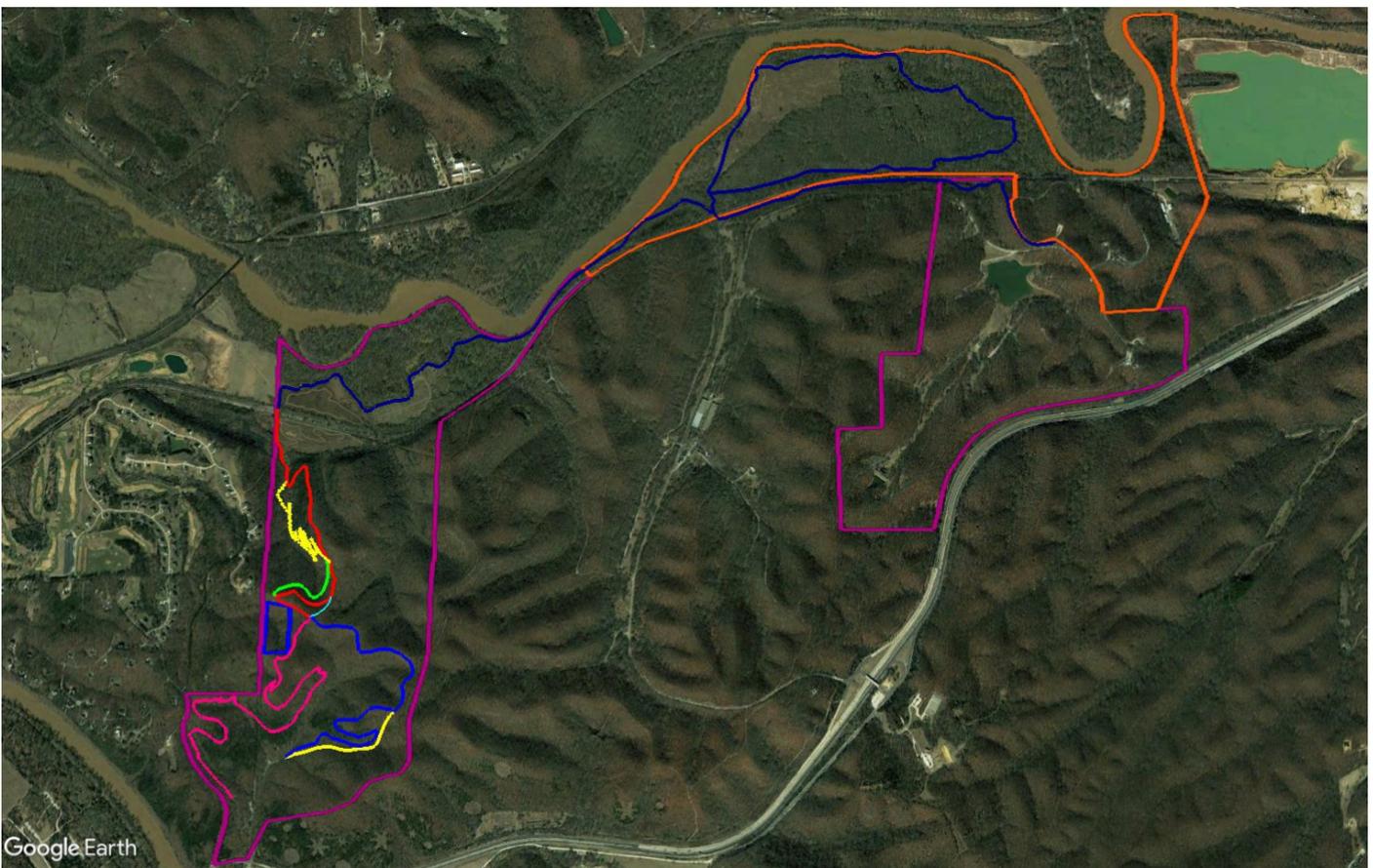


Trail Proposal

West Tyson Park: *Chubb Trail Master Plan*



Presented by: *GORC Gravity Division and Guided Path Adventures*



#1 BUILD



#2 RIDE

#3 LEARN



#4 ENGAGE COMMUNITIES



VISION

The Gateway Off-Road Cyclists (GORC) and Guided Path Adventures would like to develop the Chubb Trail System into the premiere bike network for intermediate and advanced riders while expanding current multi-user options that connect along the Meramec River corridor. Our plan would build to the highest standards given by respected trail designers and stewards.

The Bureau of Land Management (BLM), in partnership with the International Mountain Bicycling Association (IMBA), has developed trail guidelines as a comprehensive approach to trail planning, design, construction, and management specific to mountain bike trails. The long-term vision of the BLM includes mountain biking as the first of several trail-based activities covered under a set of specific national guidelines.

BACKGROUND

St. Louis is home to over 100 miles of trails spread throughout St. Louis and St Charles County. These trails have been built primarily with volunteer labor from GORC. With all the miles of trails available in the St. Louis region, Central Eastern Missouri and Southern Illinois, nearly all are constructed in a ‘cross country’ style which does not draw all potential audiences. There is a lack of advanced trail options in the area except for about 3 miles of the Chubb trail. Local area riders have been driving 3-5 hours away to find a quality trail experience that will meet these standards such as Griffin Bike Park (Terre Haute IN), Two Rivers Bike Park (Springfield MO), and many trails in Northwest Arkansas such as Lake Leatherwood and Coler. St. Louis riders, from novice to advanced, need somewhere to challenge themselves in our own community. All the above mentioned riding areas offer a unique quality trail experience that St. Louis currently lacks. With your support we can make the St Louis region into a biking and outdoor destination.

ECONOMIC IMPACT

Currently in Missouri, outdoor recreation creates 133,000 direct jobs, \$14.9 billion in consumer spending and \$889 million in local and state taxes. ([Outdoor Industry Association 2017](#)). The proposed projects would likely bring additional revenue to the St. Louis region as more people would visit from neighboring areas. Long term benefits include creating local jobs, supporting local businesses, and expanding outdoor opportunities in the region. Making St. Louis a biking destination will help with business retention and growth outside of the outdoor industry also as many Americans are looking for easy access to outdoor recreation.

ENVIRONMENTAL IMPACT

Mountain biking causes little damage to the surrounding soil and vegetation and is zero emission recreation when properly built and maintained--particularly when trail design and construction conforms to trail standards that have been adopted by IMBA and many federal agencies. GORC has been working with local land managers for over 20 years to clean up and minimize impact on the soil, vegetation, and wildlife. In respect to the current property, all proposed trails are being kept away from adjacent land that has been designated for conservation. Bringing in volunteer and professional trail builders to manage water flow and erosion through trail features will respect the environment, enhance enjoyment of the current trail system, and reduce maintenance work in the future.

HEALTH IMPACT

More outdoor opportunities are needed as we face ever-expanding health problems from a lack of physical activity. Groups such as GORC and Guided Path Adventures (GPA) are creating trails and encouraging more park users of all ages, genders, and socioeconomic status. The proposed improvements to the existing trail network will encourage children and adults to spend more time outside and get more physical activity. Expanded trail systems designed with progressive and fun features will bring more people outdoors in a forward thinking, exciting and inclusive way.

CHUBB TRAIL MASTER PLAN (PHASES)

The Chubb Trail currently makes up 7 miles, split between Lone Elk State Park and West Tyson County Park. The majority of biking occurs on the West Tyson end of the system as it has more technical challenges and steep grades, making it a popular trail for advanced and intermediate mountain bikers. The north side of the Chubb trail in West Tyson also has unique drops and natural features but due to the grade and difficulty would benefit from being a biker intended directional downhill trail.

The Chubb Trail System is also a popular destination for runners, hikers and equestrians. There is a need to implement other optional loops that would decrease congestion and erosion from the existing trail. Some preferred directional trails open to all users and some bike specific trail would allow a better user experience and still promote a largely multi-user trail experience.

Other benefits include better access by emergency services, and potentially giving hikers and mountain bikers a trail that is less susceptible to wet conditions and potentially allow for a more satisfying winter option which may limit damage to other trails in wet conditions during and after rainfall.

Phase 1: A moderate blue square multi-use, multi-directional trail at 4.4% gradient for sustainability.

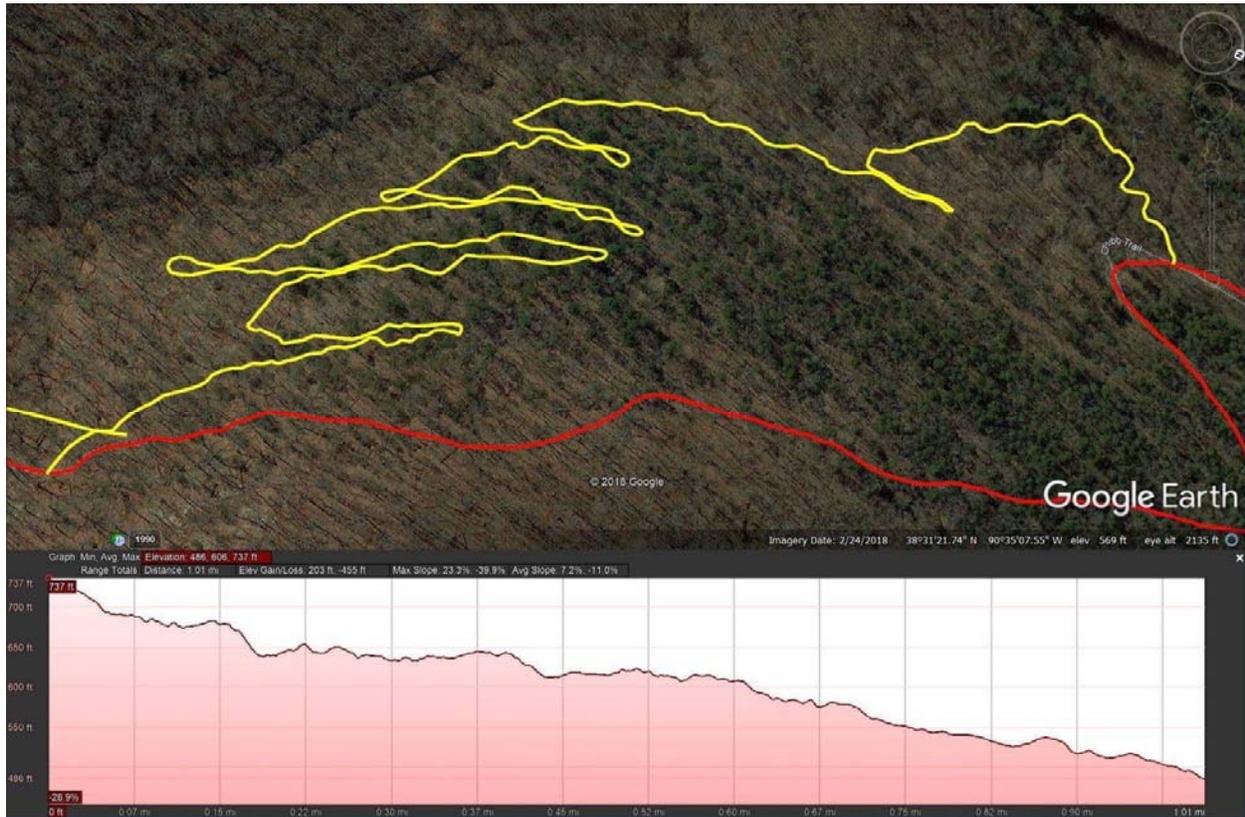
Phase 2: Directional Green to Black Diamond Bike Only South Side Descent to West Tyson Parking lot.

Phase 3: Blue square intermediate skill level flow trail with a jump line connecting the original North Side Chubb Trail and Phase 1 altogether.

Phase 4: Construct advanced trail features and double black diamond drop zone

PHASE 1

Construct a new moderate blue square multi-use, multi-directional trail at 4.4% gradient for sustainability

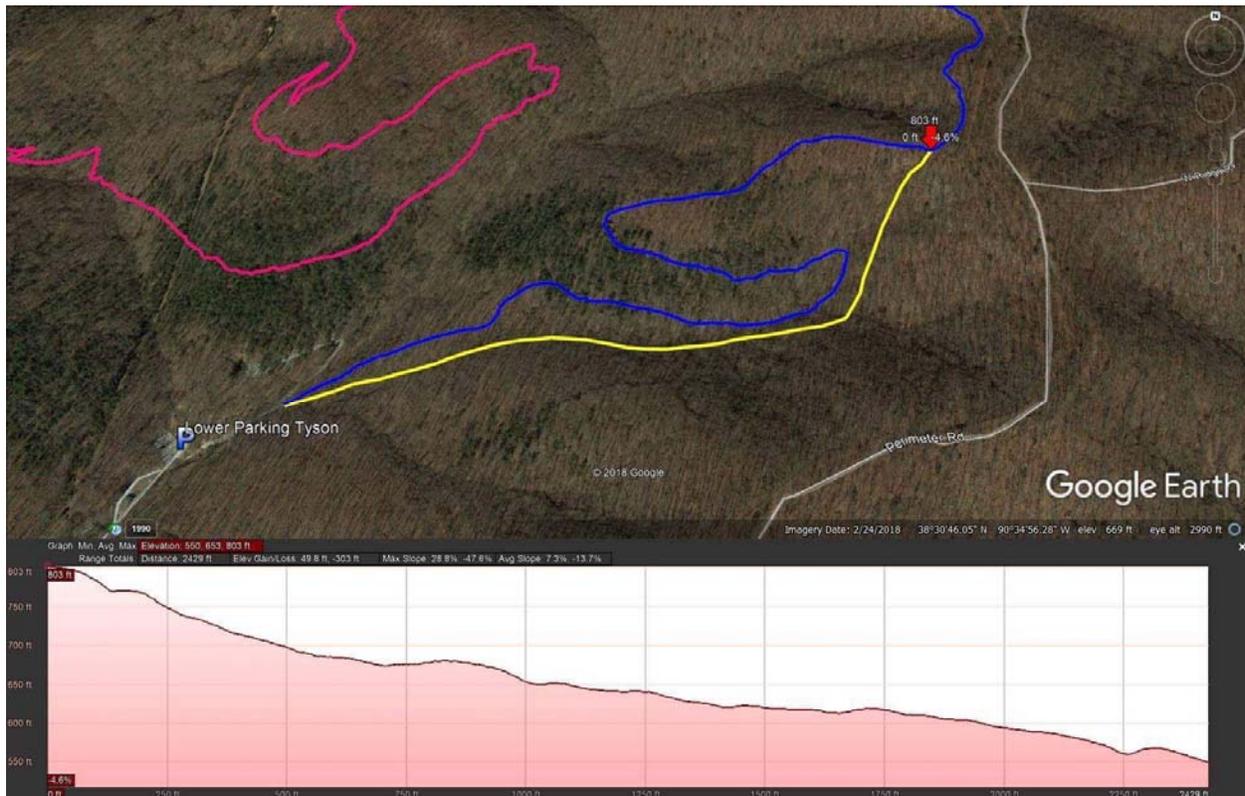


Proposed trail in yellow

- 1.02 miles in length, 4.4% gradient, 236 ft. of elevation change. Ties in with current/existing trail in red.
- This trail can be constructed with volunteer labor using hand tools at little or no cost.
- Will create a better trail user experience for all users as traffic will spread out to different trails, leaving the original North side trail primarily for descending.
- Provides a less technical beginner-intermediate option in both directions.

PHASE 2

Construct a directional Green (beginner) to Black Diamond (expert) Bike Only South Side Descent to West Tyson Parking lot

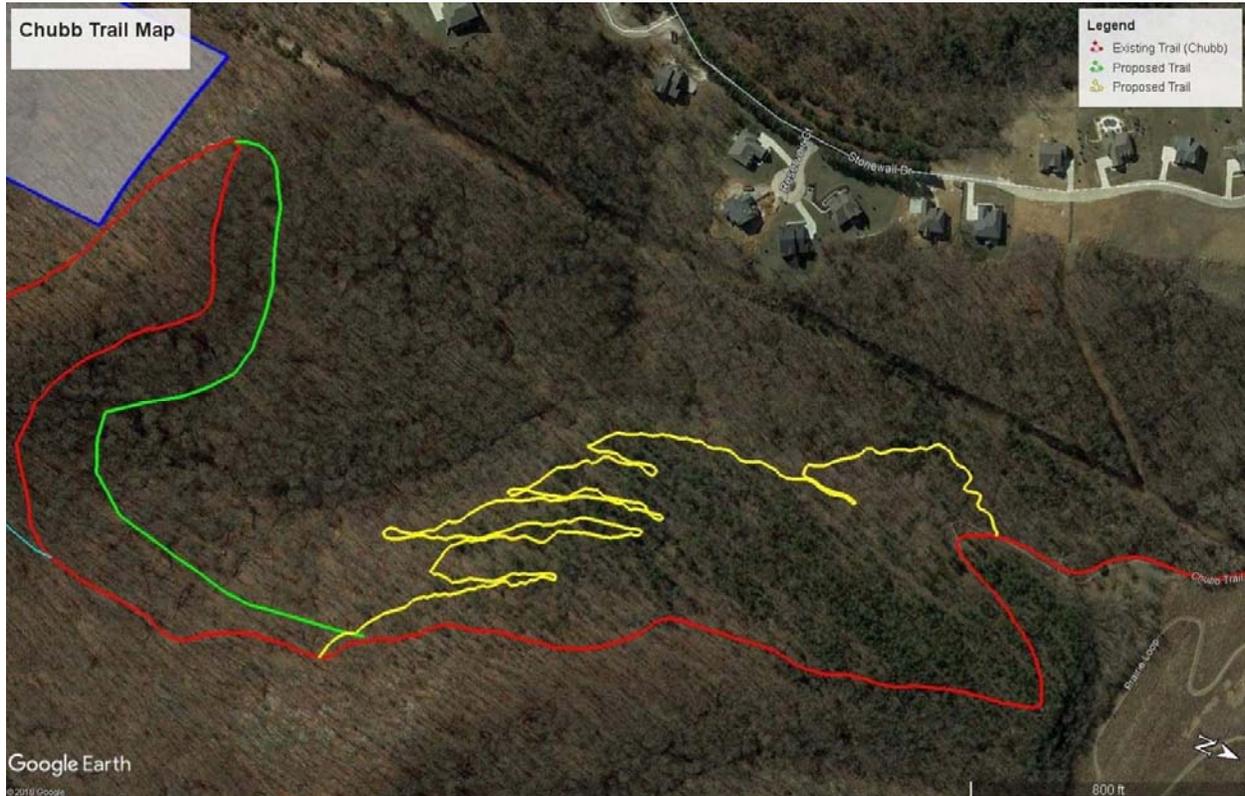


This yellow alignment of phase 2 from Flint Quarry down to the lower West Tyson parking lot is not yet flagged. Dropping off the top of the ridge to the South East boundary of the park would allow a moderate green/blue level descent. Phase 2 is a two part project.

- 2a - This trail will be descent oriented green to blue level trail with optional black diamond oriented natural trail features for people to test the skills of ever evolving mountain bike technology and themselves. West Tyson has lots of natural limestone for challenge with pinch points, rock gardens and small drops to challenge riders.
- 2b - A short existing trail sits at the bottom of the lower West Tyson Parking lot that could have basic trail features added to it as a flatter novice level trail. The descent from 2a would connect into 2b.

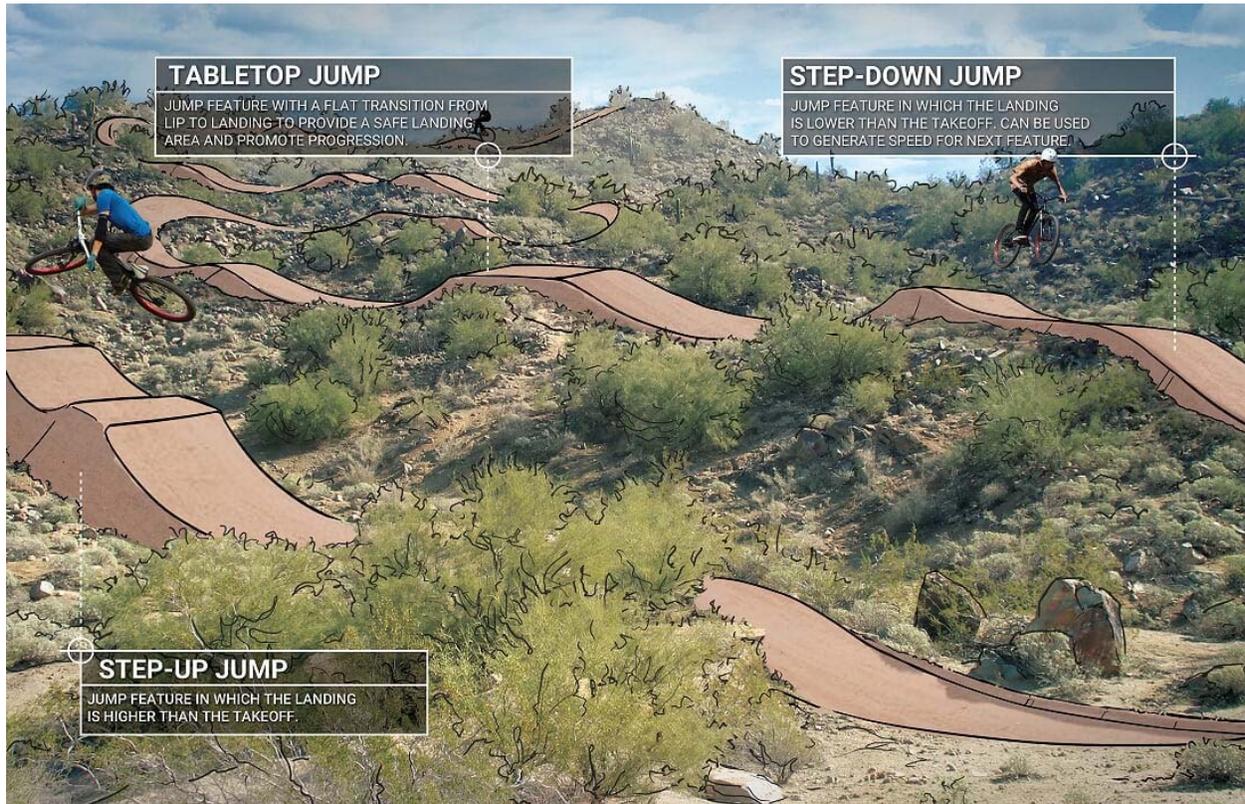
PHASE 3

Construct a Blue square intermediate skill level flow trail with a jump line connecting the original North side Chubb Trail and Phase 1 altogether.



This Machine built trail would encompass berms and tabletops to enhance the flow and rider experience.

- This trail will allow riders of multiple ability levels to ride a fast descent on an enhanced natural surface trail with table tops and berms using the hillside to create a unique flow trail experience that does not currently exist in the St. Louis region.
- May require moderate use of heavy machinery such as a bobcat which can access the ridgeline via an old gravel road in the adjacent neighborhood or via the powerline access point.



Feature Example

This image helps explain three basic jumps used on flow trails. Table tops, step-downs and step up jumps. These trails are primarily machine built due to the amount of soil that needs to be moved. (From: http://gqte.imba.com/images/GQTE_digi_publish_FINAL_high_res.pdf)



Feature Example

Here is breakdown of a roller going into a table top, followed by two mini berms. This creates a sense of speed on a flow trail and also allows for proper drainage.

(From: http://gqte.imba.com/images/GQTE_digi_publish_FINAL_high_res.pdf)

PHASE 4

Construct advanced trail features and double black diamond drop zone

In this phase the goal is to safely and effectively implement natural and constructed features and drops into Phase 2 and 3, as well as potential double black diamond drop zones and descents connecting off the top of the ridge down through the recently purchased land towards the south side trail. This zone offers multiple lines down in the bowl then links to one central trail connecting back to the south side trail.

On the other end of the trail network near Lone Elk State park, the use of constructed features could be used to add character as well as aide in zones that are slow to dry. This would allow a better quality trail experience for novice riders.

Below we describe progressive/creative trail play features present in Bentonville Arkansas on public land in town. Features include: elevated bike bridges, skinny elevated bridges, wall rides, drop lines, alternate lines with varying difficulty levels. These constructed features have made Bentonville a bike destination, embraced by the community as it has shown direct business and health benefits ([Bentonville Economic Impact Study 2018](#)).

Example: Elevated Bike Bridge



Example: Skinny Elevated Bridge



Example: Wall Ride

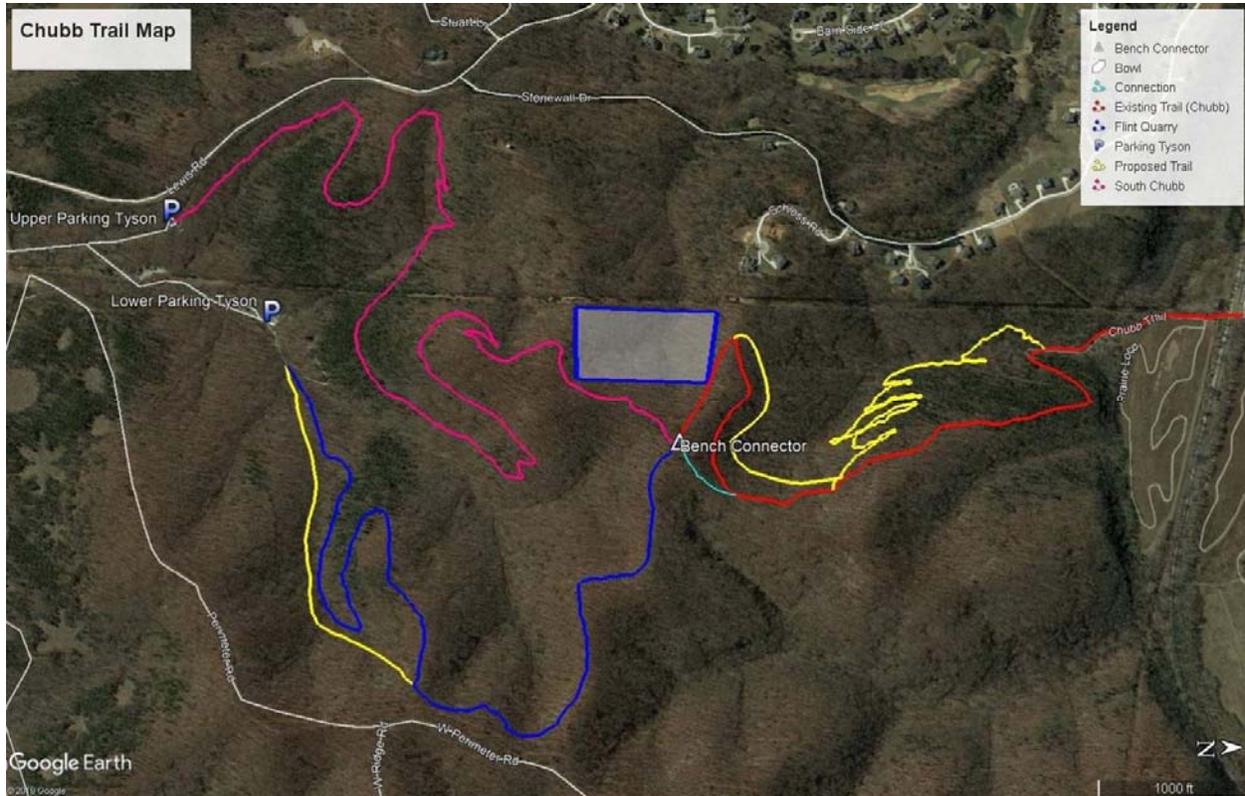
Example: Multiple lines with different difficulty levels



Example: Drops off wooden features or off natural rock drops



Chubb Trail Master Plan Map



*Proposed trails are yellow

FUNDRAISING

Progressive features and lines often require specialized equipment and labor to properly design and implement. To cover the costs of phases 3 and 4, we propose to seek out grant funding, as well as matching funds via financial sponsorship of businesses paired with grassroots level fundraising. We want to build these trails to the highest standards, so that we can further St. Louis as an outdoor and biking destination.

The projected cost of professionally designed trails is \$50,000 per mile. Due to the extensive trail building experience of GORC, the total cost would be lower as the actual build could be augmented with local volunteer labor.

Three (3) main costs associated with professional built trails:

- Professional trail design and layout.
- Heavy equipment rental such as bobcats and power wheelbarrows.
- Materials for wooden structures and structural engineering approval.