



Midpeninsula Regional
Open Space District

R-17-86
Meeting 17-13
June 6, 2017

AGENDA ITEM 1

AGENDA ITEM

Authorization for an additional \$689,965 for construction of engineered Concrete and Stone Veneered Trail Steps related to the Mount Umunhum Summit Project (Summit Project).

GENERAL MANAGER'S RECOMMENDATION

Authorize approval of a contract amendment with D-Line Constructors, Inc., for the Summit Project in the amount of \$599,969 and a separate 15% contingency of \$89,996 for construction of the Mount Umunhum Trail Steps, thus limiting the new, not-to-exceed total contract amount to \$8,813,465.

SUMMARY

The contracted scope of work for the Mount Umunhum Summit Project (Summit Project) began in earnest in October 2016 and will be completed in time for the grand opening of September 15, 2017. One engineering segment of the Mount Umunhum Trail located adjacent to the summit and along a steep rock slope remains to be completed. The District's Land and Facilities Services Department (L&F) has been working on completing the Mount Umunhum Trail alignment that extends from the Bald Mountain Staging Area to the summit, constructing 4.7 miles of new trail and installing three new bridges. Work on the final segment, trail steps to reach the summit, began in 2016. As these steps were beginning to take shape, District management determined the need to halt the construction to conduct additional due diligence to determine whether the step design was appropriate for the terrain, and the anticipated level and type of visitation in this expected high use area.

After conducting background research and soliciting engineering firms, the District entered into a contract under the General Manager's authority with the civil, structural, and geotechnical engineering firm Mesiti-Miller Engineering, Inc., (MME) on March 24, 2017 to develop construction plans and specifications for the Mt. Umunhum Trail Steps. MME completed the plans and specifications on May 26, 2017. Based on this final design, District management determined that the construction work would need to be contracted out due to the complexity of the structural and concrete work, the need for high stone masonry skill to complete the veneering work, and the short window of time available between now and mid-September. D-Line Constructor, Inc., (D-Line) continues to work at the site, are already mobilized, have demonstrated great skill and attention to detail regarding concrete and stone work, and expressed an interest in completing this additional scope of work. D-Line submitted a construction bid of \$599,969 on June 1, 2017 with a confirmation that the work can be completed by September 15. To complete this work in time for the grand opening, the General Manager recommends Board authorization to amend the contract with D-Line by an additional \$599,969 and approval of a

separate 15% contingency of \$89,996 in the event issues arise during construction. As of May 15, the Fiscal Year (FY) 2016-17 Budget is forecasted to have sufficient savings in the Measure AA Capital-Non Land Fund to cover work billed through the end of June. Work completed between July 1 and September 15 (next fiscal year) will be paid through the current proposed budget allocation of \$185,928 from the Mount Umunhum Summit-Trail Construction Project, possible budget transfers from other completed Mount Umunhum contracts, or a First Quarter Budget Amendment.

BACKGROUND

In August 2016, the Board awarded a contract for construction services to D-Line for \$8,123,500 (includes a 10% contingency for \$738,500) for the Summit Project located at Sierra Azul Open Space Preserve (R-16-82). As of June 1, 2017, the Summit Project has spent none of the contingency total of \$738,500. However, four change orders totaling approximately \$470,000 are currently in negotiation to address unforeseen conditions and to upgrade specific materials to extend their durability and the life span of the improvements. The Summit Project, which includes the main elements listed below, is set to finish in time for the Grand Opening on September 15, 2017:

- Two weather shelters, one at the summit and one at the trailhead area
- A vehicular turn-around at the summit with ADA parking stalls
- An ADA, surfaced pathway around the East and West Summits
- A ceremonial circle near the West Summit
- East Summit viewing area
- Guardrails and site appropriate safety elements
- Final grading and site topographic restoration
- Upper and lower summit stairs
- Parking area with roughly 50 stalls, including 3 ADA stalls
- Vault toilet at the parking area
- Emergency helicopter landing zone
- Rehabilitation of roughly 1/3 mile of summit roadway
- Water storage tanks and associated infrastructure
- Stormwater infrastructure, including bioretention basins
- District standard split-rail fencing.
- Two emergency call boxes, one at the summit and one at the parking lot

DISCUSSION

Crews from the Land and Facilities Services Department (LFS) typically self-perform all trail construction work, and started construction of the trail steps in 2016 as the final element to complete the new 4.7-mile trail alignment. LFS crews began construction of the steps based on a minimalist design intended to conform to the contours of the hillside. After District crews had excavated one flight of steps and were beginning to initiate the excavation of a second section, the design was re-evaluated given the very steep terrain, the narrow and shallow nature of the carved steps, the non-standard step dimensions and heights, and lack of available landing areas or places to “step off” the main trail. Given these issues, which are entirely due to the steep, rocky terrain, the General Manager, in consultation with the Engineering and Construction and Legal Departments, made the decision to revise the step design to better conform to step designs

used by comparable agencies in high use areas over the last several years. The new design, which was prepared by Mesiti-Miller Engineering, Inc., (MME), calls for wider steps, decreases their height, and adds a hand support railing. This design also calls for a continuous, stone-veneered, concrete slab for the steps and more extensive excavation of the existing rocky hillside. The new design is beyond the capacity of the LFS crew to complete in time and better suited to contract labor with experience working on larger concrete projects.

The scope of work for the project includes:

- Hand excavation of rock slope
- Concrete installation for steps, walls, foundation, and landings
- Stone veneer finish to the steps
- Handrail

Completion of the Trail Steps at this time would achieve the goal of completing the Summit Project as envisioned and as approved by the Board of Directors in 2012. These Trail Steps are a critical element for completing the trail and pathway circulation at the summit. The Trail Steps will make it possible to bring hikers traveling along the Mount Umunhum Trail to the very top via trail and will offer visitors who drive to the top a more complete experience and circular pathway that begins from the parking lot and takes in all the possible views from the summit area. Given the short timeframe left to complete all work by September 15, the one viable way to complete this work on time is to leverage the current circumstances whereby we have an existing and skilled contractor in D-Line who is already mobilized at the summit and ready to begin the work.

FISCAL IMPACT

The proposed FY2017-18 budget does not include sufficient funds for the recommended contract amendment of \$599,969 and 15% contingency of \$89,996. These costs are fully eligible for Measure AA reimbursement.

	FY2016-17
MAA Capital – Non Land Fund (Fund 30)	
Savings Forecasted as of May 31 (includes encumbrances):	\$617,060
Estimated Amendment Amount Spent through June 30:	\$200,000
Savings Remaining (Estimated):	\$417,060

	FY2017-18 (Pending Board Approval)
MAA 23-002 Mount Umunhum Summit – Trail Construction Budget:	185,928
Spent to Date:	0
Encumbrances:	0
Estimated Remaining Authorized Amount:	\$489,965
Budget Remaining (Estimated):	(\$-304,037)

The budget shortfall for the work under this contract in FY2017-18 will either be funded via possible savings on other contracts for the Mount Umunhum Project, or if these possible savings are not sufficient, a budget amendment will be presented to the Board for ratification.

The following table outlines the Measure AA Portfolio budget, costs to date, and the fiscal impact related to the MAA 23-004 Mount Umunhum Summit Project. Funding availability in the overall portfolio is sufficient.

MAA 23 Portfolio Allocation:	\$27,970,000
Life-to-Date Spent (as of 5/31/2017):	\$10,519,650
Total Encumbrances:	\$5,517,981
Proposed Amendment:	\$689,965
Balance Remaining (Proposed):	\$11,242,404

BOARD COMMITTEE REVIEW

The Planning and Natural Resources Committee forwarded their preferred option for the Summit Project to the full Board on August 11, 2015, which the full Board unanimously approved on August 25, 2015. The preferred option includes the Mount Umunhum Trail to the summit, of which the Trail Steps would be a part of to complete the trail alignment layout.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act.

CEQA COMPLIANCE

Construction of the Mount Umunhum Summit Area was included in the Mount Umunhum Environmental Restoration and Public Access Plan EIR, which was certified by the Board on October 17, 2012 (R-12-91). Subsequently the Board approved two EIR Addenda: one on December 9, 2015 (R-15-165) for minor project modifications related to installation of gates and fencing, and acquiring a road access easement to Mount Thayer for District vehicles, contractors, and emergency access only (no general public access); and the other on August 10, 2016, (R-16-96), addressing the movement of additional soil material to Mount Thayer, and the addition of three gabion retaining walls for the road rehabilitation project.

NEXT STEPS

Pending Board approval, the General Manager will direct staff to issue a contract amendment in the form of a change order with D-Line to proceed with construction of the trail steps.

Attachment:

1. Project Site Map

Responsible Department Head:

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Prepared by:

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Sierra Azul Open Space Preserve



Mount Umunhum Trail Steps Project

 Trails Steps Location

Midpeninsula Regional
Open Space District
(MROSD)
May 2017



Feet
0 100 200