March 2023

Town of Richmond 203 Bridge Street P.O. Box 285 (mailing) Richmond, VT 05477

To Whom It May Concern -

Umiak Outdoor Outfitters is filing for a conditional use permit for the summer season of 2023. Umiak has been running public tubing tours out of our seasonal Richmond location (4 W Main Street) for two summers and river paddling tours for thirty plus years.

We believe our goal, in filing for the conditional use permit, is completely aligned with The Richmond Conservation Committee, The Parking Advisory Committee, and fulfills the criteria found in the Conservation Reserve Fund.

In comparison to a request filed by the Richmond Parking committee for a grant of Wetland Delineation work from 2021, while we are not seeking funding, it reads, "This project meets the General Criteria of the Conservation Reserve Fund Policy in the following ways. The project "contributes toward the acquisition or permanent projection of natural, agricultural or historic resources of importance to Richmond." (General Criterion 1).

The project will also "protect, enhance and provide public access to a natural or recreation area." (General Criterion 4). In addition, the project meets the Natural Resources Protection Criteria in the following ways. The project will "preserve river, stream, and wetland quality." (Natural Resources Protection Criterion 1) The project also "supports low- or no-cost outdoor recreational activities such as fishing, hiking, skiing, hunting, swimming, canoeing, etc. (Natural Resources Protection Criterion 7)." Mariano, Diane, and Lou Borie. "Richmond Conservation Committee." RichmondVT.Gov, 13 Sept. 2021. <u>www.richmondvt.gov/fileadmin/files/Archive/2018/11/2f-2021\_OverockerPark-Wetland-Delineation.pdf</u>

Umiak would like to propose a removable style ladder on the riverbank of the Winooski River at the bend of Overocker Park. The purpose of this ladder is to protect against riverbank erosion from the public climbing up and down the bank. This will also provide safe footing for river take-outs and access. This removable style ladder has been designed and implemented all over Northeastern Rivers by the caretakers of The Northern River Canoe Trail. The ladder varies in size, but a basic design uses 3x8" rough-cut cedar steps. The other measurements are calculated by using some basic algebra (rise/run) of the bank to river. The structure itself is anchored using 3'Helical anchor sets and some rebar.

Umiak would oversee the installation, maintenance, and removal of the ladder. Our top priority is protecting not only the safety of our clients but of our fellow recreationalists as well as the fragile ecosystem of the river. Umiak feels that this small project meets all guidelines laid out in the Conditional Use Applications general and specific standards. The most relevant point in our situation is as follows; In the specific standards section, third bullet point down, it reads

"Outside storage of goods, parts, supplies, vehicles machinery, and other personal property shall be appropriate to the neighborhood and shall not impair safety." While our ladder will be stored outside, we feel that we will only be enhancing the community with a safer access/takeout. We also feel that we would be enhancing the protection/prevention of shoreline erosion. The daily foot traffic brought on by the construction of Over Rocker Park will only grow and we feel this will become more hazardous and destructive. In specific standards, bullet point eleven, it reads, "Proposed structures should take advantage of existing slopes and vegetation to provide screening for the project." Our ladder would use the existing riverbank as an anchor while using natural material to blend into the landscape. Also depending on water levels, it may or may not be fully visible. The placement location of the ladder was chosen and selected with much consideration. It would be located on the inside edge of the riverbank, minimizing river flow, and utilizing any natural eddies.

It is important to note, that this ladder was in fact, used last season in this exact spot that we are referencing. It served its diligent duty of keeping recreationalists safe, as well as protected the riverbank from eroding. The stairs were easy to install as well as simple to remove as it is a temporary structure.

As paddlers and recreationalists, we feel that this ladder is in alignment with the original goals of the creation of the park. We only want to further the safety and wellbeing of both recreationalists and of Richmond's natural resources. We also strive to bring tourism to such a unique and diverse economy. We have created great partnerships with local businesses. Our goal is to continue to serve our customers with enhanced experiences while also bringing local businesses more customers.

Umiak would be interested in installing the ladder by May 15, 2023 in anticipation for our summer season. Our river operations conclude in Richmond on September 15, 2023. The removal of the ladder would happen at this point, or in anticipation of a high water event.

We thank you for taking the time to read our application. Any questions, concerns, or problems, feel free to reach out to us at 802.253.2317.

Thank you for your consideration.

Umiak Outdoor Outfitters





# NFCT Removeable Steps Revised 3/2022



Typically the steps are built out of 3"x8" rough cut cedar, often sourced from Goodridge Lumber in Albany, VT. Treads are a minimum of 3' wide. A 5' wide step is preferred for launching boats, although larger staircases can be more unwieldy to install and remove.

#### 1) Measurements

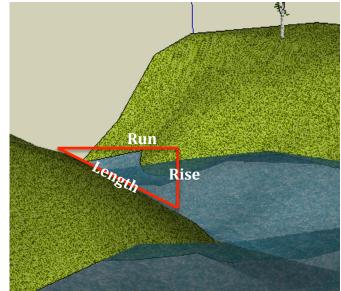
Calculate ladder **length**, total **rise** and **run** using line level, measuring tape, measuring stick

#### 2) Calculate number of steps:

Start with an estimated step height (between 6-9 inches. Divide total rise by this height, than round up to get the number of steps. **Steps= Total Rise/step height.** Then, recalculate the rise/step. *IE: Rise:54. 54/8 = 6.75 steps. Round up to 7. 54/7=7.7"/step.* 

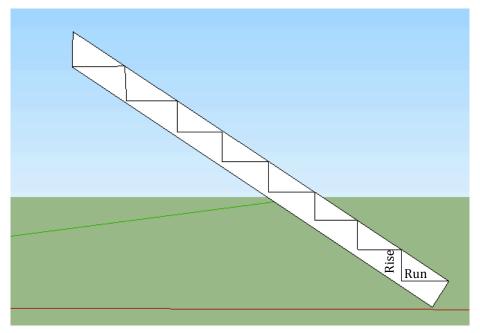
## 3) Calculate step width:

Width= Run/step Step width should be between 12 and 18 inches

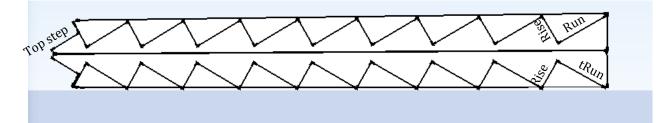


### 4) Draw out steps

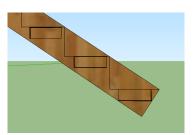
Use carpenter square to draw rise and run per step (ie. 16 inches out, 8 inches up) on the 3x8 stringer, starting from the lower "corner". (The stringer below this settles in the river bottom sediments).

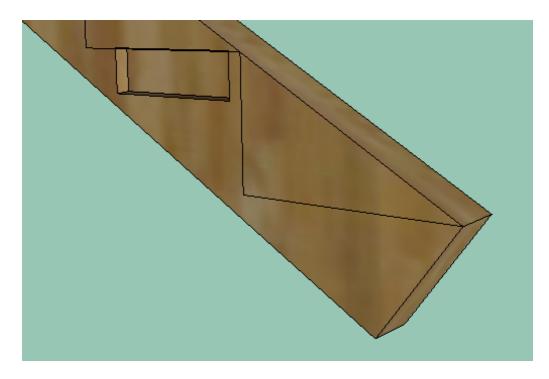


Draw steps on second stringer so they mirror each other exactly.



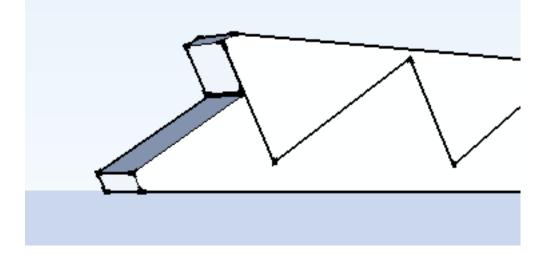
5. Make a block out of wood of the same cut as the treads. Use this to trace the locatons of the notches for everything but the top step. Be consistent with the locations of the notches (i.e. on the line, but one inch in from the edge). Note: rough cut lumber varies – measure each piece of lumber before deciding what block – or blocks – to use for tracing.





6. **Use a router to cut notches in the stringers.** For a 3x8 stringer, notches should be 1" deep. Test the fit with a block of wood. Use a chisel or multi-tool to clean up notches as necessary.

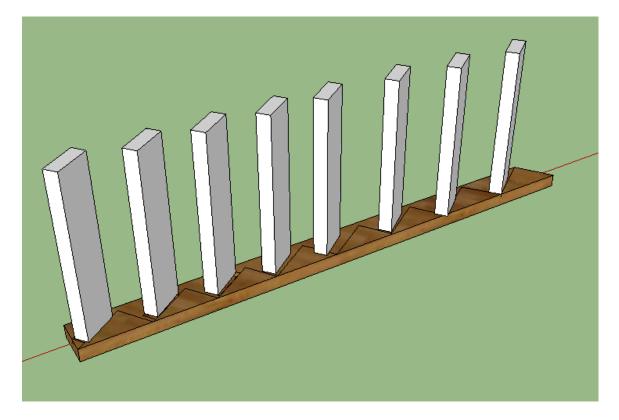
7. Use a circular saw and a handsaw, or a chainsaw, to cut the top step notch.



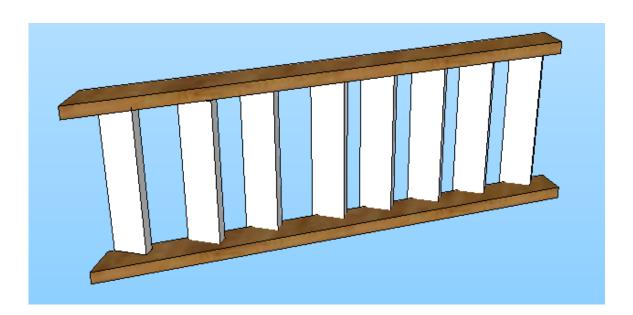
7.. **Cut the treads to length.** These cuts are important. Each tread must be the same length and cut square. Typically we make the treads 3' wide. The top tread needs to be at least 4" wider as it spans both stringers.

8. Predrill two 3/8"holes in each notch for the galvanized lag bolts (3x8"x6").

9. Lay a stringer on the ground. Put all the treads in place, ser in the notches.



10. Place the second stringer on top. Working your way from one side to the next, ensure the treads are set in the notches. Affix the lag bolts and washers using an impact drill driver and a mallet. Flip the ladder over and repeat for the other side. The ladder is ready to install!



10. Affix eyebolts at the top and bottom of the stringers, on both sides. For long staircases, an additional set makes sense in the middle.

11. Position the ladder into place on the bank. Shape the bank as necessary to insure stable positioning.

12. Screw in helical anchors using a bar. We typically use  $\frac{1}{2}$ " x 30" galvanized earth anchors purchased from milspec.com. The anchors should be located near the top and bottom of the ladder, above and below eyebolts, and set perpendicular to the bank.

In rocky soils, we sometimes use a rock drill and concrete adhesive to anchor eyebolts to riprap rock set in the bank. In situations where the ladder may be installed or removed at highwater, we run 3/16" galvanized or stainless steep wire rope between the helical anchors. We clip the ladder into this wire, Otherwise, we secure the steps to the anchors with shackles.

13. Often we affix top cribbing "wings "of ~6x8 cedar anchored in place with rebar, backfilled with soil or gravel. (These wings are independent of the steps)

