

EVERGREEN PARK TRAIL ASSESSMENT

SHEBOYGAN, WI

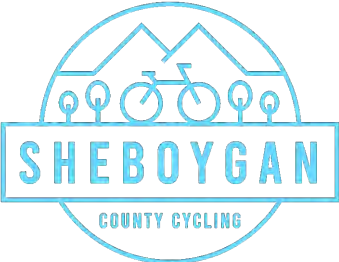
SPRING 2024



ACKNOWLEDGMENTS

PREPARED FOR:
THE CITY OF SHEBOYGAN PUBLIC WORKS AND
SHEBOYGAN COUNTY CYCLING

CITY OF SHEBOYGAN
PUBLIC WORKS



PREPARED BY:
INTERNATIONAL MOUNTAIN BICYCLING ASSOCIATION –
TRAIL SOLUTIONS



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IMBA TRAIL SOLUTIONS

IMBA Trail Solutions is the international leader in developing trails, with experience in over 1000 projects in North America, Europe, and Asia. Our staff excels at planning, design, and construction of trail systems that provide high-quality experiences for local riders and destination visitors while simultaneously minimizing environmental impacts.

IMBA Trail Solutions is a fee-for-service based arm of the International Mountain Bicycling Association (IMBA), a 501(c)(3) nonprofit organization. IMBA's mission is to create, enhance, and protect great places to ride mountain bikes. Based in Boulder, Colorado, and with staff distributed across the country and the world, IMBA meets its goal to create great mountain bike experiences through its Trail Solutions program. IMBA Trail Solutions employs approximately twenty professional trail planners and builders. In addition to being industry professionals and exceptional mountain bike riders, IMBA Trail Solutions staff hold a broad base of applicable skills and knowledge from planning, landscape architecture, and environmental sciences to GIS systems, CAD, and graphic design.

Our wealth of experience has allowed us to develop the gold standard guidelines for the creation of both sustainable and enjoyable singletrack trails. These guidelines have influenced all major federal land management agencies and a large number of state and local parks departments. We pride ourselves on the positive experiences IMBA Trail Solutions has provided to the millions of active trail users around the world and on the economic independence that communities have achieved through the development of destination trail systems.



PROJECT BACKGROUND

The City of Sheboygan and Sheboygan County Cycling partnered with IMBA Trail Solutions to (1) perform a detailed assessment of existing trails in Evergreen Park, Jaycee Quarry Park, and Maywood Environmental Park, (2) engage in community outreach and visioning, and (3) provide recommended improvements that align with stakeholder goals. This effort builds off of IMBA Trail Solutions' 2021 Evergreen Park Concept Plan, which provided a high-level park plan for the City of Sheboygan. The following document provides key takeaways from desktop analyses and site assessment performed in October 2023 along with a phased vision for the future of these parks.

Located three miles northwest of downtown Sheboygan, the city-owned parks provide a variety of outdoor opportunities to nearly 50,000 community members. Evergreen Park is a forested, shared-use city park, offering a state-of-the-art playground, rental shelters, picnic pavilions, and over six miles of natural surface trails for bikers, hikers, birdwatchers, and others. The park hosts the highly-attended Making Spirits Bright holiday light show annually from November 21 through December 31 along the park's paved perimeter loop. Evergreen Park has decades of mountain bike history dating back to the early 90s when it began hosting the final races in the annual Wisconsin Off-Road Series.

Neighboring to the east of Calumet Drive, Jaycee Quarry Park features a disc golf course, a beach and swimming area in an old limestone quarry, and a few miles of shared-use trails along the Pigeon River. To the west of Evergreen Park, Maywood Environmental Park features various habitats and wildlife viewing opportunities, with year-round outdoor education programming and events. While Maywood trails can be used to access Evergreen Park, they are not designed for mountain biking and several sections are designated as hike-only trails.

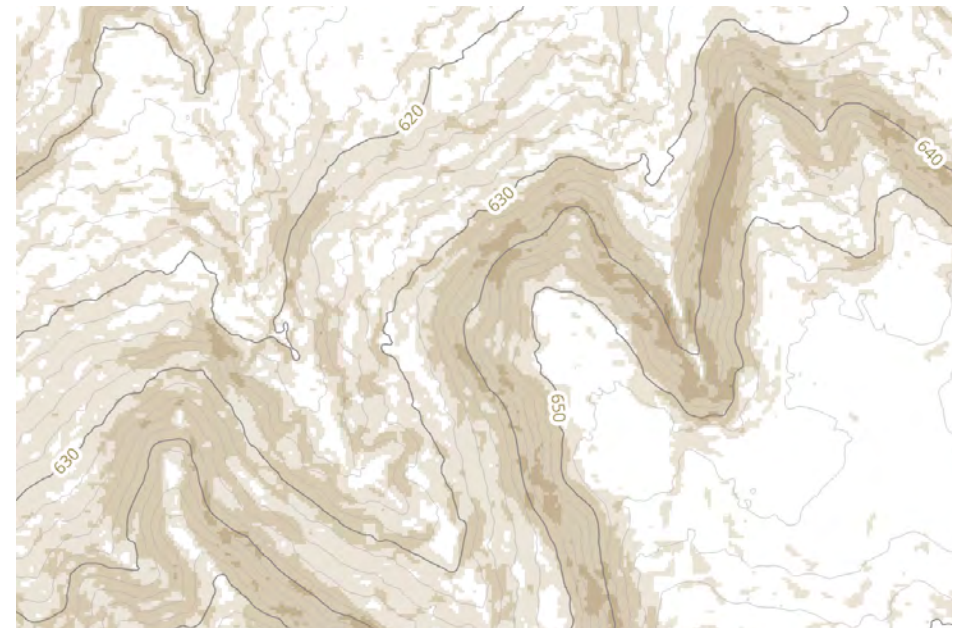


Desktop Analysis

Prior to the on-site visit, IMBA Trail Solutions staff worked with the City of Sheboygan and Sheboygan County Cycling to collect geospatial data for basemap development and desktop analysis. Datasets included:

- Digital Elevation Models (DEM)
- Aerial Imagery
- Park Boundaries and Infrastructure
- Hydrology and Wetlands Data
- Soil Data
- Trail Alignments

IMBA Trail Solutions processed high-resolution DEM data to produce two-foot contours and a slope analysis map to gain a better understanding of topography. Utilizing these datasets, IMBA Trail Solutions staff generated custom georeferenced maps and loaded them into Avenza Maps for fieldwork.



Contours and slope maps were generated to visualize and analyze park terrain.

Field Data Collection

IMBA Trail Solutions staff rode and walked each trail in the three parks, making frequent stops to assess trail conditions and collect GPS point data with detailed field notes. Each trail was given a qualitative rating for Condition and Character on a one-to-five scale, one being poor, and five being exceptional. Condition ratings are based on the assessment of factors such as trail grade sustainability, degree of erosion, proper drainage location, quality of feature construction, and ease of wayfinding. Character ratings are evaluations of trail experience tailored to each trail type and skill level. Notes and images record assessment findings; each of these were grouped into general categories and post-processed for ESRI StoryMaps, printed maps, report documentation, and trail database refinement. All assessment data is geospatially referenced and available via ESRI shapefile or KML.



All shared-use trails in Evergreen Park and its two neighboring parks were assessed by IMBA Trail Solutions staff.

TRAIL NETWORK OVERVIEW

A trail network assessment was performed on October 4-6, 2023, with a review of the trail amenities, trailhead, signage, and nearly fifteen miles of trails in Evergreen, Maywood Environmental, and Jaycee Quarry Parks. During the time of assessment, there were few other users riding the trails. The local National Interscholastic Cycling Association (NICA) group held afternoon practice sessions, which brought nearly 20 riders to the trails. Hikers and dog walkers were occasionally encountered on the trails throughout the three-day visit. Weather conditions were excellent for the full duration of the visit with mild temperatures and no rain.

Parking and Trailhead

Evergreen Park, Maywood Environmental Park (Maywood), and Jaycee Quarry Park (Quarry) each have parking areas with trails connecting the parks. Maywood has parking near its Ecology Center on the north of Pigeon River, where the trails are open to hiking only. A bridge crosses the Pigeon River to connect to the southern shared-use portion of the Maywood property. Evergreen Park has three main parking areas: One in the southeast corner near the playground and two adjacent to Calumet Drive along the paved perimeter loop. Some of this parking is closed leading up to the Making Spirits Bright holiday light show for park preparation. The Quarry parking lot is the largest among the three parks; mountain bikers most commonly use this lot to access the trail system.

Although parking is ample, the parks lack a central trailhead location, information kiosk, and trail map for hikers, bike riders, and other users to learn about the trail network, plan routes, and gather for group outings. These amenities are key to trail network success. The City of Sheboygan and Sheboygan County Cycling have plans underway to develop a trailhead and hub locations for Evergreen Park.

Wayfinding and Signage

One of the most obvious shortcomings of the Evergreen Park trail network, as identified in the 2021 Evergreen Park Concept Plan, is a lack of clear signage and wayfinding throughout the tightly-packed, complex network of trails that span Evergreen, Maywood, and Quarry parks. This has caused the formation of many off-trail social paths, further complicating the trail layout. As reported in community surveys and anecdotal conversation, trail users, especially newcomers and those unfamiliar with the trail layout, frequently get lost in these parks due to the sparse signage in the trail network. This is not only frustrating for hikers and bike riders, but it also potentially dangerous, even in a suburban city park environment.

A main priority for Sheboygan County Cycling is establishing a designated route through the trail network with clear signage. In Winter-Spring 2024, the group plans to install wayfinding posts and indicators along designated trails, providing users with an easily navigable route through the park.



Example of a central trailhead with an informative kiosk and trail map in Heritage Park, Slinger, WI.

TRAIL ASSESSMENT

IMBA Trail Solutions Staff performed on-site trail assessment for each of the shared-use natural surface trails in Evergreen, Maywood, and Quarry Park. Assessment findings were grouped into the following six categories:

Fall Line



Sustainable trail design includes a variety of researched and time-tested trail design and construction principles. One of the keys to trail sustainability is working with the contours of the land and avoiding trail grades that exceed half the grade of the hillside. Trails that do exceed half the side slope are considered fall line trails, which introduce a host of potential issues. Fall line trails are susceptible to major erosion and rutting as water flows down the trail tread instead of sheeting across.

Duplicative Trails



Dense trail networks may further complicate user navigation and have more significant ecological impacts on fragile environments. In some parks, new trails emerge from the landscape seasonally as users – sometimes intentionally – forge new paths through the forest. Many of these trails parallel existing trails, adding unnecessary complexity to the trail network and causing greater environmental impacts.

Hazard



Trail hazards are things that are particularly dangerous for trail users. These may include fallen trees, broken bridges, or trail features in disrepair. Hazards are specifically called out in assessment maps.

Wet



Wet areas of a trail are caused by a variety of reasons, including tread drainage issues (tread cupping, lack of tread outslope, lack of grade reversals) and geological issues (seeps, wetlands, and poorly drained soils). Wet areas result in trail widening as users attempt to navigate around the water, causing additional erosion. Wet areas may be avoided by locating trails on suitable terrain and constructing trails with proper drainage.

Overgrown

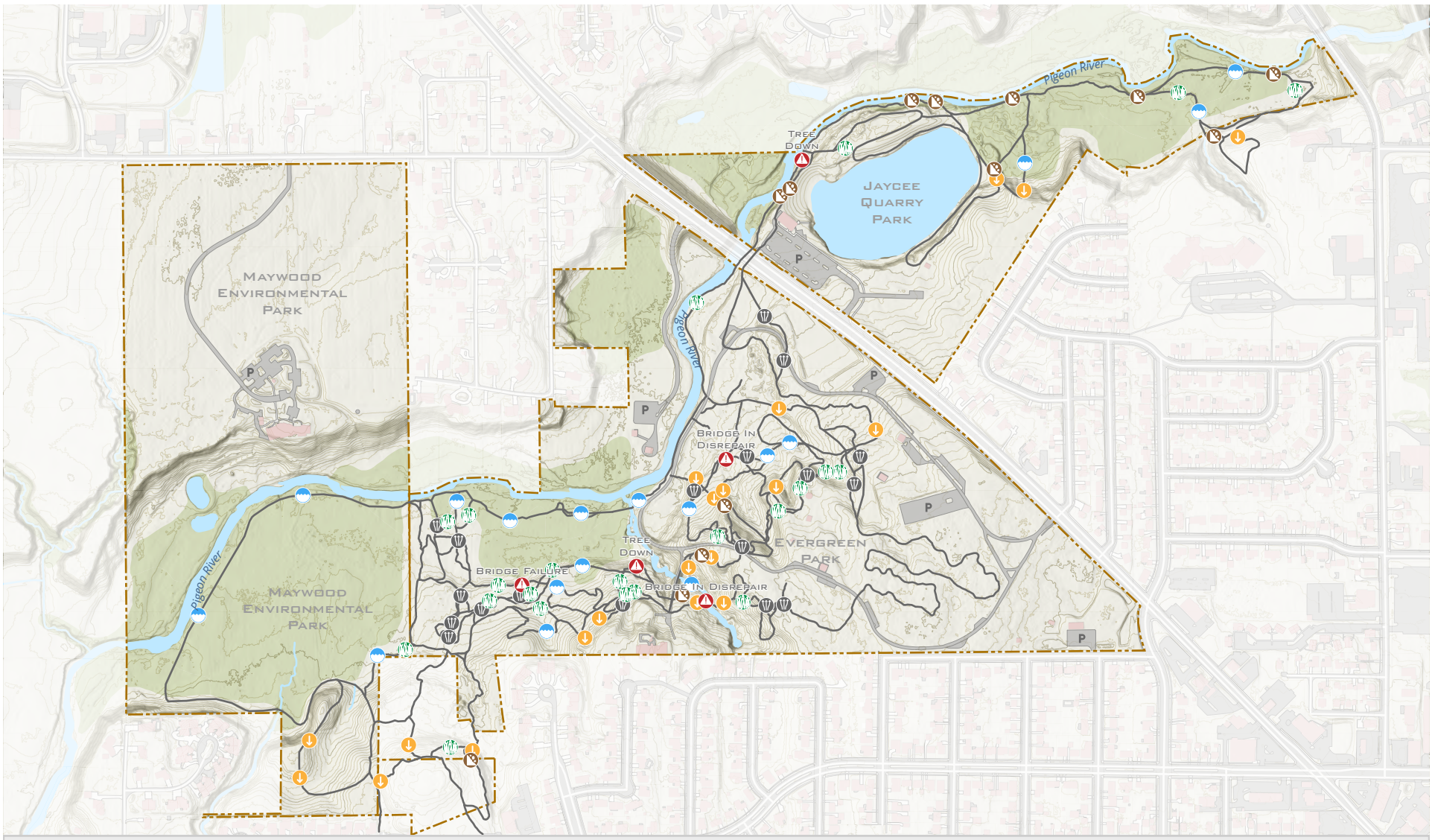


Trails require frequent maintenance; the recommended maintenance interval varies by region, landcover type, and use intensity. In some instances, overgrown trails are simply past-due for a seasonal cleanup. In other instances, overgrown trails are the result of infrequent use and are all but closed to hikers, riders, and other users. In the latter scenario, the trails should be considered for official decommissioning with a revegetation effort.

Tread Erosion



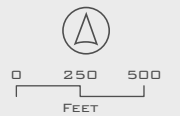
There are many common symptoms of tread erosion including tread cupping, significant rutting, and exposed roots that become more apparent over time. Trails that traverse steep drainages or that are located along flowing bodies of water are particularly susceptible to major erosion. In many cases, trail tread should be rock-armored if drainage crossings are unavoidable. Trails next to streams or rivers should be strategically located to avoid cut banks (the outer edge of a stream bend, which is expected to migrate further outwards over time). Trail tread located near a cut bank is likely to become undercut by the stream.



TRAIL ASSESSMENT

EVERGREEN PARK | SHEBOYGAN, WI | SPRING 2024

- PROJECT AREA
- WETLANDS
- EXISTING TRAILS
- FALL LINE
- DUPLICATIVE TRAILS
- HAZARD
- WET
- OVERGROWN
- TREAD EROSION



FINDINGS

Evergreen Park, Jaycee Quarry Park, and Maywood Environmental park are considered gems to Sheboygan, Wisconsin – home to diverse wildlife, beautiful trees, and undulating terrain along the Pigeon River. The detailed trail analysis performed by IMBA Trail Solutions revealed some challenges resulting from a lack of clear signage and up-front trail network planning, but there are excellent opportunities to improve the trail network and complement the parks’ natural environments. The full list of assessment notes can be found in Appendix A.

Evergreen Park

Evergreen Park features some excellent terrain above the floodplains and wetlands of the Pigeon River. The trails in this park are often difficult to navigate with many overlapping and crisscrossing trail alignments through the forest. Some of the segments are seemingly abandoned, but without clear signage, it is difficult to decipher between closed and open trails. Fall line segments are common throughout Evergreen, which often correlated with eroding trail tread. Additionally, wet segments are mostly found in the low-lying wetlands or drainage crossings. The bridges within the trail network are in great disrepair, and many downed trees as a result of storms in past years.

The assessment findings suggest the need for significant trail reroutes and tread establishment. Overall, there are few site constraints throughout the park with many opportunities for updated bike-specific, hike-only, and shared-use trails and amenities that align with community and stakeholder goals. Following this site assessment, conceptual zones were drafted for Evergreen Park to demonstrate the upgraded trail potential of the area. These zones and supporting documentation were presented in a StoryMap and included in a community engagement survey.



Many trees in Evergreen Park were felled by severe winds in June of 2022.



Damaged and downed bridges were documented as part of the assessment process.

Maywood Environmental Park

Maywood Environmental Park is bisected east-to-west by the Pigeon River. The north side includes hike-only trails and facilities and was not included in this assessment; the south side has shared-use trails (available for hiking, biking, and cross-country skiing). Over 60% of the shared-use south side of Maywood is delineated wetlands. About one mile of shared-use trail is located on the ten acres of elevated terrain near the southern border of the Maywood parcel.

This area provides great extended trail mileage for hikers and riders, but there are limited opportunities for additional trail development due to nearby private parcels that hinder connectivity with the remainder of the trail network. Some tread improvements may be made to the existing trail to decrease the number of eroding fall line segments. Turns and gentler slopes may be constructed to climb and descend the steeper hillsides in a more sustainable manner. Trails on flat, grassy areas may be elevated to prevent water from gathering on the trail surface.



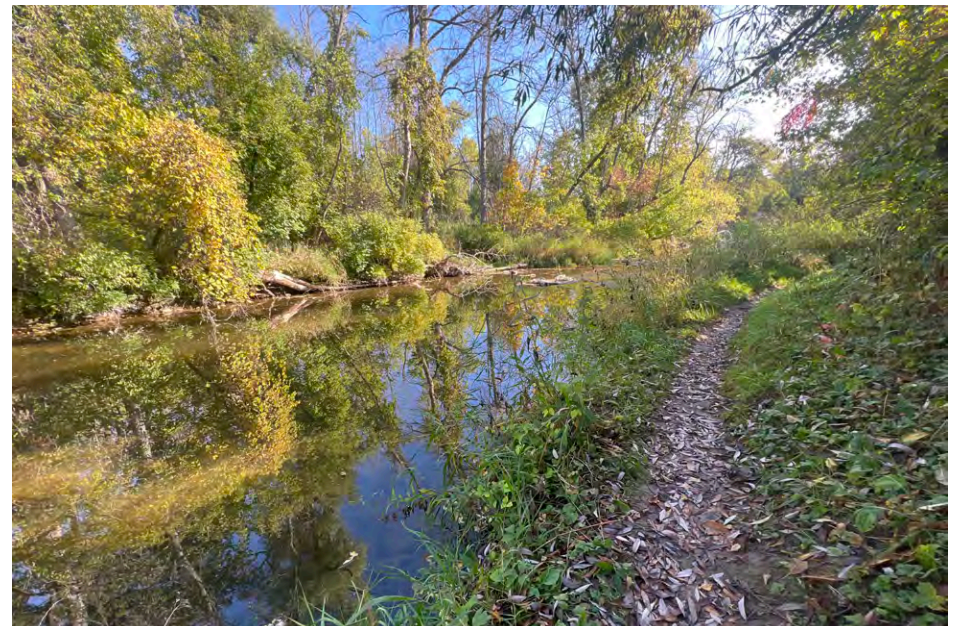
Mowed grassy paths through the low-lying areas of Maywood Environmental Park.

Jaycee Quarry Park

Jaycee Quarry Park has a wide range of groups that frequently use the park. The quarry lake itself includes a sandy beach and a summer inflatable water adventure park. In addition, a 20-hole disc golf course covers most of the park property. Finally, A few miles of shared-use trail hug along the Pigeon River, property boundaries, and the perimeter of the Quarry. Dog walkers frequently use these trails as well.

Many of the segments of trail in Jaycee Quarry Park suffer from significant tread erosion resulting from trails located too close to the Pigeon River without reinforcement measures in place. The eastern portion of the property is mostly delineated wetlands, so soils are frequently wet, flooded, and poorly drained.

Similar to Maywood, this park provides great extended mileage for users, but due to site constraints, new trail development in this park is not advisable. Efforts may be focused on improving the existing tread to avoid further erosion.

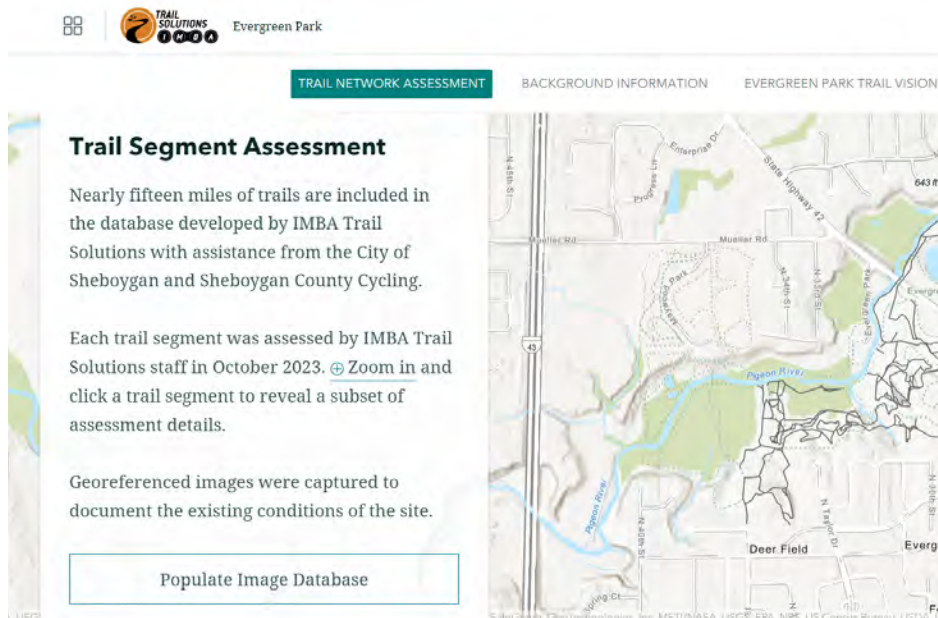


Trails in Jaycee Quarry Park provide beautiful views of the Pigeon River, but are subjected to higher rates of erosion.

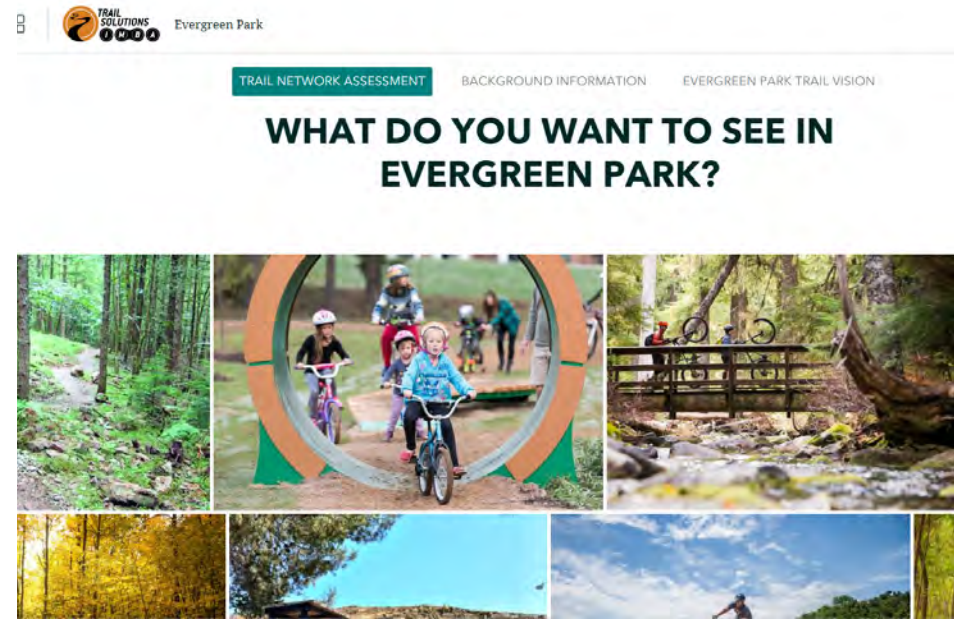
COMMUNITY ENGAGEMENT

Findings from this trail assessment were compiled and informed a preliminary, high-level vision for Evergreen Park. All of this data and information was shared publicly via an online ESRI StoryMap (Appendix B) and included in community outreach efforts carried out by Sheboygan County Cycling. Feedback on the assessment and the high-level vision for Evergreen Park was gathered through an online survey (January 2-16, 2024) and an in-person meeting held at the Mead Public Library in Sheboygan (January 24, 2024). The full list of survey comments can be found in Appendix C.

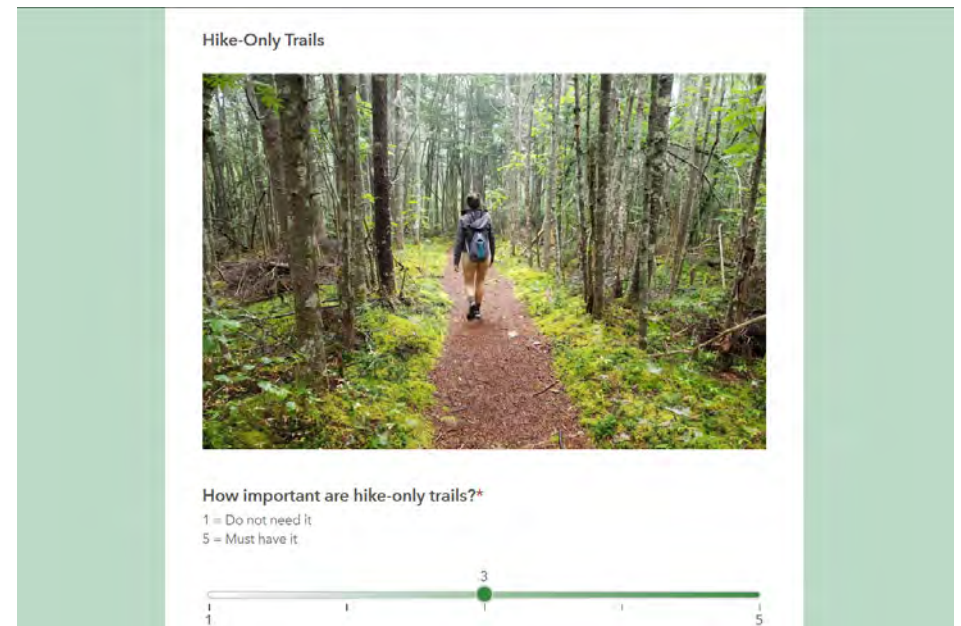
Outcomes from community engagement demonstrated a clear priority to maintain the forested natural environment of Evergreen Park with desires for new hike-only trails and bike-specific trails and amenities.



An ESRI StoryMap was built to provide context for the IMBA Trail Solutions assessment process.



Community members were asked to envision the future of Evergreen Park.

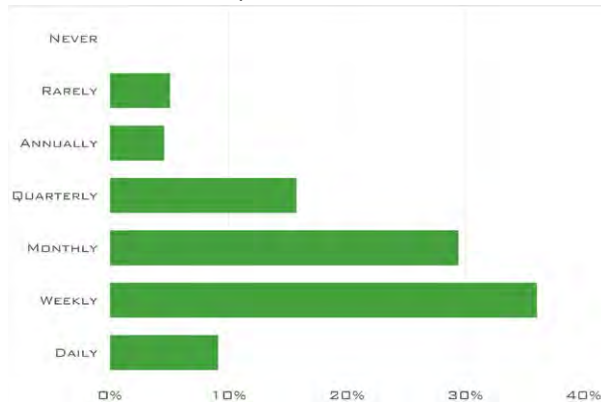


Feedback was gathered through an online survey hosted by IMBA Trail Solutions.

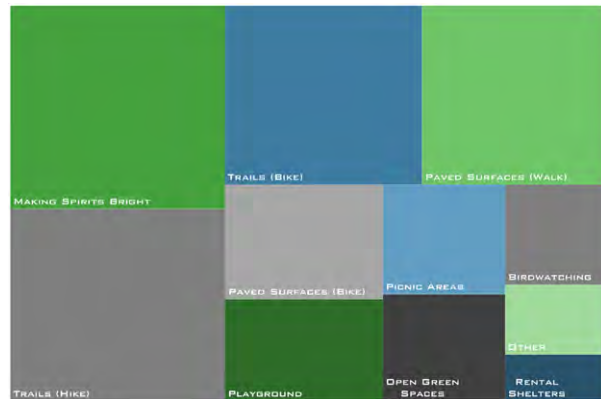
COMMUNITY SURVEY RESULTS

197 ONLINE SURVEY RESPONSES

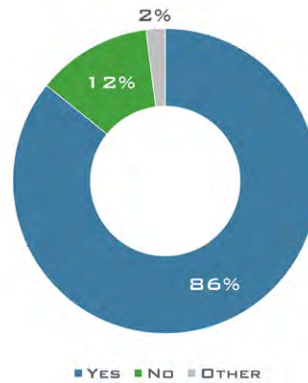
VISITATION FREQUENCY



HOW DO YOU USE THE PARK?



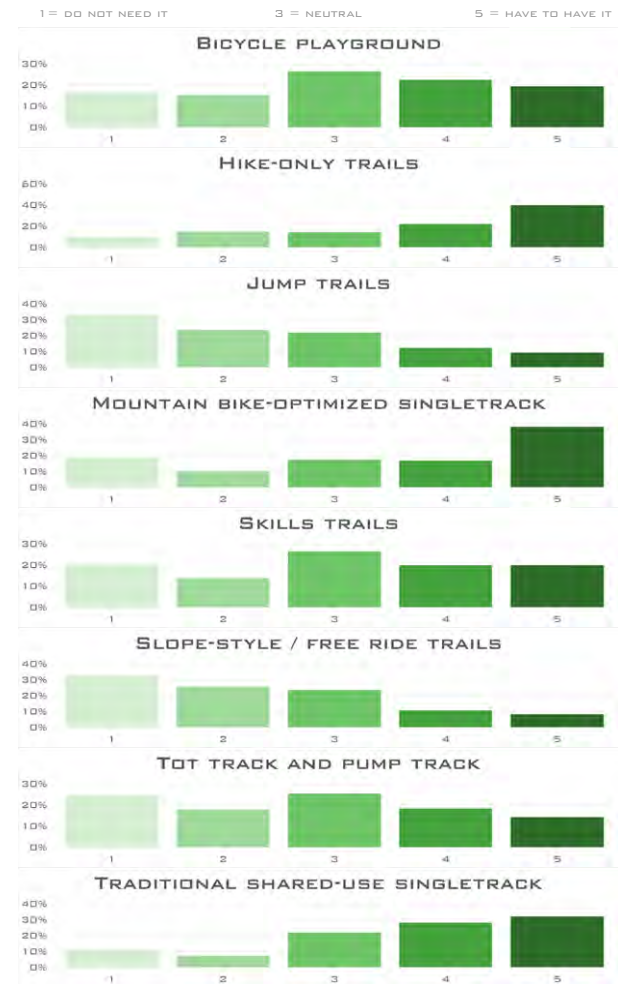
DO YOU RIDE BIKES?



WHERE DO YOU RIDE?



RANK TRAIL AND AMENITY TYPES



SAMPLE COMMENTS

1. I APPRECIATE THIS GROUP TAKING INTEREST IN THE PARK AND WANTING TO DO GOOD FOR THE COMMUNITY. I RECOGNIZE THAT BIKING EVENTS BRING NEW PEOPLE TO THE AREA AND SPEND THEIR FUN MONEY HERE WHILE VISITING. I TAKE ISSUE WITH ONE GROUP TAILORING A PUBLIC AREA FOR THEIR USE. I ALSO RECOGNIZE THAT THIS IS A GREEN SPOT WHERE ANIMALS TAKE REFUGE. WHEN JACYEES SHUTS THE PARK FOR THE LIGHT SHOW, IT'S FOR THE GOOD OF THE COMMUNITY BY RAISING FUNDS AND FOOD FOR THE DISADVANTAGED. WHEN BIKERS OR BIKING EVENTS HAPPEN, IT MAY FEED THEIR SOULS AND DROP SOME CHANGE, BUT THAT'S ABOUT IT. SEEMS A BIT SELF ABSORBED. I'M A WALKER. THERE'S BEEN MORE THAN ONE TIME THAT I'VE ALMOST BEEN RUN OVER BY A BIKER CROSSING A PAVED AREA TO CONTINUE ON THEIR TRAIL. EVERGREEN PARK NEEDS TO BE CLEANED UP OF DEAD TREES. THE TRAILS INSIDE THE WOODS NEEDS A REFRESH, BUT A FEW OF THESE IDEAS GO A BIT TOO FAR. EVERGREEN IS A TREASURE. IT NEEDS TO STAY A TREASURE FOR ALL RESIDENTS. BIKERS ARE A SMALL GROUP OF THOSE RESIDENTS.

2. MOST IMPORTANT TO ME IS TO RE-ROUTE / MAINTAIN EXISTING SINGLE TRACK FOR BETTER SUSTAINABILITY AND DRAINAGE WORKING TOWARDS BETTER TRANSITIONS FROM ONE TRAIL AREA TO THE NEXT. THE ISSUE WITH THE CURRENT TRAIL SYSTEM IS THE LACK OF ONE MAIN TRAIL SYSTEM FOR USERS TO KNOW WHERE TO GO. I RIDE EVERGREEN ABOUT 3 TIMES A WEEK SO I CAN CREATE A ROUTE THAT PAIRS TOGETHER PUT NEW COMERS WOULD BE LOST. ANOTHER OPPORTUNITY IS THE TRAILS REQUIRE A LOT OF CLIMBING WITH NO GIVE BACK ON THE DESCENTS DO TO POOR ROUTING, TIGHT TREES, AND LACK OF FLOW. I WOULD LIKE TO SEE A TRAIL HUB WITH SOME FLOW TRAIL RUNS AND JUMP LINES WHILE MAINTAINING NATURAL SINGLE TRACK LOOPS AROUND THE PERIMETER. WINMAN TRAILS IS THE PERFECT MODEL FOR WHAT I WOULD LIKE TO SEE TO GET THE WHOLE FAMILY RIDING.

3. AS A COACH/PARENT OF THE SHEBOYGAN COMPOSITE NICA TEAM EVERGREEN HAS BECOME A VERY IMPORTANT ASSET IN TEACHING THE KIDS THE SKILLS THEY NEED TO COMPETE OR SIMPLY HAVE FUN WITH THE FELLOW TEAMMATES. WHILE THE CURRENT TRAILS ARE SUITABLE FOR PRACTICE IT'S NOT IDEAL FOR PEOPLE WHO ARE NOT FAMILIAR WITH THE TRAILS. IT'S VERY EASY TO GET LOST SO WE ARE CONSTANTLY DIRECTING THE KIDS WHERE TO GO. FOR ME SIMPLE SINGLE TRACK THAT IS EASY TO NAVIGATE WITHOUT GETTING LOST AND INCLUDE SOME TECHNICAL SECTIONS AND RIDE AROUNDS IS PERFECTLY FINE BUT ANYTHING MORE WOULD BE AMAZING. THE SECOND MOST IMPORTANT TOPIC FOR ME WOULD ALSO BE THE ABILITY TO HOST MTB RACES AT EVERGREEN AGAIN THROUGH, WORS, WEMS, NICA OR ANY LOCAL EFFORT.

4. I'M MOST EXCITED ABOUT THE WAY FINDING AND TRAIL SYSTEM. I'VE BIKED THE PARK WITH A GROUP AND OFTEN FEEL LIKE THE TRAIL SYSTEM IS A PILE OF SPAGHETTI AND WOULD NEVER BIKE IT WITHOUT SOMEONE VERY FAMILIAR WITH THE PARK. THE TRAIL IMPROVEMENT AND REMOVING THE ERODING TRAILS IS ALSO GREAT. I ALSO REALLY LIKE THE PLAYGROUND AND PUMP TRACK COMPONENTS. IT'S GREAT FOR KIDS!

5. NO IMPROVEMENTS NEEDED LEAVE PARK IN A NATURAL SETTING AND SAVE TAX PAYER DOLLARS, THESE SO CALLED IMPROVEMENTS WOULD BE A BIG WASTE OF TAX DOLLARS

**The full comment list can be found in Appendix C*

TRAIL NETWORK VISION

The trail assessment performed by IMBA Trail Solutions during October 2023 in combination with community engagement throughout January 2024 informed a conceptual trail network vision that suggests improvements and new trail amenities in Evergreen Park. The conceptual trail alignments are laid out to minimize soil erosion and environmental disturbance while providing an improved shared-use trail network for all users.

Conceptual additions include zones identified for bike skills features, a pump track, a bicycle playground, and jumps. A one-mile beginner loop provides circulation through the park with bike-optimized flow trails to take advantage of the park's elevation. Hike-only and traditional shared-use singletrack trails are drawn with



A bicycle playground with beginner skills features provides a progressive learning environment for newcomers.

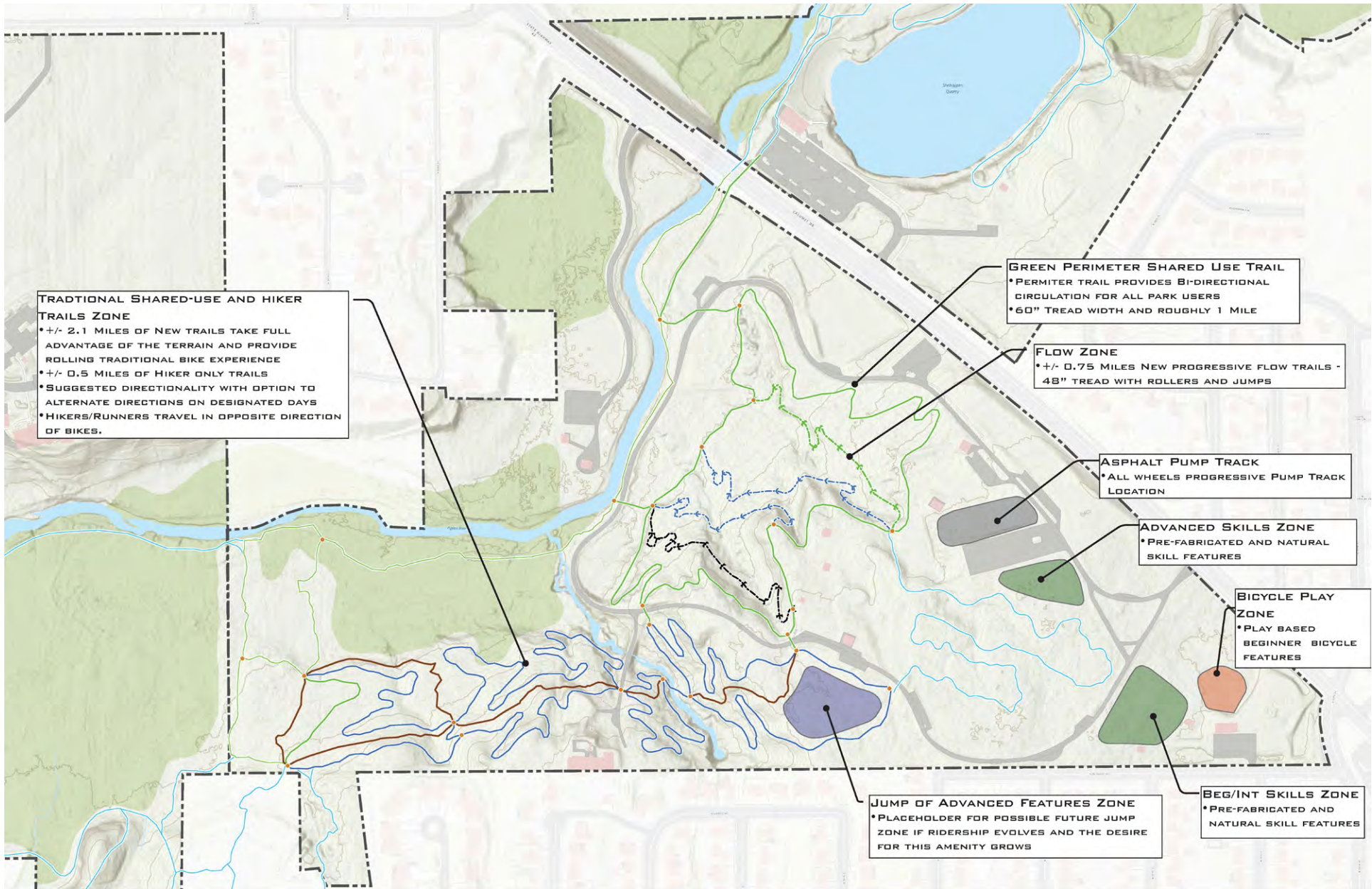
sustainable grades and alignments that allow users to configure loops of various lengths and connect with existing trails at defined hub locations.

The trail network vision recommends maintaining some of the existing trail alignments in Evergreen Park and all of the recognized and legal trails within Maywood Environmental Park and Jaycee Quarry Park. Improvements to the existing trails may be implemented on an as-needed basis to ensure proper drainage, minimize erosion, and improve the user experience. Appendix A includes potential issues identified on existing trails at the time of assessment.

All of the new trails and amenities recommended in this plan are focused within Evergreen Park, which offers the best opportunities for sustainable trail alignments that also meet the goals outlined by stakeholders and the community. If implemented, new trail development may result in some existing trail re-routes and closures to accommodate the improved trail network alignments. During this process, proper signage and re-routes should be prioritized to allow for cohesive trail experiences in the park during phases of new design and construction.



Trail construction employs a host of advanced tools, but sometimes the job simply calls for the time-tested rake.



TRAIL NETWORK VISION

EVERGREEN PARK | SHEBOYGAN, WI | JANUARY 2024

- CONCEPT HUBS
- HIKER ONLY
- EXISTING, BEGINNER, SHARED-USE
- BEGINNER, TRADITIONAL SINGLETRACK, SHARED-USE
- BEGINNER, MOUNTAIN BIKE OPTIMIZED
- EXISTING, INTERMEDIATE, SHARED-USE
- INTERMEDIATE, TRADITIONAL SINGLETRACK, SHARED-USE
- INTERMEDIATE, BIKE-OPTIMIZED
- ADVANCED, BIKE-OPTIMIZED
- PROJECT AREA BOUNDARY



RECOMMENDED PHASING

Trail design and construction is commonly divided into manageable phases of work to help communities prioritize goals, raise funds, and develop projects over a reasonable timeline. The following phases are recommended for implementing the Trail Network Vision for Evergreen Park:

1 SIGNAGE AND WAYFINDING PHASE

This phase of work is already underway, which includes establishing a designated route through the existing trail network with new signage and wayfinding.

2 INITIAL IMPROVEMENTS PHASE

The second phase includes creating a new one-mile perimeter trail that provides bidirectional circulation through the interior of the park for all users. This perimeter trail would be constructed in combination with a bicycle playground near the existing playground, a beginner and intermediate skills zone with prefabricated and natural skills features, and a progressive flow zone that would establish nearly a mile of bike-optimized trails.

3 MILEAGE AND FEATURES PHASE

The third phase includes creating hike-only trails and constructing new traditional singletrack trails that utilizes modern, sustainable trail design techniques. Additional developments may include an asphalt pump track near the existing parking lots, an advanced skills zone, alternate lines on trails that mimic NICA features, and a placeholder for an advanced feature and jump zone.

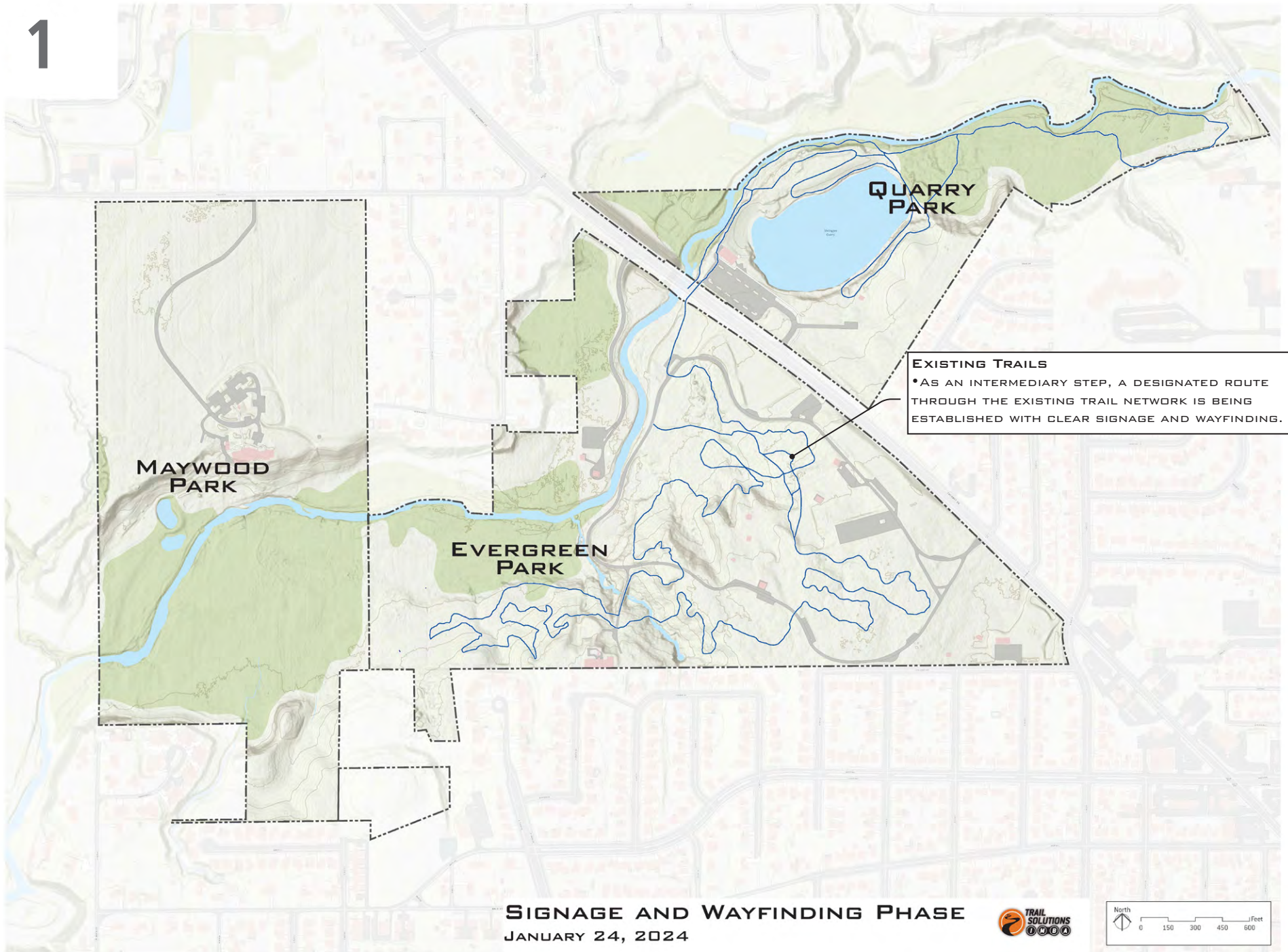


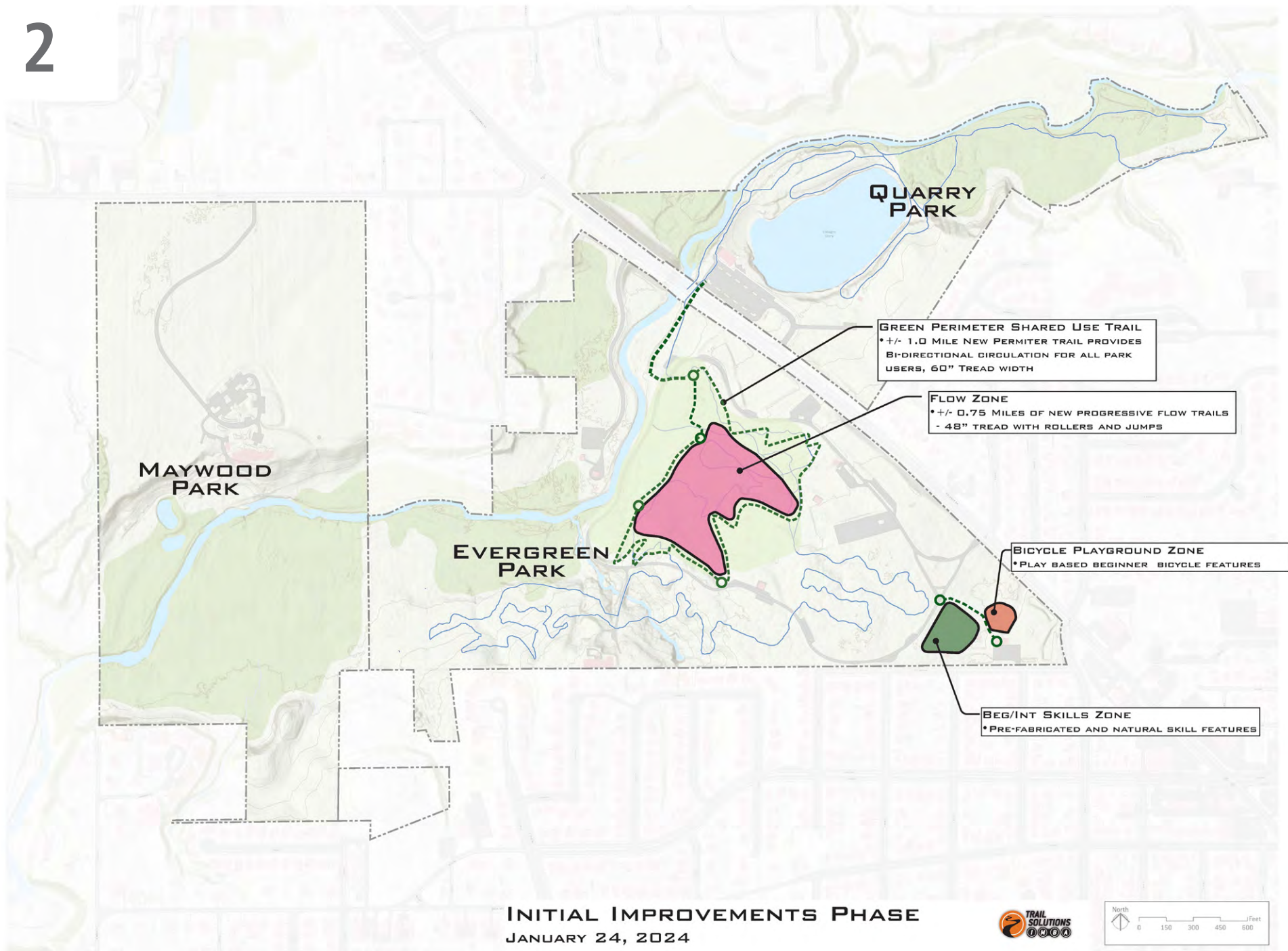
Sustainable trails provide immersive nature experiences, serving a wide range of activities and community members.



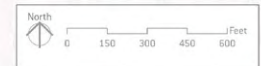
Well-designed trails minimize environmental impact by considering the local soils, hydrology, and biota.

1





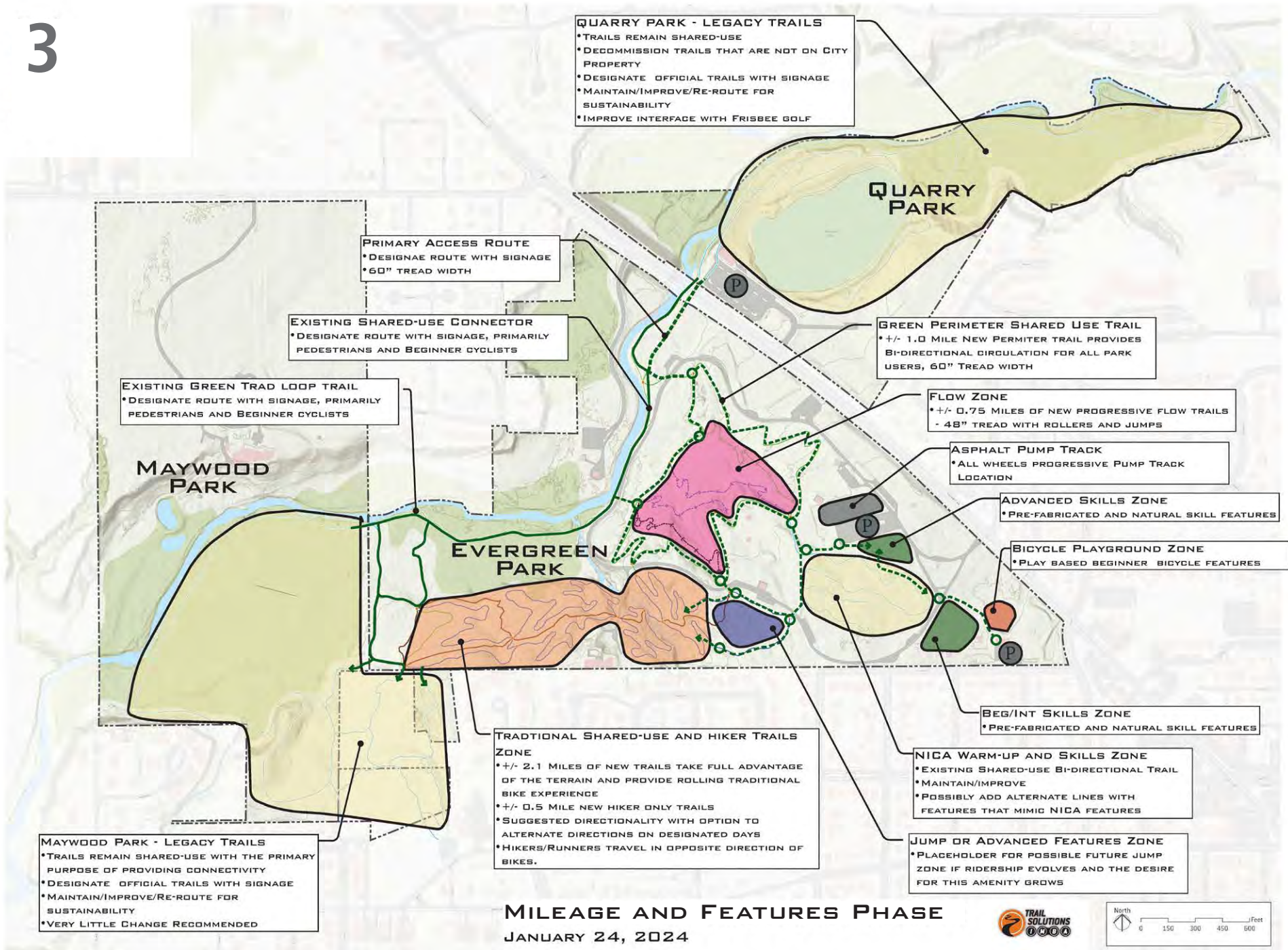
INITIAL IMPROVEMENTS PHASE
JANUARY 24, 2024



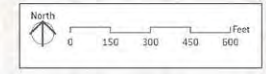
Evergreen Bike Park: Initial Improvements Phase Conceptual Cost Opinion

Item	Description	Cost
Phase 1 Development		
Bike Amenities		
Bike playground	350 to 450 feet with 7 to 10 features	\$60,000
Beginner/Intermediate skills zone	0.33-mile trail with 13-16 features	\$100,000
Green perimeter shared-use trail and Quarry Connection	1.2 miles - 60" Tread width	\$60,000
Flow Trails	0.8 miles Bike optimized flow/feature trails	\$80,000
Trail Design Services		
Field Flagging of trails	2.0 miles of trails	\$10,000
Schematic design of bike playground and skills zone	Schematic documents that would support a design build level of construction	\$17,000
Trail and Bike Amenity Implementation costs		
Signage	Main kiosk; Wayfinding, information, and bike park amenity signs	\$35,000
Permitting, compliance, and monitoring	Various local, state, and/or federal permits	\$6,000
Mobilizations for construction	Cost of mobilizing 3-person build team to/from project site	\$10,000
Phase 1 Totals:		
Estimated Phase 1 Bike Park and Trail Construction:		\$378,000
Total Estimated Contingency:		\$22,000
		\$400,000

Notes: This conceptual cost opinion provides a +A1:C28high level opinion of the costs of construction and serves as a tool for planning purposes only. It is expected that actual costs may fluctuate +/-20% from the amounts provided in this cost opinion. The cost opinion does not serve as a bid. Costs for site preparation, utility connections, and stormwater infrastructure are not included in this estimate. Permitting costs assume a variety of local, state, and federal regulations apply (i.e. stormwater, land disturbance, etc.). Construction costs assume professional trail contractors perform the work. Contingency is assumed to allow for adjustments during design and permitting. Cost opinion reflects current prices and does not account for future cost escalation.



MILEAGE AND FEATURES PHASE
 JANUARY 24, 2024



Evergreen Bike Park: Mileage and Features Phases Conceptual Cost Opinion

Item	Description	Cost
Phase 2 Development		
Bike Amenities		
Advanced Skills Zone	.25-mile trail with 10-15 features	\$120,000
NICA warm-up and skills zone	Maintenance and improvements	\$25,000
Jump or advanced features zone	4-5 progressive jump/features lines	\$175,000
Traditional shared-use trails	2.1 miles traditional machine built singletrack	\$100,000
New shared-use bridge	construct new bridge at current crossing (traditional shared-use trails)	\$20,000
Hiker only trails	0.5 miles hiking trails	\$500
Trail Design Services		
Field Flagging of trails	2.6 miles of trails	\$15,000
Design Development design of pump track and advanced skills zone	DD documents that would support a bid and contractor procurement process	\$37,500
Schematic design of jump or advanced features zone	Schematic documents that would support a design build level of construction	\$17,500
Trail and Bike Amenity Implementation costs		
Signage	Main kiosk addition; Wayfinding, information, and bike park amenity signs	\$20,000
Permitting, compliance, and monitoring	Various local, state, and/or federal permits	\$18,000
Mobilizations for construction	Cost of mobilizing multiple build teams to/from project site (up to 3 separate teams)	\$45,000
Phase 2 Totals:		
Estimated Phase 2 Bike Park and Trail Construction:		\$568,500
Total Estimated Contingency:		\$31,500
		\$600,000
Phase 3 Development		
Bike Amenity		
Asphalt Pump Track	+/- 18,000 square foot pump track	\$630,000
Phase 3 Totals:		
Estimated Phase 3 Pump Track Construction:		\$630,000
Total Estimated Contingency:		\$35,000
		\$665,000

Notes: This conceptual cost opinion provides a high level opinion of the costs of construction and serves as a tool for planning purposes only. It is expected that actual costs may fluctuate +/-20% from the amounts provided in this cost opinion. The cost opinion does not serve as a bid. Costs for site preparation, utility connections, and stormwater infrastructure are not included in this estimate. Permitting costs assume a variety of local, state, and federal regulations apply (i.e. stormwater, land disturbance, etc.). Construction costs assume professional trail contractors perform the work. Contingency is assumed to allow for adjustments during design and permitting. Cost opinion reflects current prices and does not account for future cost escalation.

IMPLEMENTATION AND NEXT STEPS

Concept Plan Review

To bring this concept plan to fruition, the next step is to share this report and supporting maps with the appropriate stakeholders and staff to gather feedback and devise next steps. This coordination will help identify unknown sensitive resources that should be avoided, highlight potential conflicts that could be proactively mitigated, and address other important issues in order to ensure positive outcomes with the project. Public meetings with community leaders, residents and other stakeholders are encouraged to engage the public and build interest in the project.

Design

This plan offers a vision for trail development in Evergreen Park in Sheboygan, Wisconsin. The plan identifies conceptual opportunities but will require refinement and detailed design. Design is vital to a successful trail system. Professional trail layouts will minimize resource impacts and maximize visitor experience. During design, it is imperative to identify permitting and compliance needs. Trail design includes field flagging, which is subject to degradation due to weather and animals. Field layout should occur no more than two years before anticipated construction for most projects.

Permitting and Compliance

All construction projects are subject to regulatory requirements. Obtaining proper permits ensures that work follows local, state, and federal laws as trail concept plans are implemented. At least as important, working under permits can help trail builders and visitors to be good stewards of the land.

Trails are used for many reasons, but a chief motivator among visitors is to enjoy the outdoors. Ground disturbance, uncontrolled erosion, and sedimentation can negatively impact our environment, water quality, flora, and fauna. These impacts are also unsightly and, if not quickly mitigated, can rapidly increase maintenance costs and ultimately create trails that visitors no longer want to visit.

Utility Locate

It is against state law to excavate or grade without a utility location. It is extremely important that contractors notify the applicable organizations in a timely fashion for utility location services prior to construction.

Construction

The trails recommended in this plan require extensive mechanized construction and knowledge of sustainable trail building practices. IMBA Trail Solutions recommends the alignments be constructed by professional trail builders. The Professional Trailbuilders Association (PTBA) maintains a list of quality trail builders; however, this list is not exhaustive and does not include all qualified trail builders.

Maintenance and Stewardship

Maintenance is an ongoing cost and should be planned and budgeted from the onset of a project. Trails should be managed according to trail type guidelines, respective trail narratives, and recommended difficulty levels. Typical annual maintenance budgets for traditional and mountain bike-optimized trails range from 5% to 15% of the construction cost. Some of the annual maintenance for trails can be performed by trained volunteers. These tasks will include corridor trimming, downed tree removal, tread clearing, and minor drainage work. Professional assistance will be required occasionally. Increasingly, mountain bike trail systems are hiring part- or full-time staff to provide maintenance to trail systems. Ensuring a quality, consistent riding experience is key to attracting visitors and keeping a local riding community satisfied and growing.

CONCLUSION

Evergreen Park is a treasure for the City of Sheboygan, offering a diverse array of outdoor recreational opportunities for both residents and visitors. This park serves many purposes, attracting individuals in search of nature, exercise, tranquility, and exploration, all within the forested heart of the city. Evergreen park has been around for decades and has witnessed eras of enhancement, decline, restoration and evolution. Now, with renewed energy from the City of Sheboygan and Sheboygan County Cycling, there is a great opportunity to breathe new life into the park's trail system, ensuring its enjoyment for generations to come. This concept plan showcases exciting additions to the park, such as flow trails, skills features, a dedicated bicycle playground, hike-only trails, and a revitalized traditional singletrack network. Collectively, these enhancements provide a more comprehensive and sustainable trail network, fostering enduring recreational experiences for all who visit.

