to the MAA 21-006 Alma College Cultural Landscape Rehabilitation project.

MAA 21 Portfolio Allocation:	\$17,478,000
Life-to-Date Spent (as of 06/30/2017):	\$1,001,925
Total Encumbrances:	\$473,192
Proposed LCI Contract Amendment (MAA 21-006)	\$25,000
Balance Remaining (Proposed):	\$16,877,883

BOARD COMMITTEE REVIEW

The Alma College Cultural Landscape Rehabilitation Plan was reviewed by the Planning and Natural Resources Committee and Board on numerous occasions. As part of the Board's approval of the Bear Creek Redwoods Preserve Plan and associated Environmental Impact Report, the Board also approved the Rehabilitation Plan on January 25, 2017 (R-17-15).

PUBLIC NOTICE

Public notice was provided as required by the Brown Act.

CEQA COMPLIANCE

The additional geotechnical analysis is not a project under the California Environmental Quality Act. The Alma College Cultural Landscape Rehabilitation Project was included in the Bear Creek Redwoods Preserve Plan Environmental Impact Report, certified by the Board in January 2017.

NEXT STEPS

Following Board approval, the General Manager will direct staff to continue working with LCI to develop recommendations for the Alma College site retaining walls, which will be incorporated into construction documents for the Rehabilitation Project.

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