REQUEST FOR PROPOSALS
TRAIL BUILDING PROJECT
MARYLAND MOUNTAIN TRAIL SYSTEM
City of Black Hawk, Colorado
October 9, 2019

I. PURPOSE

It is the intent of the City of Black Hawk ("City") to enter into a contract ("Contract") with a qualified, professional Trail Builder ("Contractor") to provide pre-construction and construction services necessary to complete construction of the Maryland Mountain Trail System Project ("Project").

II. SCOPE OF WORK

The Scope of Work to be provided by the selected candidate will include assistance to the City during the process of pre-construction, construction, and the one-year warranty period. Specific tasks to be performed by the Contractor include those generally performed by professional trail builders in the trail-building community.

The City intends to construct a multi-use trail system on Maryland Mountain, which is generally located north of Chase Gulch and west of State Highway 119 in the City of Black Hawk, Colorado. Total proposed trail length included within this Contract is expected to be approximately 11.3 miles. A Maryland Mountain Park Master Plan is included herein as Exhibit A, a set of construction details is included herein as Exhibit B, and trail specifications are included herein as Exhibit C. Some project specifics are as follows:

A. The Phase 1 Tramway Mainline, as shown in Exhibit A, has been constructed by others.
B. The Hidden Treasure Trailhead, including the proposed bridge over Highway 119, is being constructed by others.
C. The constructed trail system will not exactly match the trail routes proposed in Exhibit A, but trail routes and destinations shall generally follow the concept presented in the Master Plan. Detailed route design and trail staking/flagging shall be provided by the Contractor. The constructed trail shall minimize construction impacts and future maintenance while providing a durable, high-quality trail experience. Flagged routes shall be approved by the City prior to construction.
D. Contractor shall construct approximately 6.9 miles of machine-built singletrack mountain-biking trails. Ultimate trail width shall be 24" to 30" per the details included in Exhibit B. The maximum width of the trail corridor shall be less than 48".
E. Contractor shall construct approximately 2.3 miles of hand-built singletrack mountain-biking trails. Ultimate trail width shall be 18" to 24" per the details included in Exhibit B. Maximum width of disturbance shall be less than 36".
F. Contractor shall construct approximately 2.1 miles of hand-built hiking trails. Ultimate trail width shall be 18" to 24" per the details included in Exhibit A. Maximum width of disturbance shall be less than 36".
G. Contractor shall construct approximately 600 feet of hand-built hike-a-bike trail through difficult terrain using switchbacks, rock stairs, and rock walls as necessary.

H. Trail work shall include vegetation removal, grading, slope stabilization, and compaction.
I. Contractor shall facilitate biweekly on-site progress meetings with the City. Contractor shall coordinate a final walk-through with the City following construction to identify any items that need correction.
J. All trail construction shall conform to the guidelines and specifications presented in Trail Solutions, IMBA's Guide to Building Sweet Singletrack, as published by the International Mountain Bicycling Association.
K. Contractor shall be familiar with backcountry operations and safety protocols as well as "leave no trace" practices.
L. Where necessary, rock can be harvested on-site to be used in retaining walls.
M. The Phase 3 "Mainline Repair", as depicted on Exhibit A, will be constructed by others under a separate contract.
N. The Phase 4 "Future Connection to Briggs Lot", as depicted on Exhibit A, will be constructed under a separate contract.
O. Trail identification and historic interpretive signage will be designed and installed by others.
P. Contractor shall develop an operations and maintenance plan for the Project.
Q. Prospective candidates are strongly encouraged to visit the site to evaluate the terrain, vegetation, proposed routing, etc. If vehicle access into upper Chase Gulch is desired, prospective candidates shall coordinate with Matt Reed at (303) 582-2288 or mreed@cityofblackhawk.org during regular business hours to gain access.

III. SUBMITTAL REQUIREMENTS and SCHEDULE

Proposals must be received by 4:00pm, Thursday, December 5th, 2019. It is the responsibility of the Contractor to ensure that the submittal arrives at the Public Works office prior to the time and date indicated above. Mail or deliver submittals to the City of Black Hawk Public Works at P.O. Box 68, 987 Miners Mesa Road, Black Hawk, CO 80422.

Submittals shall be clearly marked Trail Builder Proposals, Maryland Mountain Trail System. Contractor shall provide four (4) complete hard copies and one (1) electronic (.pdf) copy of their Proposal.

For questions or additional information on this RFP, contact Matt Reed, Project Manager at (303) 582-2288 or mreed@cityofblackhawk.org.

The current schedule for Trail Builder selection is as follows, and is subject to change by the City:

RFP Available to Prospective Trail Builders:	Wednesday, October 9th, 2019
Deadline for RFP Questions:	Tuesday, November 12th, 2019
Final Addendum to RFP Issued (if necessary):	Friday, November 15th, 2019
Proposals Due:	4:00pm, Thursday, December 5th, 2019
Trail Builder Interviews (at City's Option):	Mid-December, 2019
Contract approved by City Council:	Wednesday, January 8th, 2020
Desired Construction Start Date:	Early Spring, 2020
Desired Construction End Date:	Fall, 2020

Proposals shall include the following information:

A. OVERVIEW OF THE TEAM

1. Identify roles and responsibilities of your team members using a simple organizational chart.
2. Identify relevant experience of key team members, including resumés as applicable.
3. Provide a brief description of how your team will maximize quality and value received by the City of Black Hawk on this Project.

B. PROJECT EXPERIENCE

1. The selected Contractor shall demonstrate expertise in the construction of singletrack trails within an environmentally-sensitive setting under similar specifications. Provide a description of relevant projects completed by your team, including information about the owner, scope, cost, and completion date of each project. Emphasize projects with similar scope to the Project.
2. To minimize the environmental impact and to keep the footprint of disturbance within the immediate trail construction area only, construction equipment shall be limited to hand tools or small walk-behind or ride-on trail-building dozers and other mechanized equipment. Provide the type of tools and equipment that would be used on the hand-built and machine-built trail sections.
3. Provide a list of references and professional affiliations.

C. TRAIL BUILDER COST PROPOSAL

1. Provide a Cost Proposal to include all activities shown in the above Scope of Work. Cost Proposal may be provided in any format. However, costs shall be broken out by activity where appropriate to ensure that everything requested in the Scope of Work is included in the Cost Proposal.
2. The actual constructed length of the trails may vary from the estimated trail lengths included herein. To allow the City to make a consistent comparison between all Proposals, assume the estimated lengths shown in the scope of Work are exactly what will be constructed when preparing the Cost Proposal. However, please add as separate line items (not included in the overall Cost Proposal) lineal foot pricing to construct each type of trail in excess of the estimated lengths.
3. A sample of the City's Contract is included with this RFP for reference. This sample Contract can be used to identify terms and conditions, including insurance requirements.
4. The submitted Cost Proposal constitutes a binding offer to perform the trail-building services required to complete this Project.

D. SCHEDULE

1. Provide a pre-construction and construction schedule for the Project that coincides with your team's availability. Schedule may be provided in any format.
2. The schedule will be evaluated on clarity, accurate description of schedule elements, and realistic durations.

IV. EVALUATION and SELECTION CRITERIA

A selection/evaluation committee will analyze and rate the Proposals provided, based on the factors shown in Exhibit D.

Upon review of the proposals, the City may designate the most qualified proposals as finalists. These finalists may be invited to make oral presentations and participate in a question and answer session with the City.

The City of Black Hawk reserves the right to enter into negotiations with a trail builder, to reject any or all Proposals, and to waive any irregularities or informalities.

V. ACKNOWLEDGEMENT STATEMENT

Contractor must sign below to acknowledge the conditions of the RFP and return this page with their Proposal.

The undersigned states under penalty of perjury that their Proposal is true to the best of their knowledge and contains current accurate information as of the date identified below.

MARYLAND MOUNTAIN TRAIL SYSTEM

TRAIL BUILDING PROPOSAL

Name of Contractor:_____

Address: _____

_____

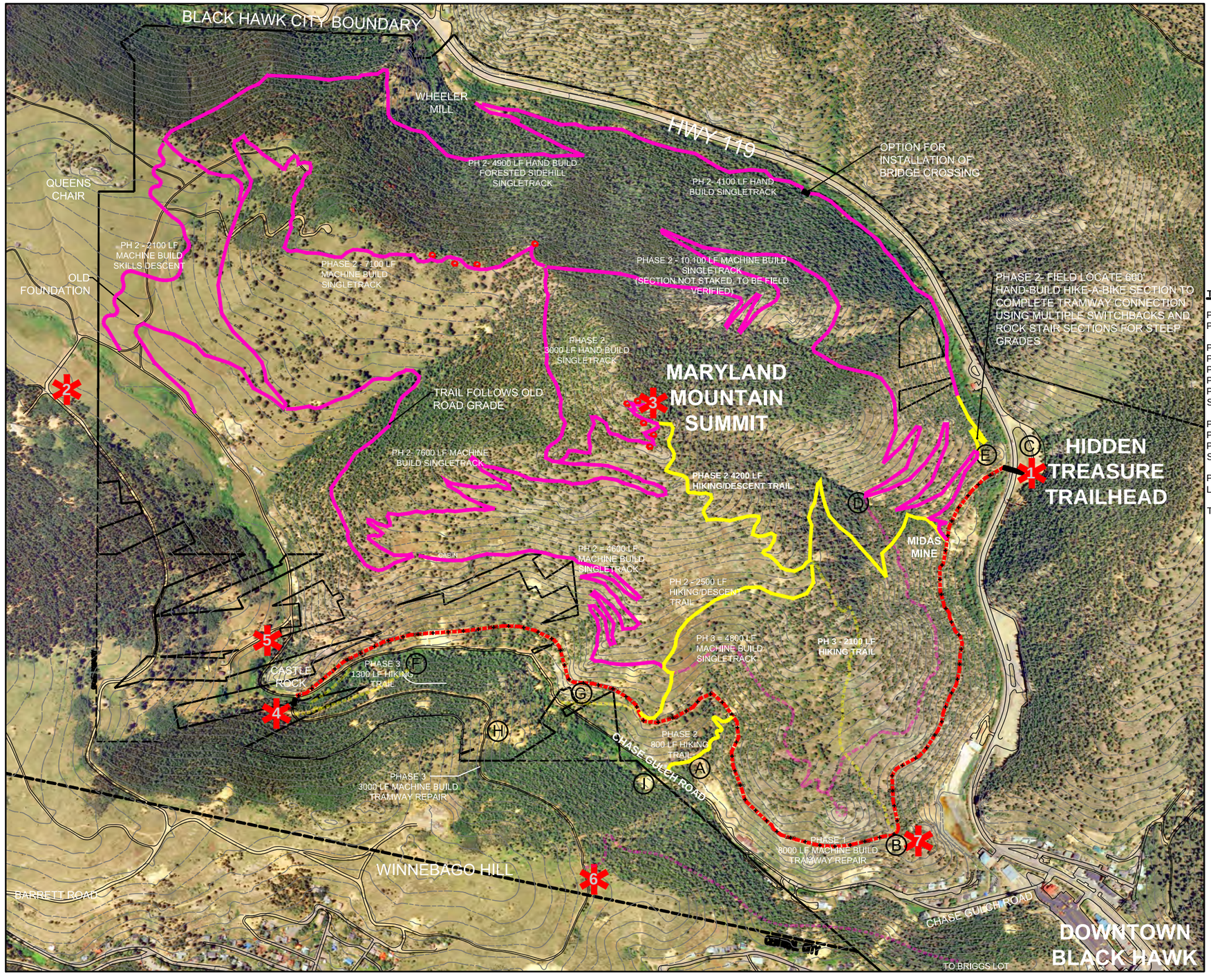
Phone:_____

Print Name:_____

Title:_____

Email Address:_____

Authorized Signature:_____ Date:_____



PLAN LEGEND

- EXISTING HISTORIC TRAMWAY MAINLINE
- PHASE 2 AND PHASE 3 (DASHED) SINGLETRACK MTN BIKE TRAIL ROUTE
- PHASE 2 AND PHASE 3 (DASHED) HIKING TRAIL ROUTE
- TRAIL DESTINATION
- HISTORIC DESTINATION WITH INTERPRETATION
- TECHNICAL TRAIL
- PEDESTRIAN/BIKE BRIDGE

TRAIL PHASES

PH 1 - HIDDEN TREASURE TRAILHEAD
PH 1 - MAIN LINE = 8000'/1.5 MILES

PH 2 - MACHINE BUILD SINGLETRACK = 29,400'
PH 2 - HAND BUILD SINGLETRACK = 12,000'
PH 2 - HIKING TRAILS = 7500'
PH 2 - HIKE A BIKE = 600'
PH 2 - MACHINE BUILD SKILLS = 2100'
SUBTOTAL = 51,600' / 9.8 MILES

PH 3 - MAINLINE REPAIR = 3000'
PH 3 - MACHINE BUILD SINGLETRACK = 4800'
PH 3 - HIKING TRAIL = 3400'
SUBTOTAL = 11,200' / 2.1 MILES

PH 4 - FUTURE CONNECTION TO BRIGGS LOT AT GREGORY STREET TBD

TOTAL TRAILS = +/-13.4 MILES

TRAIL SYSTEM DESTINATIONS

1. HIDDEN TREASURE TRAILHEAD / PARKING / RESTROOMS
2. FUTURE POTENTIAL CONNECTION
3. MARYLAND MOUNTAIN SUMMIT
4. WATERFALL / CASTLE ROCK
5. CONTINENTAL MILLS OUTPOST
6. POTENTIAL CITY CONNECTION
7. TRAMWAY OVERLOOK / REST-STOP
8. HISTORICAL INTERPRETIVE OPPORTUNITIES (B)

A. BONANZA MILL
B. SITE OF WRECKS OF ENGINES 2&3
C. HIDDEN TREASURE MINE
D. OLD CABIN
E. DEEP MINESHAFT
F. BELDEN MILL VIEWING AREA
G. ROBERT EMMET MINE
H. QUEEN OF THE WEST MINE
I. SARATOGA MILL SKELETAL RECONSTRUCTION

MARY HART DESIGN
land planning + landscape architecture

EXHIBIT A

Maryland Mountain Park Master Plan

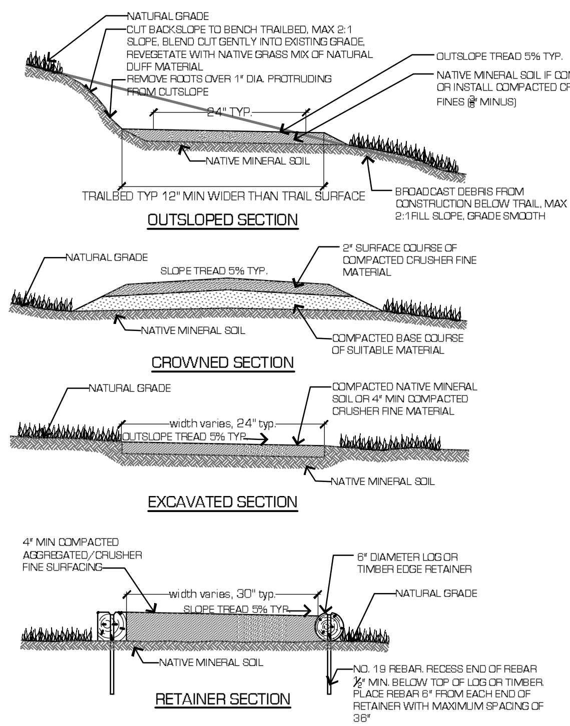
City of Black Hawk, CO

SCALE: 1" = 200'

August 16, 2019

EXHIBIT B

DETAILS:



OUTSLOPE TREAD 5% TYP.

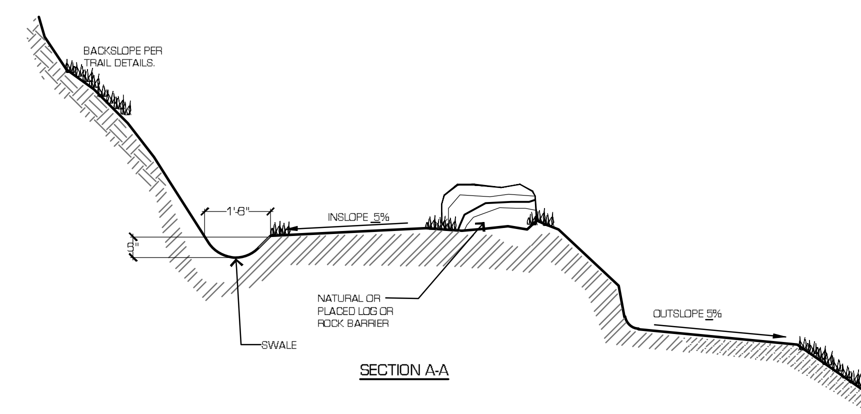
NATIVE MINERAL SOIL IF COMPACTABLE OR INSTALL COMPACTED CRUSHER FINES (⅜" MINUS)

TRAIL CONSTRUCTION NOTES:

1. TRAIL WIDTH IS TYPICALLY 18"-24" WIDE, THOUGH MAY VARY 12" LESS OR MORE DEPENDING ON SITE CONDITIONS. TRAIL BENCH IS 36"-48" USING MINI TRAIL DOZER EQUIPMENT ONLY.
2. LAYOUT SHALL FOLLOW "ROLLING CONTOUR" PRINCIPALS - GENTLY TRAVERSING A HILL OR SIDESLOPE WITH OUTSLOPED TREAD AND GENTLE UNDULATIONS/GRADE REVERSALS TOWARD DOWNHILL EDGE TO MINIMIZE ERIOSION. GRADE REVERSALS ARE RECOMMENDED TO BE INSTALLED EVERY 50 - 100 FEET TO FORCE WATER TO DRAIN OFF THE TRAIL. SEE "GRADE DIP" DETAIL.
3. FALL LINE LAYOUTS AS WELL AS FLAT AREAS ARE TO BE AVOIDED. CONSTRUCTION OF TRAILS IN FLAT AREAS ARE TO USE A CROWNED OR RETAINER SECTION.
4. TRAIL GRADE SHOULD NOT EXCEED HALF THE GRADE OF THE SIDE SLOPE IT IS CROSSING.
5. AVERAGE OR OVERALL TRAIL GRADE IS TO BE LESS THAN 10%. TYPICAL GRADES OF LESS THAN 6% WITH SHORT SECTIONS UP TO A MAXIMUM OF 20% ARE RECOMMENDED.
6. INCLUDE NATURAL OBJECTS TO ENHANCE TIGHT AND TWISTY TRAIL LAYOUTS TO DEFINE SIDES OF THE TRAILS AND EMPHASIZE TURNS. LARGE ROCKS, LOGS, SCRUB OAK OR OTHER OBSTACLES MAY BE STAGGERED ON EITHER SIDE OF THE TRAIL OR CREATE CHOKEPOINTS. DO NOT LINE TRAIL WITH LOGS OR ROCKS WHICH WILL TRAP WATER AND INCREASE EROSION.
7. PROVIDE A TRAIL CORRIDOR CEILING OF 8' MINIMUM, OR 10' FOR EQUESTRIAN TRAILS. THE GOAL IS TO MINIMIZE IMPACT TO THE ENVIRONMENT AND LEAVE AREA LOOKING AS NATURAL AS POSSIBLE
8. EARTHMOVING MACHINES MAY BE UTILIZED FOR CONSTRUCTION PROVIDED THE OPERATOR IS SUITABLEY TRAINED AND THE PROPER MECHANIZED TOOL IS SELECTED TO ENABLE CREATION OF APPEALING TRAIL CORRIDORS.

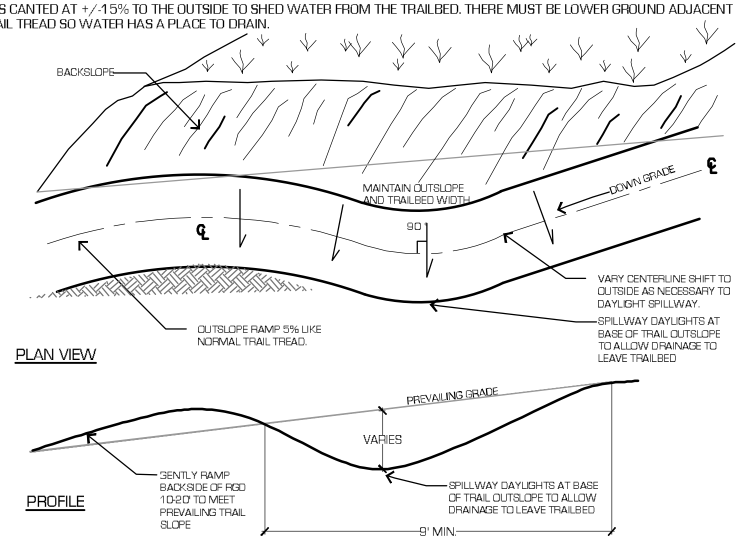
MACHINE-BUILD SINGLETRACK TRAIL SECTIONS

SCALE: n.t.s.



GRADE DIP NOTES:

1. GRADE DIPS ARE SUBTLE, NAVIGABLE SHAVED DOWN SECTIONS OF TRAIL FOLLOWED BY A GENTLE DIRT RAMP TO HELP COLLECT WATER AND DRAW IT OFF THE TRAIL TREAD.
2. LOOK FOR A NATURAL ROLL OR CHANGE IN TRAIL GRADE THAT COULD BE ACCENTUATED WITH A RGD.
3. ALTERNATIVE TRAIL DRAINAGE SOLUTION IS A "KNICK." A KNICK IS A 5'-10' SEMICIRCULAR SHAVED DOWN SECTION OF TRAIL THAT IS CANTED AT +/-15% TO THE OUTSIDE TO SHED WATER FROM THE TRAILBED. THERE MUST BE LOWER GROUND ADJACENT TO TRAIL TREAD SO WATER HAS A PLACE TO DRAIN.

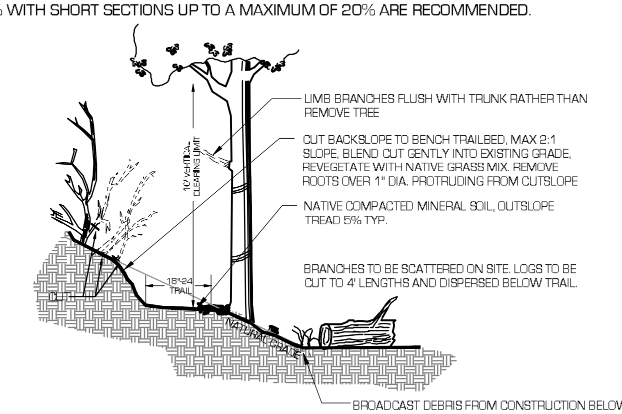


ROLLING GRADE DIP

SCALE: n.t.s.

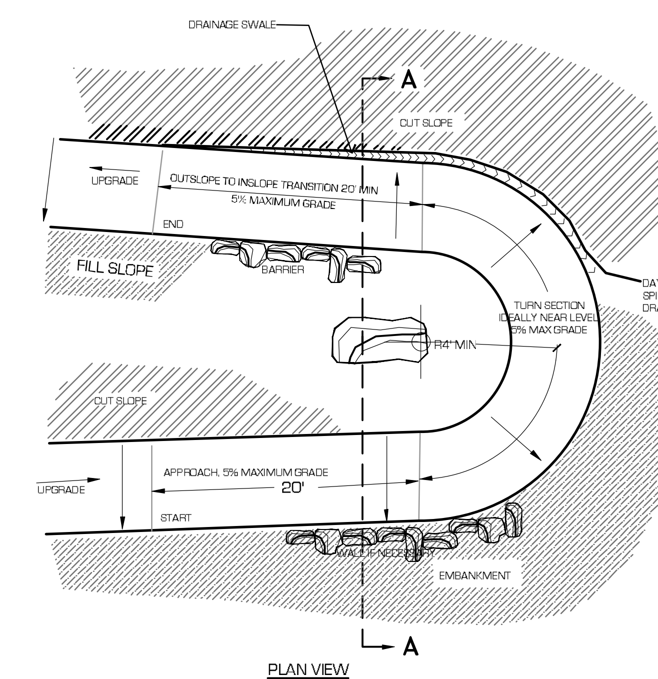
TRAIL CONSTRUCTION NOTES:

1. HAND BUILD TRAIL AND PLATFORM WIDTH IS TYPICALLY 18"-24" WIDE, THOUGH MAY VARY 6" LESS OR MORE DEPENDING ON SITE CONDITIONS.
2. LAYOUT SHALL FOLLOW "ROLLING CONTOUR" PRINCIPALS - THIS SECTION TYPICALLY TRAVERSES A STEEP HILSIDE. USE OUTSLOPED TREAD AND GENTLE UNDULATIONS/GRADE REVERSALS TOWARD DOWNHILL EDGE TO MINIMIZE ERIOSION. GRADE REVERSALS ARE RECOMMENDED TO BE INSTALLED EVERY 50 - 100 FEET TO FORCE WATER TO DRAIN OFF THE TRAIL. SEE "GRADE DIP" DETAIL.
3. TRAIL GRADE SHOULD NOT EXCEED HALF THE GRADE OF THE SIDE SLOPE IT IS CROSSING. AVERAGE OR OVERALL TRAIL GRADE IS TO BE LESS THAN 10%. TYPICAL GRADES OF LESS THAN 6% WITH SHORT SECTIONS UP TO A MAXIMUM OF 20% ARE RECOMMENDED.



HAND BUILD SINGLETRACK

SCALE: NTS



ROLLING CROWN SWITCHBACK

SCALE: n.t.s.

DRAWING NO: 5

DRAWING TITLE: ADD/ALT SCOPE CONSTRUCTION DETAILS

REVISIONS		
NO.	DATE	ISSUE
1	10.1.16	PRICING

Tramway Mainline
Black Hawk, CO

SCALE: AS SHOWN

NOTE: IF THIS DRAWING IS NOT 24"X36", IT HAS BEEN REVISED FROM ITS ORIGINAL SIZE. SCALE IS NO LONGER APPLICABLE.

MARY HART DESIGN
landscape architecture | land planning

EXHIBIT C
Maryland Mountain Park Trail Construction Specifications
City of Black Hawk, CO
9.26.19

General Standards for Mountain Bike Trails

1. Trail Design

Design of all routes must be guided by the sustainable trail principles promulgated by the 2004 edition of IMBA's *Trail Solutions: IMBA's Guide to Building Sweet Singletrack.*

2. Trail Flagging

Trail corridor should be pin flagged at a minimum of 50' intervals. All trees requiring removal over 3" DBH shall be marked with flagging tape indicating they are to be removed. Client must approve the final alignment before construction can commence.

3. Corridor clearing

Corridor clearing shall be confined to within three (3) feet of trail and backslope edges. Woody material such as stumps, logs, and brush shall be removed from the trail tread. Debris shall be treated as follows: Cut and scatter all branches and brush with no debris left within 10 feet of trail or arranged to blend into the landscape; butt-ends of any sawed limbs placed facing away from trail. Any downslope spoils must be distributed such that no berm is present. Spoils must be stabilized with a covering of forest duff.

4. Tread

The trail tread shall consist of packed earth or rock. Any stumps should be excavated and removed from the trail tread. All tread shall be constructed with a maximum of three (3) feet wide bench whenever possible. Trail width specification applies to active tread only, backslope is not included. Trail slope will typically follow the "Half Rule" – that the tread grade is not greater than half the percentage of the slope it travels across. If fill is required, it should be supported by a stone retaining wall sufficient to support equestrian use. Backslope of trail should be graded to a 3 to 1 slope until it matches the existing slope.

5. Trail Slope

Trail grade should average 8% or less and slope max target will be 15 % to prevent user-based erosion, except if armored or surface is built of rock or wood. Typically, 5% outslope is to be provided on all treads for drainage unless in a bermed condition.

6. Rocks

Maximum size rock material to be left in trail shall not protrude more than three (3) inches from the tread surface, unless trail difficulty incorporates stone challenge elements. All rock embedded in the trail surface should be stable. When used in structures, care will be taken to match rock to the immediate surroundings. Excess tool marks on rocks are not acceptable. Non-native rock may not be imported into a work area without approval of Client.

7. Trail, Finished Condition

Hand finish and grading of backslope, down slope spoils, and drainage features shall leave a surface that matches the texture of the surrounding forest floor while enabling water to drain off the trail.

8. Turns

All turns should have a minimum radius of eight (8) feet and can be either a traditional rolling crown switchback or, on slopes with a maximum cross grade of 20%, an insloped turn with an entrance and exit rolling grade dip.

9. Grade reversals

Grade reversals are to be installed at appropriate intervals to prevent erosion. A designed grade reversal or constructed rolling grade dip should generally occur at least every 100 feet. Any grade reversal must be strongly anchored to discourage short cutting.

10. Invasive species

All hand tools and mechanized equipment should be free of invasive seeds and clean of any dirt and mud when entering a project site. Equipment transported from a site with invasives to another site should be cleaned.

11. Mechanized Equipment Best Practices

All track marks will be raked smooth. Impacted area will be finished to have a *nature shape* – spoils piles rounded, smoothed and cleared of significant brush, blade edges blended. When applicable, machinery shall not travel over finished trail construction for removal from the project site. A spill kit will be onsite whenever mechanized equipment is operated. Scarring of trees is to be avoided. Significant and repeated scarring may result in a financial penalty of $100 per tree over 4" diameter at breast height ("DBH").

12. Switchbacks

The switchback unit includes any walls, armoring, and drainage features associated with the structure. All switchbacks will be constructed in the "rolling crown" style. Uphill leg of switchback will have a strong grade reversal to maximize lifespan of structure. Entry and exit legs will have a grade of less than 20% unless armored by stone. Interior of legs will be strongly anchored to discourage short cutting. Turn platform will have a radius range of between 6' and 9' to allow access by skilled equestrians while maintaining a backcountry esthetic. Any retaining structures will be constructed of stone and comply with all Rock Retaining Wall specifications. If multiple switchbacks are required, they will be sited to minimize "stacking." Where feasible, insloped turns can be substituted for switchbacks with the approval of a Client's representative.

13. Insloped Turn

The insloped turn unit includes any walls, armoring, and drainage features associated with the structure. Each insloped turn includes a Grade Reversal or Rolling Grade Dip before and after. The dips for these drainage features should be a minimum of 6' long and can have a cross slope of up to 15%. Uphill dip should be sited to minimize unweighting effects for higher speed users. Turning radius should be consistent and greater than 8'. Cross slope on the trail tread in the turn should be no more than 20%. Turns with a running grade over 20% in the apex should have a rock armored drain 2' wide following the inside the turn.

14. Rock Armor

Armor trail tread surface where necessary with stone pitching at least 10" deep. Stones should be stable and aligned perpendicular to the direction of travel. Variance in the surface height of stones can be no more than 1". Each end of a pitched section shall be supported by larger "bookend" stones embedded in the ground. Additional guide stones may be required if the final surface of the trail appears more rugged than the adjacent landscape.

15. Rock Retaining Walls

Rock retaining walls should be stable and battered (inclined back into the slope) a minimum of 15% from vertical. All walls should have rubble backing of at least 6" in depth behind the wall to allow for drainage and to prevent damage from frost heaves. The base of the wall should be placed on firm compacted mineral soil or rock outcroppings. Any small stones used to "chink" larger stones in place should be placed in the back of the wall. The top of the wall should not be counted in the width of the trail tread. The top layer of stones should be stable and large enough to avoid being dislodged by shared use traffic. Deadmen (stones that extend from the

wall into the slope) should be used to ensure integrity. There should one deadman for every 5 square feet of wall.

Multi-use, Machine Build Singletrack Mountain Bike Trail

- Machine Construction with maximum machine width of 48”
- Maximum average grade 8-10%, maximum sustained grade 20% short distances
- Trail corridor 5’ feet wide maximum, trail ceiling 10-12 feet high
- Finished trail tread intended to be 18”- 24” wide compacted outsloped natural surface trail, tread to be generally free of obstructions. Trail tread will be 36” to 48” wide until vegetation regrows narrowing the trail tread to 18” - 24”.
- Rolling grade designed with drainage features such as nicks where necessary, downslope berm material to be dispersed on site

Hand Build Singletrack Mountain Bike Trail

- Hand built construction
- Maximum average grade 10-12%, Maximum sustained grade 25% short distances
- Trail tread corridor 24”-30” width, trail ceiling 8-10 feet high
- Finished trail tread 18”-24” wide generally using full bench cut, compacted outsloped natural surface
- Clear corridor of existing trees, major trees at sides of corridor may remain and be limbed for height clearance. Tree material to be cut up into portable sections and dispersed on site.
- Cut trees flush and/or remove based on trail disturbance and structural integrity, finished trail tread will have obstructions, rocks, roots etc that will remain as technical elements
-Rolling grade designed with drainage features such as nicks where necessary, downslope berm material to be dispersed on site
- Switchback radius maximized for terrain and rideability, minimum 4-6 feet

Hiking Trail Only (or non-climbing mountain bike trail)

- Hand built construction
- Maximum average grade 15%, Maximum sustained grade 30% short distances
- Clear corridor of existing trees, major trees at sides of corridor may remain and be limbed for height clearance. Tree material to be cut up into portable sections and dispersed on site.
- Cut trees flush and/or remove based on trail disturbance and structural integrity, finished trail tread will have obstructions, rocks, roots etc that will remain as technical elements.
- Trail corridor maximum 4 feet wide, trail ceiling 8-10 feet high
- Finished trail tread 18-24” wide natural compacted outsloped surface
- Designed with drainage features where necessary
- Switchback radius maximized for terrain, minimum 4 feet
- Incorporate rock steps if needed

EXHIBIT D
EVALUATION CRITERIA

CITY OF BLACK HAWK
REQUEST FOR PROPOSALS
TRAIL BUILDER
MARYLAND MOUNTAIN TRAIL SYSTEM

	Reviewer's Score (0.0 - 5.0)	Weight	Points
A. QUALIFICATIONS OF THE TEAM			
Team Organization and Clarity of Responsibilities	5	2	**10**
Qualifications of Team Members	5	4	**20**
Demonstrated Quality and Value	5	2	**10**
B. PROJECT EXPERIENCE			
Relevance and Success Demonstrated by Examples	5	5	**25**
References and Professional Affiliations	5	2	**10**
C. PROPOSAL			
Cost Proposal	5	5	**25**
Construction Schedule	5	3	**15**
D. OVERALL CLARITY OF PROPOSAL	5	3	**15**
TOTAL SCORE			**130**