

Midpeninsula Regional Open Space District

PLANNING AND NATURAL RESOURCES COMMITTEE

R-15-120 August 11, 2015

AGENDA ITEM

AGENDA ITEM 3

Final Design Development Options for the Mount Umunhum Summit Project

GENERAL MANAGER'S RECOMMENDATIONS

- 1. Review three design options and associated estimates of probable cost for the Mount Umunhum Summit Project (Summit Project).
- 2. Confirm the recommendation for a mid-level option, and direct staff to make any desired adjustments to the design.
- 3. Direct staff to proceed with final design development and production of construction documents, which will form the basis for permit submittals and a Request for Bids package.
- 4. Receive update on efforts to locate well or other water source for the project.

SUMMARY

A range of alternative design options have been prepared for public access facilities at the Mount Umunhum Summit, costing from \$2.5M to \$5.08M. These options, including the recommended mid-level option, will be presented to the Planning and Natural Resources Committee (Committee) to finalize the Summit Project Schematic Design. Following Committee confirmation, staff will prepare the final Construction Documents, which will be used as part of permit application submittals and as the basis for a Request for Bids to solicit bid proposals for construction.

MEASURE AA

The Mount Umunhum Summit Project is included in the FY2015-16 Action Plan as Measure AA Project #23-4. This project is part of the "Mt. Umunhum Public Access and Interpretation Projects" portfolio to complete the summit area restoration, and install new parking areas and visitor amenities to allow public access.

BACKGROUND

The Summit Project in Sierra Azul Open Space Preserve will provide a unique destination to some of the best views in the Bay Area with a target timeline to open the site to the public during the fall of 2016. Preliminary public access improvements were presented to the Committee at the April 21, 2015 meeting (R-15-67) and refined designs were presented at the June 30, 2015 meeting (R-15-100). Consulting landscape architects Restoration Design Group (RDG) have

since incorporated Committee feedback received on June 30, including simplifying the design of shade structures to reduce cost. At this time, RDG requires definitive direction on public access features and facilities in order to advance the design development and begin production of construction documents to meet the anticipated public access opening of fall 2016. To facilitate a discussion on the final recommended design with the Committee, staff and consultants will be presenting three options for public access amenities, which includes the General Manager's recommended option.

DISCUSSION

The three options for public access facilities at Mount Umunhum were formulated from the full range of access improvements that were identified as part of the early schematic design phase, and represent a range of total costs from over \$5M (Option A) to approximately \$2.5M (Option C). All options include restoration of natural landforms, planting of native vegetation, an ADA-accessible drop-off area, accessible trails at the summit, and interpretive elements. The cost estimates provided in this report do not include any of the radar tower long-term options nor provisions of potable water. The preliminary summit design, including all other potential improvements, is included as Attachment 1. Detailed cost estimates for Options A, B, and C are provided as Attachment 2.

Option A is considered the most refined and developed option and includes the greatest scope of public access improvements, including a substantial trailhead type picnic shelter with stone walls and solid roof, landform restoration of the upper graded terrace (formerly "Upper Parking"), and a stairway from this area to the West Summit. Option A represents a construction project costing approximately \$5.1 million and delivers a heightened level of detailing and materials beyond typical District design standards.

Option B, which costs approximately \$3.7 million, is similar in most respects to Option A, yet achieves cost savings by replacing the trailhead picnic shelter with a smaller, less expensive shelter retains the landform of the upper graded terrace for use as special event parking, and eliminates the stairway to the West Summit.

Option C is the lowest cost and represents the most modest approach to site development. Option C reduces the ADA-accessible parking capacity, size, and detailing of the summit turnaround; simplifies the custom rock viewing coves with benches, reduces the parking capacity of the main lot, removes the picnic structure from the trailhead, and removes the equestrian area. Option C incorporates typical rustic District design standards for visitor amenities, using, for example, less durable split rail fence instead of more substantial cor-ten metal railing.

A summary cost comparison of the three options is presented in Table 1 below.

Table 1. Summary of Cost Estimates for Three Summer Poject Options					
ITEM / DESCRIPTION	OPTION A	OPTION B	OPTION C		
GENERAL SITE WORK	\$400,000	\$400,000	\$400,000		
GENERAL RESTORATION WORK	\$480,000	\$480,000	\$480,000		
WEST SUMMIT	\$140,800	\$140,800	\$85,800		
TURN-AROUND AND TOWER AREA	\$724,900	\$724,900	\$391,650		
EAST SUMMIT	\$84,000	\$84,000	\$44,000		

Table 1. Summary of Cost Estimates for Three Summit Project Options

UPPER PARKING	\$467,500	\$27,000	\$27,000
SUMMIT STAIR	\$380,000	\$0	\$0
LOWER PARKING	\$488,500	\$463,500	\$293,700
TRAILHEAD	\$347,000	\$172,000	\$30,000
EQUESTRIAN TERRACE (to separate user groups)	\$205,000	\$205,000	\$0
INTERPRETIVE AND OTHER SIGNAGE	\$130,000	\$130,000	\$130,000
General Conditions (Mobilization, O+P - 15% of total)	\$577,155	\$424,080	\$282,323
SUBTOTAL with General Conditions	\$4,424,855	\$3,251,280	\$2,164,473
TOTAL with 15% Design Contingency	\$5,088,583	\$3,738,972	\$2,489,143
UPPER PARKING ALTERNATE - Full Build-out	\$513,800		

RECOMMENDATION

The General Manager recommends Option B as the preferred option. Option B was formulated to strike a balance between the extensive scope of built improvements in Option A, and the minimal facilities and typical materials used in Option C. Option B retains the heightened level of detail and materials of Option A, as is appropriate for a key destination location such as Mount Umunhum, while still remaining in general alignment with the scale of amenities offered at other District Preserves; however, Option B reflects the desires of the Committee to provide a suitable destination location with appropriate amenities not found at other Preserves, such as wind and shade shelters. If potable water is found to be available, it would be incorporated into any of the three Options at the same cost.

FISCAL IMPACT

The Planning Department's FY2015-16 Budget includes \$611,000 for schematic design, permitting, construction documents and initial construction of the new parking areas, restrooms, landing zone, other public access improvements and site amenities. Additional funds will be requested in the FY2016-17 Budget to complete the construction of the Summit Project improvements. Cost for any of the options, including the most expensive Option A, is included in Measure AA allocation for this Project. In addition, generous funding from the State Coastal Conservancy in the amount of \$500,000 for the Summit Project will be used to fund the native plant restoration, which is considered to be a non-capital project and therefore does not qualify for Measure AA funding.

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).

NEXT STEPS

Committee confirmation of the recommended option (i.e., acceptance of a Final Schematic Design) will mark the end of the conceptual design phase. Remaining work will focus on the production of bid documents for contracting, and initiating permitting. No major changes would occur after the Final Schematic Design without a formal change of scope. Construction is scheduled for Spring/Summer 2016. The timeline to meet the goal of providing public access to the summit of Mount Umunhum by October 2016 appears in the table below.

Mount Umunhum Summit Project Implementation Timeline			
Refined Conceptual Design	April 21, 2015 (completed)		
Draft Schematic Design for Committee Review*	June 30, 2015 (completed)		
Final Schematic Design for Committee Review	August 11, 2015 (this meeting)		
Permitting/Construction Documents	Fall 2015		
Approve Restoration Grading Contract**	Winter 2015/16		
Approve Visitor Amenities Construction Contract**	Winter 2015/16		
Construction Phase	Spring/Summer 2016		
Restoration Planting	Fall 2016		

Finally, investigations on providing water to the public (potable or non-potable) are currently ongoing. Staff is soliciting quotes from three separate companies to investigate the possibility of a new well location at or near the summit. An update on this effort will be provided at this meeting.

Attachments

- 1. Draft schematic design
- 2. Cost estimates by option

Responsible Department Head: Jane Mark, AICP, Planning Manager

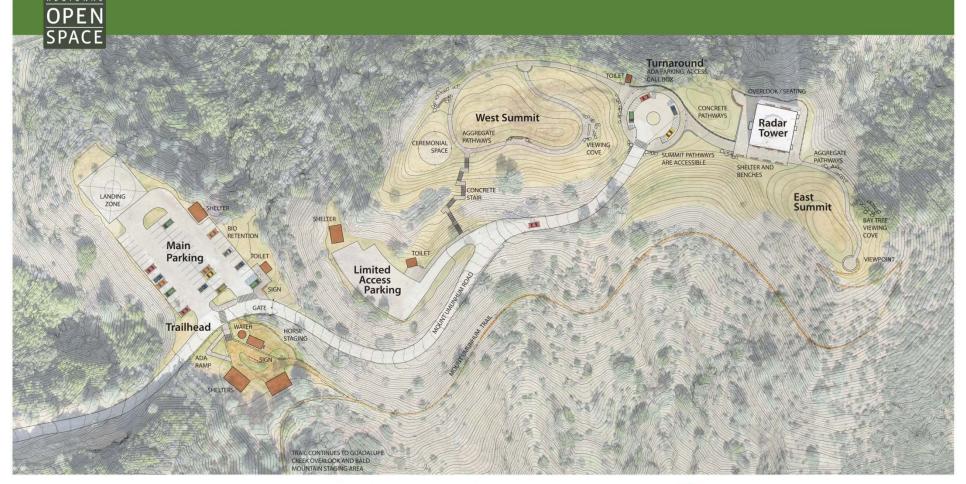
Prepared by: Lisa Bankosh, Planner III Meredith Manning, Senior Planner

Contact: Meredith Manning, Senior Planner

ATTACHMENT 1

MOUNT UMUNHUM SUMMIT PROJECT

Midpeninsula Regional Open Space District



DRAFT SCHEMATIC PLAN 30 June, 2015



EGIONA



Restoration Design Group Team

SANDIS Rutherford + Chekene Ware Associates

Tim Best Vic Claassen Lech Naumovich Leslie Stone Associates Cornerstone Earth Group

Mount Umunhum Summit Project - Schematic Plan - 3 Options Midpeninsula Regional Open Space District / Restoration Design Group, LLC Preliminary Estimate of Probable Construction Costs

7/27/2015

OPTION A

ITEM / DESCRIPTION	QTY. UNIT	COST	TOTAL
GENERAL SITE WORK			
Demolition (Misc.Site Work, Prep Base of Tower For Public Access)	1 LS	\$50,000	\$50,000
Rough Grade Summit, Tower, Parking Areas and Trailhead	1 LS	\$350,000	\$350,000
GENERAL RESTORATION WORK			
Native Seeding	1 LS	\$30,000	\$30,000
Rock Outcrops for Renaturalized Revegetation Areas (From Site or Imported)	1 LS	\$50,000	\$50,000
Soil Preparation	1 LS	\$100,000	\$100,000
Revegetation of Restoration Areas Irrigation Allowance	1 LS 1 LS	\$200,000 \$100,000	\$200,000 \$100,000
Subtotal	I LS	φ100,000	\$100,000 \$480,000
WEST SUMMIT Summit Area ADA Pathways (6 ft. width)	3,400 SF	\$12	\$40,800
Summit Viewing Coves Stone or Concrete Walls (West Summit)	4 EA	\$20,000	\$80,000
Ceremonial Space (West Summit)	1 LS	\$20,000	\$20,000
Subtotal			\$140,800
TURN-AROUND AND TOWER AREA			
Turn-Around and Adjacent Road (AC Paving - Summit Approach Road Excluded)	8,000 SF	\$12	\$96,000
Bollards/Barriers at Turn-Around	1 LS	\$30,000	\$30,000
Truncated Domes at Turn-Around	1 LS	\$15,000	\$15,000
Concrete Paving at Turn-Around, Path To 1st Viewing Cove, Ramp to Tower Court	6,000 SF	\$12 \$	\$72,000 \$42,400
Aggregate Paved ADA Court Around Tower Breezeway Shelter at Tower (Steel)	5,300 SF 1 LS	\$8 \$200,000	\$42,400 \$200,000
Guardrail along Northside of Tower/Court	175 LF	\$150	\$26,250
Stone curb (9") around Turn-Around and Ramp to Tower Court	300 LF	\$150	\$45,000
Galvanized Metal Railing Along Road at Turn-Around	200 LF	\$100	\$20,000
Benches	11 EA	\$5,000	\$55,000
Stone Wall West of Tower (34")	85 LF	\$250	\$21,250
Customized Pre-manufactured Single Vault Toilet Call Box at Turnaround (does not include cable runs from source)	1 LS 1 LS	\$50,000 \$10,000	\$50,000 \$10,000
Water Tank (temporary, non-potable for irrigation)	1 LS	\$12,000	\$12,000
Drainage and Bioretention Areas Allowance (C.3 Areas)	1 LS	\$30,000	\$30,000
Subtotal			\$724,900
EAST SUMMIT			
Summit Area ADA Pathways (6 ft. width)	2,000 SF	\$12	\$24,000
Bay Tree Viewing Cove (East Summit)	1 LS	\$20,000	\$20,000
Viewpoint (Circular Stone Seatwall) Subtotal	1 LS	\$40,000	\$40,000 \$84,000
Subicial			\$04,000
UPPER PARKING - RENATURALIZED		A AAA	Aaaaaaaaaaaaaa
Rough Grading and Rock Slope Naturalization	1 LS	\$300,000	\$300,000
Native Seeding Rock Outcrops for Renaturalized Revegetation Areas (From Site Areas or Imported)	1 LS 1 LS	\$12,500 \$50,000	\$12,500 \$50,000
Soil Preparation	1 LS	\$30,000 \$25,000	\$30,000 \$25,000
Revegetation of Restoration Areas	1 LS	\$50,000	\$50,000
Irrigation Allowance	1 LS	\$30,000	\$30,000
Subtotal			\$467,500
SUMMIT STAIR			
In Grade Concrete Stairway and Railing (From Upper Parking Entry to West Summit)	1 LS	\$300,000	\$300,000
Retaining Walls at Stair Landings	1 LS	\$50,000	\$50,000
Improvements at Base of Stair (Vehicle Pull-out / Pedestrian Landing) Subtotal	1 LS	\$30,000	\$30,000 \$380,000
Subtotal			\$300,000

ITEM / DESCRIPTION	QTY. UNIT	COST	TOTAL
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Lower Parking and Entry Road Section (AC Paving)	25,000 SF	\$10	\$250,000
Landing Zone (AC Paving)	6,400 SF	\$10	\$64,000
Concrete Pathways to Toilet and Crosswalk to Trailhead	1,000 SF	\$12	\$12,000
Custom Pre-manufactured Double Vault Toilet	1 LS 1 LS	\$75,000	\$75,000
Sign Board	-	\$5,000	\$5,000
Vehicular Gate for Restricted Access to Summit	1 LS	\$7,500	\$7,500
Drainage and Bioretention Areas Allowance (C.3 Areas) Subtota	1 LS al	\$75,000	\$75,000 \$488,500
TRAILHEAD		^	* ***
Trailhead Area Aggregate Paving	2,500 SF	\$8	\$20,000
Concrete Stairs and ADA Ramp	1 LS	\$25,000	\$25,000
Split-Rail Fence	400 LF	\$40	\$16,000
Benches	2 EA	\$3,000	\$6,000
Sign Board	1 LS	\$5,000	\$5,000
Picnic Shelter (Solid Roof w/ Stone Walls)	1 LS	\$275,000	\$275,000
Subtota	1		\$347,000
EQUESTRIAN TERRACE (BELOW TRAILHEAD)			
Housing Trail (4 ft. width)	9.000 SF	\$12	\$108,000
Equestrian Staging Area	1 LS	\$20,000	\$20,000
Parking Area (AC Paving)	1 LS	\$45,000	\$45,000
Picnic Area	1 LS	\$20,000	\$20,000
Water Tank (non-potable for fire)	1 LS	\$12,000	\$12,000
Subtota	al		\$205,000
INTERPRETIVE AND SIGNAGE			
Interpretive Allowance (Summit and Tower Areas)	1 LS	\$100,000	\$100,000
Site, Trail, and Regulatory Signage	1 LS	\$30,000	\$30,000
OPTION A SUBTOTAL			\$3,847,700
General Conditions (Mobilization, O+P - 15% of total)			\$577,155
SUBTOTAL with General Conditions			\$4,424,855
Design Fee Contingency (15%)			\$663,728
OPTION A TOTAL			\$5,088,583
ADDITIONAL / EXCLUDED ITEMS			
MROSD Soft Costs, Survey, Permits, Coordination and Project Management			Excluded
Summit Approach Road (Estimate is for Summit Court, Turn-around, Parking Areas Only)		Excluded

MROSD Soft Costs, Survey, Permits, Coordination and Project Management	Excluded
Summit Approach Road (Estimate is for Summit Court, Turn-around, Parking Areas Only)	Excluded
Site Geotechnical Slope Stability Studies and Implementation	Excluded
Water and Electrical Service for Temporary Irrigation System	Excluded
40-Year Maintenance Cost (Basic Maintenance Assumed to be Provided by MROSD)	Excluded

OPTION B

ITEM / DESCRIPTION	QTY. UNIT	COST	TOTAL
GENERAL SITE WORK			
Demolition (Misc.Site Work, Prep Base of Tower For Public Access)	1 LS	\$50,000	\$50,000
Rough Grade Summit, Tower, Parking Areas and Trailhead	1 LS	\$350,000	\$350,000
GENERAL RESTORATION WORK			
Native Seeding	1 LS	\$30,000	\$30,000
Rock Outcrops for Renaturalized Revegetation Areas (From Site Areas or Imported)	1 LS	\$50,000	\$50,000
Soil Preparation	1 LS	\$100,000	\$100,000
Revegetation of Restoration Areas	1 LS	\$200,000	\$200,000
Irrigation Allowance Subtotal	1 LS	\$100,000	\$100,000 \$480,000
WEST SUMMIT	3,400 SF	\$12	\$40,800
Summit Area ADA Pathways (6 ft. width) Summit Viewing Coves Stone or Concrete Walls (West Summit)	3,400 SF 4 EA	¢12 \$20,000	\$40,800 \$80,000
Ceremonial Space (West Summit)	1 LS	\$20,000	\$20,000
Subtotal	0	<i>q</i> _0,000	\$140,800
TURN-AROUND AND TOWER AREA			
Turn-Around and Adjacent Road (AC Paving - Summit Approach Road Excluded)	8,000 SF	\$12	\$96,000
Bollards/Barriers at Turn-Around	1 LS	\$30,000	\$30,000
Truncated Domes at Turn-Around	1 LS	\$15,000	\$15,000
Concrete Paving at Turn-Around, Path To 1st Viewing Cove, Ramp to Tower Court	6,000 SF	\$12	\$72,000
Aggregate Paved ADA Court Around Tower	5,300 SF	\$8	\$42,400
Breezeway Shelter at Tower (Steel) Guardrail along Northside of Tower/Court	1 LS 175 LF	\$200,000 \$150	\$200,000 \$26,250
Stone curb (9") around Turn-Around and Ramp to Tower Court	300 LF	\$150	\$20,230 \$45,000
Galvanized Metal Railing Along Road at Turn-Around	200 LF	\$100	\$20,000
Benches	11 EA	\$5,000	\$55,000
Stone Wall West of Tower (34")	85 LF	\$250	\$21,250
Customized Pre-manufactured Single Vault Toilet	1 LS	\$50,000	\$50,000
Call Box at Turnaround (does not include cable runs from source)	1 LS	\$10,000	\$10,000
Water Tank (temporary, non-potable for irrigation) Drainage and Bioretention Areas Allowance (C.3 Areas)	1 LS 1 LS	\$12,000 \$30,000	\$12,000 \$30,000
Subtotal	1 20	ψ00,000	\$724,900
EAST SUMMIT			
Summit Area ADA Pathways (6 ft. width)	2,000 SF	\$12	\$24,000
Bay Tree Viewing Cove (East Summit)	1 LS	\$20,000	\$20,000
Viewpoint (Stone Circular Seatwall)	1 LS	\$40,000	\$40,000
Subtotal			\$84,000
UPPER PARKING (Minimal Improvements)			
Vehicular Gate for Restricted Access to Upper Parking	1 LS	\$7,500	\$7,500
AC Paving Removal at Parking Entry and Regrade to gravel surface	1 LS	\$10,000	\$10,000
Minimal regrading to naturalize topography	1 LS	\$7,500	\$7,500
Native Seeding Subtotal	1 LS	\$2,000	\$2,000 \$27,000
			<i>4_1,000</i>
SUMMIT STAIR Not included			
LOWER PARKING			
Lower Parking and Entry Road Section (AC Paving)	25,000 SF	\$10	\$250,000
Landing Zone (AC Paving)	6,400 SF	\$10	\$64,000
Concrete Pathways to Toilet and Crosswalk to Trailhead	1,000 SF	\$12	\$12,000
Pre-manufactured Double Vault Toilet	1 LS	\$50,000	\$50,000
Sign Board Vehicular Cate for Restricted Access to Summit	1 LS	\$5,000 \$7,500	\$5,000 \$7,500
Vehicular Gate for Restricted Access to Summit Drainage and Bioretention Areas Allowance (C.3 Areas)	1 LS 1 LS	\$7,500 \$75,000	\$7,500 \$75,000
Subtotal	1 20	ψι 0,000	\$463,500
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ITEM / DESCRIPTION		QTY. UNIT	COST	TOTAL
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Trailhead Area Aggregate Paving		2,500 SF	\$8	\$20,000
Concrete Stairs and ADA Ramp		1 LS	\$25,000	\$25,000
Split-Rail Fence		400 LF	\$40	\$16,000
Benches		2 EA 1 LS	\$3,000 \$5,000	\$6,000
Sign Board			\$5,000	\$5,000
Picnic Shelter (Post and Beam w/ Seatwall)	Subtotal	1 LS	\$100,000	\$100,000
	Subtotal			\$172,000
EQUESTRIAN TERRACE (BELOW TRAILHEAD)				
Housing Trail (4 ft. width)		9.000 SF	\$12	\$108.000
Equestrian Staging Area		3,000 SI 1 LS	\$20.000	\$20,000
Parking Area (AC Paving)		1 LS	\$20,000 \$45.000	\$45,000
Picnic Area		1 LS	\$20.000	\$20,000
Water Tank (non-potable for fire)		1 LS	\$12,000	\$12,000
	Subtotal	1 20	ψ12,000	\$205.000
	Custota			\$200,000
INTERPRETIVE AND SIGNAGE				
Interpretive Allowance (Summit and Tower Areas)		1 LS	\$100,000	\$100,000
Site, Trail, and Regulatory Signage		1 LS	\$30,000	\$30,000
OPTION B SUBTOTAL				\$2,827,200
General Conditions (Mobilization, O+P - 15% of total)				\$424,080
SUBTOTAL with General Conditions				\$3,251,280
Design Fee Contingency (15%)				\$487,692
OPTION B TOTAL				\$3,738,972

ADDITIONAL / EXCLUDED ITEMS	
MROSD Soft Costs, Survey, Permits, Coordination and Project Management	Excluded
Summit Approach Road (Estimate is for Summit Court, Turn-around, Parking Areas Only)	Excluded
Site Geotechnical Slope Stability Studies and Implementation	Excluded
Water and Electrical Service for Temporary Irrigation System	Excluded
40-Year Maintenance Cost (Basic Maintenance Assumed to be Provided by MROSD)	Excluded

OPTION C

ITEM / DESCRIPTION	QTY. UNIT	COST	TOTAL
GENERAL SITE WORK Demolition (Misc.Site Work, Prep Base of Tower For Public Access)	1 LS	\$50,000	\$50,000
Rough Grade Summit, Tower, Parking Areas and Trailhead	1 LS	\$350,000 \$350,000	\$350,000 \$350,000
Rough Grade Gummit, Tower, Fanking Arous and Trainfold	1 20	<i>\\</i> 000,000	φ000,000
GENERAL RESTORATION WORK			
Native Seeding	1 LS	\$30,000	\$30,000
Rock Outcrops for Renaturalized Revegetation Areas (From Site Areas or Imported) Soil Preparation	1 LS 1 LS	\$50,000 \$100,000	\$50,000 \$100,000
Revegetation of Restoration Areas	1 LS	\$100,000 \$200,000	\$100,000 \$200,000
Irrigation Allowance	1 LS	\$100,000	\$100,000
	total	<i>Q</i> .00,000	\$480,000
WEST SUMMIT			
Summit Area ADA Pathways (6 ft. width)	3,400 SF	\$12	\$40,800
Summit Viewing Coves Log Benches (West Summit)	4 EA	\$7,500	\$30,000
Ceremonial Space (West Summit)	1 LS	\$15,000	\$15,000
Sub	total		\$85,800
TURN-AROUND AND TOWER AREA (Reduced Turn-Around w/ 2 ADA Stalls)			
Turn-Around & Adjacent Road (AC Paving - Summit Approach Road Excluded)	6,500 SF	\$12	\$78,000
Bollards/Barriers at Turn-Around	1 LS	\$15,000	\$15,000
Truncated Domes at Turn-Around	1 LS	\$15,000	\$15,000
Concrete Paving at Turn-Around, Path To 1st Viewing Cove, Ramp to Tower Court	5,000 SF	\$12	\$60,000
Aggregate Paved ADA Court Around Tower	5,300 SF	\$8	\$42,400
Guardrail along Northside of Tower/Court	175 LF	\$150	\$26,250
Split-Rail Fence Along Road at Turn-Around Benches	200 LF 9 EA	\$40 \$5,000	\$8,000 \$45,000
Customized Pre-manufactured Single Vault Toilet	1 LS	\$50,000 \$50,000	\$43,000 \$50,000
Call Box at Turnaround (does not include cable runs from source)	1 LS	\$10,000	\$10,000
Water Tank (temporary, non-potable for irrigation)	1 LS	\$12,000	\$12,000
Drainage and Bioretention Areas Allowance (C.3 Planters)	1 LS	\$30,000	\$30,000
Sub	total		\$391,650
EAST SUMMIT			
Summit Area ADA Pathways (6 ft. width)	2,000 SF	\$12	\$24,000
Viewpoint (Aggregate Paving w/ Log Benches)	1 LS	\$20,000	\$20,000
UPPER PARKING (Minimal Improvements)			
Vehicular Gate for Restricted Access to Upper Parking	1 LS	\$7,500	\$7,500
AC Paving Removal at Parking Entry and Regrade to gravel surface	1 LS	\$10,000	\$10,000
Minimal regrading to naturalize topography	1 LS	\$7,500	\$7,500
Native Seeding	1 LS	\$2,000	\$2,000
Sub	total		\$27,000
LOWER PARKING (Reduced Size)			
Partial Lower Parking and Entry Road Section (AC Paving)	15,000 SF	\$10	\$150,000
Landing Zone (Compacted Earth Surfacing)	6,400 SF	\$3	\$19,200
Concrete Pathways to Toilet and Crosswalk to Trailhead	1,000 SF	\$12 \$50,000	\$12,000
Pre-manufactured Double Vault Toilet Sign Board	1 LS 1 LS	\$50,000 \$5,000	\$50,000 \$5,000
Vehicular Gate for Restricted Access to Summit	1 LS	\$5,000 \$7,500	\$5,000 \$7,500
Drainage and Bioretention Areas Allowance (C.3 Planters)	1 LS	\$50,000	\$50,000
o	total	,	\$293,700

ITEM / DESCRIPTION		QTY. UNIT	COST	TOTAL
TRAILHEAD (Reduced Amenities)				
Trailhead Area Aggregate Paving		1,000 SF	\$8	\$8,000
Timber Stairs		1 LS	\$5,000	\$5,000
Split-Rail Fence		150 LF	\$40	\$6,000
Benches		2 EA	\$3,000	\$6,000
Sign Board		1 LS	\$5,000	\$5,000
5	Subtotal		. ,	\$30,000
EQUESTRIAN TERRACE (BELOW TRAILHEAD)				
No improvements in this area				
INTERPRETIVE AND SIGNAGE				
Interpretive Allowance (Summit and Tower Areas)		1 LS	\$100,000	\$100,000
Site, Trail, and Regulatory Signage		1 LS	\$30,000	\$30,000
OPTION C SUBTOTAL				\$1,882,150
General Conditions (Mobilization, O+P - 15% of total)				\$282,323
SUBTOTAL with General Conditions				\$2,164,473
Design Fee Contingency (15%)				\$324,671
OPTION C TOTAL				\$2,489,143
ADDITIONAL / EXCLUDED ITEMS				

ADDITIONAL / EXCLODED ITENIS	
MROSD Soft Costs, Survey, Permits, Coordination and Project Management	Excluded
Summit Approach Road (Estimate is for Summit Court, Turn-around, Parking Areas Only)	Excluded
Site Geotechnical Slope Stability Studies and Implementation	Excluded
Water and Electrical Service for Temporary Irrigation System	Excluded
40-Year Maintenance Cost (Basic Maintenance Assumed to be Provided by MROSD)	Excluded