



Madison Parks Division

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May 28, 2021

Dane County PARC and Ride Grant Application- Aldo Leopold Park Bike Playground and Pump Track

Madison Parks Division is proud to submit the following project for grant consideration. This is a unique opportunity to support a piece of cycling infrastructure that complements and supports all others in Dane County.

Background:

The Bike Playground and Pump Track at Aldo Leopold Park is a project years in the making. Off-road bike facilities have been a high priority for Dane County and Madison residents for many years. While other communities in Dane County have developed off road bike amenities, the City of Madison currently has only one mile of official off road trails. In an effort to start the trail development process, Madison Parks completed a city wide feasibility study in 2019 and 2020 in cooperation with the International Mountain Bike Association (IMBA). This study identified both the location of Aldo Leopold Park and the amenity of a pump track or bike playground as a priority.

The proposed pump track and skills loop form a bike playground amenity at Aldo Leopold Park. These types of amenities serve the largest and most diverse base of riders possible. They are a fun way to learn to ride a bike at any age, then allow people to progress in skill level all the way to the most advanced level. Research has found bike riding by children has fallen almost 20% since 2007. With fewer children learning to ride bikes each year, it's critical for all bike infrastructure to provide amenities such as pump tracks that make learning to ride a bike safe and fun. While pump tracks and bike playgrounds have been highly successful in other cities, Dane County currently does not have any such amenities. This makes the proposed project critically important for Dane County and the City of Madison.

Aldo Leopold Park and Neighborhood:

Aldo Leopold Park is a neighborhood park owned and managed by Madison Parks. It is located in near southwest Madison, and is adjacent to Aldo Leopold School. The Cannonball Trail as identified in the Dane County Parks *Park and Open Space Plan* runs along the western property line and would provide a direct connection to the bike playground and pump track.

A student photography study, completed by the Aldo Leopold students in 2017, identified bicycle facilities as an important addition to the school grounds and area surrounding the school. A pump track was a specific request made by this group because of the recreational value it added. Additionally, the Neighborhood Resource Team, a group of residents and city staff focused on providing assistance to the residents of the neighborhood, have recognized the importance of this project and assisted Madison Parks in implementing it.

This project is in a unique position to benefit some of the residents of Dane County and Madison that have the highest need. It is an opportunity to grow ridership among those who may benefit the most and may have traditionally felt left out of cycling.

The pump track will serve a racially diverse school and neighborhood. The demographics of Aldo Leopold School are as follows:

- Hispanic 38%
- African American 28%
- White 24%
- Asian 3%
- Multi-racial 7%

The area is also mixed income with some of the highest rates of economically disadvantaged students in the City. The area has a low rate of owner occupied housing with 29% for these neighborhoods on average vs. 49.3% city-wide. Finally, the neighborhoods served by the pump track has a high percentage of households with children below 17 years of age (29% vs. 17.5% city-wide).

Madison Parks feels it is important to build this amenity to serve the Leopold Neighborhood because people of color, people living with lower incomes, and people who are otherwise marginalized (because of gender, age, home language, etc.) often suffer disproportionately from chronic diseases, such as obesity, diabetes, depression, hyper tension, and heart disease as well as others. This is caused by barriers to health care, lack of access to healthy foods, and barriers to opportunities for active and healthy lifestyle choices.

Access to parks and recreation services provides mental, physical, and spiritual benefits for the community. While this pump track cannot address all these issues, it will provide a unique recreational opportunity, close to home, for many disadvantaged youth.

We anticipate these new features at Aldo Leopold Park will be very popular. Between the children that live in the housing that surrounds the park, the over 700 students that attend Aldo Leopold School and the thousands of bicyclists that use the Cannonball Trail in any given week, the features will be heavily used.

Pump Tracks:

A pump track is designed to encourage cyclists of all skill levels improve their riding skills in a manner that is fun and repetitive. Pump tracks are typically a bi-directional closed circuit or series of closed circuits made up of rollers, berms, and features. The rider learns to weight and unweight the bike over the berms and rollers to generate momentum. The motion is known as pumping and when done correctly the entire track can be ridden without the need to pedal. Pump tracks are recommended to have asphalt surfaces in order to provide a year round maintenance free surface.

Asphalt surfaced pump tracks and bicycle playgrounds are relatively new bike park facilities that began to appear in parks in North America around 2015 and have continued to grow in popularity. They have proved especially popular near or at school settings where new riders use them to learn to ride and to hone balance and skill.

Objectives and Design Intent (Pump Track)

- Appropriate for beginner to intermediate ability levels
- Provide skill progression
- Provide approximate 7,000 sq.ft. footprint of asphalt surface
- Site drainage in the forms of both hard pipe and swales
- Layout allows for pump track viewing from nearby shelter
- Construction will not impact adjacent community garden

Objectives and Design Intent (Bike Playground Skills Loop)

- Integrated and looped asphalt trail for novice and beginner riders, minimum 850' in length.
- Include rideable pre-fabricated and/or custom bike playground features

Construction timeline and funding:

Madison Parks has bid this project and is currently (late May of 2021) entering into a contract with the selected builder to finalize the design and schedule a start date for construction. Project funding has been secured through the Madison Parks 2021 Capital Budget and the work is expected to be completed by October, 2021. Although this project is fully funded, Madison Parks would welcome Dane County as a partner in this exciting and important project. If Dane County were to partner with us, it would allow Madison Parks to use the funding secured for this project on other single track recreational bicycle projects identified in the recently completed feasibility study.

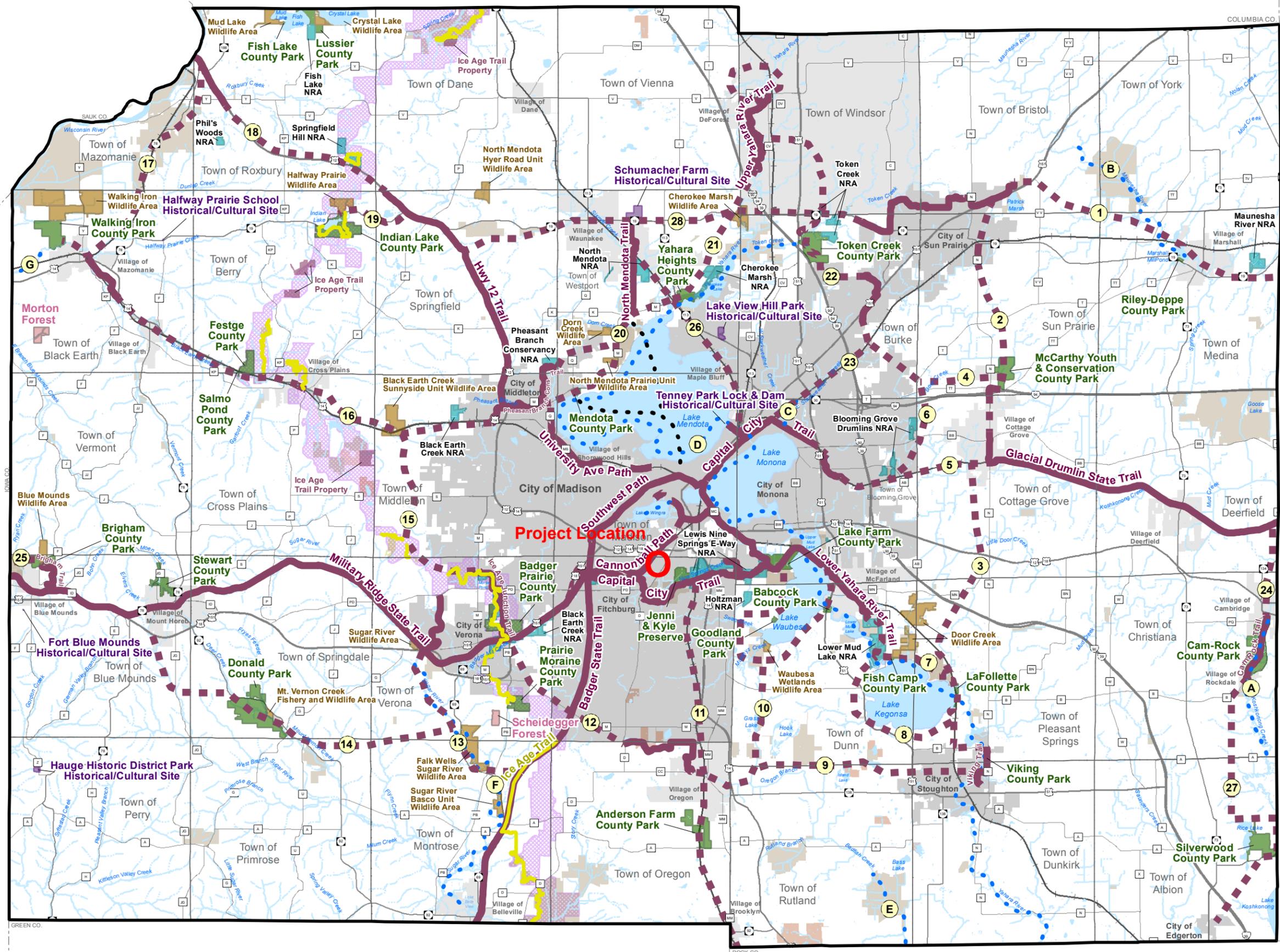
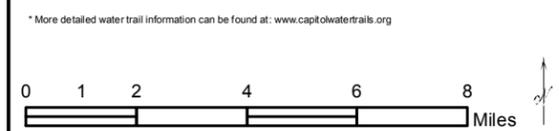
Summary:

Madison Parks feels that a bike playground and pump track is a critically important addition to Dane County's bike infrastructure. This will be the first facility of its kind in southern Wisconsin. It will not only serve a large segment of existing bike riders but will be one of the few amenities that creates new ones. The planning of this project has already generated excitement from the community and is sure to be one of the most popular bike amenities in the area.

Dane County Parks & Open Space Plan Regional Trail Map 2018 - 2023

- Existing and Proposed Regional Trails**
- Existing Shared-Use Bicycle/Pedestrian Trail
 - Proposed Shared-Use Bicycle/Pedestrian Trail
 - Proposed Bicycle/Pedestrian Ferry
 - Existing Water Trail
 - Existing Ice Age National Scenic Trail
 - Ice Age National Scenic Trail Corridor
- Dane County Parks System**
- Recreation Park
 - Natural Resource Area
 - Wildlife Area
 - Historical or Cultural Site
 - Forest
 - Trails

- Proposed Shared-Use Bicycle/Pedestrian Trails**
1. Token Creek Co. Park to Riley Deppe Co. Park
 2. Georgia O'Keeffe Trail
 3. McCarthy Co. Park to Lake Kegonsa State Park
 4. McCarthy Co. Park Connector
 5. Capital City Trail to Glacial Drumlin Trail
 6. Blooming Grove Drumlin to Door Creek Park
 7. Lower Yahara River Trail
 8. Kegonsa Lake Loop (includes on-road segments)
 9. Stoughton to Oregon
 10. Oregon to Waubesa Lake Loop
 11. Fitchburg to Oregon Rail Trail
 12. Oregon to Badger State Trail to Military Ridge State Trail
 13. Sugar River Trail
 14. Sugar River to Mount Horeb
 15. Black Earth Creek to Pope Farm Park to Badger Prairie Co. Park
 16. Black Earth Creek (Good Neighbor) Trail
 17. Mazomanie to Sauk City Rail Trail
 18. Highway 12 Trail Connector
 19. Indian Lake Co. Park Spur Trail
 20. North Mendota Trail
 21. Upper Yahara River Trail
 22. DeForest to Sun Prairie
 23. Starkweather Creek Trail
 24. Glacial Drumlin Trail to CamRock
 25. Blue Mounds Loop
 26. Sherman Flyer Trail
 27. CamRock Co. Park to Silverwood Co. Park to City of Edgerton
 28. Highway 19 Trail
- Water Trails***
- A. Koshkonong Creek
 - B. Maunsha River
 - C. Starkweather Creek
 - D. Yahara Chain
 - E. Badfish Creek
 - F. Sugar River
 - G. Black Earth Creek



Data Sources:
 Recreation Parks, Forests, Historical/Cultural Sites, Wildlife Areas, Natural Resource Area Properties, Natural Resource Area Boundaries, Trails, Proposed Regional Shared-Use Trails and Ferry, Water Trails:
 Dane County Parks (2017), Municipalities, Hydrography, Town Boundary: Dane County (2017), Railroad: Dane County (2014), Ice Age National Scenic Trail, Corridor and Properties: Ice Age Trail Alliance (2017), Existing Bicycle/Pedestrian Trails: Madison Area Metropolitan Planning Organization (2017).

Concept Design

- 1 Snake Ladder
 - 2 A-Frame (11 Deg)
 - 3 Split Decision
 - 4 90° Berm Turn
- Add Alternate #2 (Shown in Blue)
- 5 90° Wall Ride (Asphalt Pumptrack)
 - 6 90° Wall Ride (Asphalt Pumptrack)
- *Asphalt Skills Trail is 750 Linear Feet.*

DESIGN



**Add Alternate #2 Two Wall Rides (Shown in Blue)*

Typical Engineering Drawing

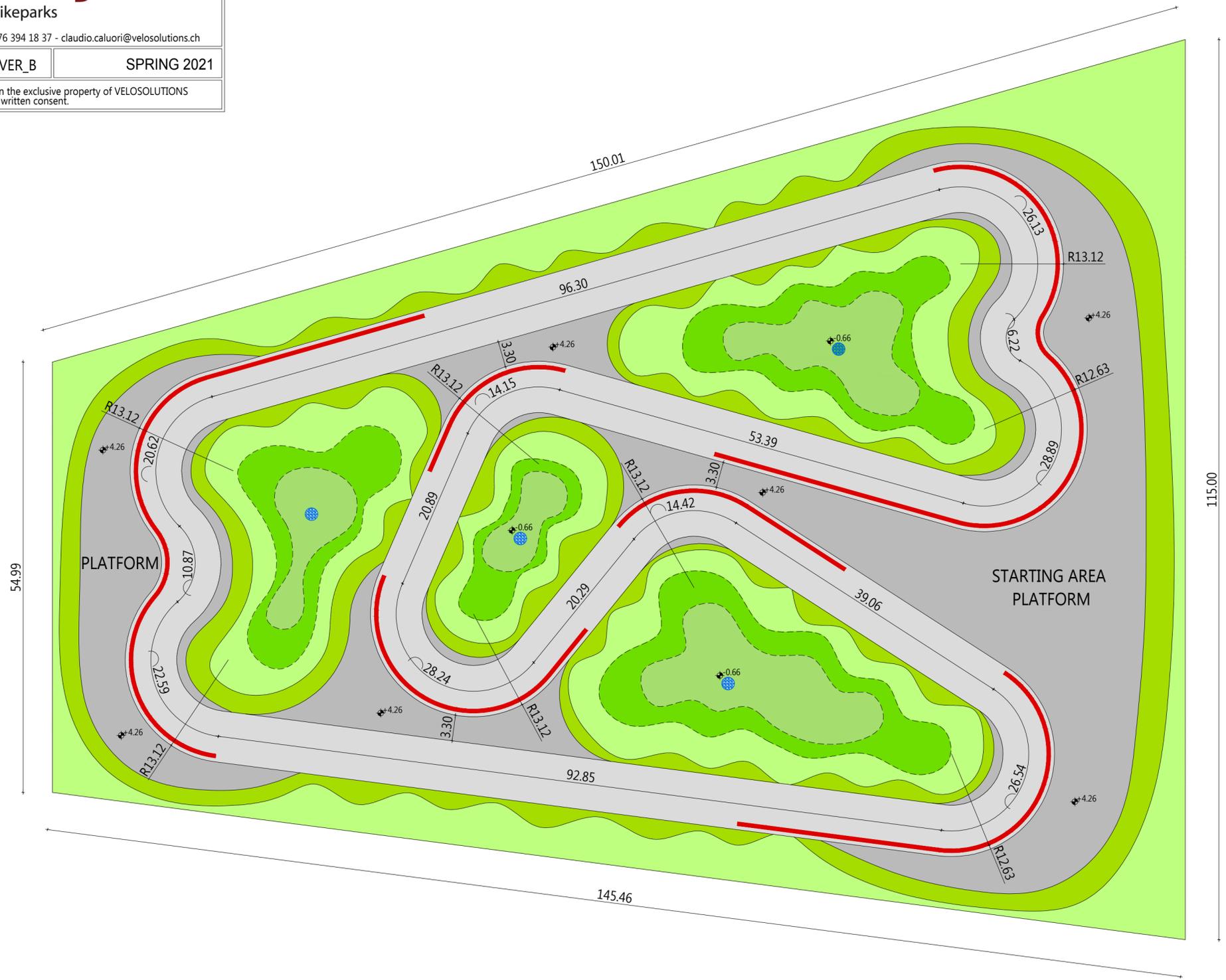
PUMP TRACK PROJECT



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SCALE: 1:250 1_B - PROP_PROJECT_VER_B SPRING 2021

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