



PUBLIC MEETING: Port Commission Action Meeting

DATE: Tuesday **September 19, 2023, 6 PM**

LOCATION: Cascade Locks City Hall 140 Wa Na Pa St, Cascade Locks, OR 97014

<https://us02web.zoom.us/j/85806615790>

AGENDA

- 1) Commission meeting called to order
 - a. Pledge of Allegiance
 - b. Roll Call
 - c. Modifications, Additions and Changes to the Agenda
- 2) Public Comment (Speakers may be limited to three (3) minutes)
- 3) Discussion
 - a. Determine date to further discuss City Electrical Systems Upgrade
- 4) Consent Agenda (**Consent Agenda may be approved in its entirety in a single motion. Items are considered routine. Any Commissioner may take a motion to remove any items from the Consent Agenda for individual discussion).
 - a. Approval of minutes for Commission Meeting from August 15, 2023 and September 5, 2023 – [Page 2](#)
 - b. Ratification of bills in the amount of \$331,017.29 – [Page 8](#)
 - c. Approval of payroll for August 18, 2023 in the amount of \$39,964.54 and for September 5, 2023 in the amount of \$43,119.24
- 5) Business Action Items
 - a. Approval of Recommendation for Award of Cascade Locks Trail Project – Brittany Berge – [Page 9](#)
 - b. Consider Ordinance Amendment Regarding Alcohol Use on Port Property – Jeremiah Blue
- 6) Commissioner Comments
- 7) General Manager Report
- 8) Executive Session under ORS.192.660(2)(e) Real Property Negotiations
- 9) Adjournment

IMPORTANT DATES

September 21, 2023

Hood River County Sheriff Office, Deputy Joel Carmody – GM Blue

Skamania County Chamber of Commerce; Carson, WA – VP Klute and GM Blue

September 27, 2023

Special Districts of Oregon (SDAO) Training; Salem, OR – VP Klute, C Nance and C Thweatt

Port of Kalama Tour; Kalama, WA – GM Blue and C Peterson

September 27-28, 2023

Oregon Infrastructure Summit; Corvallis, OR

September 28-29, 2023

Oregon Public Ports Association (OPPA) Annual Conference; Astoria, OR – P Lorang and GM Blue

October 3, 2023 and October 17, 2023

Port of Cascade Locks Commission Meeting

October 11-13, 2023

Pacific Northwest Waterways Association (PNWA) Annual Convention; Vancouver, WA – P Lorang, VP Klute, GM Blue



PUBLIC MEETING: Port Commission Meeting

DATE: Tuesday **August 15, 2023, 6 PM**

LOCATION: Cascade Locks City Hall 140 Wa Na Pa St, Cascade Locks, OR 97014

<https://us02web.zoom.us/j/85806615790>

MINUTES

- 1) Commission meeting called to order 6:00 PM
 - a. Pledge of Allegiance
 - b. Roll Call
 - i. President Lorang
 - ii. Vice-President Klute
 - iii. Commissioner Nance
 - iv. Commissioner Peterson
 - v. Commissioner Thweatt
 - vi. Members of the Staff and Other Support – GM Jeremiah Blue, Secretary Keriane Stocker, Accountant Chuck Mosher, Accounting Specialist Melissa Warren
 - vii. Members of the Public – Zoom Attendees – Hallie Ballou, Janice Crane, Chris Matlock, the following with no last name: dave
 - c. Modifications, Additions and Changes to the Agenda
 - d. Declarations of Potential Conflicts of Interest
- 2) Public Comment (Speakers may be limited to three (3) minutes)
- 3) Consent Agenda (**Consent Agenda may be approved in its entirety in a single motion. Items are considered routine. Any Commissioner may take a motion to remove any items from the Consent Agenda for individual discussion).
 - a. Approval of minutes for Commission Meeting from July 18, 2023 and August 1, 2023
 - b. Ratification of bills in the amount of \$808,445.68
 - c. Approval of payroll for July 2023 in the amount of \$87,640.70

C NANCE MADE A MOTION THAT WE APPROVE THIS CONSENT AGENDA; VP KLUTE SECONDED; Passed Unanimously

- 4) Business Action Items
 - a. Approve Next Action for Strategic Business Plan
 - i. GM Blue summarized that last week, Annie from Moss Adams presented what the Commission's options were. A copy of the current draft was sent out to the commissioners. He also explained the current financial status of the plan and informed that Business Oregon is aware that the Port may be postponing their SBP and would still be in compliance. C Nance asked whether we have in the budget for the \$40,000. GM Blue replied that they do. VP Klute expressed her wish to collaborate with the City so that the Port and City's goals are aligned as much as possible. P Lorang stressed the importance of considering community long-term viability and quality of life. He also mentioned that Mayor Fallon suggested trainings regarding Community Development Code. Commissioners showed interest. Klute added that she would be fine pushing the SBP to the first of the year.

VP KLUTE MOVED TO POSTPONE THE STRATEGIC BUSINESS PLAN CREATION UNTIL THE FIRST OF THE YEAR; C NANCE SECONDED; Passed Unanimously

- b. Decide on Cascade Locks Museum Board Member and Energy Council Representative
 - i. VP Klute expressed interest in the Cascade Locks Museum Board. C Thweatt expressed interest as the Energy Council Representative. C Nance added that he would be willing to attend as a substitute for the Energy Council if C Thweatt cannot make a meeting.

VP KLUTE MOVED TO HAVE PAM (C THWEATT) APPOINTED TO THE ENERGY COUNCIL BOARD AS ONE OF THEIR REPRESENTATIVES; C NANCE SECONDED; Passed Unanimously

C THWEATT MADE A MOTION TO APPOINT CARRIE (VP KLUTE) TO THE MUSEUM BOARD; C PETERSON SECONDED; Passed Unanimously

5) Commissioner Comments

- a. Discussion regarding the Sternwheeler being back in operation was made. C Nance described the experience as "awesome". C Peterson informed that the Gorge Canoe Club had about ten (10) people following the wake on the first day of the soft opening. He added that it was good to see that they were hiring a lot of locals. The upcoming PCT Days was also mentioned. VP Klute inquired if the Port was interviewing other commercial brokers. GM Blue replied that the Commission previously met Anne Medenbach and her contract is with the Port Attorney at the moment. He advises that the Commission should determine whether urgency to find a tenant was the priority, or if competition was more important. C Nance stated that the commission rate would be relatively similar so it really depended on how much interest each commercial broker can bring. VP Klute also inquired about Sternwheeler Days. Warren replied that it was an event held by the Lions Club and was not a Port event. It had activities and food vendors. C Nance said that it would be nice to have an event during the shoulder season. Ideas were discussed to promote a similar event. C Thweatt wanted to add that, in regard to the SBP, she hopes the Commission can support Jeremiah (GM Blue) in his decision-making and really give support where he needs it. C Peterson added that he attended the ODOT tour of the Mitchell Point Tunnel. C Nance mentioned that in the next meeting he would like to potentially revisit the Port's law regarding alcohol use in Marine Park. He inquired about any updates about digitizing the Port as well as trainings available.
- b. P Lorang announced the arrival of his new granddaughter.

6) General Manager Report

- a. GM Blue announced that he met with the City regarding the Conditional Use Permit for Ixtapa. The City is asking for a traffic study for the restaurant. The Port will employ Darrin (Eckman) to do the study. He informed that the Port will also be working on Flex 6 later this month. The water pipe break that occurred in the winter will be repaired.
- b. C Nance inquired if the EV charging stations was an item that was going to next week's agenda. GM replied that it was presented to the Commission to see if it was something they were interested in and the groundwork was just getting started. C Thweatt followed up about the list of projects the Port is currently working on. GM Blue reported that he has it ready and was finalizing it to ensure that nothing was missing. He would send it out after the meeting. C Peterson requested that a discussion about the use of the beach be put on the next agenda.

C NANCE MADE A MOTION TO ADJOURN; C PETERSON SECONDED; Passed Unanimously

7) Adjournment 6:44 pm

Port of Cascade Locks

Port Commission President
Brad Lorang

Port Commission Secretary
Albert Nance

Date Signed

Date Signed



PUBLIC MEETING: Port Commission Business Meeting

DATE: Tuesday **September 5, 2023, 6 PM**

LOCATION: Cascade Locks City Hall 140 Wa Na Pa St, Cascade Locks, OR 97014

<https://us02web.zoom.us/j/85806615790>

MINUTES

- 1) Commission meeting called to order 6:01 PM
 - a. Pledge of Allegiance
 - b. Roll Call
 - i. President Lorang
 - ii. Vice-President Klute
 - iii. Commissioner Nance
 - iv. Members of the Staff and Other Support – GM Jeremiah Blue, Secretary Keriane Stocker, Accountant Chuck Mosher, Accounting Specialist Melissa Warren, Attorney Tommy Brooks, Gov't Relations Consultant Mark Johnson
 - v. Members of the Public – Jordon Bennett City Administrator; Zoom Attendees – Janice Crane, Darrin Eckman, Chris Matlock, Ginger Shepherd (Columbia Gorge News), TZ
 - c. Modifications, Additions and Changes to the Agenda
 - d. Declarations of Potential Conflicts of Interest
- 2) Presentations
 - a. City Electrical System Upgrades – Jordon Bennett, City Administrator
 - i. Johnson gave the Commission an introduction to the project, explaining that the Port was awarded \$2.4M by the State to be invested in business development in the Business Park, specifically on electrical infrastructure. CA Bennett's presentation detailed the proposal to purchase BPA land and substation near the Business Park, remove the old BPA substation, install a new 35 megawatt substation and to relocate the 14 megawatt Pyramid substation next to the new substation. The new substation would be dedicated to the Business Park and would allow for maximum power distribution.
 - b. Commission Policy and Procedures Manual – Mark Knudson, SDAO
 - i. Knudson presented on Board Training and Commission Policies. GM Blue reminded that Port policies should ideally be reviewed annually, therefore any concerns and modifications the Commission wish to make in the interim, can also be addressed at that time.
- 3) Discussions
 - a. Joint Meeting Between Port of Cascade Locks and City of Cascade Locks
 - i. Thoughts regarding a joint-work session with the City were shared as well as topics that the commission felt should be focused on. An overall outline included: Focusing on overlapping points on which the Port and City's vision and SBP aligned with each other, shared challenges between the entities, business growth and the downtown area, affordable housing, and collaborating for holiday events. Consideration of public input was a priority all around. P Lorang recommended getting in touch with John Morgan, owner of the MorganCPS group and previous city planner. C Peterson also expressed interest in re-establishing the Joint Work Group for Economic Development

(JWEGED) sub-committee. C Thweatt, additionally, suggested that officials from each entity should attend each other's meeting.

- b. Review Ordinance Regarding Alcohol Use on Port Property
 - i. GM Blue reviewed the current Port's ordinance with the Commission. He was instructed to explore specifics on public intoxication and the prohibition of glass containers.

4) Commissioner Comments

- a. VP Klute stated that she would like to see the Son of Man lease on next week's agenda, including particulars on rent vs expense.
- b. P Lorang stated that he is enjoying his semi-retirement.
- c. C Nance commented that he would also like to see the Son of Man lease on next week's agenda. He would also like to have another conversation involving the substation.
- d. C Peterson informed that his priorities were the substation and business growth. He recently participated in several Oregon Government Ethics Commission (OGEC) trainings. He added that there will be an opening ceremony for the Columbia Historic Highway on Saturday, October 9th.
- e. C Thweatt mentioned that she would like more information on the timeline for the EDA grant. She would also like to investigate methods for receiving public feedback.

5) General Manager Report

- a. GM Blue reported that summer traffic on the bridge is wrapping up. He also made the commission aware that at the next Commission meeting, the commissioners will meet with the coordinators of major events that took place throughout the season and will discuss lessons learned and successes. GM Blue also informed that Accountant Specialist Warren will be on a leave of absence and the commission can contact Accountant Mosher or himself with questions and concerns. He also reported that lane-painting on the road up to the tollbooth will commence at the end of the month. C Klute asked whether there were any updates on Flex 6. GM Blue replied that the Port is working with Commercial Broker Anne Medenbach and she is actively promoting it and reaching out to her client base.

6) Executive Session under ORS 192.660(2)(f) Discussion of exempt public records and ORS.192.660(2)(h) Legal counsel regarding litigation or litigation likely to be filed

- a. Recess from Regular Session, into Executive Session at 8:56 pm
- b. Recess out of Executive Session, into Regular Session at 10:10 pm

C NANCE MAKES A MOTION TO ADJOURN; C PETERSON SECONDS; Passed Unanimously

7) Adjournment 10:11 pm

Port of Cascade Locks

Port Commission President
Brad Lorang

Port Commission Secretary
Albert Nance

Date Signed

Date Signed

**Port of Cascade Locks
Bill List
From 8-16-2023
To 9-15-2023**

Date	Num	Name	Credit
08/25/2023	58172	Hayley L McCurdy	\$ 450.00
08/28/2023	58173	Columbia Gorge Construction, LLC	\$ 14,000.00
09/05/2023	58236	AquaTechnex	\$ 1,595.00
09/05/2023	58237	Brittany Berge	\$ 188.72
09/05/2023	58238	Business Oregon	\$ 14,057.54
09/05/2023	58239	Chuck Mosher	\$ 203.49
09/05/2023	58240	Cingular	\$ 491.66
09/05/2023	58241	City - Cascade Locks	\$ 8,579.05
09/05/2023	58242	CM & WO Sheppard Inc	\$ 262.07
09/05/2023	58243	Coburn Electric	\$ 290.00
09/05/2023	58244	Durham & Bates Insurance	\$ 42,591.00
09/05/2023	58245	Home Depot	\$ 253.13
09/05/2023	58246	Hood River Supply	\$ 180.79
09/05/2023	58247	Jeanetta Blue	\$ 100.00
09/05/2023	58248	Karen Carter	\$ 1,000.00
09/05/2023	58249	Kathy Fallon	\$ 141.04
09/05/2023	58250	Keriane Stocker	\$ 40.00
09/05/2023	58251	Les Schwab Tire Center	\$ 36.98
09/05/2023	58252	Merina+Co	\$ 2,382.05
09/05/2023	58253	Michael-Alan Mechanical Inc	\$ 523.00
09/05/2023	58254	ONSITE Supply House	\$ 441.74
09/05/2023	58255	Santander Bank, N.A.	\$ 8,618.00
09/05/2023	58256	Ship Interior Systems	\$ 1,390.00
09/05/2023	58257	Staples Business Advantage	\$ 256.43
09/05/2023	58258	Tenneson Engineering	\$ 29,912.88
09/05/2023	58259	Elyzabeth Nagode	\$ 520.00
09/05/2023	58260	Special Dist Ass'n of Oregon	\$ 440.86
09/06/2023	58261	Cathy Fallon	\$ 341.02
09/07/2023	58262	Gorge Networks	\$ 773.25
09/07/2023	58269	Century Link	\$ 89.74
09/07/2023	58270	First Bankcard 1	\$ 1,978.28
09/07/2023	58271	First Bankcard 4	\$ 758.42
09/07/2023	58272	Jeremiah Blue	\$ 3,775.00
09/07/2023	58273	JettlyLight, LLC.	\$ 120,000.00
09/07/2023	58274	Joanne Willace	\$ 40.00
09/11/2023	58275	Building Innovations LLC	\$ 6,170.30
09/11/2023	58276	First Bankcard 2	\$ 792.99
09/11/2023	58277	First Bankcard 3	\$ 1,277.85
09/11/2023	58278	LoopNet, Inc	\$ 89.00
09/11/2023	58279	RA Gray	\$ 61,746.40
09/11/2023	58280	RADCOMP Technologies	\$ 4,239.61
			\$ 331,017.29

Action Item

PORT COMMISSION REPORT

DATE: September 18, 2023

TO: Port Commission - Meeting of September 19, 2023

FROM: **Brittany Berge, Special Projects Coordinator**

SUBJECT: **Approve Recommendation for Award of Cascade Locks Trail Project**

SYNOPSIS: In 2021, the Columbia River Gorge National Scenic Area (CRGNSA) approved the development of the Cascade Locks Trail System, created in partnership with the Port of Cascade Locks (Port) and the Northwest Trail Alliance (NWTa). The system will eventually consist of nearly 15 miles of new multi-use trails, supported by new trailheads, that will connect to the existing network of Gorge trails around Cascade Locks. The purpose of this project was to help meet the growing demand for mountain biking opportunities in the Pacific Northwest and to provide visitor-related economic development to the community of Cascade Locks.

Later in 2021, the Port, with the support of NWTa and the CRGNSA, received a grant from the Oregon Parks and Recreation Department to fund the construction of approximately 6.3 miles of bike-optimized new trail. NWTa is currently constructing approximately 3.0 miles of the trail as a match for the grant; this RFP is to construct the balance of approximately 3.3 miles. Located due east of Cascade Locks, the site is on what is known as Wyeth Bench, to the north and below the Gorge Face.

The Port has received two proposals for the RFP for Phase 1 of the Cascade Locks Trail Construction. Unfortunately, both bids came in over the awarded grant amount from OPRD of \$130,950, therefore will be unable to complete the full scope of work outlined in the RFP. The decisions coming before the commission at this time is to select the bidder and allow Chris Bernhardt and Mark Johnson to work with the selected bidder to determine how much of the trail can be completed for the awarded amount. We received two bid amounts for \$174,001.58 and \$217,546.20. It is recommended that the commission provisionally awards the bid to Ptarmigan Ptrails, LLC and allows staff to negotiate scope of work.

This issue comes to the Port Commission for formal action at this time.

PORT COMMISSION OPTIONS: There are two options for the Port Commission at this time.

- A. Award the contract to Ptarmigan Ptrails, LLC to construct phase one of the Cascade Locks Trail System, and direct staff and Port contractors to work with Ptarmigan to determine the work plan that can be**

accomplished with grant funds available for the project from Oregon Parks and Recreation, and any other sources that may become available.

- B. Reduce the amount of trail to be built (pending OPRD approval), finding additional funding (maybe through economic development grants), seeing if the CRGNSA has anything they can kick in, and/or seeing if NWTa can take on additional construction.**
- C. Take other action as may be desired by the Commission.**

Recommended Motion. A motion to award the contract to Ptarmigan Ptrails, LLC to construct phase one of the Cascade Locks Trail System, and direct staff and Port contractors to work with Ptarmigan to determine the work plan that can be accomplished with grant funds available for the project from Oregon Parks and Recreation, and any other sources that may become available.

PORT OF CASCADE LOCKS

CASCADE LOCKS TRAIL CONSTRUCTION

REQUEST FOR PROPOSALS

AUGUST 9, 2023

PROJECT MANAGER:
MARK JOHNSON
PORT OF CASCADE LOCKS
427 PORTAGE ROAD (PO BOX 307)
CASCADE LOCKS, OR 97014
PHONE: 541-308-5306

REQUEST FOR PROPOSAL

Dear Prospective Bidder:

The Port of Cascade Locks (Port) invites you to submit a proposal for construction of a portion of Phase I of the new Cascade Locks Trail System. The Port is looking for proposals to complete the scope of work attached within the time frame presented. This Request for Proposal (RFP) is being conducted in accordance with Port Policies and Procedures, Oregon Administrative Rules (OAR's), and Oregon Revised Statutes (ORS) that govern Ports (ORS 777) and public contracting (ORS 279B).

This document contains the instructions that must be followed by any proposer submitting a proposal. Noncompliance with these instructions shall be cause for disqualification.

All questions and discussion regarding the RFP must be directed solely to Mark Johnson at the Port. Mark Johnson's contact information is listed below.

Mark Johnson
541-308-5306
mjohnson@portofcascadelocks.org

CLOSING DATE AND LOCATION

Completed RFP submissions must be transmitted electronically to Mark Johnson no later than 5:00 PM, PDT on September 13, 2023

The address for submission is:

mjohnson@portofcascadelocks.org

SUBJECT LINE: Cascade Locks Trail Construction

IMPORTANT DATES

This estimated schedule of events may be modified, at the sole discretion of the Project Manager, in order to accommodate unexpected events.

Activity	Date
RFP Issued	August 9, 2023
Onsite pre-bid meeting (optional)	August 23, 2023
Requests for clarifications/questions	August 30, 2023
Responses to clarifications/questions	September 6, 2023
Proposals Due/ Closing Date	September 13, 2023
Proposal Evaluation	September 18, 2023
Recommendation to Management/Approval	September 19, 2023
Notification of Award	September 20, 2023
Start date of Agreement (approx.)	As soon there after

Request for Clarification; Request for Changes to Contract Terms; Protest of Contract Terms

Proposers may submit a written request for clarification of RFP provisions, request for changes to contract terms, including the statement of work, or a protest of contract terms, including the statement of work, no later than the “Deadline for Requests for Change.” Any proposal taking exception to the contract terms or other RFP provisions may be deemed non-responsive and may be rejected. Emails for requests for clarifications, requests for change, and protests shall be marked “Request for Clarification/Request for Changes/Protest” and shall be sent to the following RFP contact:

Mark Johnson

mjohnson@portofcascadelocks.org

Re: Request for Clarification/Request for Changes/Protest

Amendments to RFP

The Port will issue any amendment to the RFP in the form of an addendum. Anyone intending on submitting a proposal should contact Mark Johnson at the Port and request to be added to the list of proposers that will receive information and any amendments to the RFP. Notice of any addendum will be emailed to those proposers that have contacted Mark Johnson.

Cancellation of RFP

The Port may cancel this RFP at any time upon its finding that it is in the public interest to do so, in its sole discretion.

Rejection of Proposals

The Port may reject a particular proposal or all proposals upon its finding that it is in the public interest to do so.

Intent to Award

The Port will provide written notice to any apparent successful proposers. Identification of “apparent successful proposers” is procedural only and creates no right of the named proposers to award of the contracts.

Award

After review of received Proposals, Port staff will make a make a recommendation and the Port will proceed with final award.

SCOPE OF WORK

In 2021, the Columbia River Gorge National Scenic Area (CRGNSA) approved the development of the Cascade Locks Trail System, created in partnership with the Port of Cascade Locks (Port) and the Northwest Trail Alliance (NWTa). The system will eventually consist of nearly 15 miles of new multi-use trails, supported by new trailheads, that will connect to the existing network of Gorge trails around Cascade Locks. The purpose of this project was to help meet the growing demand for mountain biking opportunities in the Pacific Northwest and to provide visitor-related economic development to the community of Cascade Locks.

Later in 2021, the Port, with the support of NWTa and the CRGNSA, received a grant from the Oregon Parks and Recreation Department to fund the construction of approximately 6.3 miles of bike-optimized new trail. NWTa is currently constructing approximately 3.0 miles of the trail as a match for the grant; this RFP is to construct the balance of approximately 3.3 miles. Located due east of Cascade Locks, the site is on what is known as Wyeth Bench, to the north and below the Gorge Face. A mature mixture of deciduous and coniferous trees populate the rocky soil and basalt outcroppings are found throughout the area; a portion of the project burned in the Eagle Creek Fire. There are existing trails to the east, west, and south of the project area, and several active and closed access roads.

The Port seeks to have the project completed as soon as possible but understands that weather, operating restrictions, and other conditions may preclude the rapid execution of the project. In all cases, however, the project must be completed by February 28th, 2025.

The permit issued by the CRGNSA allows mechanized equipment (chainsaws, totters, brushers, excavators, totters, etc) to operating only between July 16 and February 28; noise-producing equipment may *not* operate outside of this window.

GENERAL CONDITIONS

DEBARMENT AND SUSPENSION OF PROPOSERS

Port may debar a proposer for any of the reasons specified in ORS 279B.130 after notice and reasonable opportunity to be heard.

DISCUSSIONS BETWEEN PROPOSERS AND THE PORT

Only the Port employee listed on this RFP (Mark Johnson), or his designated representative, is authorized to provide an explanation or interpretation of language included in the RFP. All interpretations, clarifications, or modifications deemed acceptable by the Port shall be issued as Revisions to the RFP and will be sent to all potential proposers recorded as having received the RFP.

EXAMINATION OF RFP DOCUMENTS

It is a proposer's responsibility to read each question or requirement statement carefully to ensure a complete understanding of the requested information. Failure to do so shall be at the proposer's own risk. Each question should be restated as a heading to the response so that it is clear which question is being addressed.

REQUIRED INFORMATION

In order to be considered responsible, acceptable, and eligible for evaluation; proposals must contain all requested information and shall be in sufficient form and detail to enable a comprehensive understanding and analysis by Port.

It is a proposer's responsibility to ensure that the Port representative listed on this RFP has received all information necessary to determine a proposer's capability to meet the requirements of the RFP. The Proposal shall be submitted in accordance with the structure, format, and content requirements described herein. Failure to comply with these requirements may cause a proposal to be rejected without further consideration.

SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

The proposer shall comply with all state and federal laws and county and local ordinances and regulations which in any manner affect those engaged or employed in the work.

CONSTRUCTION CONTRACTORS REGISTRATION

Oregon law requires all contractors must be registered with the Construction Contractors Board in order to submit a bid to do work and to do work as a contractor. The proposer shall include registration with the Construction Contractors Board within the proposal.

RECEIPT OF PROPOSALS AND CONFIDENTIALITY

Proposals must be received strictly in accordance with the deadline (time and place) for submission, as stated in this RFP. Late proposals shall be rejected. Notwithstanding ORS 192.410 to 192.205, proposals are not required to be open for public inspection until after the notice of intent to award a contract is issued. Port may withhold from

disclosure to the public any materials that are exempt or conditionally exempt from disclosure under ORS 192.501 to 192.501. The fact that proposals may be opened or discussed at a public meeting does not make the contents of the proposals subject to disclosure.

Proposals are confidential until they are opened on the Closing date. After opening, the opened proposals may be available for public inspection under Oregon Public Records Law, ORS 192-410-192.505. Application of the Oregon Public Records Law shall determine if any information claimed to be exempt from disclosure is, in fact, exempt. Proposers shall include material designated as confidential on separate sheets of paper clearly marked as "Confidential," which shall be readily separable from the remainder of the proposal. In the event of a public records request, a proposer will be notified prior to release of any information submitted by the proposer.

SUBMISSION OF PROPOSAL

Proposers shall complete and return all the information requested in the RFP by the stated Due Date and Time as specified in the "Closing Date and Location." Proposals in response to this RFP must be submitted as follows:

- It is proposer's responsibility to transmit the electronic RFP to be delivered by the required Due Date and Time (it is suggested that the proposer send a follow-up e-mail confirming that the proposal has been transmitted to insure that the size of the files transmitted are not stripped off by Port's email security measures).
- One electronic file must be sent by e-mail to the address specified in "Closing Date and Location."

PROTESTS AND JUDICIAL REVIEW

If a proposer feels it has been aggrieved by an award decision as provided in ORS 279B.410, the proposer may appeal the decision through the following administrative process:

- A protest must be in writing, signed by an authorized representative of the proposer and submitted within seven (7) calendar days after A Notice of Intent to Award to the Port's General Manager at the Port's current place of business.
- The Port will consider the merits of the protest as presented in the written documentation and make a decision in a timely manner. Port will issue a written notice to the proposer of Port's decision.
- The Decision will be final and no further administrative remedies shall be available to the proposer.
- Judicial review is available as provided in ORS 279B.405.

Signature Required; Proposer Affirmations

The proposal must be signed by an authorized representative of the proposer. Proposer's signature and submission of a signed proposal in response to the RFP constitutes proposer's affirmation that:

- (a) Proposer has completely read and understands all the provisions of this particular RFP;
- (b) The proposal submitted is in response to the specific language contained in the RFP, and proposer has made no assumptions based upon either verbal or written statements not contained in this RFP or any other previously issued RFP, if any;
- (c) The proposal was prepared independently from all other proposers and without collusion, fraud, or dishonesty;
- (d) Port shall not be liable for any claims or be subject to any defenses asserted by proposer based upon, resulting from, or related to proposer's failure to comprehend all requirements of the RFP;
- (e) Port shall not be liable for any expenses incurred by proposer in either preparing and submitting its proposal or in participating in the proposal evaluation/selection or contract negotiation process, if any;
- (f) Proposer accepts and agrees to be bound by the terms and conditions of the RFP and any negotiable terms and conditions it offers for negotiation to the extent accepted by Port in the negotiation process. Proposer further accepts and agrees to be bound by all the terms and conditions of the contract awarded and to provide all services required to be provided thereunder.

Proposals Constitute Firm Offers

Submission of a proposal constitutes proposer's affirmation that all terms and conditions, including pricing, constitute a binding offer that shall remain firm for a period of ninety (90) days from the Closing Date.

EVALUATION OF PROPOSALS

EVALUATION PROCESS AND SCORING

The Port evaluation team will evaluate the written proposals submitted against the nine (9) evaluation criteria, as described below.

Port may choose to incorporate information learned during presentations, as well as information learned through its own due diligence when evaluating and ranking Proposals. It is always in the best interest of each proposer to provide informative, concise, well-organized technical and business information relative to the requirements in the initial Proposal and in any subsequent submittals in response to subsequent requests for information or clarification by Port.

Port reserves the right, in addition to the evaluation team, to investigate the qualifications and facilities of any proposer.

EVALUATION CRITERIA

Port will use the following criteria to evaluate each proposal. Port will rank proposals based solely upon the information submitted in response to this RFP. Port will evaluate the following criteria

Evaluation Criterion 1 – PRICE (30%)

The price evaluation will be based on the total price to execute the project submitted by the proposer.

Evaluation Criterion 2—WARRANTY, MAINTENANCE AND REPAIRS (PASS/FAIL)

Proposers should include proof of insurance, contractor licensed and bonded in the State of Oregon.

Evaluation Criterion 3—INSTALLATION SCHEDULE AND DUE DATE (20%)

Proposers should include a description of the construction process and due date.

Proposers should include progress benchmarks with corresponding dates for completion.

Evaluation Criterion 4—INDUSTRY EXPERIENCE (50%)

Proposers should include a summary of experience in the industry, with examples of services and products provided to demonstrate experience on similar projects building bike-optimized, multi-use friendly new singletrack trails, preferably in the Gorge but at least in the Pacific Northwest within the northern Oregon or southern Washington Cascade Mountain Range. The Port is requesting a minimum of three (3) references be submitted with your company's bid proposal.

Table of Contents

SECTION 1: PRIMARY MOUNTAIN BIKE TRAIL EXPERIENCES..... 4

SECTION 2: TRAIL CONSTRUCTION SPECIFICATIONS 5

SECTION 3: PROJECT DESCRIPTION AND SCOPE..... 8

3.1 GENERAL PROJECT DESCRIPTION 8

3.2 MOUNTAIN BIKE-OPTIMIZED SINGLETRACK..... 8

3.3 PROJECT SCOPE..... 8

3.4 ADDITIONS AND DELETIONS 8

3.5 DISCREPANCIES..... 9

SECTION 4: MAPS AND CONSTRUCTION NOTES 10

SECTION 5: PROJECT DETAILS 15

5.1 PHASE 1 15

SECTION 6: TRAIL CONSTRUCTION REQUIREMENTS..... 16

6.1 TRAIL DESIGN 16

6.2 BIKE-OPTIMIZED TRAILS..... 16

6.3 TRAIL CONSTRUCTION BEST PRACTICES 16

6.4 CORRIDOR CLEARING AND TRAIL ALIGNMENT..... 16

6.5 DEBRIS..... 17

6.6 TREAD..... 17

6.7 ROCKS..... 18

6.8 WOODY MATERIAL 18

6.9 FALL ZONE CLEARING 18

6.10 BACKSLOPE..... 18

6.11 TRAIL, FINISHED CONDITION..... 18

6.12 SPOILS STABILIZATION..... 18

6.13 TURNS..... 19

6.14 GRADE REVERSALS..... 19

6.15 ABOVE-GRADE EARTHEN STRUCTURES..... 19

6.16 WATER DIVERSIONS 19

6.17 INVASIVE SPECIES..... 19

6.18 FILTER STRIPS..... 20

6.19 MECHANIZED EQUIPMENT BEST PRACTICES 20

6.20 NOISE RESTRICTIONS 20

6.21 SENSITIVE SALAMANDER SPECIES 20

6.22 RIPARIAN AREAS 20

6.23 INVASIVE PLANTS..... 20

6.24 CULTURAL RESOURCES.....	21
6.25 BONNEVILLE POWER ADMINISTRATION.....	21
SECTION 7: UNIT DEFINITIONS AND DETAIL DRAWINGS	22
7.1 TRAIL CONSTRUCTION (FIGURES 1 - 4).....	22
7.2 CLEARING LIMITS (FIGURE 5)	22
7.3 ARMORED TREAD/STONE PITCHING (FIGURE 5)	22
7.4 ROLLING GRADE DIP (FIGURE 7).....	23
7.5 TERRACE (FIGURE 8)	23
7.6 ROCK RETAINING WALL (FIGURE 9)	23
7.7 ROCK ARMORED FORD (FIGURE 10)	24
7.8 CONSTRUCTED TURN/INSLOPED TURN (FIGURE 11).....	24
7.9 CONSTRUCTED TURN/INSLOPED SWITCHBACK.....	24
7.10 BOARDWALK/PUNCHEON (FIGURE 12A-C)	25
7.11 TREAD RECONSTRUCTION	25
7.12 ROCK RIP-RAP	25
7.13 FILLED TREAD TRAIL (FIGURE 13).....	25
7.14 BASIN AND RISE TRAIL (FIGURE 14).....	25
7.15 TRAIL CLOSURE (FIGURE 15).....	25
7.16 TECHNICAL TRAIL FEATURE (TTF)	26
7.17 BOULDERS.....	26
7.18 MODIFICATIONS.....	26
7.19 FIGURES.....	27
SECTION 8: CONTRACTOR QUALIFICATIONS, REQUIREMENTS, AND RESPONSIBILITIES	39
8.1 MOUNTAIN BIKE-OPTIMIZED EXPERIENCE	39
8.2 TOOLS	39
8.3 MECHANIZED EQUIPMENT	39
8.4 BACKCOUNTRY PROTOCOL	39
8.5 TIMETABLE.....	39
8.6 MEETINGS AND PROGRESS REVIEWS.....	40
8.7 WHAT CONTRACTOR PROVIDES.....	40
8.8 COORDINATION.....	40
8.9 PUBLIC SAFETY	40
8.10 EMPLOYEE/SUBCONTRACTOR CONDUCT	40
8.11 COMPETENCE	40

8.12 COMPLIANCE WITH MODERN PRACTICES.....	40
8.13 CONDITION OF MATERIALS AND EQUIPMENT.....	41
8.14 DISPOSAL OF MATERIALS AND SUPPLIES NOT APPROVED.....	41
8.15 DISPOSAL OF MATERIALS AND SUPPLIES NOT USED	41
8.16 USE OF PREMISES – STORAGE.....	41
8.17 TRAIL REHABILITATION.....	41
8.18 USE OF SUBCONTRACTORS	41
8.19 PERMITS	41
8.20 FIRE PROTECTION	42
8.21 OPERATION RESTRICTIONS	42
8.22 SAMPLE TRAIL SECTIONS.....	42
8.23 RESOURCE PROTECTION	42
SECTION 9: APPENDIX A - PROJECT DESIGN FEATURES TO PROTECT SCENIC, NATURAL, CULTURAL, AND RECREATION RESOURCES.....	43

NOTE: THE TERM “CLIENT” HEREIN INCLUDES CLIENT’S REPRESENTATIVE.

SECTION 1: PRIMARY MOUNTAIN BIKE TRAIL EXPERIENCES

Based on the desires identified by the community, the primary trail experiences for the proposed mountain bike trails shall be:

1) *Escape*

An outing that takes a rider's mind off the stress of daily life allows them to return mentally refreshed. This typically entails a route designed to avoid the sights and sounds of other human activity, highlighted by an absorbing, potentially distracting, trail that allows a rider to focus on their adventure.

2) *Challenge*

The trails should be technically stimulating for riders. Challenging trails reward skill and are in high demand by riders as they seek to improve their expertise. This is *not* to say that the trails should be hard, but instead should be challenging within the identified skill level; success comes from incrementally improving one's skills over time to unlock the subtle efficiencies of flow and momentum. The trails should not be straight or contain extended constant grades as these decrease the skills needed to navigate a trail.

These characteristics will vary in primacy based on the landscape, terrain, trail density, proximity to developed facilities (e.g., roads), and other factors.

Difficulty Rating

The trails have been designed with a specific difficulty level in mind, based on the system developed by the International Mountain Bicycling Association. Trail construction must adhere to these guidelines, as modified by this document.

Feasible Trails for the Landscape

Given the typical terrain, vegetation, and soils it is possible to develop bike-optimized singletrack trails that offer a wide range of experiences, including those that highlight the primary experience characteristics of Escape and Challenge.

Design Specifications

The physical characteristics of a trail combine to define the experiences that people will have on the trail. Escape and Challenge will be achieved through a meandering tread with variable sinuosity. The trail will provide a consistently enjoyable experience for riders based on the preferred or mandatory directionality of the trails; some trails will be maximized for an experience in either an ascending or descending direction but the trail will not be heavily manipulated in a manner commonly associated with "flow" trails.

Optional lines are allowed and encouraged for descending-direction riders if they do not impede bi-directional trail movement.

SECTION 2: TRAIL CONSTRUCTION SPECIFICATIONS

Trail Number/Name	6	
Mileage (appx.)	0.44	
Difficulty Rating	More Difficult (Blue Square)	
Primary Experience	Challenge	
Secondary Experience	Escape	
<i>Trail Characteristic/Feature</i>	<i>Value</i>	<i>Description</i>
Finished tread width, 0% - 20% sideslope	24" - 30"	
Finished tread width, 21% - 40% sideslope	24" - 36"	
Finished tread width, 40%+ sideslope	36"	
Horizontal clearance	48" - 72"	Typically centered on trail tread.
Vertical clearance	8' - 10'	Over entire trail tread.
Outslope	0% - 7%	Avoid aggressive outsloping for purposes of drainage; use grade reversals instead.
Inslope	0% - 7%	Avoid aggressive insloping to avoid the sensation of a "flow trail".
Average grade, soil	5%	
Maximum grade, soil	10%	Maximum length of segment = 10'; may be exceeded where flow reduces braking.
Maximum grade, rock or armored, climbing	10%	Maximum length of segment = 10'
Maximum grade, rock or armored, descending	10%	Maximum length of segment = 10'
Maximum grade, soil, optional lines	15%	Maximum length of segment = 20'
Maximum grade, rock or armored, optional lines	20%	Maximum length of segment = unlimited
Grade reversal, frequency (trough-to-trough)	50'	More than outslope, grade reversals will be responsible for draining the tread. Grade reversals should not make the trail feel "hyperkinetic" or resemble a pump track. Instead, the natural terrain should be "surfed" to take advantage of microtopography.
Turn radius	5' - 8'	"Switchberm" style turns with tighter radii and minimal berming necessary only to resist turning forces. Maximum berm height = 12". Backsides of berms must be filled at 1:2.
Roughness/texture	6"	Relief from surround typical soil-based tread
Roughness/texture, optional lines	12"	Relief from surround typical soil-based tread
Sightlines	100'	Continual clear sightlines are expected.
TTFs, natural, unavoidable	allowed, encouraged	Encourage root- and rock-based TTFs to meet Challenge and Escape experiences. Must meet other criteria.
TTFs, natural, optional lines	allowed, encouraged	Encourage root- and rock-based TTFs to meet Challenge and Escape experiences. May exceed roughness/texture criteria by 100%; finished tread width criteria may not be exceeded. Optional lines must be approved in advance.
MTTFs, natural, unavoidable	Not allowed	
MTTFs, natural, optional lines	Not allowed	

Trail Number/Name	7	
Mileage (appx.)	1.81	
Difficulty Rating	More Difficult (Blue Square)	
Primary Experience	Challenge	
Secondary Experience	Escape	
<i>Trail Characteristic/Feature</i>	<i>Value</i>	<i>Description</i>
Finished tread width, 0% - 20% sideslope	24" - 30"	
Finished tread width, 21% - 40% sideslope	24" - 36"	
Finished tread width, 40%+ sideslope	36"	
Horizontal clearance	48" - 72"	Typically centered on trail tread.
Vertical clearance	8' - 10'	Over entire trail tread.
Outslope	0% - 7%	Avoid aggressive outsloping for purposes of drainage; use grade reversals instead
Inslope	0% - 7%	Avoid aggressive insloping to avoid the sensation of a "flow trail".
Average grade, soil	5%	
Maximum grade, soil	10%	Maximum length of segment = 10'; may be exceeded where flow reduces braking.
Maximum grade, rock or armored, climbing	10%	Maximum length of segment = 10'
Maximum grade, rock or armored, descending	10%	Maximum length of segment = 10'
Maximum grade, soil, optional lines	15%	Maximum length of segment = 20'
Maximum grade, rock or armored, optional lines	20%	Maximum length of segment = unlimited
Grade reversal, frequency (trough-to-trough)	50'	More than outslope, grade reversals will be responsible for draining the tread. Grade reversals should not make the trail feel "hyperkinetic" or resemble a pump track. Instead, the natural terrain should be "surfed" to take advantage of microtopography.
Turn radius	5' - 8'	"Switchberm" style turns with tighter radii and minimal berming necessary only to resist turning forces. Maximum berm height = 12". Backsides of berms must be filled at 1:2.
Roughness/texture	6"	Relief from surround typical soil-based tread
Roughness/texture, optional lines	12"	Relief from surround typical soil-based tread
Sightlines	100'	Continual clear sightlines are expected.
TTFs, natural, unavoidable	allowed, encouraged	Encourage root- and rock-based TTFs to meet Challenge and Escape experiences. Must meet other criteria.
TTFs, natural, optional lines	allowed, encouraged	Encourage root- and rock-based TTFs to meet Challenge and Escape experiences. May exceed roughness/texture criteria by 100%; finished tread width criteria may not be exceeded. Optional lines must be approved in advance.
MTTFs, natural, unavoidable	Not allowed	
MTTFs, natural, optional lines	Not allowed	

Trail Number/Name	8	
Mileage (appx.)	1.06	
Difficulty Rating	More Difficult (Blue Square)	
Primary Experience	Challenge	
Secondary Experience	Escape	
<i>Trail Characteristic/Feature</i>	<i>Value</i>	<i>Description</i>
Finished tread width, 0% - 20% sideslope	24" - 30"	
Finished tread width, 21% - 40% sideslope	24" - 36"	
Finished tread width, 40%+ sideslope	36"	
Horizontal clearance	48" - 72"	Typically centered on trail tread.
Vertical clearance	8' - 10'	Over entire trail tread.
Outslope	0% - 7%	Avoid aggressive outsloping for purposes of drainage; use grade reversals instead.
Inslope	0% - 7%	Avoid aggressive insloping to avoid the sensation of a "flow trail".
Average grade, soil	5%	
Maximum grade, soil	10%	Maximum length of segment = 10'; may be exceeded where flow reduces braking.
Maximum grade, rock or armored, climbing	10%	Maximum length of segment = 10'.
Maximum grade, rock or armored, descending	10%	Maximum length of segment = 10'.
Maximum grade, soil, optional lines	15%	Maximum length of segment = 20'.
Maximum grade, rock or armored, optional lines	20%	Maximum length of segment = unlimited.
Grade reversal, frequency (trough-to-trough)	50'	More than outslope, grade reversals will be responsible for draining the tread. Grade reversals should not make the trail feel "hyperkinetic" or resemble a pump track. Instead, the natural terrain should be "surfed" to take advantage of microtopography.
Turn radius	5' - 8'	"Switchberm" style turns with tighter radii and minimal berming necessary only to resist turning forces. Maximum berm height = 12". Backsides of berms must be filled at 1:2.
Roughness/texture	6"	Relief from surround typical soil-based tread.
Roughness/texture, optional lines	12"	Relief from surround typical soil-based tread.
Sightlines	100'	Continual clear sightlines are expected.
Technical Trail Features (TTFs), natural, unavoidable	allowed, encouraged	Encourage root- and rock-based TTFs to meet Challenge and Escape experiences. Must meet other criteria.
TTFs, natural, optional lines	allowed, encouraged	Encourage root- and rock-based TTFs to meet Challenge and Escape experiences. May exceed roughness/texture criteria by 100%; finished tread width criteria may not be exceeded. Optional lines must be approved in advance.
MTTFs, natural, unavoidable	Not allowed	
MTTFs, natural, optional lines	Not allowed	

SECTION 3: PROJECT DESCRIPTION AND SCOPE

3.1 General Project Description

The US Forest Service is developing a 14.8-mile, shared-use trail system on National Forest System (NFS) lands surrounding Cascade Locks and within the Columbia River Gorge National Scenic Area (CRGNSA) and Hood River County, Oregon.

The purpose of this project is to help meet the growing demand for mountain biking opportunities in the Pacific Northwest consistent with the 1986 Columbia River Gorge National Scenic Area Act. This project, developed in coordination with the Port of Cascade Locks and the Northwest Trail Alliance, and responsive to the 2019-2023 Oregon Statewide Comprehensive Outdoor Recreation Plan, will result in a trail system to connect to the existing Gorge 400 Trail, Herman Creek Trail, and Pacific Crest National Scenic Trail (PCT) and expand biking, hiking, and equestrian trail opportunities near the community of Cascade Locks.

The surroundings demand a high standard-of-care during construction activities due to steep slopes, heavy vegetation, surface water, high-voltage power lines, buried utilities, active recreation, and/or the protection of natural, cultural, and scenic resources.

3.2 Mountain Bike-Optimized Singletrack

This focus of this project is the construction of mountain bike-optimized natural surface singletrack trail. A mountain bike-optimized trail is one that maximizes the fun and efficiency of the bicycling experience through the provision of trail features and macro- and micro-design techniques. Desired characteristics include: cambered trail surfaces to counter user forces, insloped turns, incorporation of native rock features, and seamless transitions between trail types. Trail features and flow should progress as a user gets deeper into the system; larger, tighter, more narrow examples of similar elements moving from “green circle” (easier) to “blue square” (more difficult) to “black diamond” (most difficult) areas. Along segments intended for more skilled trail users, optional lines available only to more-skilled riders are desirable.

All of the trails are open to pedestrians and some of the trails are open to equestrians, so the design and construction must accommodate multiple recreation uses.

3.3 Project Scope

Construct a portion of Phase I (appx. 3.31 miles) of the recently approved Cascade Locks Trail System to provide a new destination-quality trail network in the Columbia River Gorge National Scenic Area adjacent to Cascade Locks, OR.

3.4 Additions and Deletions

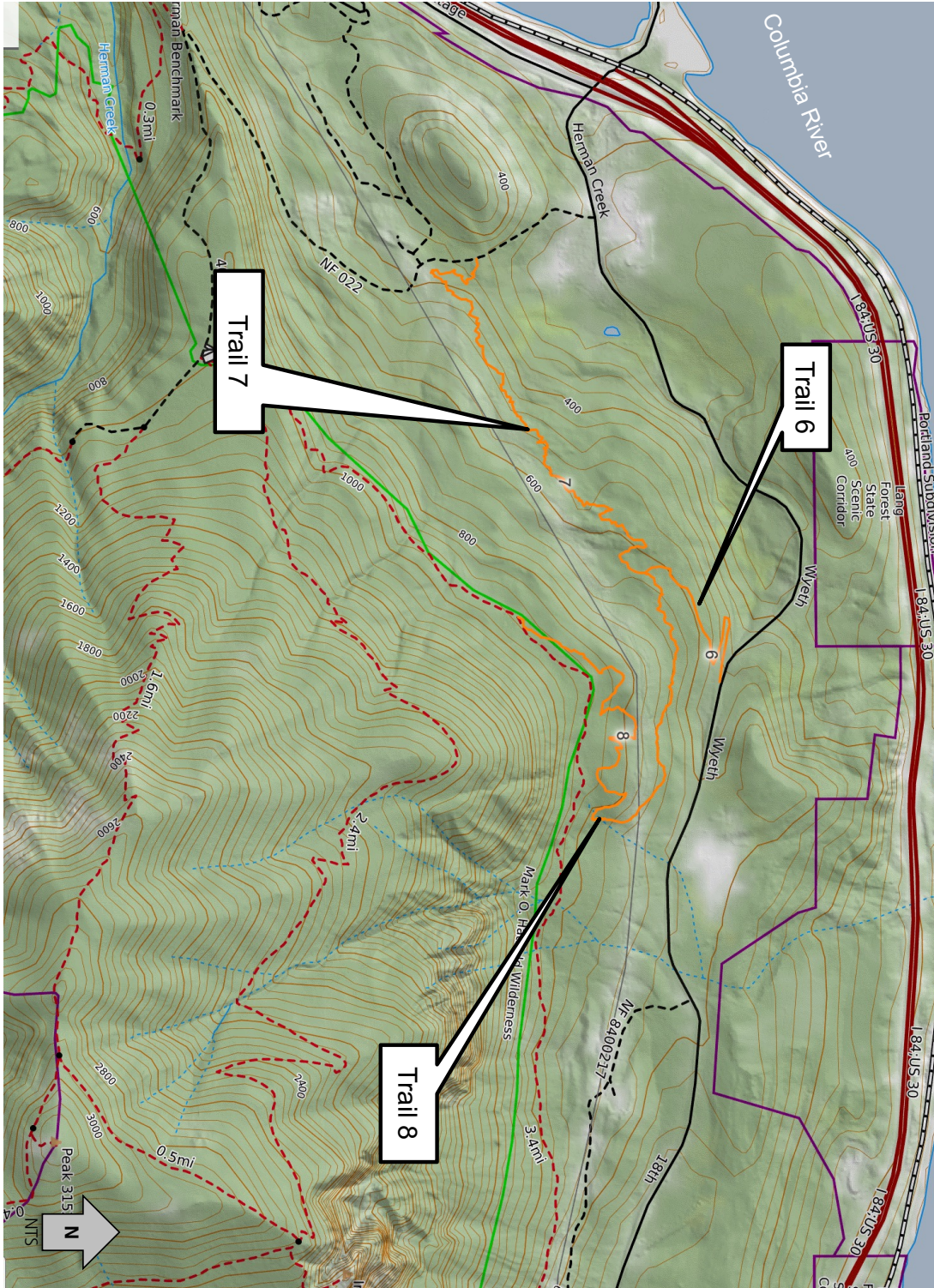
No extras or additional work will be allowed or paid for unless such extras or additional work are ordered in writing by the client, and the price fixed and agreed upon before such work is performed. The client will not accept any overruns or pay any quantities beyond those specified.

The client retains the right, without invalidating the contract, to make additions to or deductions from the work defined in this document, and in case such deductions or additions are made, an equitable adjustment of the addition to or deduction in cost shall be made between the client and the contractor, and must be agreed to in writing.

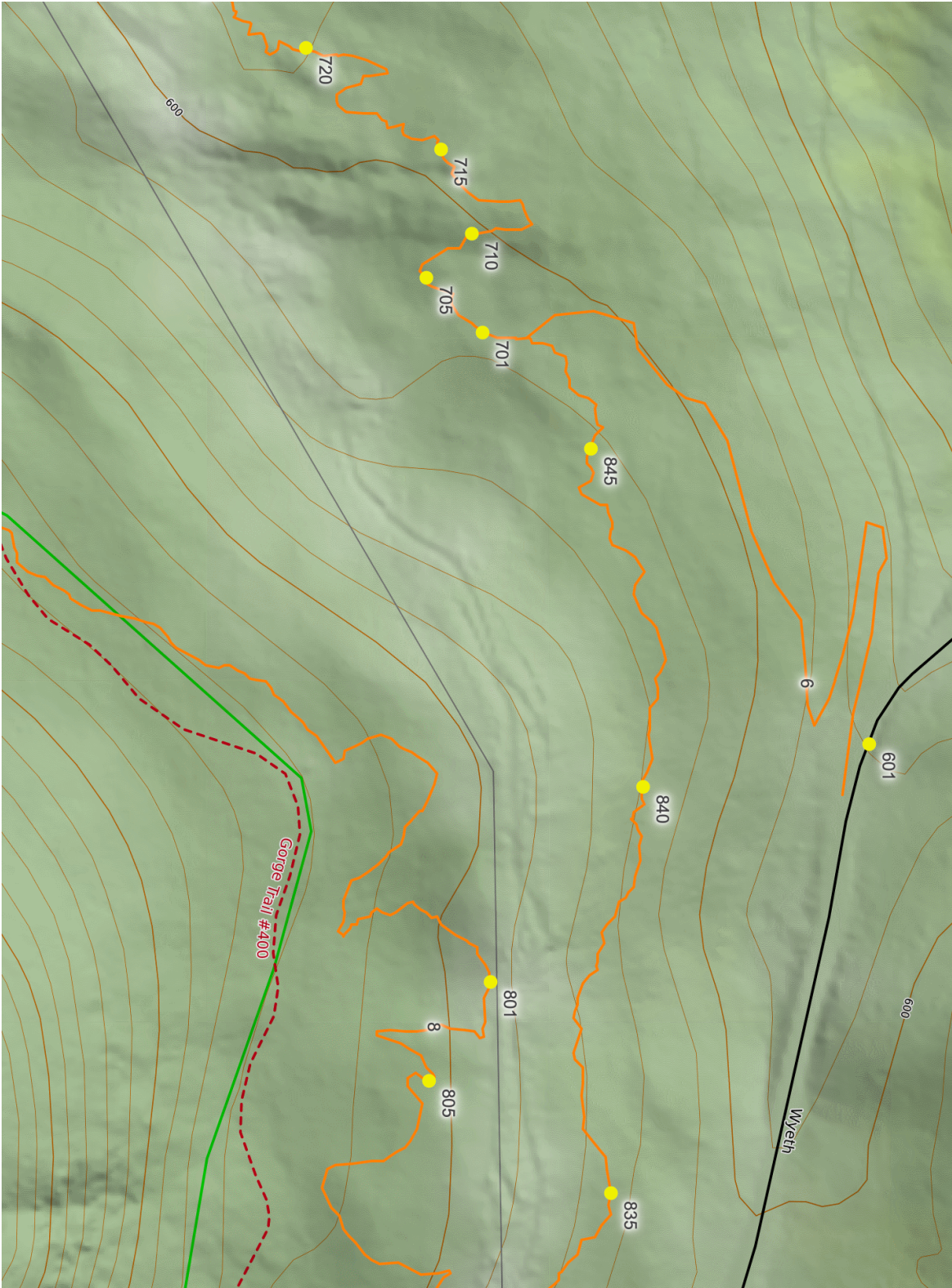
3.5 Discrepancies

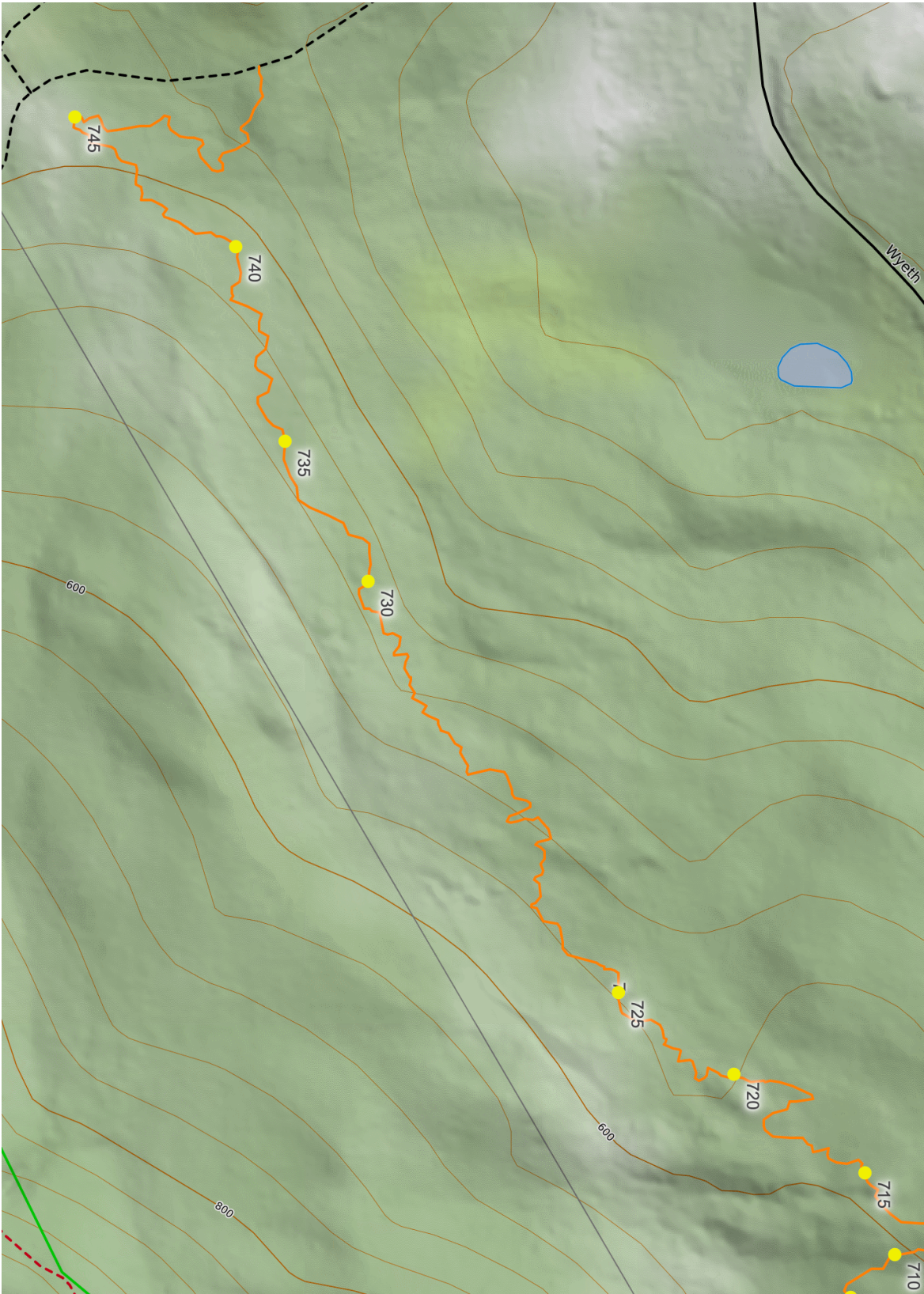
Should the contractor discover discrepancies in this and/or related documents (e.g., project details or specifications), the matter shall at once be brought to the attention of the client, and the discrepancies corrected before proceeding further.

SECTION 4: MAPS AND CONSTRUCTION NOTES



Cascade Locks Trail System - Phase I
Site Plan







Point #	Note
601	Locate utilities prior to construction.
701	Use native rock to create 8-foot long by 3-foot wide rock armored segment in main line.
705	Left-hand quarter-berm into native soil and then up and over rock mound. Manipulate rocks as needed to make passable line.
710	Trail on steep sidehill, use native rocks to create downhill edge of bench.
715	Trail on steep sidehill, use native rocks to create downhill edge of bench.
720	Trail on steep sidehill, use native rocks to create downhill edge of bench.
725	Short, steep section.
730	Trail enters old roadbed.
735	Trail leaves old roadbed.
740	Trail on steep sidehill, use native rocks to create downhill edge of bench.
745	Install small right-hand quarter-berm.
801	Whoopdee across landing so riders can carry speed up the opposing climb.
805	Stacked climbing turns.
810	Install optional rock rolldown with approach above turn.
815	Install optional rock-over.
820	Install optional rock rolldown on uphill side of trail.
825	Trail crosses BPA road.
830	Trail exits BPA corridor.
835	Future intersections; ignore flagline that heads NE (downhill) and continue on flagline that heads SE (uphill).
840	Rock outcropping, route trail up and over.
845	Install optional rock drop.

SECTION 5: PROJECT DETAILS

5.1 Phase 1

Description: Construct approximately 3.31 miles of trail per the attached maps and the trail alignments flagged in the field.

Trail ID	GPS Length (LF)	Ground Length (appx. LF)	Ground Length (appx. miles)
6	1,922	2,306	0.44
7	7,975	9,570	1.81
8	4,653	5,584	1.06

SECTION 6: TRAIL CONSTRUCTION REQUIREMENTS

6.1 Trail Design

Design of any new segments or reroutes must be guided by the sustainable trail principles promulgated by accepted resources such as the current editions of the *Trail Solutions*; *IMBA's Guide to Building Sweet Singletrack*, *Managing Mountain Biking*; *IMBA's Guide to Providing Great Riding, Bike Parks*; *IMBA's Guide to New School Trails*, and the *USDA's Trail Construction and Maintenance Notebook*.

6.2 Bike-Optimized Trails

All trails constructed as part of this project shall be natural surface singletrack trail that is optimized for mountain bicyclists. A subset of the larger family of rolling contour trails, bike-optimized trails share the following basic characteristics:

- Synergy with the landscape: Making the most of what the natural terrain provides by using the trail to explore the topography and features (rocks, trees, terrain) present. Some describe a good trail as one that has been revealed, not so much as constructed.
- Opposition to user forces: Bike-optimized trails maximize the efficiencies afforded by using a bicycle and are designed to counteract forces that direct a user off the trail. Insloped turns and cambered tread surfaces, for example, promote traction, safety, sustainability, and enjoyment.
- Conservation of momentum: The ideal trail avoids “flow killers” such as sharp turns, incongruent features, and disjointed climbs and descents. Instead, it utilizes undulations and cambered turns to rewards smooth, deliberate riding and to maximize forward motion. A bike-optimized trail encourages a better understanding of the bicyclist/bicycle interface, allowing riders to reach that unique sensation of floating through the landscape.
- Leading the user forward: A sense of discovery, combined with a design that maximizes a rider's forward momentum, helps to draw the user forward. The trail is never repetitive or predictable, nor is it “awkward”, with variety and innovation combining to create an intuitive feel.

6.3 Trail Construction Best Practices

To satisfy erosion and sediment control requirements, the trail must be finished as the project advances. Ideally, all roughed-in corridor will be finished the same day and before any anticipated rainfall. Any segments requiring delayed finishing must be approved in advance by the client.

6.4 Corridor Clearing and Trail Alignment

The trail corridor was flagged with pink ribbon flagging and/or pin flags. Corridor clearing and trail construction shall be confined to within ten meters (10 m) of either side of the corridor flagging. More restrictive corridor clearing conditions shall apply when warranted by the situation, including but not limited to where the trail:

- a) Crosses roads or streams.
- b) Is adjacent to private property.
- c) Crosses or is adjacent to public rights-of-way.

- d) Crosses or is adjacent to the Bonneville Power Administration (BPA) right-of-way. Trail layout and construction will ensure that no portion of the trail is within fifty feet (50') of any BPA structure (e.g., steel lattice tower, steel pole, concrete pole, or concrete foundation) and that trail corridor avoids all equipment landings. No grade changes to facilitate construction or disposal of overburden shall be allowed within BPA's easement area. As needed, BPA right-of-way and access roads shall be returned to their original condition following trail construction.

Changes to the approved flagline must be approved in advance. If the flagging has disappeared and it is impossible to identify the corridor, the contractor shall immediately contact the client before proceeding with corridor clearing.

All felled trees will be left on site to contribute to coarse woody debris. Downed trees should be left in whole pieces to the greatest extent practicable.

No trees greater than thirty inches (30") diameter at breast height (dbh) will be removed during trail construction or maintenance unless the trees are classified by the client as hazard or danger trees.

Trees between eighteen inches (18") and thirty inches (30") dbh can be removed on a limited basis (averaging no more than one tree per 1,000 feet of trail) within the trail corridor.

Trees greater than eleven inches (11") but less than eighteen inches (18") dbh can be removed on a limited basis (averaging no more than one tree per 150 feet of trail) within the trail corridor.

Removal of any tree greater than eleven inches (11") requires approval by the client. A penalty of \$500 per tree shall be levied against the contractor for unauthorized cutting/removal/damage of trees per the above standards.

6.5 Debris

Cut and scatter all branches and brush removed as part of the trail development. No debris shall be left within ten feet (10') of the trail. Butt-ends of any sawed limbs must face away from trail. The trails and adjacent areas shall be left in a finished and natural-looking condition and minimize disturbance to natural resources to the extent possible. Construction shall leave no scars greater than three inches in diameter on live parts of native trees/plants. Any created slash shall be dispersed away from the trail with one surface in contact with the ground. Slash heights shall be less than twenty-four inches (24") in height.

6.6 Tread

All tread should be constructed as full bench whenever possible. If fill is required, it should be supported by a stone retaining wall sufficient to support the expected forces.

Specific tread widths are a function of their location in the system. Specific values are enumerated in Section 2: Trail Construction Specifications. Narrower gateways through natural obstacles (trees, rock outcrops) are encouraged. Tread widths in areas of dynamic flow, landings, and insloped turns, for example, may be wider to accommodate the full range of riding experiences. Significant deviations from these situations require approval of the client.

6.7 Rocks

Maximum size rock material to be left in the trail is a function of its location in the system. Specific values are enumerated in Section 2: Trail Construction Specifications.

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; grain patterns, lichen growth, etc. Excessive tool marks on rocks are unacceptable. Non-native rock may not be imported into a work area without approval of client.

6.8 Woody Material

Woody material such as stumps, logs, and brush shall be removed from the trail tread. No stumps less than twelve inches (12") in diameter shall be left within five feet (5') of the trail tread. Remaining stumps shall be cut to 8" or less from the surrounding ground and dirt added to cut face of stump.

6.9 Fall Zone Clearing

Areas adjacent to dynamic trail segments where users have a greater potential to exit the immediate trail corridor shall be cleared of impact focusers; butt-end branches, stumps, and rocks under six inches (6") in diameter.

6.10 Backslope

The trail backslope shall be graded to a three-to-one (3:1) slope or until it matches the existing slope. In areas where the backslope has the potential to become part of the active tread (e.g., upper entrance to insloped turns) it must be finished to trail tread specifications.

6.11 Trail, Finished Condition

Final finishing and grading of the trail tread, backslope, down-slope spoils, and drainage features shall result in a surface that matches the texture of the surrounding forest floor while enabling water to drain off and away from the trail.

6.12 Spoils Stabilization

All excavated materials not used in the trail tread or other trail structures must be stabilized. Spoils shall be distributed in a thin layer adjacent to the trail tread. Spoils may not be placed in drainages or swales. When possible, spoils should be mulched with native materials to discourage erosion while native seed stocks reestablish. In certain circumstances, installation of engineered erosion control measures may be required.

If seeding is used in stabilization or revegetation, it must be a mix approved by the Columbia River Gorge National Scenic Area. Any mulch/erosion control/fill materials must be certified weed-free and from a source approved by the Columbia River Gorge National Scenic Area.

At all times, spoils stabilization must satisfy the terms of the project approval and applicable regulations.

6.13 Turns

All turns shall be insloped to resist the forces exerted by users. Acceptable values for turn radii and grades across the turns are enumerated in Section 2: Trail Construction Specifications. Insloped turns shall be constructed to have good flow for wheeled trail users, e.g., no decreasing-radius turns. All turns must include an entrance and exit rolling grade dip. If conditions warrant, a traditional rolling crown switchback may be constructed with prior approval of client.

6.14 Grade Reversals

A designed grade reversal or constructed rolling grade dip should occur at least as frequently as identified in Section 2: Trail Construction Specifications, and preferably more frequently. Any grade reversals must be anchored or choked with rocks/logs to discourage short cutting. Grade reversals shall be measured trough-to-trough or tip-to-tip.

In mountain bike-specific trails, grade reversals also double as elements: rollers, booters, and pump/rhythm sections. In this context, grade reversal shape, size, and placement should reflect its location within the system. Specific details will be determined by the contractor in partnership with the client.

6.15 Above-Grade Earthen Structures

Any portion of trail rising above the grade of its surroundings must be composed of mineral soil. If soil is scarce, a rock core may be used so long as it provides less than fifty percent (50%) of the total volume of the structure. Use of organic materials, duff, woody debris, etc., is prohibited.

Fill structures must have a fill slope of at least two-to-one (2:1) or the angle of repose of the local soil, whichever is softer. A rock retaining wall may be substituted for a fill slope with permission of the client. Fill structures must be completely stabilized and compacted. Acceptable techniques include track-packing or compaction via a dedicated tamping unit. Hand tamping is not acceptable. Raw soil faces that do not become tread must be mulched and seeded in the same fashion as spoils and satisfy the terms of the project erosion control methodologies.

Examples of above-grade earthen structures include built (rather than excavated) grade reversals and turn pads on insloped switchbacks.

6.16 Water Diversions

In general, the tread should be outsloped at approximately five percent (5%). When not possible or desirable due to purpose-built insloping, resource concerns, or obstruction, water can be directed down the trail for up to ten feet (10') before a water diversion location.

6.17 Invasive Species

To reduce the spread of invasive plant species the following protocols are required:

- a) All hand tools and mechanized equipment must be free of invasive seeds and clean of any dirt and mud when entering the project site.
- b) Immediately after removing machines from the site they shall be cleaned.

- c) All materials used during construction and maintenance of the trailhead and trail system will be certified weed-free and from a source approved by the Columbia River Gorge National Scenic Area.

6.18 Filter Strips

Filter strips are vegetated areas downslope of the trail corridor intended to treat sheet flows coming off the tread. Filter strips function by slowing down flow velocities, filtering out sediments, and providing an opportunity for infiltration into the underlying soils. Properly mulched spoils may be designated as part of the filter strip. Filter strips shall not be used as regular travelways for equipment and materials. Areas with inadequate filter strip capacity above waterways may require installation of engineered erosion control measures to satisfy erosion and sediment control methodologies.

6.19 Mechanized Equipment Best Practices

All track marks must be raked smooth. Affected area will be finished to have a nature shape, e.g., spoils piles rounded, smoothed and cleared of significant brush, blade edges blended, etc. A spill kit suitable for five gallons of fluid will be onsite and within 200 yards of mechanized equipment whenever equipment is being operated. Equipment shall be serviced and refueled outside of riparian areas to reduce the chance of spilling toxic fuels and lubricants.

6.20 Noise Restrictions

To avoid potential noise disturbance to northern spotted owls, construction and maintenance activities requiring the use of chainsaws, heavy equipment, or helicopter support will only occur between July 16 and February 28 of any given year.

6.21 Sensitive Salamander Species

To protect habitat for sensitive salamander species, ground disturbance will be minimized, and no fill will be added to sections of trail crossing talus slopes or boulder fields.

6.22 Riparian Areas

Construction activities should maintain at least 95% ground cover (e.g. vegetation, duff, or litter) within riparian areas. Avoid ground disturbing activities in saturated soil areas where practicable.

6.23 Invasive Plants

Construction will limit disturbance to existing populations of non-native invasive plants to the extent practicable.

To reduce the potential for transport or spread of invasive plants, all vehicles and equipment used during construction of the trailhead and trail system will be washed before entering the project site.

To reduce the potential for weed spread through fill material (e.g. gravel and rock), all materials used during construction will be certified weed-free and from a source approved by the Columbia River Gorge National Scenic Area.

6.24 Cultural Resources

Contractor shall review a copy of the Columbia River Gorge National Scenic Area Inadvertent Discovery Plan. If cultural resources are discovered during implementation, all construction activities within 100 feet of the discovered resource shall cease. Cultural resources should remain as found; further disturbance is prohibited.

6.25 Bonneville Power Administration

Access to BPA structures shall remain open and unobstructed at all times during trail construction. Equipment, machinery, and vehicles traveling within BPA's easement area shall remain at least 25 feet (25') away from any BPA structure or guy anchor ground attachment point. If there is a possibility that any equipment will encroach on this distance, then a safety watcher is required. There will be no storage of flammable materials or refueling of vehicles or equipment within BPA's easement area.

SECTION 7: UNIT DEFINITIONS AND DETAIL DRAWINGS

Any accompanying figures are for illustrative purposes only and do not relieve contractor of the need to satisfy written requirements contained elsewhere in this document.

7.1 Trail Construction (Figures 1 - 4)

The trail tread shall consist of packed soil or rock. Stumps and/or roots should be excavated and removed from the trail tread unless they are specifically allowed as part of the trail texture. Backslope dimensions are derived from the surrounding area such that they have a run-to-rise of two-to-one (2:1). In areas where the backslope has the potential to become part of the active tread it must be finished to trail tread specifications.

The trail should contain frequent grade reversals. To encourage self-cleaning, the grade of the drains at the bottom of the grade reversals must be sloped to drain in an aggressive manner while simultaneously resisting user forces. In some cases, this will require insloping with a drainage basin placed into the hillside. If grade reversals result in a fill slope, these slopes and the associated feature(s) will be finished to satisfy the above-grade earthen structure guidelines.

Any downslope spoils must be distributed such that no berm is present. Spoils must be stabilized with a covering of forest duff. In areas with insufficient duff, seed-free straw from a source approved by the Columbia River Gorge National Scenic Area may be substituted for forest materials. Excess soil shall not be distributed into drainages or adjacent to streams.

If borrow pits are created during trail construction, they will be finished to satisfy the requirements of the trail and its surroundings: slopes graded to the local angle of repose, stumps and roots trimmed, spoils stabilized and covered with forest duff. Borrow pits may not form a potential injury hazard for forest users and may not be created outside of the approved corridor.

7.2 Clearing Limits (Figure 5)

The trail shall be cleared of vegetation per the dimensions shown in Figure 5 and in compliance with other specifications noted in this document, particularly Section 6.4. Furthermore, clearing shall be used to maximize sight distances to the extent practical.

7.3 Armored Tread/Stone Pitching (Figure 5)

The width of armored tread should be at least 1.5 times the width of the specified trail tread to permit users to find their line as the trail matures, and at least two times as wide in areas where more varied line selection is likely (e.g., landings, insloped turns).

Stone pitching must extend at least ten inches (10") deep with a minimum of two-thirds (2/3) of the rock buried below the surface of the surrounding grade. Stones should be stable and aligned perpendicular to the direction of travel. Each end of a pitched section shall be supported by larger "bookend" stones embedded in the ground. Stones used for armoring should be a minimum of four inches (4") thick and a minimum of twenty-four inches (24") wide. Voids shall be filled with compacted native mineral soil, crushed rock, and/or crusher fines. Client may require additional guide stones along the edges of the trail if the final surface of the trail appears more rugged than the adjacent landscape.

7.4 Rolling Grade Dip (Figure 7)

The minimum length of the drain portion shall be six feet (6') and the ramp must be at least ten feet (10') long; the height differential between the bottom of the dip and the top of rise shall be approximately eight inches (8") to twenty-four inches (24"). The sides of the rise must have a slope of at least two-to-one (2:1) or the angle of repose of the local soil, whichever ratio is greater (e.g., whichever slope is more gentle).

To encourage self-cleaning, the grade of the drains at the bottom of the grade reversals must be sloped to drain in an aggressive manner while simultaneously resisting user forces. In some cases, this will require insloping with a drainage basin placed into the hillside. If grade reversals result in a fill slope, these slopes and the associated feature(s) will be finished to satisfy the above-grade earthen structure guidelines.

Rolling grade dips/grade reversals must be sited at least twenty feet (20') uphill from significant turns in order to reduce the effects of unweighting by higher speed users. Exceptions on these dimensions and requirements may be made by the client on a site-by-site basis to accommodate terrain constraints or to enhance the user experience. In certain locations, the client may approve smaller structures reinforced with large rocks that fit the character of the trail to be an acceptable substitute.

7.5 Terrace (Figure 8)

A terrace is a combination of landing, drain, retaining wall, and step, useful for creating sustainable shared-use trails in steeper corridors than would be unsupported by the natural surface tread alone. Steps are used to accelerate the climb/descent while the use of landings between risers allows continued use by bicycles. Terraces may be incorporated in new trail construction or applied as a corrective maintenance measure.

Step risers should be constructed out of stone. Maximum riser height is determined from the step height requirements of the trail segment. The riser shall be battered (sloped) in the direction of uphill travel. A riser may be assembled from multiple stones with the understanding it must withstand the dynamic loading of climbing and descending users.

The landing must have a minimum length of at least 1.5 times the stride or wheelbase of the longest users. Each landing must contain a drain off to the side, preferably to the downhill side; it is not acceptable for a landing to drain over its riser. The drain differential must be at least six inches (6"). The fill required to create the landing is considered part of this unit.

The downhill edge of the landing must be supported by a retaining wall of stone. The landing's retaining wall must satisfy all the requirements of a stand-alone wall (see 5.7).

7.6 Rock Retaining Wall (Figure 9)

The measurement unit of a rock retaining wall is square feet, calculated from the exposed vertical face. Rock retaining walls should be stable and battered (inclined back into the slope) a minimum of fifteen percent (15%) from vertical. All walls should have rubble backfill of at least six inches (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 inserted from the back of the wall. The top of the wall shall not be counted in the width of the trail tread. The top layer of stones shall be installed in a manner to avoid being accidentally dislodged by trail users. Deadmen (stones that extend from the wall into the slope) should be used to ensure integrity. There should be one deadman for every half square yard (0.5 SY) of wall face.

7.7 Rock Armored Ford (Figure 10)

Grade reversals shall be created in the trail tread prior to the crossing on each bank. Maximum grade on each approach is fifteen percent (15%) for a maximum distance of fifty feet (50'). The armored tread surface shall extend through the stream and up the banks until a grade of less than fifteen percent (15%) can be achieved. The armored tread will be flush with the stream bottom to discourage failures from cavitation. Armoring shall extend downstream one-half (1/2) the required maximum tread width of trail tread to discourage headcutting.

7.8 Constructed Turn/Insloped Turn (Figure 11)

The insloped turn unit includes armoring and drainage features associated with the structure.

Each insloped turn requires a grade reversal/rolling grade dip before and after; these shall not be counted as separate units for cost estimating or payment purposes. The dips for these drainage features should be a minimum of six (6) feet long. To encourage self-cleaning, the grade of the drains at the bottom of the grade reversals must be sloped to drain in an aggressive manner while simultaneously resisting user forces. In some cases, this will require insloping with a drainage basin placed into the hillside. If grade reversals result in a fill slope, these slopes and the associated feature(s) will be finished to satisfy the above-grade earthen structure guidelines. The uphill dip should be sited to minimize unweighting effects for higher speed users except where warranted and desired on expert or advanced trails.

Specifications for radius and cross slope across the turn are enumerated in Section 2: Trail Construction Specifications. Turning radii should be consistent. Turns with a running grade of twenty percent (20%) or greater in the apex should have a rock armored drain twenty-four (24) inches wide following the inside of the turn. If multiple turns are required, they will be sited to minimize “stacking”.

7.9 Constructed Turn/Insloped Switchback

The switchback unit includes any walls, armoring, and drainage features associated with the structure.

Each insloped switchback requires a grade reversal/rolling grade dip before and after; these shall not be counted as separate units for cost estimating or payment purposes. The dips for these drainage features should be a minimum of six (6) feet long. To encourage self-cleaning, the grade of the drains at the bottom of the grade reversals must be sloped to drain in an aggressive manner while simultaneously resisting user forces. In some cases, this will require insloping with a drainage basin placed into the hillside. If grade reversals result in a fill slope, these slopes and the associated feature(s) will be finished to satisfy the above-grade earthen structure

guidelines. The uphill dip should be sited to minimize unweighting effects for higher speed users except where warranted and desired on expert or advanced trails.

All switchbacks will be constructed with an insloped turnpad. Specifications for radius and cross slope across the turn are enumerated in Section 2: Trail Construction Specifications. Turning radii should be consistent. Turns with a running grade of twenty percent (20%) or greater in the apex should have a rock armored drain twenty-four (24) inches wide following the inside of the turn. Interior of legs shall be anchored by and filled with large rocks and/or woody debris to discourage shortcutting.

Fill structure for turnpads will comply with composition, compaction, and fill slope requirements of an Above-Grade Earthen Structure. Client may require that a retaining wall be employed in place of a fill slope. 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".

7.10 Boardwalk/Puncheon (Figure 12a-c)

No boardwalks/puncheons are anticipated for the project; this detail can be ignored.

7.11 Tread Reconstruction

Any tread reconstruction should match the new trail construction specifications noted elsewhere in this document.

7.12 Rock Rip-Rap

Rock Rip-Rap is a six inch (6") deep layer of placed stone intended to stabilize slopes with concentrated storm flow. Typically, this technique will be used to protect drains of rolling grade dips and drainage channels below an armored crossing. Individual stones should be gabion-class or equivalent. Rock Rip-Rap is measured by the square yard.

7.13 Filled Tread Trail (Figure 13)

Filled tread trails are used in areas with approximate sideslope of <5% and/or where lack of surface drainage is likely to cause wet tread conditions.

7.14 Basin and Rise Trail (Figure 14)

Basin and rise trails design are used in areas with gentle sideslopes (approx. 5-10%) in well-draining soils under moderate to dense conifer canopies.

7.15 Trail Closure (Figure 15)

Existing compacted tread shall be scarified to encourage regrowth of native seed stock. Exposed soils will be covered with local leaf litter, duff, and/or imported material as deemed appropriate by the client. Trail tread will be disguised with woody debris if any is available. If trail is incised, check dams will be placed at a minimum of every twenty-five feet (25') to capture sediment. If the trail is actively eroding, grade reversals will be added to stem continued damage. The trail corridor will be erased via the placement of vertical debris if available. If the length of trail to be closed is greater than one hundred feet (100') the vertical debris must extend a minimum of fifty feet (50') from each end.

7.16 Technical Trail Feature (TTF)

The location and design of any Technical Trail Feature (TTF) will be a collaborative effort between the contractor and the client. Design specifications will be derived from the specifications of the host trail segment and adhere to current best practices for the design and construction of TTFs. Wooden, metal, or other non-native material TTFs are not allowed.

TTFs should have a playful and organic appearance to better match the natural environment. Recommendations include curved structures instead of straight lines or angles and surfaces that pitch, yaw, and vary in width.

A fall zone sufficient to accommodate the likely trajectory of a trail user accidentally leaving the TTF shall be cleared of all materials that could focus impact (e.g., stumps, sharp rocks, woody materials).

7.17 Boulders

On-site boulders shall be salvaged during construction and reuse in the trail system where necessary to help anchor the apex of turns, define and improve intersections, prevent short-cutting, create chokes, and otherwise enhance the edge of the trail corridor where necessary. Landscape boulders shall be a minimum of eighteen inches (18") in diameter, with a minimum of one-third (1/3) of the rock buried below grade.

7.18 Modifications

Modifications to the specifications may be allowed but must be made by the client in writing.

7.19 Figures

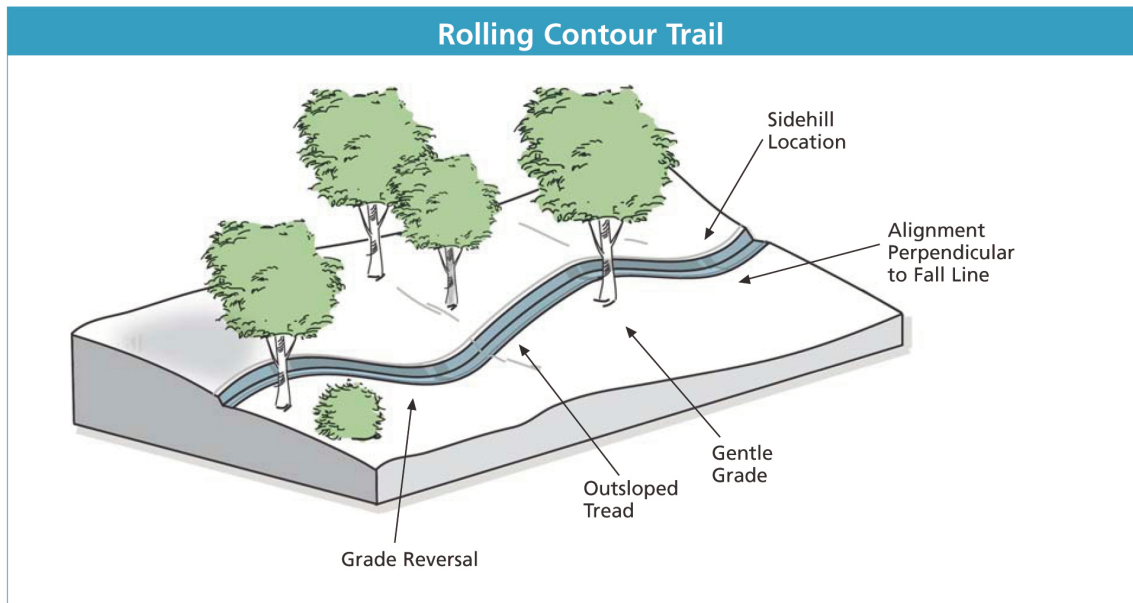


Figure 1: Rolling Contour Trail

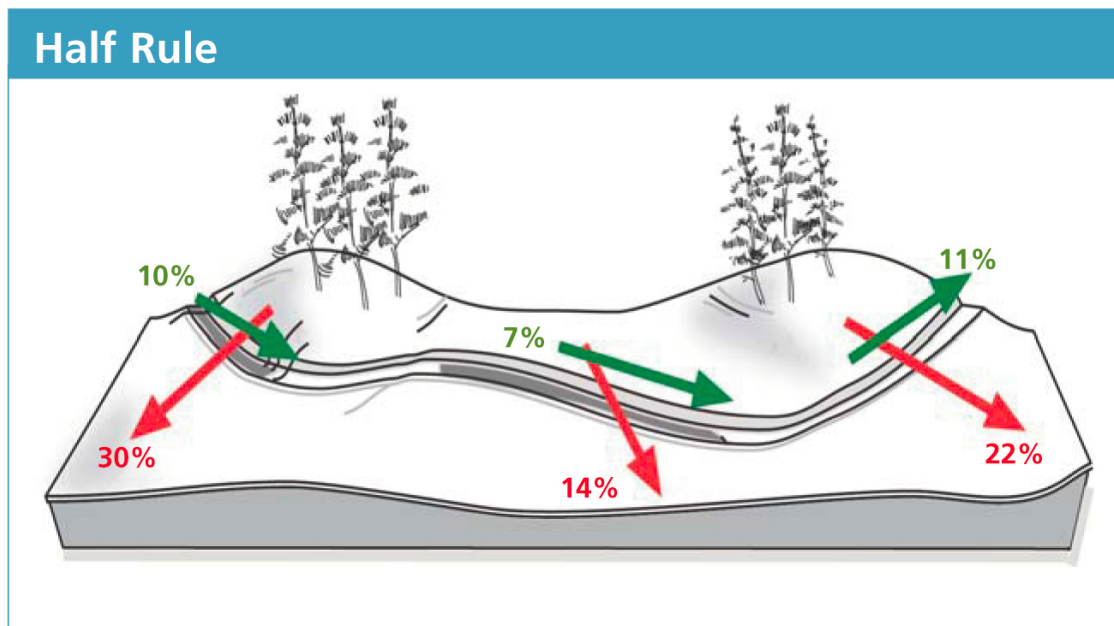


Figure 2: Illustration of The Half Rule

Full Bench Trail

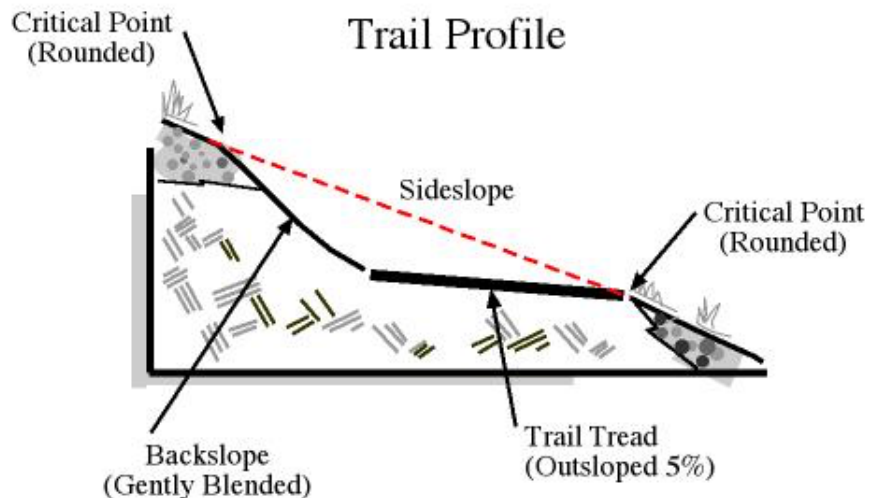
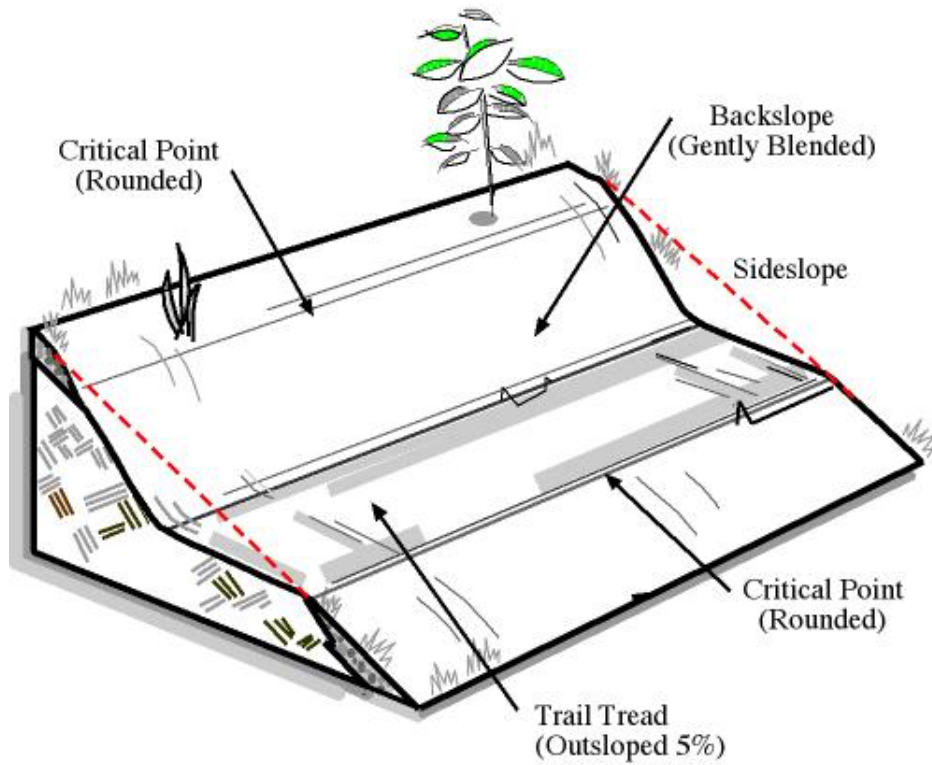
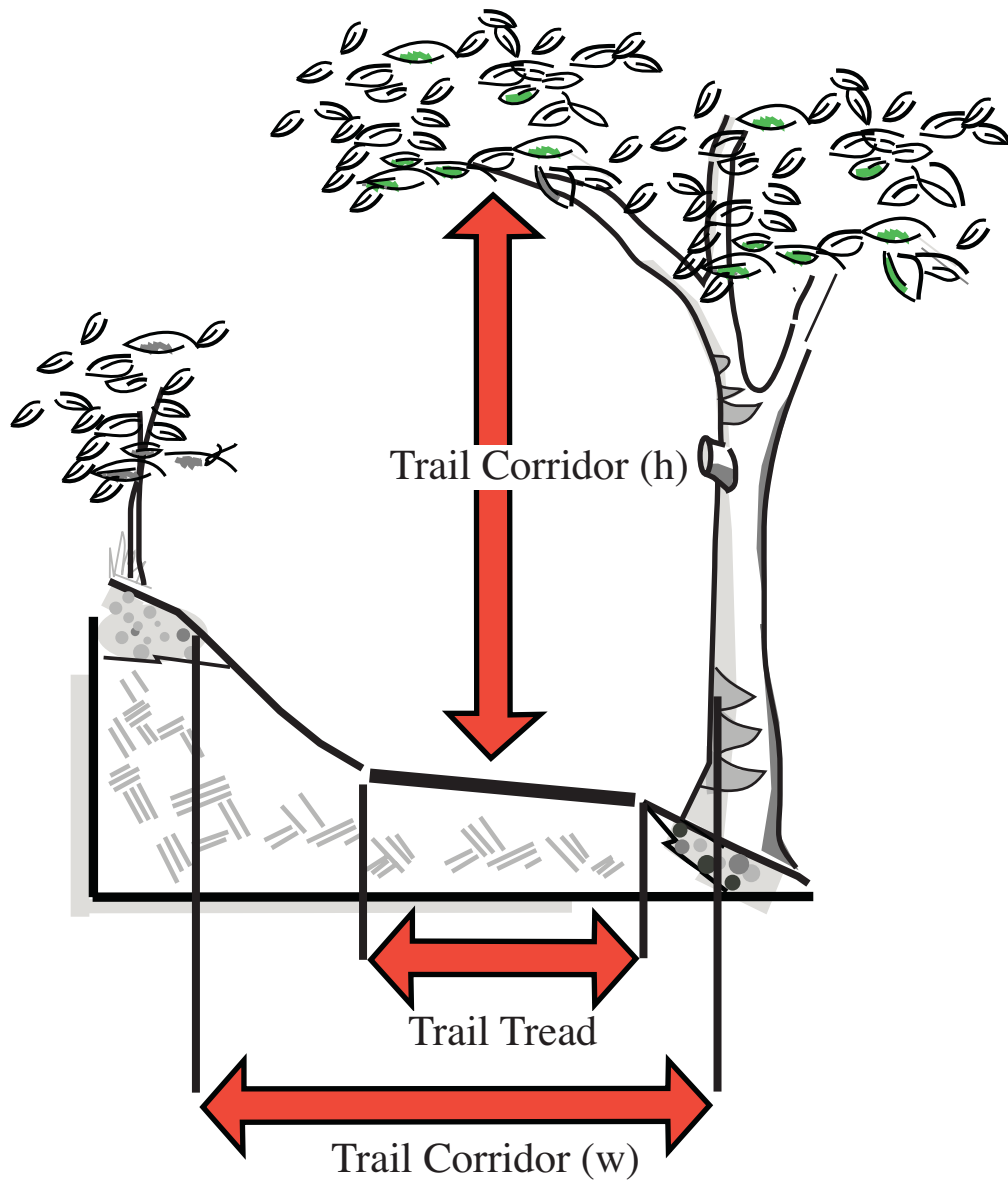


Figure 3: Full Bench Trail



Trail Tread = 24" – 36"
 Trail Corridor (w) = 48" – 72"
 Trail Corridor (h) = 8' – 10'

Figure 4: Clearing Limits

Stone Pitching

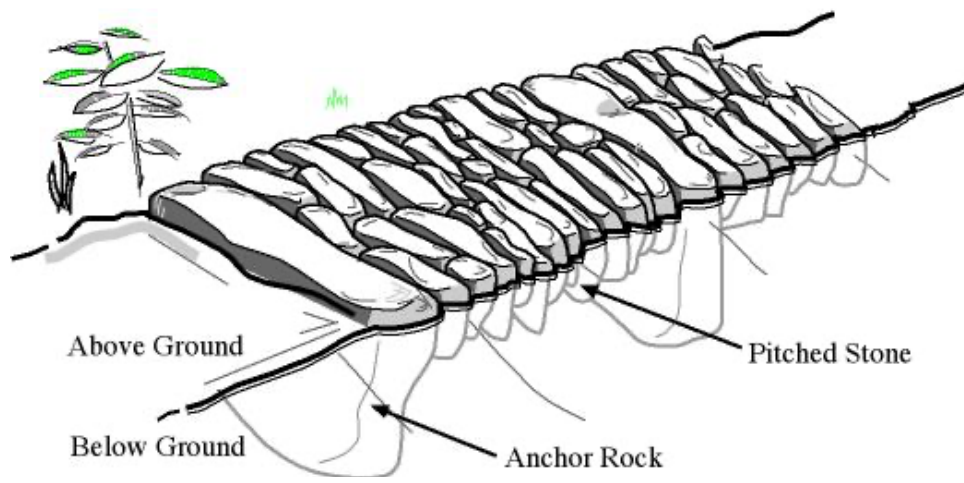


Figure 5: Stone Pitching

Rolling Grade Dip

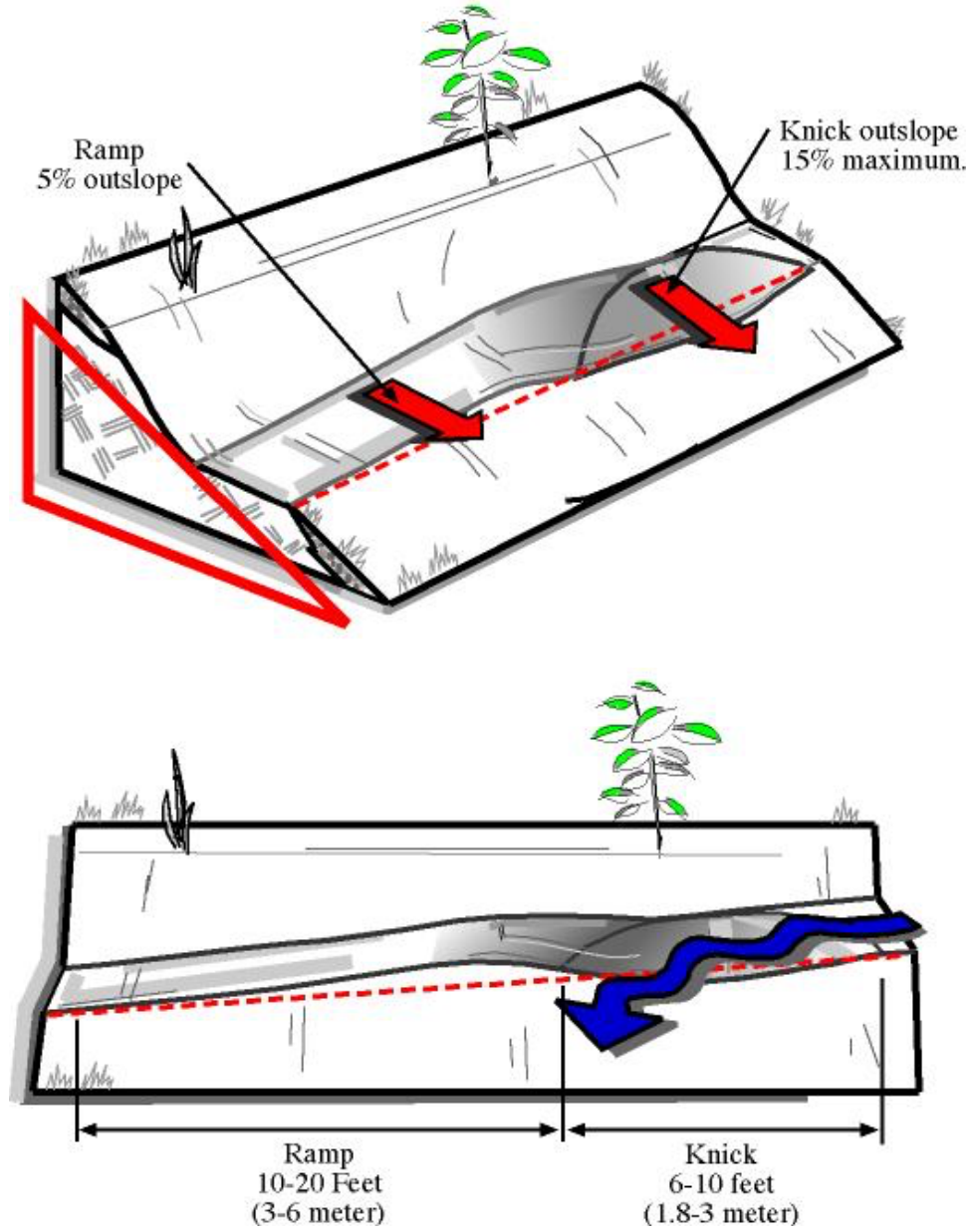


Figure 7: Rolling Grade Dip

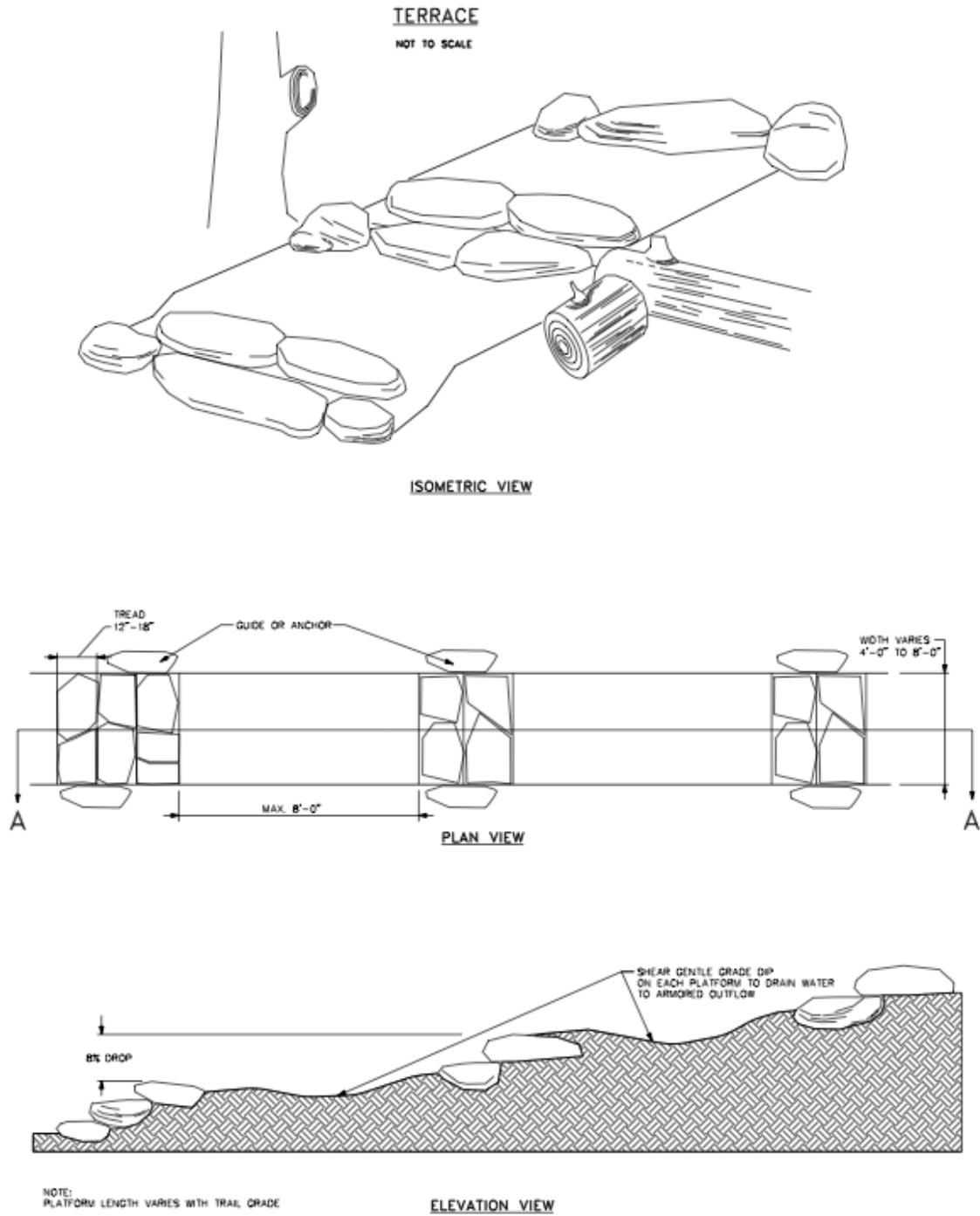


Figure 8: Terrace

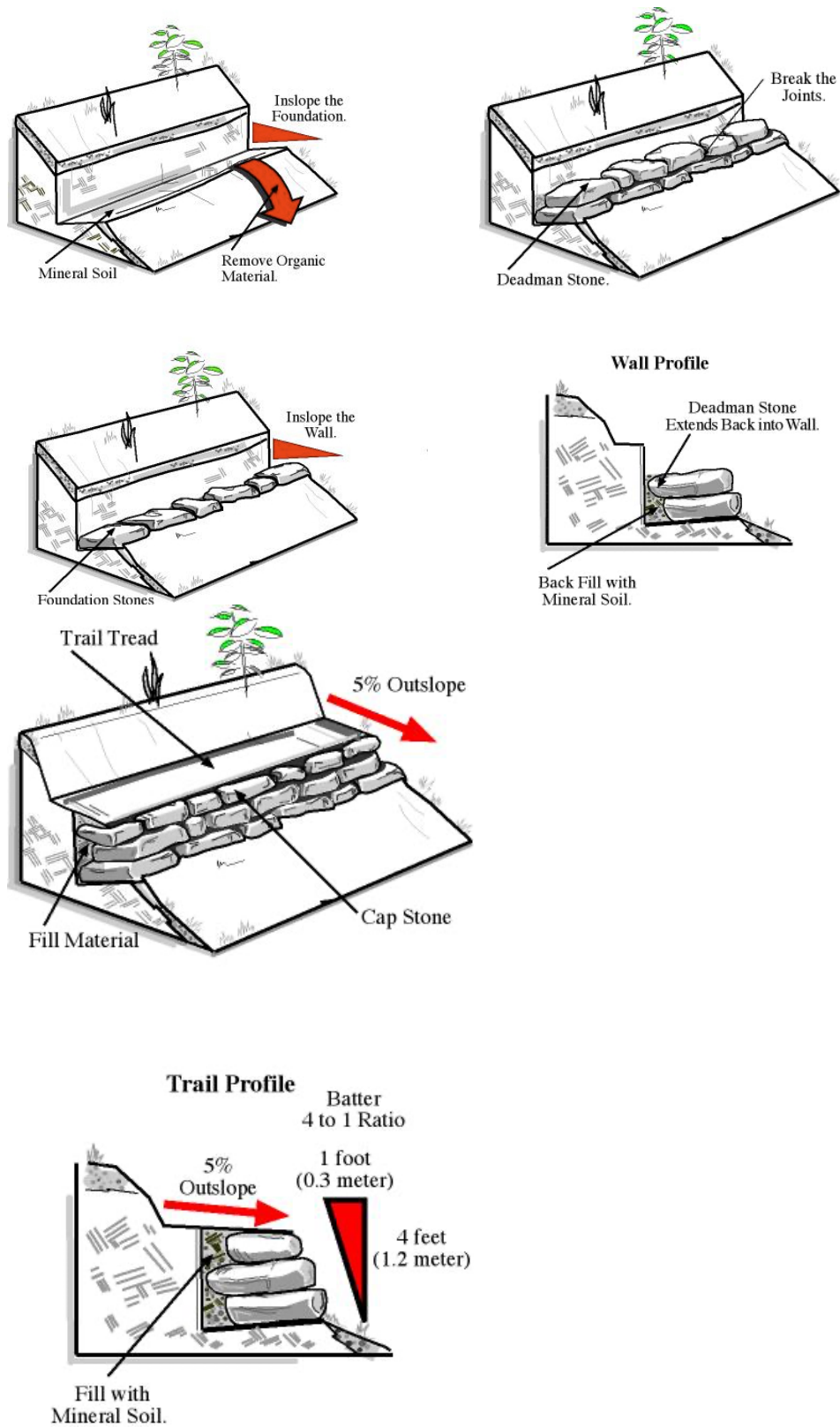
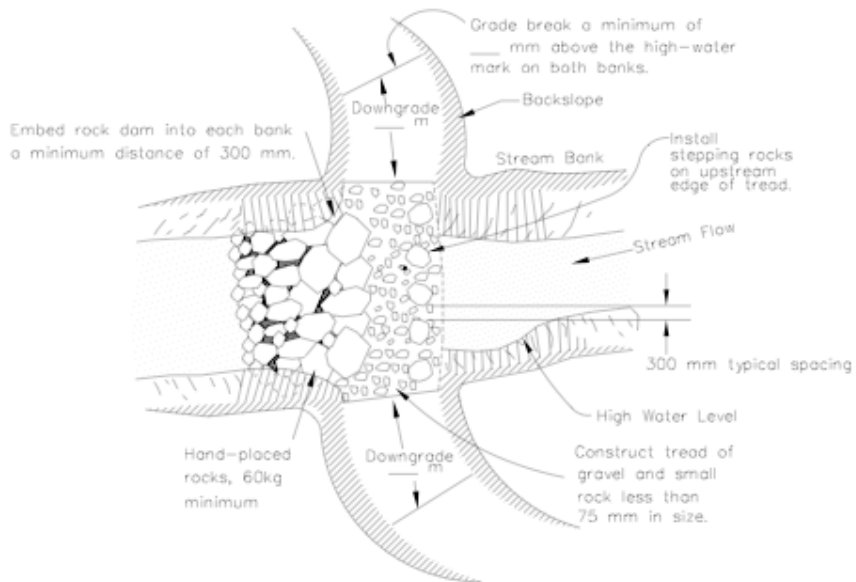


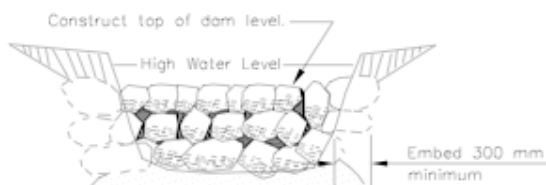
Figure 9: Rock Retaining Wall

SHALLOW STREAM FORD AND GULLY CROSSING ROCK STRUCTURE

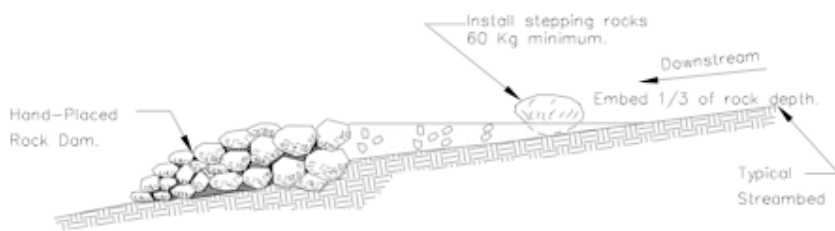
NOT TO SCALE



PLAN VIEW



PROFILE - ROCK DAM



CROSS SECTION

4/96 912-7

Figure 10: Rock Armored Ford

Insloped Turn

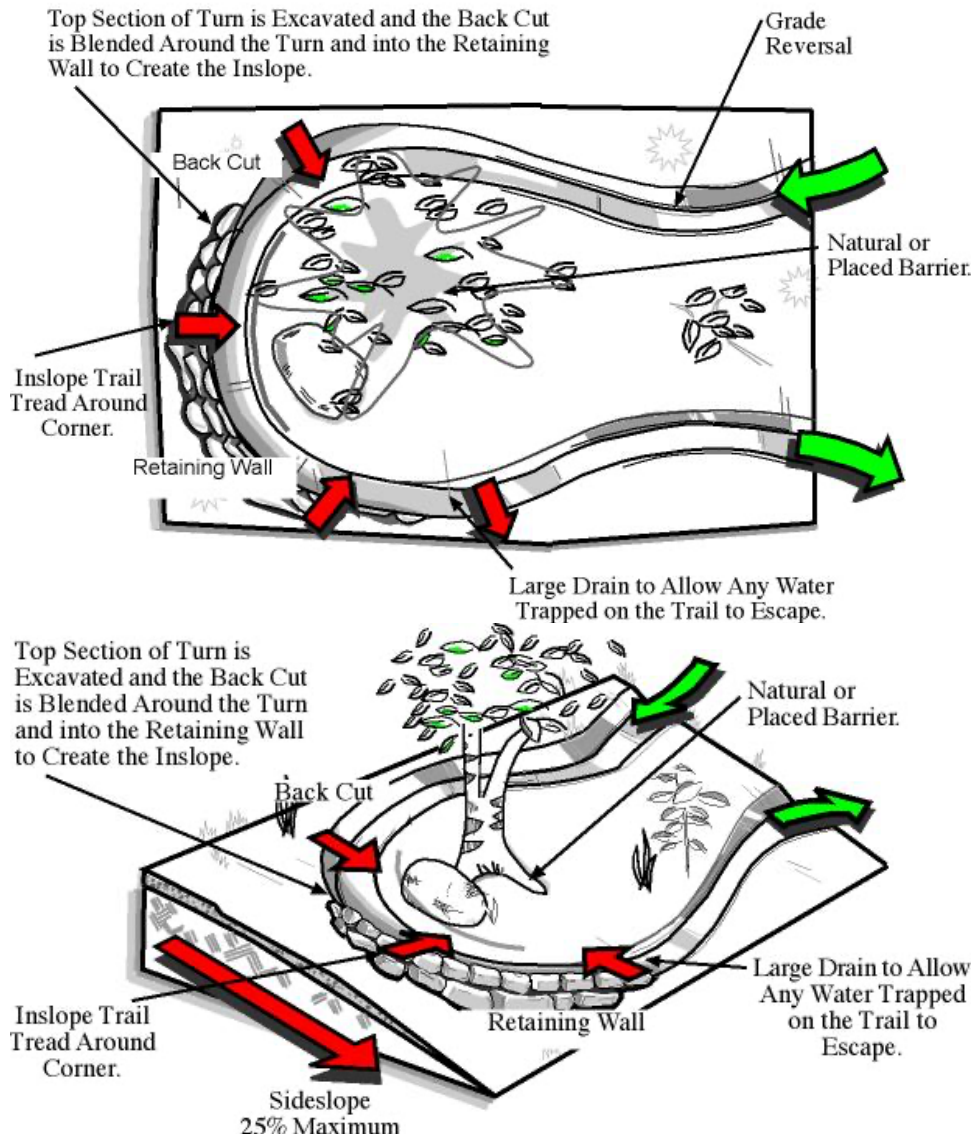


Figure 11: Insloped Turn

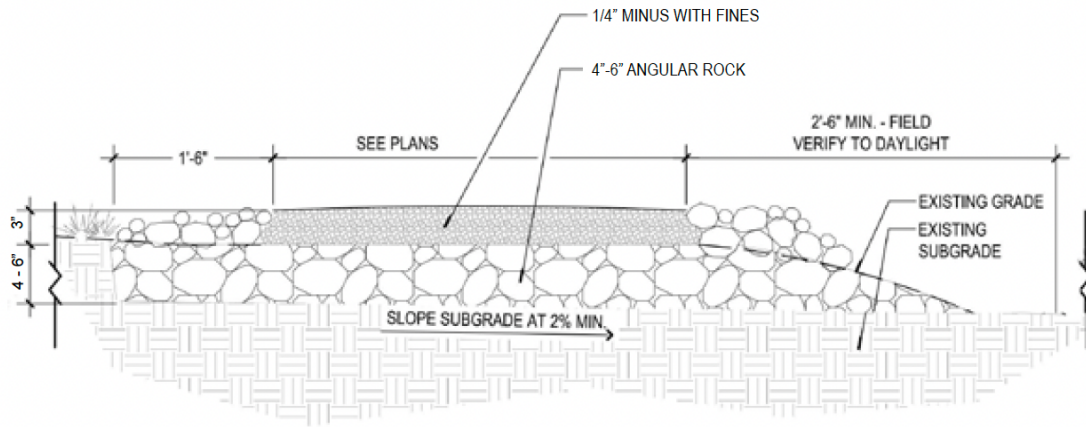
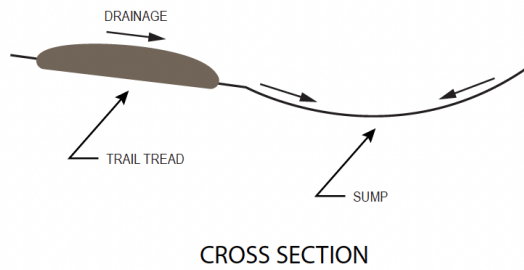
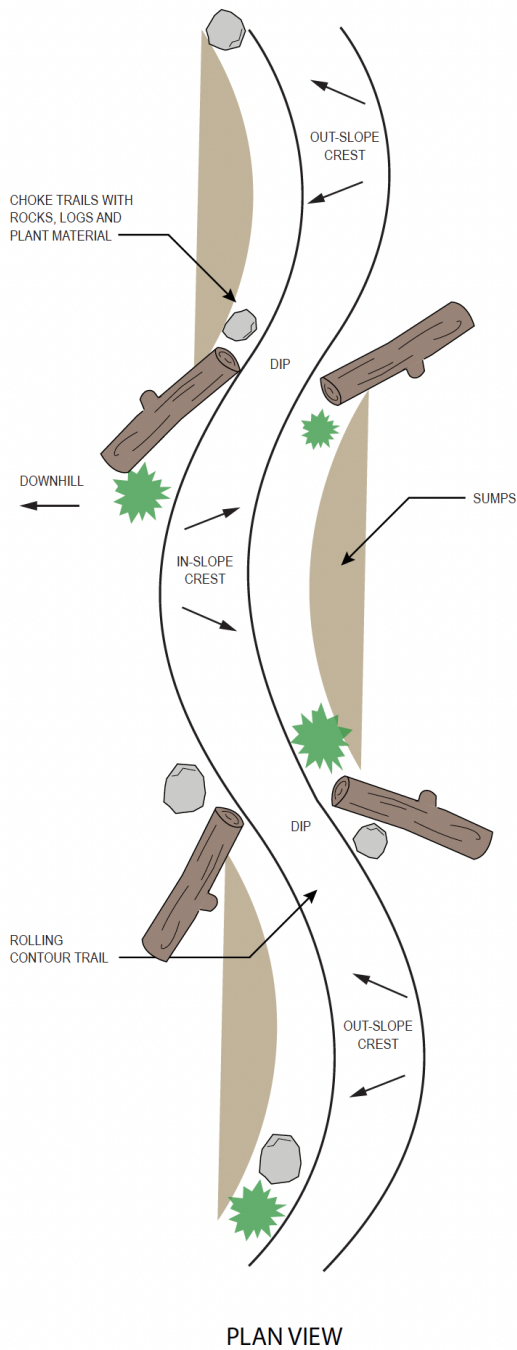


Figure 13: Filled Tread Trail



- NOTES
- 1) TRAIL TREAD TO BE BUILT WITH EXCAVATED MINERAL SOIL FROM SUMPS. NO IMPORT MATERIAL REQUIRED.
 - 2) BASIN AND RISE CONSTRUCTION TO OCCUR IN AREAS PRONE TO BEING WET SUCH AS WHERE EXISTING SIDE SLOPE IS $\leq 5\%$.
 - 3) IMPORTED ROCK MATERIAL IS NOT ANTICIPATED. ROCKS ENCOUNTERED ON SITE AS PART OF TRAIL CONSTRUCTION MAY BE USED AS CHOKES MATERIAL.
 - 4) IMPORTED LOG MATERIAL IS NOT ANTICIPATED. DOWNED LOGS ENCOUNTERED ON SITE MAY BE USED FOR CHOKES CONSTRUCTION.
 - 5) LOG AND ROCK MATERIAL TO BE BURIED 1/3 TO 1/2 OF HEIGHT.

Figure 14: Basin and Rise Trail

Trail Closure and Reclamation

Ensure smooth transition from existing trail to new trail.

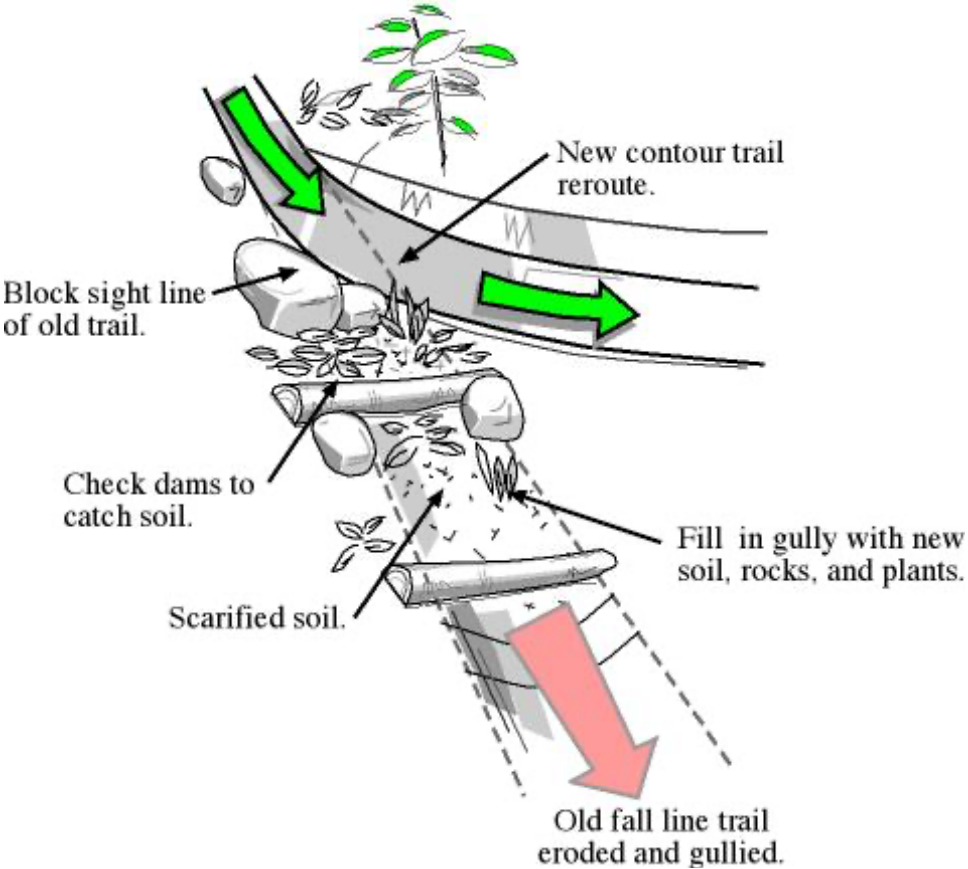


Figure 15: Trail Closure

SECTION 8: CONTRACTOR QUALIFICATIONS, REQUIREMENTS, AND RESPONSIBILITIES

8.1 Mountain Bike-Optimized Experience

In partnership with the client, the contractor will be expected to maximize the potential of the landscape hosting the trail corridors. Creativity is encouraged. The client is the final arbiter of the correctness of completed work. Inspection of work will be both visual and dynamic. The client will validate the riding experience of each trail as a prerequisite to final approval. Sections that do not ride properly will be improved and/or rebuilt at the contractor's expense until they are deemed acceptable to the client; the contractor will not be paid for partial or incomplete work, or work that does not meet the requirements, implicit and explicit, of this contract.

The contractor shall thoroughly test ride all trails and trail features by bike with appropriate expert rider, to ensure the specified riding experience, design, flow, rhythm, character, difficulty, and specifications are met. Testing shall be performed during the trail alignment and trail feature location process, as well as during construction and following construction, to the extent possible and in consultation with the client. Trails and features shall be modified and corrected as necessary until performance specifications are met and approved by the client.

8.2 Tools

The contractor shall perform the required work using hand tools and/or small mechanized equipment that is a maximum of thirty-nine (39) inches wide. Some sites may not be suitable for equipment this large and other sites may not be suitable for any mechanized equipment regardless of size due to terrain constraints. Permanent modification of trail outside the scope of work to accommodate equipment access (e.g., widening of an existing trail or creation of a permanent access route) is not desirable and must be specifically approved in advance by the client.

8.3 Mechanized Equipment

All mechanized equipment shall be in good mechanical condition, free of any fluid leaks, be equipped with spark arrestors if applicable, and have fire extinguishers mounted.

All equipment will be clean and free of debris before introduced to work site. Equipment is subject to inspection at the start and during the project.

Any equipment that appears to not meet these criteria shall be removed from the project site at the request of the client and at no additional cost to the client.

8.4 Backcountry Protocol

The Contractor's crew shall be familiar with backcountry operation and safety protocols as well as be familiar and adept at "leave no trace" practices.

8.5 Timetable

Ideally, the project will be completed by 28 February 2024. The client realizes that this may not be possible given the contracting timeline and therefore requests that the project be completed no later than 28 February 2025.

8.6 Meetings and Progress Reviews

The contractor shall meet with the client at the beginning of each workweek or as otherwise agreed upon by both parties to review progress and project expectations for the week.

8.7 What Contractor Provides

The contractor shall provide the necessary supervision, equipment, materials, and tools to perform specified trail maintenance and trail construction on identified trails and sites, including fuel for any mechanized equipment/tools and any and all personal protection and safety equipment.

8.8 Coordination

Trail contractor shall be responsible for coordination with the site development general contractor and subcontractors, if any, as required to complete all operations.

8.9 Public Safety

The contractor shall ensure that reasonable precautions are taken to protect the public at all times where work is being performed, including closure of construction area until the client has accepted the work.

8.10 Employee/Subcontractor Conduct

All of the contractor's employees and subcontractors shall conduct themselves in a proper manner at all times. Intoxication or any unsafe behavior by the contractor's employees while performing duties related to this contract is strictly prohibited. The contractor will be required to remove from the site any individual whose continued employment or retainer is deemed to be contrary to the public interest or inconsistent with the best interests of this trail construction project, and will not use such individual to perform services under this contract.

8.11 Competence

The contractor may be required to immediately remove from the worksite any employee or subcontractor of the contractor who is incompetent or who endangers persons or property or whose physical or mental condition is such that it would impair the employee's/subcontractor's ability to satisfactorily perform the work. Notification to the contractor shall be made by telephone promptly and confirmed in writing as soon as possible. No such removal shall reduce the contractor's obligation to perform all work required under this contract.

8.12 Compliance with Modern Practices

All work shall be performed and completed in a thoroughly skillful, efficient, and professional manner in accordance with best modern practices, regardless of any omissions from the attached specifications and/or drawings. Completed trails and features shall reflect professional workmanship in appearance, quality, and attention to detail. Trails and features shall be well integrated into site, aesthetically pleasing, and well-shaped, crafted, and finished according to commonly accepted best practices for high quality and sustainable natural surface trails. Work shall be completed to the client's satisfaction.

8.13 Condition of Materials and Equipment

All materials and equipment incorporated into the trail shall be new or otherwise in good working order and shall comply with the applicable standard in every case where such a standard has been established for the particular type of material in question.

8.14 Disposal of Materials and Supplies Not Approved

Materials, supplies, etc., that have been delivered to the job but do not comply with specifications and have not been approved shall be immediately replaced by the contractor at the contractor's expense. The contractor shall replace goods with material, supplies, etc., in full accordance with the specifications.

8.15 Disposal of Materials and Supplies Not Used

Materials, supplies, etc., that have been delivered to the job but are not used shall be removed from the site and properly disposed by the contractor at the contractor's expense.

8.16 Use of Premises – Storage

Contractor shall confine its apparatus, storage of materials, and operation of its employees/subcontractors to limits indicated by law, ordinance, permits, and/or directions of the client, and shall not unreasonably encumber the premises with its materials. Before any work is undertaken, the contractor shall consult with the client and secure from client the use of such space as may be available for the storage of materials and/or equipment. Contractor will be held responsible for any damage done in connection with the use of this location for storage.

8.17 Trail Rehabilitation

The contractor shall rehabilitate sections of trail that are to be closed as a result of trail realignments, if any. Any travelways created as a result of construction and/or ingress/egress will be restored to their original condition.

8.18 Use of Subcontractors

The contractor shall be able to use subcontractors to complete the work provided the subcontractors are described in the bid submission and otherwise meet applicable licensing and insurance requirements, if any. Use of subcontractors not described in the bid submission will only be allowed with written permission of the client.

8.19 Permits

The contractor shall be responsible for obtaining necessary permits.

8.20 Fire Protection

The contractor shall take all measures necessary to prevent fires from starting and spreading, including but not limited to the following:

- a) Fire Equipment. The contractor shall ensure that all equipment operating in the permit area carry a serviceable shovel and a fire extinguisher.
- b) Industrial Fire Precaution Level (IFPL) Status Checks and Waivers. Oregon Department of Forestry establishes IFPL levels (detailed information can be found [here](#)). This project is in the MH-4 area for purposes of determining the IFPL. Contractor shall check IFPL daily during the fire season (usually June through October depending upon fire indicators) before conducting any activities. The contractor shall comply with the restrictions and prohibitions under the applicable IFPL, unless a waiver of the applicable IFPL granting permission to use otherwise prohibited equipment or engage in otherwise prohibited activities is obtained in writing from the Forest Service. The Forest Service may require the contractor to take additional resource protection measures in conducting activities and projects in the permit area to be consistent with the applicable IFPL. These measures shall be listed in the fire waiver.
- c) Fire Safety Inspections. The Forest Service may make periodic inspections to ensure the contractor complies with fire safety requirements. Failure to comply with these requirements shall result in a temporary shutdown of all activities or projects at the contractor's expense until full compliance is achieved.

8.21 Operation Restrictions

To avoid potential noise disturbance to northern spotted owls, construction and maintenance activities requiring the use of chainsaws, heavy equipment, or helicopter support will only occur between July 16 and February 28 (with the exception of trailhead development on Wyeth Road).

8.22 Sample Trail Sections

The contractor shall construct sample segments of a minimum fifty linear feet (50 LF) as indicated in the construction plans. These sections shall contain a complete sample of the construction methods, materials, and workmanship intended for the project. Owner's representative must accept work before additional construction may proceed. Modifications and corrections shall be executed as necessary for acceptance by owner. The approved samples shall be retained during construction as a standard of work. The samples may be part of the actual trail system.

8.23 Resource Protection

The contractor shall comply with all conditions for protections listed in Appendix A. The client may issue a stop work order at the contractor's expense if out-of-compliance work is being performed. The contractor shall be responsible for remediating any out-of-compliance work.

SECTION 9: Appendix A - Project Design Features to Protect Scenic, Natural, Cultural, and Recreation Resources

The following Project Design Criteria were disclosed in the Final Environmental Assessment for the project. This list is provided for ease of reference and are generally reflected in the main body of the contract. The requirements are considered non-discretionary.

Wildlife and Fisheries

1. All felled trees will be left on site to contribute to coarse woody debris.
2. Trail layout will ensure that no trees greater than 30" diameter at breast height (dbh) will be removed during trail construction or maintenance unless the trees are classified as hazard or danger trees.
3. Trees between 18" and 30" dbh can be removed on a limited basis (averaging no more than one tree per 1,000 feet of trail) within the trail corridor.
4. Trees > 11 inches but < 18 inches dbh can be removed on a limited basis (averaging no more than one tree per 150 feet of trail) within the trail corridor.
5. To avoid potential noise disturbance to northern spotted owls, construction and maintenance activities requiring the use of chainsaws, heavy equipment, or helicopter support will only occur between July 16 and February 28.
6. Use appropriate best management practices for sections of trail through wet areas to minimize delivery of sediment. All fords in these wet areas should be hardened to minimize sediment delivery and erosion.
7. To protect habitat for sensitive salamander species, ground disturbance will be minimized, and no fill will be added to sections of trail crossing talus slopes or boulder fields.

Water Quality and Soil Productivity

1. Trails will be constructed to conform to the terrain, minimize erosion, provide suitable drainage, and provide adequate pollutant filtering between the trail and any nearby waterbodies.
2. Activities within and adjacent to riparian areas should not accelerate sediment delivery to streams, lakes, wetlands, seeps, and springs.
3. To the extent practical, stream crossings will be oriented perpendicular to the channel; located where channels are narrow, straight, and characterized by stable soils; and designed to minimize restriction of flood flows and maintain floodplain connectivity. Low-water crossings will be designed to maintain the function and bedload movement of the natural stream channel and to minimize flow constriction, site disturbance, and channel blockage to the extent practicable. Unimproved fords will be located in stable reaches with a firm rock or gravel base that has sufficient load-bearing strength for allowed uses. Low-water crossings and ford approaches will be hardened, designed to minimize erosion, and constructed during dry season or during the in-water work period.
4. Construction activities should maintain at least 95% ground cover (e.g. vegetation, duff, or litter) within riparian areas. Avoid ground disturbing activities in saturated soil areas where practicable.

Botany

Sensitive Plants

1. The trail will be routed to avoid disturbance of dry cliff and rock-face habitat suitable for Howell's daisy (*Erigeron howellii*) and long-bearded hawkweed (*Hieracium longiberbe*).
2. In order to protect *Lobaria linita* and *Hypogymnia duplicata* species and habitat, removal of any trees greater than 11" diameter at breast height will require prior consultation with the Forest Service botanist.

Invasive Plants

1. To reduce the potential for transport or spread of invasive plants, all vehicles and equipment used during construction of the trailhead and trail system will be washed before entering NFS lands.
2. To reduce the potential for weed spread through fill material (including gravel and rock), all materials used during construction will be certified weed-free.

Recreation

1. On shared use sections of trail, trail layout and clearing will be used to maximize sight distances to the extent practical.

Cultural Resources

1. Contractors working on the project will review a copy of the Columbia River Gorge National Scenic Area Inadvertent Discovery Plan. If cultural resources are discovered during implementation, all construction activities within 100 feet of the discovered resource shall cease. Cultural resources should remain as found; further disturbance is prohibited. Notify Forest Service immediately.

Lands

1. Trail construction will ensure that no portion of the trail is within 50 feet of any BPA structure (e.g. steel lattice tower, steel pole, concrete pole, or concrete foundation) and that trail corridor avoids all equipment landings.
2. No grade changes to facilitate construction or disposal of overburden shall be allowed within BPA's easement area. As needed, BPA right-of-way and access roads shall be returned to their original condition following trail construction.
3. Access to BPA structures shall remain open and unobstructed at all times during trail construction and maintenance.
4. Equipment, machinery, and vehicles traveling within BPA's easement area shall remain at least 25 feet away from any BPA structure or guy anchor ground attachment point. If there is a possibility that any equipment will encroach on this distance, then a safety watcher is required. There will be no storage of flammable materials or refueling of vehicles or equipment within BPA's easement area.



PTARMIGAN PTRAILS
CONSULT :: DESIGN :: BUILD



Cascade Locks Trail
Construction
Port of Cascade Locks



PTARMIGAN PTRAILS, LLC
OREGON CCB#: 215474
UTAH#: 12238663-5501

907-841-0114
eddie@ptarmiganptrails.com



PTARMIGAN PTRAILS
CONSULT :: DESIGN :: BUILD

Ptarmigan Ptrails, LLC

PO Box 649

Port Orford, OR 97465

BID

BILL TO:

Mark Johnson
Port of Cascade Locks

Date: 9/11/2023

Project Title: Cascade_Locks_23

P.O. Number:

Invoice Number:

Terms: 45 Days

Description	Detail	Quantit	Unit Price	Cost
ITEM 1*	Mobilization	1	\$ 2,350.00	\$ 2,350.00
ITEM 2*	Trail 8	5584	\$ 9.88	\$ 55,169.92
ITEM 3*	Trail 6	2306	\$ 9.51	\$ 21,930.06
ITEM 4	Trail 7	9570	\$ 9.88	\$ 94,551.60
			Subtotal	\$ 174,001.58
			Tax	0.00%
			Total	\$ 174,001.58

*Fuel and labor costs have increased since 2021 due to inflation and cost of operations. Thank you for your business. We are excited to work with you on your project.

Regards,

Eddie Kessler



PTARMIGAN PTRAILS
CONSULT :: DESIGN :: BUILD



Table of Contents

I. Company Profile	2
II. Project Team	3
III. Relevant Experience	5
IV. Proposed Approach	13

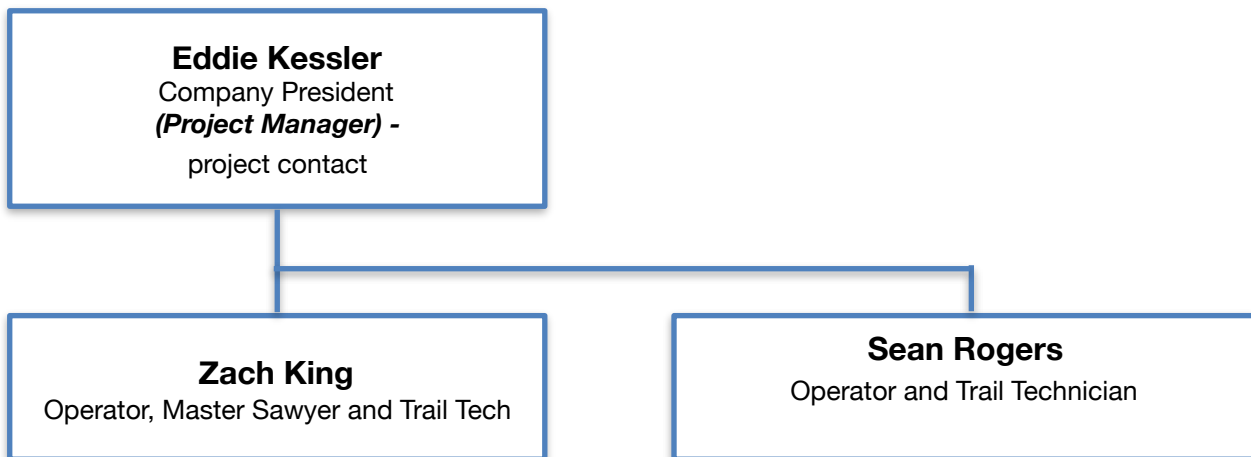


1. Firm Information

Ptarmigan P trails, LLC is a Pacific Northwest based trail construction company and proud member of the nationally recognized Professional Trail Builders Association. We are an Oregon and Utah Limited Liability Corporation. Our firm was founded in 2009 with a mission to provide fun, sustainable, aesthetically pleasing and user specific trails. We are a company of riders and trail users incorporating progressive design and current best management practices for every project we take on. Working with peers across the nation, we strive to stay up to date with current industry trends.

Having worked previously for Port of Cascade Locks and in the local area on similar projects, our team appreciates and understands the complex nature of the the regions values, landscape, soils and ecosystem services, especially within the Mt Hood National Forest and surrounding communities. Ptarmigan P trails will use our past experiences to make the project a success. We believe more people on trails and bikes make for better communities. Our portfolio speaks to our success in creating lasting relationships with clients. Ptarmigan P trails (PTRAILS) is well suited to work with Port of Cascade Locks and the USFS to provide trail construction for the *Cascade Locks Trail Construction Project*.

1.1. Project Team Leaders Organizational Chart





1.2. Project Team

Eddie Kessler - Company President Ptarmigan P Trails LLC

Project Role: Project Manager, co-lead designer and client liaison

Eddie has owned Ptarmigan P Trails since 2011 and has been building trail since 2006. He manages all trail construction and design operations for Ptarmigan P Trails, leading on the ground equipment operations and providing detailed project management. Eddie holds a B.A in American Policy with an emphasis on Environmental Studies from the University of Central Florida, and a Masters of Outdoor Environmental Education from Alaska Pacific University. He has worked professionally on trails all across the nation from Arkansas to Alaska. Eddie believes getting people into the outdoors is the best way to create a sense of connection within our natural lands and the communities we live in. He lives with his wife Erin and daughter Evie in Southwest Oregon and has served on the board of Envision Mat-Su, Valley Mountain Bikers and Hikers and was a founding member of the Wild Rivers Coast Mountain Bike Association. He currently serves on the local 2CJ school board and Port Orford Parks and Recreation Commission.





Zack King - Equipment Operator, Trails Specialist and GIS Tech

Zach joined Ptarmigan P Trails in 2017, following 5 years with the Northwest Youth Corps. He's currently in the final year student in the Landscape Architecture program at University of Oregon and has worked in the northern Cascades, Fremont Winema National Forest and remote regions of the Pacific Northwest. Since joining Ptarmigan P trails Zach has been a part of our projects in Oregon, Utah, California, Alaska and Arkansas. He's an integral part of our design and construction operations team, having evolved his skills from detailed hand finish and technical power saw expertise to mountain bike optimized trail operations, team management and trail design. Having constructed and designed trail at Thurston Hills in Springfield, he has a keen personal interest in seeing sustainable and family friendly biking expand to Eugene, the city he has called home for the past 5 years. Zack is an asset to our project team.



Sean Rogers - Trails Specialist

Sean joined P trails in 2020 and has been riding and building dirt jumps since 2002 Sean got his start working for various professional trail contractors and Denver Parks and Recreation Department, but has moved on to equipment operations and lead hand finisher with P trails. Sean has extensive knowledge in maintaining and resurfacing trails, managing erosion, creating features for a variety of skill levels, and using specific angles and measurements to quantify skill level requirements on features. Sean is an accomplished rider and racer and enjoy going fast on his mountain bike.





2.Relevant Experience

Thurston Hills Natural Area (2017-2020 Willamalane Parks and Recreation District)

Location: Springfield, OR 97478

Contact: Fraser MacDonald, Natural Resource Manager

Info: 541-736-4051, FraserM@willamalane.org

Cost: \$340,000 in total

Participating Stakeholders: Willamalane Parks and Recreation, Lane County, Oregon Parks and Recreation Department, Bonneville Power Administration, City of Springfield, Disciples of Dirt, Bureau of Land Management

In 2020, Thurston Hills was awarded a CRT Achievement Award for Public-Private Partnerships Enhancing Public Lands Access and Use from American Trails. Our firm was hired to help Willamalane Parks and Rec develop the first and second phases at Thurston Hills Natural Area, a suburban multi-use wilderness park in the Eugene/Springfield area. For Phase I we finalized design details with WPRD staff on all trail alignments throughout the project site and moved on to construction of what is now called Mossy Maple, Yew Haw Trail, and a full design/build of Acer Spades, a beginner-intermediate downhill flow trail. The project created a trail system providing nature escape with dedicated native surface routes for hikers and mountain bikers, while providing a shared use, universal access compliant trail as either a climbing trail or hiking path.



WPRD again hired Ptarmigan P trails in 2019 to design 4 additional miles on the south side of Thurston Hills. WPRD trusted in our approach and expertise, and we collaboratively designed new trail through complex hydric soils, areas containing rare native plant species, and along shared property managed by a separate federal agency (Bonneville Power Admin). Thurston's challenges represented a learning opportunity that can applied to many projects within urban/wildland land interface.



PTARMIGAN PTRAILS
CONSULT :: DESIGN :: BUILD



Thurston Hills Project Photos:





PTARMIGAN PTRAILS
CONSULT :: DESIGN :: BUILD



Chehalem Ridge Nature Park (METRO) (2020-2021)

Location: Gaston, OR

Contact: Karen Vitkay - Metro Senior Regional Planner

Contact Info: karen.vitkay@oregonmetro.gov, 503-758-4878

Cost:

Participating Stakeholders: METRO, Oregon Parks and Recreation Department, Washington County, Trailkeepers of Oregon

Ptarmigan P Trails constructed over 7.5 of new trail in this multi-use system and worked with METRO to adjust and realign 1/3 of the natural surface and AAA trails (All Ages and Abilities). CRNP now provides a unique and beautiful nature experience, with interpretive, aerobic and wilderness experiences for residents on the west side of the METRO area. The majority of the trail system was designated for hiking and biking, while a separate area also included design and management standards for equine users. Due to the complexity of the permitting, compliance and construction process, PTRAILS also provided ongoing design services to METRO in order to finalize route alignments and provide problem solving real world trail concerns. During the construction process, our team worked with METRO agency and contractor peers to alleviate concerns in trail connectivity and potential trail impact issues that arose when bringing the trail design to life. We were honored to be a part of this significant project that helps bring new recreational trails to an underserved area of the Portland metro community.





PTARMIGAN PTRAILS
CONSULT :: DESIGN :: BUILD





Whiskey Run Mountain Bike Trails - Phase I, II, III (2017 - 2022)

Location: Bandon Area, Coos County, Oregon

Contact: Lance Morgan County Forester, John Sweet County Commissioner -

Contact Info: 541-396-7751; lmorgan@co.coos.or.us, 541-217-8135, jsweet@co.coos.or.us

Cost: \$675,000

Participating Stakeholders: Coos County, City of Bandon, City of Coos Bay, Oregon Parks and Recreation Department, Travel Oregon, Oregon Regional Solutions, Wild Rivers Coast Alliance, Oregon Coast Visitors Association, Bandon Chamber of Commerce, Travel Southern Oregon Coast, Wild Rivers Coast Mountain Bicycling Association

Our firm designed and constructed all three phases of the 32 mile MTB optimized trail system composed of beginner, intermediate and expert trails. The trails traverse steep coastal drainages and flat marine terraces, offering a challenging build process due to coastal weather and soil dynamics. The entire trail system is located within a working timber forest, creating its own distinct design and construction hurdles. Whiskey Run is the first year round, sustainable trail system on Oregon's Pacific Coast. Phase I was constructed to appeal to families, beginner and intermediate riders. Phase II was designed and constructed to draw in more advanced riders with steeper grades, challenging features and more exposed trails. In 2021/22 we designed and built an entirely new area of trails called "The Volstead." Still part of Whiskey Run, this area requires commitment to a minimum 8 mile ride and offers a unique backcountry "light" trail experience on the south side of the trail system.



The development of Whiskey Run's multiple phases required working with county leaders, land management department heads and bridging the ideas of multiple stakeholder groups. The trail system was designed to serve visiting tourists and local residents. Because the project had the potential to add significant economic impact to the surrounding communities of Coos Bay and Bandon, our team paired the interests of the local mountain bike organization with the goals of the regional development board. The success of Whiskey Run has created numerous small businesses, supported local TLT taxes in the form of "heads in beds" and provided the canvas for the local youth NICA team to train and win 2 state mountain bike championships (2021, 2022).



PTARMIGAN PTRAILS
CONSULT :: DESIGN :: BUILD



Additional Whiskey Run Photos:





PTARMIGAN PTRAILS
CONSULT :: DESIGN :: BUILD



Mountain of the Rogue Trail Construction

Location: Rogue River, Or/ Medford District BLM
 Contact: Nic McDaniels - Medford District Recreation Planner
 Contact Info: 541-490-8048, nmcdaniels@blmn.gov
 Cost: \$186,000, 3.75 Miles

Participating Stakeholders: Bureau of Land Management Medford Office, Rogue Valley Mountain Bike Association, Oregon Department of Parks and Recreation

Ptarmigan P trails constructed over 2.5 miles of new trail and enhanced and has rebuilt 4.25 miles of existing trail at the BLM’s mountain of the Rogue. The project team worked to create trail additions that added more flavor and options to the Mountain of the Rogue Experience. Most exciting, our team constructed a 1/2 mile hand built trail on the backside of the mountain, and a 3/4 mile, hand built double-black expert trail. The expert trail traverses steep sideslopes and connects multiple basalt rock slabs, creating a wild and challenging experience for riders.





Additional Relevant Trail Design and Construction Experience

- **Cascade Locks Easy Up Trails** - Port of Cascade Locks :: Cascade Locks, OR 2021
- **Newell Creek Canyon Nature Park MTB Trails** - METRO :: Portland, OR 2021
- **Ecola Point to Indian Beach*** - OPRD Cannon Beach, OR 2020
- **Ravine Trail at Crystal Bridges** - NWA Trail Stewards :: Bentonville Arkansas 2019
- **Mt Fitzgerald Expansion** - NWA Trail Stewards :: Springdale, Arkansas 2019 - 2020
- **Cascade Locks Green Trail** - Port of Cascade Locks :: Cascade Locks, OR 2021
- **Seward Community Bike Park (Design Build)** - Seward, AK 2019
- **Randolph Ranch MTB Trail System** - Scotts Valley, CA, 2017-2019
- **7th Street Bike Park (Design/Build)** - John Day, Oregon, 2018
- **Northwoods Trails - Hot Springs, AR** - IMBA and City of Hot Springs, AR 2018
- **Sasquatch Trail construction** – BLM Mountain of the Rogue Rec Area :: Rogue River, OR
- **Gutrobber Trail Construction** – BLM, Alsea Falls :: Alsea, OR
- **Government Peak Singletrack Phase II, III** – VMBAH :: Palmer, AK 2016, 2019
- **BACK 40 OZ Trails** – Bella Vista Trail Blazers & IMBA Trail Solutions :: Bella Vista, AR 2016
- **Lava Flow Trail** – IMBA Trail Solutions, BLM CCFO:: Cedar City, UT 2015
- **GPRA Singletrack Machine & Hand Finishing*** - VMBAH :: Palmer, AK 2015
- **Whiterock Singletrack** – Whiterock Conservancy/Singletrack Trails INC :: Coon Rapids, IA 2014
- **Kincaid Singletrack Phase II** - Singletrack Advocates/Municipality of Anchorage :: Anchorage, AK 2013



3. Proposed Approach

Our team has experience working in the region and on similar large scale projects. Ptarmigan P Trails understands the processes and intention of the design experiences and quality expectations.

Kickoff Meeting

In order to meet contract deadlines and production expectations, we expect to hold an initial meeting to review trail design specifications, on site conditions, logistical planning and conceptual alignments with district staff and their representative. This meeting shall be an opportunity for the PTRAILS team and agency staff to review any concerns or potential issues our team should be aware of. It's a chance for a friendly check-in and a way to constructively facilitate two-way communication between client and build team.

Construction Approach

Initial construction will take place starting from higher elevations. Start date is dependent upon decibel level restrictions and weather windows. P Trails could start as early as March 2024, or the project may have to begin in late summer 2024. Our crew will stage equipment at specified staging off Herman Creek Road areas on the upper elevations of the project site and work our way downhill from north to south.

Initial mobilization will access and begin construction of TRAIL 8 via the BPA corridor. PTRAILS will access the corridor off Herman Creek Rd, walk the machine down to the BPA corridor crossing. Our team will then work uphill to the upper terminus of TRAIL 8, and then clean back downhill to the HUB of TRAILS 6/7/8.

From the central HUB 6/7/8, PTRAIL crew will then construct trail to Herman Creek Road on TRAIL 6 and once reaching road will then clean back to hub.

Final segment of trail construction, TRAIL 7, will be conducted in a linear process. Trail 7 construction will be conducted downhill in order to achieve most desired experience criteria outlined in the RFP and BLM's GQTE.

Demobilization of trail construction equipment will utilize existing roads and pull-offs. PTRAILS crew will place signs at the trailhead and trail terminuses during construction. During trail demobilization,



Any visible impacts to existing trails and infrastructure will be repaired, raked out or removed prior to project finish.

Timing of Construction and Labor

Ptarmigan P trails LLC expects construction to take approximately 43 work days and approximately 55-60 calendar days.

- Crews will work 4 day work weeks when light allows
- Work hours will be Mon-Thurs from 7:30am until 6pm
- Hours may change due to IFPL levels and fire weather events
- No weekends or holidays unless approved by agency staff and PTRAIL administration

OPTIMAL TIMING JULY 15, 2024 THROUGH NOV 1, 2024

WEEK	1	2	3	4	5	6	7	8	9
ITEM									
1 Mobilization	X	X							X
2 TRAIL 8		X	X	X					
3 TRAIL 6				X	X				
4 TRAIL 7					X	X	X	X	

Please see the following chart for tentative project timeline.

Proposal: Cascade Locks Trail Construction



Prepared by:
Singletrack Trails, LLC

PLAN + APPROACH.....	2
TEAM QUALIFICATIONS & CAPABILITIES.....	6
PERSONNEL RESUME.....	8
DIVERSITY & ENVIRONMENTAL STATEMENTS.....	9
TECHNICAL EXPERTISE.....	11
ADAPTIVE TRAIL EXPERTISE.....	12
PROJECT REFERENCES.....	13
TYPICAL PROJECT APPROACH.....	17
PRICING DETAIL.....	19



Mark Johnson - Project Manager
Port of Cascade Locks
Cascade Locks, OR 97014



Singletrack Trails is privileged to submit this proposal to provide professional trail services for Cascade Locks Trail Construction. Singletrack Trails LLC. Is a national leader in the professional field of recreational trails infrastructure planning, design, assessment, and development. Our team has an incredible passion for providing diversified designs, public outreach facilitation, and feasibility planning for the outdoor recreation industry.

At Singetrack Trails, we believe in the synthesis of connection. That is the ethos of everything our companies do. A recreational experience engages the user, providing a fun and soul-satisfying connection with the outdoors and the community. These experiences make for more vibrant communities that value recreation and the health benefits of playing outside. Our companies employ a dedicated team of specialists having decades of cumulative experience. We are not only technically suited to provide advanced planning and design services in an efficient manner that meets expectations, but we are also extremely vested in the community outcomes of this project. Our portfolio of experience is relevant, our skill set is deep, and our passion for this project is sincere.

The information contained within this proposal is true and complete to the best of my knowledge.

We hope you enjoy reviewing our qualifications and we look forward to working with you on this project.

Sincerely,

Greg Mazu
Authorized Representative and Proposal Offerer
Founder and CEO
Singletrack Trails LLC,
2591 Legacy Way
Grand Junction, CO 81503
clent.services@singletracktrails.com
303.818.8324
OR GC License # - 240266



PLAN + APPROACH

Singletrack Trails is excited to submit our bid and proposal for the Cascade Locks Trail Construction project. We are excited for this project, as it represents our values as a trail building company, that a good trail experience can engage the user to the outdoors and leave them with a lasting impact. Not only do we believe this project represents our values, our experience in the Bend, OR area last year set us up to hit the ground running if we were to be awarded a project in the Gorge region. It is from this experience and exposure that we have built a plan and approach that includes the following:





Staffing this project with 5 builders, (one site supervisor and 4 trail artists) that have experience both in building and riding/ hiking mountain bike and hiking trails. As you will read in our references section, we have experience building trails all throughout the United States, so we understand the BMP's that are needed to produce high quality trails. Along with our crew size, we staff each project with the necessary equipment, for this project we plan to use a Mini Excavator, as well as other trail building equipment outlined throughout our proposal. From our knowledge and project understanding, we have developed the following build timeline.

-Trail 6 = 5 Construction Days

-Trail 7 = 25 Construction Days

-Trail 8 = 12 Construction Days

TOTAL Phase 1 = 42 Construction Days

In regards to project timing, if awarded we are available to begin construction Between November 1 and December 1, and project completion would be slated prior to March, 2024 (Weather Pending).

Singletrack Trails follows our in house trail BMP's program, as well as the build guidelines outline in 'Trail Solutions' - IMBA's guide to building sweet singletrack. We hope you enjoy reading our capacity, safety plan and other necessary information throughout our proposal.

TEAM QUALIFICATIONS+CAPABILITIES

WE BELIEVE IN THE SYNTHESIS OF CONNECTION

This is the ethos of everything we do at Singletrack Trails. A good trail experience engages the user, providing a fun and soul satisfying connection with the outdoors; and quality trail experiences make for more vibrant communities that value recreation and understand the health benefits of playing outside, providing a corresponding increase in quality of life and a connection to the natural environment to create long-lasting, sustainable “ribbons of dirt” for other to enjoy. We are passionate about our job and bring a high level of professionalism to each project we undertake.

Initially a reluctant CEO, Greg Mazu founded and has led Singletrack Trails since 2004. He is a visionary in the outdoor recreation industry striving to professionalize the trail building industry. Beginning as a seasonal trail crew member for the State of Colorado at Lory State Park and soon thereafter making significant improvement to the parks trail system, Greg quickly realized an opportunity existed due to an unmet need at the time for more high quality, sustainable trail construction across the United States. He began Singletrack Trails to meet this need. Under his leadership, Singletrack Trails has grown to almost 50 employees, primarily across four permanent trail crews, and is now one of the largest natural surface trail construction companies in the country.





In addition to serving as the Founder / Chief Brand Ambassador for Singletrack Trails, Greg is the Founder / Chief Brand Ambassador of Tools for Trails, Backslope Tools, Recreation Fabrication, and Desert Rats Tours - pointing to his desire to innovate and engage in continuous improvements within the professional trail building industry.

Singletrack trails does more than construct and maintain shared-use trails; we are crazy committed to pioneering a holistic approach to shaping visions into lasting experiences. We are a trusted partner creating pathways for communities to have a meaningful and lasting connections with the outdoors.

We provide the dirt conduit to healthier living and stronger communities. Driven by the desire to protect natural resources while providing better experiences for folks recreating in the outdoors, Singletrack Trails has been involved with the design and construction of more than 1,000 miles of sustainable, shared-use trails across the United States. An active member of the Professional TrailBuilders Association, we are a leader in the Rocky Mountain Region.



We also continue to grow into new regions and expand our portfolio of services for shared-use trail planning, design, construction, and development of bicycle skills training parks. Singletrack Trails has experience providing the following services:



Based in Colorado, we credit our success to the development of productive partnerships with federal land management agencies including the Bureau of Land Management, U.S. Forest Service, as well as state, county and local governments. We also have several beneficial partnerships with private owners and resorts. Through these partnerships, we have received numerous industry accolades and referrals, maintaining a high level of client retention.

But most importantly, our success is due to our amazing employees. Singletrack Trails employs a dedicated team of builders and specialists with decades of cumulative experience. Because of their love for trails and the outdoors, our staff understands how to design and build memorable trail experiences. As a result, they create what they would want to experience themselves; a reflection of their dedication to recreation, the outdoors, and community.

MEET THE TEAM



For this project we will assign a minimum of four full-time diggers, one site supervisor, and one project manager to be on site at all time. We pride ourselves on assigning the right people to each project, and guarantee that you will find this team uniquely qualified, and prepared to support your project goals.

Not only does Singletrack Trails provide an experienced crew of builders, site supervisors, and project managers, but we will also call upon senior level personnel, when necessary, to facilitate any and all project specific inquiries to ensure your needs are met.





Spencer Rugland | Master Craftsman

Spencer Rugland joined Singletrack Trails in 2019 as a skilled machine operator and now serves as the Project Manager. An experienced carpenter, mechanic, and heavy equipment operator, Spencer combines these skills with his love of the outdoors to shape dirt, create amazing trails, and manufacture features that put smiles on the faces of trail users. He has quickly become a master of the professional trail building craft. Spencer has 15 years of experience operating heavy equipment, primarily at Powderhorn Mountain Resort, a ski area in western Colorado. In 2015 Spencer was awarded Colorado Ski Country's Terrain Master of the Year award for his work with design, snow-making, heavy equipment operating, feature fabrication, building, and maintaining the terrain park.

At Powderhorn, he also managed a five person crew, and handled scheduling, risk management, as well as documentation for all activities of the staff. He now proactively and effectively manages trail crews on site ensuring projects are completed on time, on budget, and exceed client expectations. He has worked on Singletrack projects in Colorado, Utah and Arkansas



Jeff Martinez | Quality Control & Quality Assurance Manager

Jeff Martinez joined Singletrack Trails in 2020 as a skilled machine operator and trail builder, ensuring projects were completed on time and on budget. Wherever Jeff led a crew, and built a trail, he ensured that the specific community had a positive ROI from the trail project, bringing definition to the term 'home trail hero'. Additionally, he has built trails on Powderhorn Mountain Resort, a local ski mountain located in western Colorado. A skilled logistics planner and coordinator, prior to his experience as a trail builder and machine operator, Jeff was a Design Engineer and a Department of Defense contractor for direct digital control systems for 11 years. He now serves as the Quality Control & Quality Assurance Manager where his skills are combined with his experience to ensure that projects are built to a specific quality product for clients and future generations to enjoy. As a project manager, Jeff has built over 10+ miles of trail all over the country.

Jeff holds a bachelor's degree in Business Management from Chico State University. When he is not working on logistics, you can find him on the trails. He is based in Grand Junction, CO.



Adam Wadas | Director of Operations

Adam joined Singletrack Trails in 2023 as the Director of Operations, a role that combines his experience as a logistics manager and recreation enthusiast. Originally from New Jersey, Adam grew up with a passion for riding and racing mountain bikes and in 2003 he took this passion and drive with him to Colorado where he pursued a degree in Recreation Outdoor Leadership from Western Colorado University. After receiving his degree, Adam worked with the Bureau of Land Management, adding to his experience of a logistics manager and fulfilling his passion for working in public lands.

After his brief stint with the BLM, Adam worked in the Metal and Fabrication industry for 12 years, before landing with Singletrack Trails. When he is not leading the Operations Department, you can find him on the trails riding his mountain bike, gardening, or raising his twin girls which he states is the most exciting part of life.

Danon Kloster | Director of Client Relations & Director of Sales

Joining Singletrack Trails in 2021 as the Director of Client Relations, Danon is instrumental in ensuring an effective communication channel between our Operations, Sales, and Planning teams, and our clients. Danon grew up in Boulder, Colorado and has been an avid outdoor enthusiast most of his life. Post- college, Danon spent about 6 years racing bikes and “ski-bumming professionally” in Aspen, Colorado. Danon has since returned to Boulder and enjoyed life in the corporate world for a few years prior to joining Singletrack. Most recently, Danon developed and managed a multi- tiered client support department for a partner company to a Fortune-100 corporation. In addition to serving as the Director of Client Relations, he is also the Director of Sales, a department he built from the ground up using his industry knowledge and experience.

In his free time, you’ll likely find Danon riding the endless roads in the foothills of Boulder. He also loves skiing and playing golf with his wife.



DIVERSITY + ENVIRONMENTAL STATEMENTS

IDEA STATEMENT

Singletrack Trails is an Equal Opportunity Employer and is dedicated to the principles of equal opportunity in any term, condition, or privilege of employment. We do not discriminate against applicants or employees on the basis of age race, sex, color, religion, national origin, disability, sexual orientation, gender identity, veteran status, or any other status protected by federal, state, or local law. We currently employ permanent crews led and staffed by women. Currently 10% of our staff are veterans of the United States Military. Including both senior level personnel and trail builders.

We acknowledge the outdoor recreation industry, of which we are a part, has much work to do to improve diversity, equity, and inclusion (DEI) and we are committed to do more. For us, improving DEI in the outdoor recreation industry is an important IDEA we will implement. We are committed to

Inclusion, to **D**iversity, to **E**quity, and to **A**daptability.

The IDEA is to improve on existing practices, concepts and lack of diversity and apply it to as many trails and projects for which we are involved. Our goal is to make everyone consider and think about all these IDEA's when proposing, designing and creating anything within the outdoor rec world.

We are committed and invested in the development of adaptive trails and facilities, we have a personal connection within our company and have seen firsthand the difficulties and struggles of significant injuries and/or adaptations, but also amazing potential. And thanks to the improvements in technology and concepts, ourselves and the outdoor rec industry as a whole can finally focus more on a previously overlooked user group.

We are committed to improving access to the outdoors and outdoor recreation opportunities for all, including lower income individuals and residents in urban areas. Moving forward we intend to explore creative ways to increase access to trails and outdoor recreation. We will support community-based efforts to build or renovate infrastructure such as urban trails and bike parks, and support an train diverse volunteer trail crews on projects whenever possible.



ENVIRONMENTAL STATEMENT

We pride ourselves in being environmental stewards constantly seeking the balance between responsible recreation and conservation, two important facets of land management and development. We understand the effect a trail can have on the user - connecting them to the environment. Further, we believe in increasing access to the outdoors, while also taking the necessary precautions to protect the land for future generations. During the mobilization and construction process, we will take extra care of the land surrounding the project site, minimizing our impacts while building a sustainable and durable product. We do this through:

Knowing the environment around us. As a trail building company, our crews travel the country building across a range of unique ecosystems. We prevent the spread of invasive species by thoroughly cleaning our tools and machines before, during, and after each project before moving to the next.

Maintaining safe fuel storage and refueling techniques. We understand the risks associated with storing fuel outside for our various machines, especially the risk of wildfires in dry areas exacerbated by climate change.

We take extreme caution while refueling in dense forested areas. Tracking and adhering to various wildlife easements, and working alongside BLM and Forest Service guidelines. We have experience following bird easements, moose crossing easements, and other wildlife accommodations to name a few, while constructing a trail. Not only do we take these precautions on federal land, but we work closely with private landowners on private land as well to ensure the same professional standards are met.

Building Sustainable Trails. Building durable, sustainable trails correlates with a long lasting product, that mitigates erosion, and minimizes conflict between different user groups. A durable trail will last for generations, and will require minimal maintenance. On every project we carefully design, reroute, and closely follow IMBA's Trail Solutions on how to implement these various techniques.

CAPABILITIES

Singletrack Trails typically staff five to eight four-person crews during peak build season. Depending upon the project scope, we are prepared to use the following crew and machine combinations during any given project life cycle:

- One 4-person hand-build crew (with added personnel and equipment when/where necessary)
- One 2-person technical crew for large stone mason features, corridor clearing, signpost and cattle guard installation, fencing, pre-construction rock micro-blasting requirements, and completion of as-needed punch-list items
- One 4-person machine crew with two mini-excavators; supported with an ATV
- One 4-person machine crew with a trail dozer and mini-excavator; supported by an UTV
- One project management, planning, and design team





Singletrack Trails owns and operates the following machines:

- Ten Kubota U-17 Compact Excavators. Perfect for maneuverability, and working in dense forested areas
- Two Kubota U-27 Compact Excavators. Slightly bigger version of the U-17, allows for more horsepower in complex builds
- One SK650 and one SK850 Ditch Witch Skid Steers
- Four Canycom BP416/419 Off-road Rubber Track Carriers. Our Canycom machines are meant to assist in carrying rocks, crush, and other assisted building duties
- One Canycom SC75 1/2-Yard Rubber Track Dumper
- One Canycom S25 2-Yard Rubber Crawler Dumper
- One Sutter 480 Trail Dozer. The ultimate trail machine, the Sutter 480 is a durable dozer that allows our crews to build durable, sustainable full bench trails

Singletrack Trails owns all the machines listed above and will provide experienced operators with a minimum of 250 machine hours of experience. For larger projects we rent backhoe-loaders and roller-compactors, as well as contract delivery of water necessary for proper soil compaction and additional solid materials when needed.



TECHNICAL EXPERTISE

Dedicated to providing adaptive, effective and tailored solutions to each recreation project, we provide specialized technological services for facility design, field assessment, and the creation of visualizations and imagery to support client communications and public outreach.

For complex projects involving visitor use studies, we utilize geo-statistical models coupled with trail counter, voluntary GPS visitor tracking and project geo-databases. This helps us and our clients to better understand facility capacities, temporal visitor interactions, spatial usage separation requirements, and the benefits of mixed modal recreation in open space settings.

For planning and design studies, we utilize geospatial technologies for conceptual project landscape analysis and trail corridor development assessment. Our streamlined approach reduces field time, ensuring efficient use of project funds. Using LiDAR-derived terrain data we conduct preliminary durability analysis through proven influences and documented interactions of hydrology, geology, natural and cultural resources on sustainable recreation facility design.



Our geospatial technical services include:

- Data acquisition and compilation
- Hydrology, ecology and geology resource mapping
- Database model design and management
- Spatial relationship analysis and proximity modeling
- Terrain modeling, slope analysis and contour mapping
- GPS-enabled assessment and inventory surveys
- Land, transportation and infrastructure mapping
- UAV-supported aerial photography and mapping
- Recreational trail and facility mapping
- Professional cartographic presentation
- Conceptual project design visualizations
- Trail-level "TrailView" photo Inventory mapping



Included with our geospatial technical services, we have experience and can also include the following additional contractor services:

1. In house geospatial, engineering, and graphic technical design: dedicated to providing adaptive, effective, focused solutions to recreation projects, we provide specialized technological services for facility design, field assessment, and creation of visualizations to support our project teams, client communications, and public outreach engagement.
2. Wayfinding/interpretive signage: our internal technical services include site plan diagram identifying proposed locations for wayfinding interpretive signage, concept draft sign artwork template, conceptual sign detailed sketches, sign family design versioning, final conceptual sign packages, acquisition of kiosk materials, and installation.
3. Permitting: our team has experience developing Storm Water Management Plans (SWMP), Erosion and Sediment Control (E&SC) Plans, and Storm Water Pollution Prevention Plans (SWPP) for the application of EPA Construction General Permits (CGP) and National Pollution Discharge Elimination System (NPDES) Permits. With this knowledge, we can offer these permitting services at a reduced expense to our clients. Additionally, we have experience teaming with other contractors having specialized experience in Biological Assessments, Archaeological Inventory Surveys, and other requirements established within the National Environmental Policy Act (NEPA).

ADAPTIVE TRAIL EXPERTISE

Adaptive mountain bikes are three and four wheeled bikes that allow for increased accessibility for the various user groups, who may not be able to ride a standard mountain bike, to ride and enjoy outdoor recreation trails. These bikes are built as handcycles, recumbent leg cycles, and sometimes as tandem bikes. As part of our goal to increase everyone's access to the outdoors, we incorporate various adaptive trail building standards whenever possible to a project, and per client request. These standards we follow are provided by *Kootenay Adaptive Sport Association - Adaptive Trail Standards (KASA)*.

These are standards that we take into consideration and apply to regular trail construction whenever possible. Trails are not drastically changed to accommodate adaptive riders, but there are certain design elements that are changed based on the landscape to increase accessibility. Such as focusing on trail width, berm radius, off camber, grade reversals and rollers.

Not only do we focus on trail infrastructure to be more adaptive, but we try to incorporate this same accessible philosophy to trail access such as parking lots, trail toiletries, and the overall total experience of riding sweet single track trail.

At Singletrack Trails, we are continuously researching avenues to build fun, adaptive friendly features that enhance the experience and accessibility for the range of adaptive riders.





PROJECT REFERENCES

DATES

2022-In Progress

PROJECT HIGHLIGHTS

- 8 Miles of new trail construction
- 9 Miles of existing trail closure & rehabilitation
- Installation of 6 mountain bike friendly cattle guards
- Installation of 6 equestrian gates

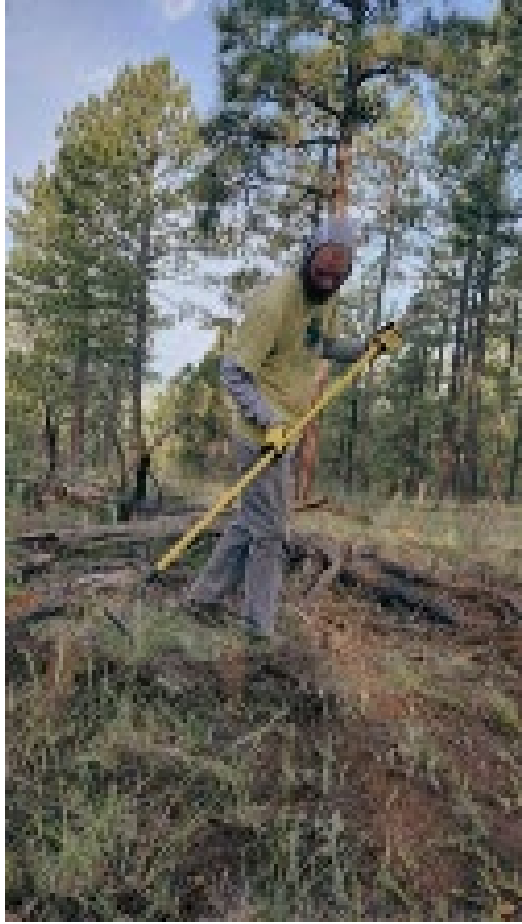
PROJECT CONTACT

Muriel Plummer
McKinley County Grants
Manager
505-722-4248
Muriel.Plummer@
co.mckinley.nm.us

Mckenzie Ridge Trail | Gallup, NM

Located approximately 7 miles southwest of Fort Wingate, NM The Milk Ranch McGaffey Trail system consists of 186 miles of non-motorized trails, 28 miles of connector trails and six trailheads managed for pack and saddle, mountain biking and hiking.

Outlined in the Zuni Mountain Trail Project and Conservation Master Plan, long-term goals for the Zuni Mountains Trail System are to develop a sustainable trail network that will earn recognition by the International Mountain Biking Association as a regional Ride Center, providing the opportunity for trails to become gateways to recreation. Community stakeholders envision the Zuni Mountains as the backbone for regional and local community development, and that this trail system will grow to be known as the leading world class trail network in the southwest. Partnering with Mckinley County in 2021, Singletrack Trails was contracted to close and rehabilitate 9 miles of unsustainable user-created trail, update and repair 2.6 miles of user-created trail and construct 8 miles of brand new trail. User-created trails were typically located in the right place, however most were in need of re-routes, grade reversals, and drainage structures to become sustainable trails. Newly constructed trails on this project were typically built near the trails being decommissioned, with the new routes being designed to take environmental and archaeological concerns into account before construction.



DATES
2021-2022

PROJECT HIGHLIGHTS

- Design & construction of a 5 acre bicycle skills park
- Design & construction of 8.5 miles of new trail construction
- 26,000 sqft OHV skills park design
- Installation of 12 technical trail features on existing mountain bike trails

PROJECT CONTACT
Nick Porell - P.E.
Public Works Director
San Juan County Public Works
305 S. Oliver Dr.
Aztec, NM 87410
Office: 505-334-4530
Mobile: 505-386-8232
nporell@sjcounty.net

Glade Run Recreation Area | Farmington, NM

Partnering with San Juan County in 2021, Singletrack Trails was contracted to design and construct new hiking, mountain bike, and multi-use trails within the Glade Run Recreational Area. The trail system expansion is an important opportunity that will provide lasting outdoor recreation systems, which highlight the surrounding area. Specifically, the outcomes of this project will help to retain a destination worthy amenity having the potential to significantly increase visitor enjoyment of the areas while providing economic growth for San Juan County.

Upgrades to the existing trail system included plans to build a 5 acre bicycle skills park at the East Glade Trail Head, 8.5 miles of new trail construction in North Glade, installation of technical trail features at the Anasazi Loop, and the design and construction of an OHV skills park at the Brown Springs OHV Trail Head.

The project was divided into two phases with phase 1 encompassing design specifications and evaluation of environmental, archaeological and hydrological impacts of the new trails and skills parks. Phase 2 involved the construction and implementation of each project site while working closely with biological and archaeological support to ensure the preservation of regional plant and wildlife habitat and historically significant artifacts.





THIS TRAIL IS
BROUGHT TO YOU BY



SINGLETRACK
TRAILS

DATES
2021-2022

PROJECT HIGHLIGHTS

- 8.6 miles of new DH trail
- Sustainable
- Conceptual Design
- Verified Alignment

PROJECT CONTACT

Carson DeMille, PE
Project Manager
Jones & DeMille
Engineering, Inc.
Email: Carson@
jonesanddemille.com
m:435.979.0266
p: 800.748.5275 ext.155

Richfield Downhill Trail Project | Richfield, UT

Partnering with Jones & DeMille Engineering in 2021, Singletrack Trails was contracted to implement the expansion of the Pahvant Trail System via a new mountain bike focused 8.6-mile downhill trail. Once complete, the new trail will link up with additional trails within the system, allowing for up to 14 miles of continuous downhill riding from start to finish.

Before construction began, Singletrack Trails assisted with the design and trail alignment verification with the proposed trail system, producing a detailed verification report that included construction notes, diagrams, site photos, GPS data, GIS data and all project area maps. Construction on Phase 1 of the new trail began in late 2021 and is scheduled to be completed by Fall 2022.





TYPICAL PROJECT APPROACH

MANAGEMENT PLAN

Singletrack Trails utilizes a defined business project change management workflow for quality and schedule control purposes. Positive active communications between stakeholders and within the project team itself are keys to a successful project. For each of our projects, we will document and distribute an effective communication and management plan specifically designed for project success. Achieving the project vision will be best accomplished through a project kick-off meeting, including a field assessment of the terrain and review of the project area with stakeholders and decision makers.

Our team proposes the following steps to minimize design and planning team expenses, while maximizing the available funding for the development of recreation infrastructure:

1. Three-part kickoff meetings for Design-Build projects:
 - a. The first post-project award kickoff meeting should be designed as a soft kickoff meeting, being conducted via video conference.
 - b. The second kickoff meeting should be onsite and/or at a designated meeting facility and occur in conjunction with a field team site visit, project area assessment, and preliminary corridor flagging.
 - c. The third kickoff meeting should occur as the construction team arrives on-site to begin infrastructure development. This on-site meeting can occur in conjunction with design passoff to the construction team, and final corridor flagging and field control staking.
2. Videoconference bi-weekly project team status update meetings. A revised schedule may be implemented at a later date depending upon active project management communication needs assessment.
3. Electronic file and document sharing: all project documents and files can be created, shared, and delivered via electronic methods, eliminating printing and plotting expenses. If desired, we can also develop a secure project oriented webpage for forum style communication threads, documentation and file sharing, design review and commenting, and calendar scheduling.



DESIGN APPROACH

The creation of new hiking, mountain bike, and multi-use trails is an important opportunity to provide lasting outdoor recreation systems, which highlight the surrounding area. From the information provided within each project scope, the Singletrack Trails design team can then begin to draft final trail design details to fit trail management objectives for every project. Singletrack Trails understands the complexities of working in a diverse range of moisture levels, vegetation cover, slopes, and ground conditions, as well as a wide range of community involvement scenarios.

Our team assesses project areas from landscape-level to site-specific perspectives. Gathering available spatial data, including topography, hydrology, soils, and natural heritage information for incorporation into a project GIS, allows the design team to better frame the project scope from an ecological and values standpoint. Detailed facility inventory and collection of existing trail conditions allows the team to frame the potential for both new and revised recreational infrastructure capacities while minimizing impacts to sensitive ecological, archaeological, and cultural resources.

MANAGEMENT PLAN

- Documented project objectives
- Final scope definition
- Establish Key Performance Indicators (KPIs)
- Project scheduling
- Process workflows
- Communications plan

QUALITY CONTROL TECHNIQUES

- Project management software
- Active schedule notification system
- Business process models and workflows
- Change management
- Resource optimization

POSITIVE OUTCOMES

- Performance metrics
- Schedule forecasting
- Documented value
- Follow up project recommendations
- Update approach processes

CONSTRUCTION APPROACH (METHODOLOGY & BMP'S)

The Singletrack Trails team has extensive experience creating trails to match our client's needs and desires. Whether that involves beginner trails to encourage skills development, classic singletrack, or challenging bike-focused trails, we seek to realize a client's vision. Singletrack Trails collaborates closely with clients to assure a unique and diverse trail product, mingling rustic hand-built "ribbons of dirt" with machine-constructed flow lines to optimize a site's recreation potential while highlighting and protecting its natural features.

In addition to our heavy mountain bike focused trail building technique, we have other areas of expertise including but not limited to building bike parks, climbing access routes, ski runs, equestrian, and adaptive trails. All of which are tailored to the user, and to the client's vision. Singletrack Trails is known for its "light touch" on the land by employing the **minimum tool rule**, defined as using the least impactful machine for the job at hand. Even when we utilize machines we are mindful of the effect that it may have on the project, which is why we endeavor to create machine built trails with a hand built feel. Few trail building companies put so much effort when using machine trail building techniques.

Our methodology involves a close working relationship with the project partners, and various representatives assigned to the project. As described in our management plan, we have a successful approach that involves open and honest communication between all parties involved in a project. As builders and land stewards, we will provide the vision on how we believe a certain trail alignment should be built, but will listen, and address the concerns of the client first and foremost. More information on our typical construction approach can be found in our personal BMP - *"Best Management Practice: Singletrack Trails Guide to Building Sweet Singeltrack"*, adapted from IMBA's trail building guide. We continue to evolve our trail building practices to meet the needs of diverse trail users. For example, we can incorporate new standards for adaptive trail construction.



SCOPE OF WORK ASSUMPTIONS

With respect to any provided Project Background and Scope of Services provided within the Request for Qualifications, Exhibits and all Addendum materials, our team assumes the following:

1. The defined project area is as described within preliminary maps and documentation; additional unpublished project area documentation and spatial data may be made available to assist in streamlining project tasks.
2. All new trail construction shall conform to the guidelines and specifications presented in *Trail Solutions, IMBA's Guide to Building Sweet Singletrack* and *Guidelines for a Quality Trail Experience*, as published by the international Mountain Bicycling Association.
3. Required maintenance to be performed by hand only, no machines. Maintenance consists of clearing corridors, clearing tread, maintaining out slope and grade reversals. Technical and Memorable features should require minimal maintenance by using long wearing, minimal maintenance materials and extensively managing drainage. Maintenance includes re-grading trail tread, re-routing (only where necessary to maintain a consistent green/blue difficulty), and installation of drains and armoring.
4. Bridges to be minimum 6 feet wide and include railings when drop greater than 2 feet is present. Rock armoring to withstand 12 inches of waterfall and debris in fewer than 8 hours.
5. Our work will include a 12-month warranty of construction and craftsmanship beginning upon affirmation of final completion. The trail will remain in rideable, aesthetically pleasing condition during this warranty period. If any issue arises due to improper construction, the firm will return at no cost to address areas deemed in need of repair.

VALUE ADDED CLIENT SUPPORT SERVICES

In addition to Value Added Project Management Services, our construction team can further reduce project expenses should the following support services be available to our development crews:

1. Temporary designated and secure storage facilities for any project materials, including but not limited to manufactured trail features, interpretive kiosk structures, etc., and necessary trail development equipment when not in-use.
2. Access will be provided through all lands within the project area, including gates or providing right of entry to facilitate access; suitable staging areas within proximity to access will be provided.
3. Authorized camping options for project personnel in excess of the 14 day stay limit at approved locations within the project area; this accommodation also provides for on-site security during scheduled construction activities.
4. Authorized temporary use of motorized vehicles (4x4 full-size vehicles, UTV's, ATV's motorcycles and electric bicycles) on agency administered routes not designated for those uses in the current travel management plan.

PROJECT COST ESTIMATES



Using available scope of work and assumptions, Singletrack Trails has developed the following proposed project cost estimates. Our project management team is prepared to adjust project budgeting, timeline estimates, and overall development goals as the project scope is developed.



Project Cost Estimate for Cascade Locks Trail Construction

Task Item	Quantity	Unit of Measure	Rate	Task Item Cost
Project Mobilization				
	1	Lump Sum	\$16,114.76	\$16,114.76
TRAIL 6				
Trail Construction - Ground Length	2306	Per Linear Foot	\$9.29	\$21,422.74
TRAIL 7				
Trail Construction - Ground Length	9570	Per Linear Foot	\$11.62	\$111,203.40
Rock Armored Segment	24	Per Square Foot	\$46.46	\$1,115.04
Berm Turn	1	Per Turn	\$3,097.35	\$3,097.35
Reinforced Downhill Edge	1	Per Linear Foot	\$30.97	TBD
TRAIL 8				
Trail Construction - Ground Length	5584	Per Linear Foot	\$10.32	\$57,626.88
Whoopdee	1	Per Linear Foot	\$51.62	TBD
Climbing Turns	1	Per Turn	\$3,097.35	TBD
Rock Roll Down (optional)	2	Per Roll Down	\$2,323.01	\$4,646.02
Rock Roll Over (optional)	1	Per Roll Over	\$2,323.01	\$2,323.01
Project Total Cost (incl. optional Roll Downs/Over)				\$217,549.20

*Cost Estimate is valid for 90 days from due date of proposal



THANK YOU



SINGLETRACK
TRAILS

Phase 1 of Cascade Locks Trail System Bid Evaluation

Evaluation Criterion 1 – PRICE (30%)

The price evaluation will be based on the total price to execute the project submitted by the proposer. [30 points, 20 points, 10 points, 0 points]

Ptarmigan Trails = 30 points

Singletrack Trails = 20 points

Evaluation Criterion 2—WARRANTY, MAINTENANCE AND REPAIRS (PASS/FAIL)

Proposers should include proof of insurance, contractor licensed and bonded in the State of Oregon.

Ptarmigan Trails = PASS

Singletrack Trails = PASS

Evaluation Criterion 3—INSTALLATION SCHEDULE AND DUE DATE (20%)

Proposers should include a description of the construction process and due date. Proposers should include progress benchmarks with corresponding dates for completion.

Ptarmigan Trails = 20 points

Singletrack Trails = 20 points

Evaluation Criterion 4—INDUSTRY EXPERIENCE (50%)

Proposers should include a summary of experience in the industry, with examples of services and products provided to demonstrate experience on similar projects building bike-optimized, multi-use friendly new singletrack trails, preferably in the Gorge but at least in the Pacific Northwest within the northern Oregon or southern Washington Cascade Mountain Range. The Port is requesting a minimum of three (3) references be submitted with your company's bid proposal. [50 points, 40 points, 30 points, 20 points, 10 points, 0 points]

Ptarmigan Trails = 50 points

Singletrack Trails = 40 points

Ptarmigan Trails = 100 total

Singletrack Trails = 80 total