

Deep Run Park

Bicycle Pump Track



Build Plans – November 2018



Bicycle pump tracks are being built in communities around the nation as a low impact human powered recreation facility for bicyclists of all ages and abilities to enjoy. The community benefits of a bicycle facility such as a pump track are significant and the efforts to install and maintain is often handled by organized volunteers. Due to it's low cost and multiple benefits, it is a desirable addition to the recreation options in any community.

This build plan addresses the formal build details for converting the underutilized wooded area that sits directly between the soccer fields and Playground 2 at Deep Run park into a bicycle pump track.

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A few friendly reminders...



What is a pump track?

A pump track is an endless loop of rollers and berms where the riders propel themselves through the track by shifting their body weight, or “pumping”, in conjunction with the track contours, rather than having to pedal. It creates a fun exercise experience for different sizes and rider abilities allowing them to work on their bike handling skills

Who can use a pump track?

The short answer is anyone with a bicycle. It doesn't matter how young or how old, users can be 3 year olds on Strider bikes or riders into their 60's or 70's that already enjoy riding on trails. A pump track provides a safe environment to experience riding a bicycle, having fun, and getting exercise—creating a community gathering spot where people will congregate to both ride and watch others ride the track.

Benefits of a pump track

- Promotes healthy, physical outdoor activity
- Great, low risk environment for cyclists of all ages and skill levels
- Creates gathering area for the community and families
- Sustainable recreation with minimal environmental impact
- Minimal risk/liability

Why we're building this...



It's a Win for Everyone Involved

With the addition of the new pump track, Deep Run Park will be at the forefront providing kids and adults alike with safe and progressive ways to access the most fun form of outdoor exercise...riding a bike!

Furthermore, Henrico Recreation & Parks is setting the gold standard in the Richmond area by redefining how district managers, park directors and local user groups can efficiently and effectively work together— providing its diverse set of users with unique new features they need and want. It's a win for everyone involved.

Here's a real-life story of how one pump track is helping to re-shape a community.



The Build Plan

Overview

The Deep Run pump track build will be managed by RVA MORE with coordination and final oversight by Deep Run Park. The build will start in March 2019 and take approximately two weeks to complete. During those two weeks a team of 4 dedicated builders will be onsite full-time and supplemented with weekend volunteer work. The primary building materials will consist of dirt which is used to create the general structure of the track. Dirt and gravel [for the asphalt phase] materials will be brought in by dump truck and moved and shaped with a combination of light duty equipment and basic hand tools.

The track will be finished with a top layer of asphalt. Finishing the track in asphalt eliminates the need for extensive track maintenance and ensures the track can be used in all weather conditions, year round, without issue. Additionally, it gives the installation or more permanent, finished feel that users expect to find at Deep Run Park.

All dirt, materials and labor will be sourced by RVA MORE in collaboration with their volunteers. RVA MORE will coordinate with Deep Run Park leading up to the build to ensure there are no user conflicts throughout the duration of the build.

The Builders

RVA MORE will be managing the entire build with the collaboration of a dedicated trail builder (DirtSculpt) and local volunteer help.

About RVA MORE

RVA MORE is a diverse group of trail enthusiasts with a passion for advocating for access to great trails in the Richmond Region. We are mountain bikers, runners, boaters, hikers and nature lovers with a commitment to our parks and to all those who find enjoyment there. Our work is supported through membership, donations, corporate sponsorship, and volunteer efforts.

RVA MORE's primary focus is to support the local trails by:

- Promoting trail access
- Maintaining and developing trail systems
- Providing funding for trails projects
- Conducting educational programs for adults & children
- Promoting responsible riding



About DirtSculpt

Dirt Sculpt is a vetted professional builder who has worked in conjunction with RVA MORE on multiple trail projects in the Richmond area. Most recently they developed a bicycle flow trail at Pocahontas State Park in Chesterfield county.

DirtSculpt has over 15 years of professional experience designing and building some of the world's best bike parks, events, and trails in the world. Checkout their website for more info and some great testimonials from other park managers.

www.dirtsculpt.com



Build Location

The pump track will be built in the wooded area that sits directly between the soccer/cricket fields and Playground 2 at the back of Deep Run Park.



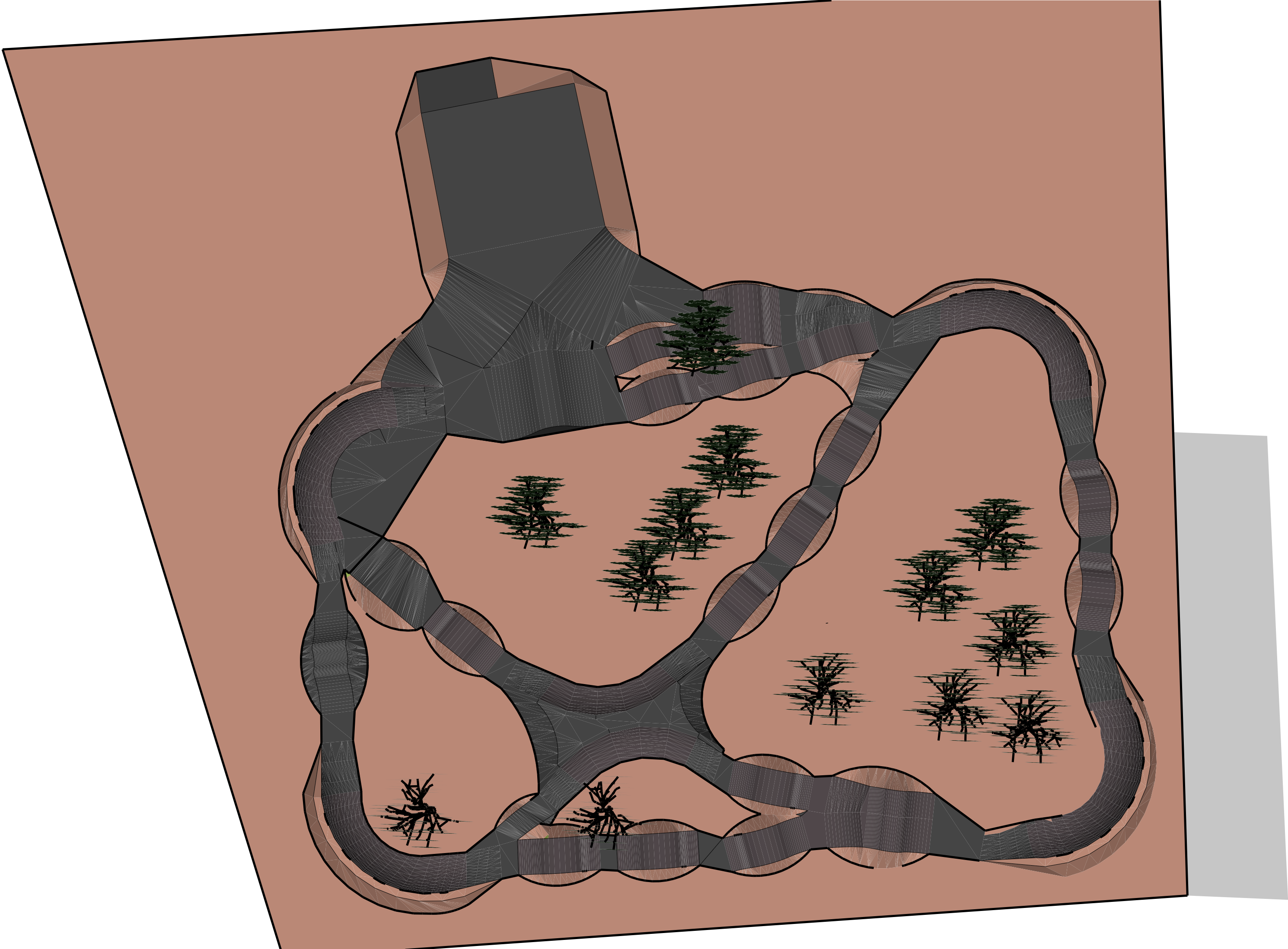


Pump
Track

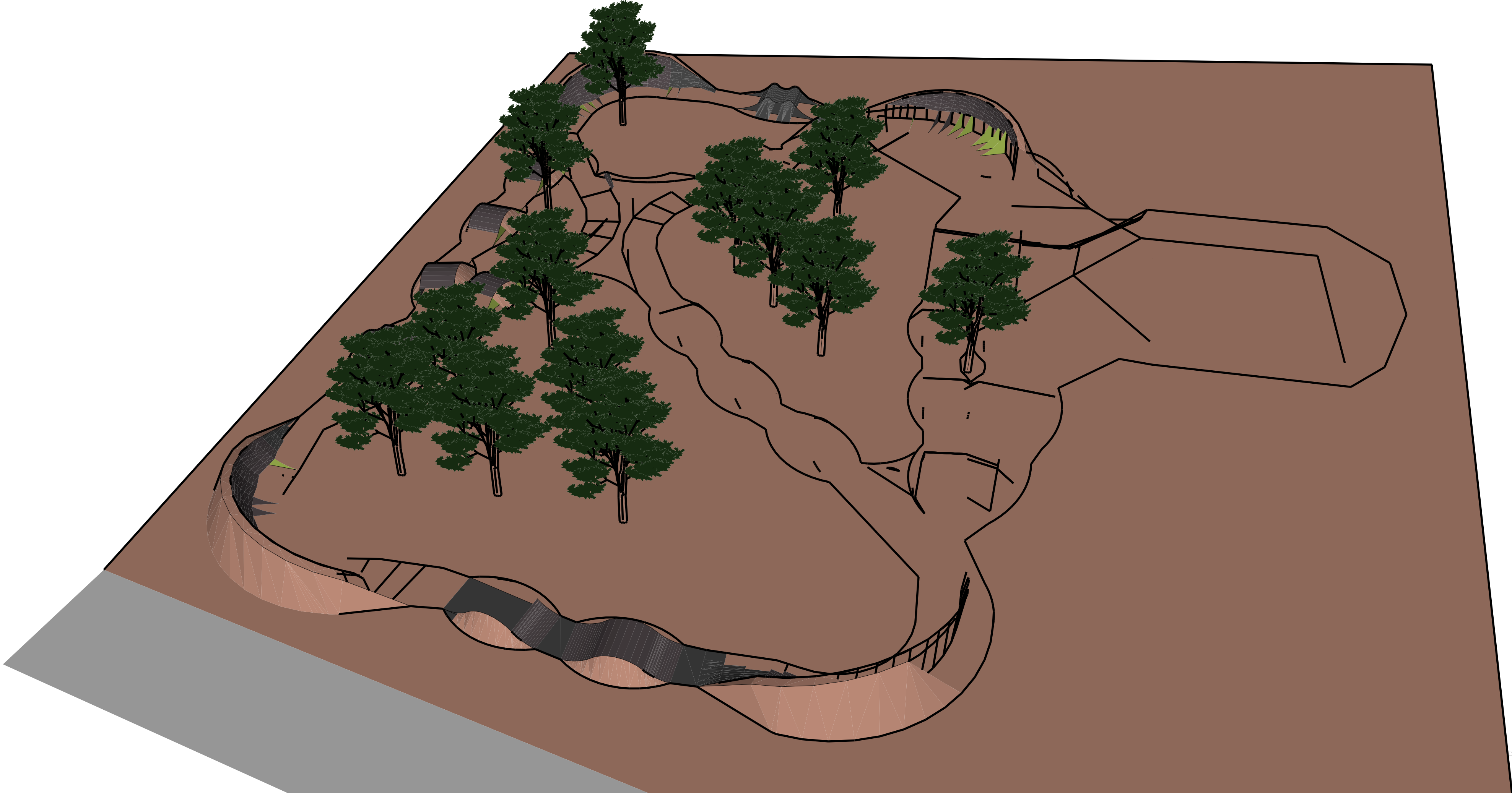
Deep Run Pump Track Design

The design of the pump track was built using a safety first approach. The track utilizes smooth gradual rollers and berms allowing riders of all ages and skills levels to safely and confidently develop their bike handling skills while getting great outdoor exercise.

Deep Run Pump Track Design



Deep Run Pump Track Design

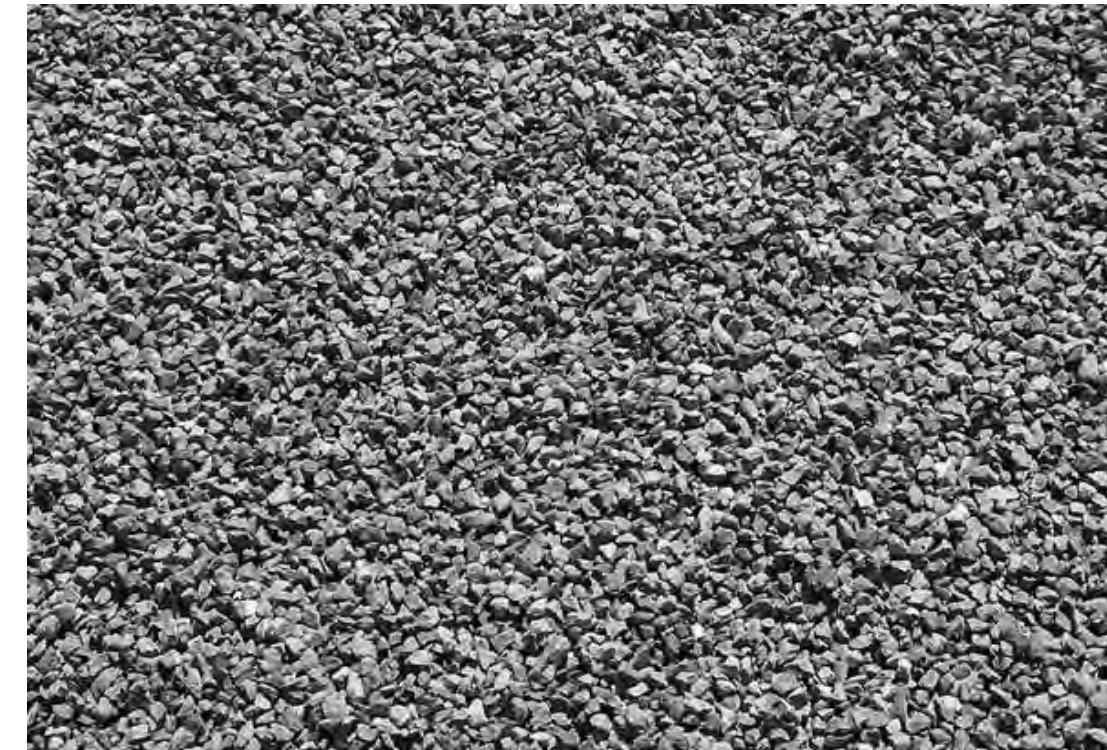


Building Materials

Below is the list of materials that will be used to build the pump track.



General Dirt – 600-800 cubic yards*
This is the primary building materials used to create the actual shape and structure of the track.



Road Asphalt Base – 58 Tons*
Used to help prep the final paved surface for the track.



Stone Base – 68 Tons*
Used to help prep the final paved surface for the track.



Top Coat Asphalt – 14 Tons*
Used for finishing the final paved surface for the track.

*approximate amounts - actuals may vary

Building Equipment

Below is the list of light-duty equipment that will be used to build the pump track.



Dump Truck

This is used to bring in both dirt and graded paving material.



Plate Compactor

This is used to help with final compaction of dirt and paving materials on the track.



Tracked Skidsteer

This is used to efficiently move large amounts of dirt into the correct locations around the track.



ATV

This is used to quickly help with initial dirt and paving compaction.
[Vehicle will be used on the premises for compaction purposes ONLY.]



Mini Excavator

This is used for moving and “rough shaping” of large piles of dirt.
[Will NOT be used for any form of excavation.]



Assorted Hand Tools

Shovels and rakes are used for more intricate shaping of the track’s rollers and berms.

The Build Process

Building a pump track is a mixture of both art and science. When dirt is placed in the correct spots and given just the right shape, the end result is a series of rollers and berms that provides endless hours of safe and fun exercise. Here's a general overview of the steps involved when building the track:



Step 1 – Dump trucks will bring in the dirt needed to build the general shape and structure of the track.



Step 2 – The skid steer is used to move the loads of dirt into the select areas where the rollers and berms will be placed - this is determined by the track design.



Step 3 – Once the dirt is in its general location the mini excavator will be used to start filling in the general shape of the track, including the rollers and berms.



Step 4 – When the general shape is "roughed in", hand tools are used to groom the final shaping of the rollers and berms.

The Build Process – Continued



Step 5 – A plate compactor is used to compress the dirt into a a rideable surface. At this point the track is given a test ride to ensure the track maintains a consistent, usable flow.



Step 6 – Once the track has been tested and confirmed to ride correctly, the final step is to cover the track with an asphalt surface.



Step 7 – Opening ceremony!

Maintenance and up-keep

With the use of a paved surface, overall pump track maintenance and up-keep will be minimal. RVA MORE, with the help of the Henrico Interscholastic Cycling Team, will coordinate quarterly work days where volunteers will come out to perform cleanup and any necessary repairs to the track.

Additionally, Pete Fagan of the Henrico County Composites Mountain Bike team has secured a RABA grant which they'll use to assist with additional trail upkeep, outside of the scope of the pump track.



RVA MORE Project Leads & Contact Info

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