

REQUEST FOR QUOTATION

TROWBRIDGE FOREST TRAIL CONSTRUCTION PROJECT:

ADVANCED DOWNHILL FLOW/TECH TRAIL

for

Blacksheep Mountain Bike Club January 2025

Closing Date and Time Requirements: April 30th, 2025 @ 11:59PM

PROPOSAL SUBMISSION REQUIREMENTS

Blacksheep Mountain Bike Club (BSMTB) invites Proposals from qualified firms for creation of an Advanced Downhill Trail in Trowbridge Forest, Thunder Bay, Ontario, all in accordance with this RFQ. In addition to the Ontario Provincial Standards General Conditions and the attached Ontario Provincial Conditions Supplemental Conditions shall become part of any award of Contract Documents.

For BSMTB to evaluate Submitted Proposals fairly and completely, offers should follow the format set out herein. Submissions Failure to complete and include information as required may result in Submitted Proposal not being considered. Responses should include, but not necessarily be limited to the Proposal Submission Requirements identified below.

Budget

- Provide a detailed proposed budget allotment for the major components of the project.

Experience and Qualifications

- Provide a detailed description of your firm, as well as all sub-consultants to be utilized on the project.
- Provide a minimum of three (3) mountain bike specific projects, with photos, from the previous five years of similar nature or contract size. At least one of the projects must have been working in a high level of rock and samples of wooded technical trail features (TTF). The list shall include a 1-3 paragraph description of the project.
- Provide a minimum of three (3) letters of recommendation from previous clients on relevant projects.
- Provide the resume for the site supervisor who will be on site full time. Project Manager Approval will be required to substitute this individual.
- Provide a detailed listing of all Project Team Design and Construction Workforce members and include their roles in the project.

Capacity

- Provide a detailed proposed project schedule and work plan which is to include a timeline for the project to completion as well as hours assigned to everyone of the Project Team.
- Provide a list of all equipment (make, model, year, and width) to be used on this project must be provided. Contractor is responsible to provide all equipment and tools to perform the scope of work.
- Provide a list of all equipment operators with hours of experience with each piece of equipment must be supplied with bid.

Design and Technical Approach

- Provide a narrative of the overall theme for the final product and concepts for each individual trail, showing a clear understanding of the objectives of this proposal, as well as identifying major issues, challenges, risks or project constraints that may be

associated with this project. Include how you will address the issues, challenges, risks and project constraints identified.

- As the Trowbridge Forest Master Plan is a high-level concept, the proponent must provide both proposed route refinements and more detailed designs for the trail segments demonstrating both creativity and understanding of the type of trails expected, and proposed method of integration into existing trails at the top and bottom of the slope.
- Include the number and type of any features (TTF's, jumps, rollers, berms, etc,) and identify the material that will be used for each feature.

Warranty

- Provide complete details of all warranty information

Other

- Provide Environmental and Social initiatives your firm and sub-consultants have been involved in the past five (5) years.

SCOPE OF WORK

Advanced DH Flow/Tech Trail (approx. 605m) Downhill Trail at Trowbridge Falls Park, Thunder Bay, Ontario, Canada is anticipated to start May 1, 2025, and be completed by October 31, 2025.

The Advanced DH Flow/Tech trail is in an area of the part that takes advantage of the longest side slopes available for a downhill trail. The area contains many bedrock boulders in the upper portion and sand/clay soil in the lower portion. The general design of the trail should utilize as much of the natural terrain as possible.

The primary objective of this contract is to complete the final trail construction phase of the Trowbridge Forest Recreation Trail Master Plan 2017. The individual steps remaining for this phase are as follows:

- Provision of final detailed design and adjustments of the schematic trail design from the Master Plan for the trails listed below in the Scope of Work. The Master Plan is considered the starting point for the design. Creativity in the trail design and utilizing proponents' knowledge of trails to be built are not only encouraged but is considered a necessity to implement the vison into construction.
- 2. Ground proofing the design work from the Master Plan for the trails listed below in the Scope of Work
- 3. Provide a flagged corridor for review by the Project Manager and BSMTB prior to starting construction.
- 4. Clearing of the forest floor and construction of trail tread, features, etc.
- 5. Finishing tread work of the trails.
- 6. Restoration of any forest area disturbed during construction.

BUDGET ALLOTMENT

The prospective bid shall include a details list of all expenses for construction of the trail including tread work, construction of TTFs and any additional costs incurred inclusive of Harmonized Sales Tax (HST).

PROPOSAL EVALUATION

All submitted proposals for this contract will be evaluated on the following criteria:

- 1. Experience, qualification and capacity 30 percent
- 2. Design and technical approach 40 percent
- 3. Budget allotment 20 percent
- 4. Environmental and social initiatives 5 percent
- 5. Unique concept or design 5 percent

Blacksheep Mountain Bike Club reserves the right to not award the contract if no bid successfully meets a minimum threshold for the project.

TRAIL TECHNICAL SPECIFICATIONS

Trail Design Principles

- Sustainability: All trail designs for new trail and reroutes must be guided in general by the sustainable trail principles published 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'; and 'the Whistler Trail Standards'. More specific trail building standards for this project are listed below and in the attached "Trail Specification Matrix". The "Trail Specification Matrix' will take precedence over the general guidelines.
- 2. Bike Optimized Trail: All trails constructed as part of this project shall be natural surface single-track trail that is purpose-built and optimized for mountain bike use. This excludes the upgrades/ changes to the nordic trails/ double track, which will conform to the standards listed in the "Trail Specification Matrix".
- 3. Synergy with the landscape: All trails are to make the most of what the natural terrain provides by using the trail to explore the topography and features (rocks, trees, waterways) present. The Project Manager and BSMTB envision trails that achieve this as having good flow and being revealed in the landscape, rather than constructed or imposed onto the landscape.
- 4. Opposition to user forces: Trails should maximize the efficiencies afforded by using a bicycle, and are designed to counteract forces that direct a user off the trail. Bermed turns and cambered tread surfaces, for example, promote traction, safety, sustainability, and enjoyment.
- 5. Conservation of momentum: Trails are to avoid "flow killers" such as sharp turns at high speed, incongruent features, and disjointed climbs and descents. Instead, it utilizes undulations and cambered turns to reward smooth, deliberate riding and maximizes forward motion.

6. Leading the user forward: Trails are to evoke a sense of discovery, combined with a design that maximizes a rider's forward momentum and 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.

Trail Layout Principles

The trail system is composed of several loops and segments designed, constructed, and maintained to a defined trail specification as outlined in the attached "Trail Specification Matrix". Making use of a range of different specifications results in a complete trail system when creating the overall trail system master plan. This method appeals to a wider range of users, with different fitness, technical proficiency, or preferred modality. It is important that individual segments and loops maintain consistent specification over their length to ensure visitors have the experience they expect. A project-specific "Trail Specification Matrix" is included.

Corridor Clearing, Debris & Spoils Treatment

Corridor clearing shall be contained to the standards listed in the "Trail Specifications Matrix" and back slope edges dependent on the classification of trail. Generally, the corridor will be cleared to a minimum of 1.0 meters (3ft) and a maximum of 1.8 meters (6ft). To achieve a more natural appearance along the trail corridor, cut and scatter away from the trail into the adjacent forest, all debris over 45 centimeters (18in) that are within 3 meters (10ft) of the trail corridor including branches, roots, and brush. Butt ends of fallen trees and limbs must face away from the trail. Cut brush and slash must not be disposed of in any waterways, wetlands, and low areas. Remove all stumps within the trail corridor as defined in the trail specification matrix.

Spoils should be distributed in a thin layer adjacent to the trail tread not more than 100mm (4") in depth. Spoils must not be disposed of in any waterways, wetlands, and low areas.

Tread Construction & Finishing Treatment

All tread should be built as full bench cut whenever possible. Trail widths will vary based on their difficulty rating as described in the "Trail Specification Matrix". Narrow gateways are encouraged through natural obstacles such as trees and rocks. Tread widths in areas of trail features such as jumps, drops, and berms may be wider to accommodate all riding experiences. Significant deviations will require approval from the BSMTB and Project Manager.

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

Existing Trees Preservation and Removal

Only brush and small trees shall be removed from the trail corridor. Trails shall be built to limit the impact on over story trees and the surrounding forest. Trees with trunks larger than 15 cm (6in) diameter in width measured at waist height require flagging and permission by the Project Manager and BSMTB before removal. Removal of healthy trees this size should only be removed when there is no better option. Dead, dying, hazardous and rotten trees shall be removed to open the trail corridor and for worker safety. The tree species that are of priority

importance to limit physical stem impact and damage to the root structure are White Birch (*Betula papyrifera*), White Cedar (*Thuja occidentalis*), and White and Black Spruce (*Picea glauca* and *Picea mariana*). There shall be no cutting of any kind near White Pine (*Pinus strobus*).

Rock and Boulder Treatment

Rocks and boulders unearthed during construction shall be used as anchors or built into the trail as features. Unearthed rocks and boulders must be stabilized near the trail corridor. They are not permitted to be able to roll down the side slope. 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. Excess tool marks on rocks shall be avoided as much as possible. Non-native rock or boulders may not be imported into a work area without approval of the Project Manager and the BSMTB.

Fall Zone Treatment

Fall zones around Technical Trail Features (TTFs) shall be cleared of brush/ sharp debris, branches, stumps and butt end logs.

Back slope Treatment

Back slope shall be graded to meet IMBA standards or until it matches the existing grade of the slope.

Turn Treatment

A turn is defined as a change-of-direction that turns more than 90 degrees across the local landscape. All turns are to be bike optimized in-sloped turns. Turns that exceed 30cm (12") of in-sloped tread height above the surrounding landscape are defined as constructed features. Acceptable values for turn radius, camber and turn pad grade are identified in the "Trail Specifications Matrix". Turns should be constructed to have good flow for wheeled trail users.

Grade Reversal Treatment

Grade reversals should be used in extended downhill sections to control the flow of water down tread. Any grade reversal must be strongly anchored with a significant landscape feature, boulder, or large tree or trees, to discourage short cutting.

Above Ground Earthen Structures Treatment

Any portion of trail rising above the grade of its surroundings must be composed of mineral soil or rock. 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, wood, etc., is prohibited.

Examples of above-grade earthen structures include aggressive grade reversals ("rollers", "in-sloped rollers", "jumps"), berms, switch berms and turn pads on in-sloped switchbacks.

Water Diversion Treatment

All tread should be out-sloped at five percent (5%). When not possible or desirable due to purpose-built in-sloping, resource concerns, or obstructions, water can be directed down the trail for up to 15 meters (50ft) before a water diversion location. All tread should be designed to shed standing water and to prevent erosion. Trails that cannot shed water shall be hardscaped with appropriate materials such as rock.

Invasive Species Prevention

To reduce the spread of invasive plant species all hand tools and mechanized equipment should be free of soil, seeds, and clean of any dirt and mud when entering the project site. When transferring materials between distinct locations within the City or within the project site, all tools and equipment must again be cleaned to discourage transport of invasive species to the local landscape.

Equipment is subject to inspection at the start and will be requested to be removed and replaced if found to have soils or seeds present from sources not native to the location. This will be done at the expense to the contractor.

Material Requirements

All constructed features such as bridges, boardwalks, and other TTFs shall be constructed with rough cut cedar.

Materials placed below or in contact with grade may be constructed from MCA pressure treated lumber. Other materials imported to the site shall be approved by the Project Manager and the BSMTB.

Culverts shall be corrugated high density polyethylene pipe (HDPE) with a smooth interior to ASTM D3350 and ASTM D2412 that is a minimum of 20 centimeters (8in) in diameter. Culverts will have a minimum earthen cover of 20 centimeters (8in) and will extend at least 30 centimeters (12in) on either side of the trail tread. The tread shall be hardscaped on the edges to reduce erosion.

Archaeological Artifact Protocol

An "Archeology Assessment" of the project area will be provided to the successful proponent. Construction shall avoid any areas of importance as identified by the "Archaeology Assessment". In the event that unidentified artifacts are found during construction, trail construction must stop immediately in that area and findings shall be reported to the Project Manager and BSMTB.

Construction Access Requirements

Access to the construction site is restricted to the trail corridor and approved access roads and hydro lines. Access via hydro line will require a permit from Hydro One Network Inc and is the responsibility of the contractor. Access from Highway 11/17 may require a permit from the MTO and is the responsibility of the contractor. Separate access routes may only be created with permission from the Project Manager and BSMTB. Any created access shall be closed and reclaimed back to its prior condition upon project completion.

Utility Locate Requirements

Utility Locates are required in the Province of Ontario. Contractor will be responsible for all utility locates, maintaining their currency and any cost that may be incurred.

Meeting and Progress Review Requirements

The contractor shall meet with the Project Manager and BSMTB at the beginning of each work week or as otherwise agreed upon by both parties to: review progress, check completed trail and trail features against the construction documents for completeness, tabulate completed work for payment and project expectations for the upcoming week.

Pricing Instructions

Pricing must include all duty, taxes (other than HST), customs, clearances, cartage, freight and all other charges now or hereafter imposed or in force and is a Total Firm Price. Harmonized Sales Tax (HST) to be extra and must be shown separately on invoicing. All pricing is to be in Canadian Funds.