

Lake Monona Waterfront Design Challenge

RFQ #10082-0-2022-BP | Framework Plan Report



A

Agency
Landscape + Planning

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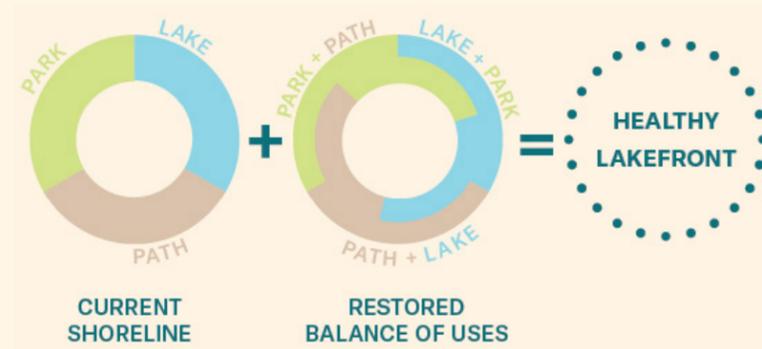
REVIVING LAKE MONONA

Summary

The Lakes have always been essential to Madison's civic identity and character - there is much beloved about the relationship between Madison's unique culture and its vibrant natural heritage. The Lakes also serve as a mirror, reflecting the City literally on a bright day and symbolically in terms of where investments are made. Madison's future treatment of Lake Monona offers the chance to reflect City values to be equitable, welcoming, and environmentally healthy.

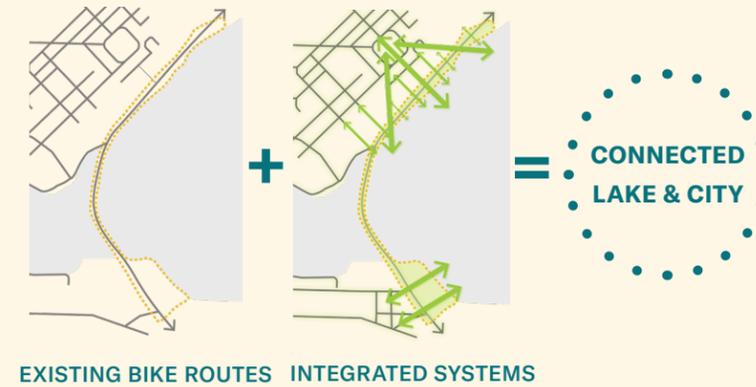
While there have been ambitious plans and much to applaud about the Lake's evolution, there is much unmet potential today. Climate change, community open space needs, and shifts in transportation patterns have increased the urgency to fully leverage the Lake's role in contemporary Madison. Change on Lake Monona has been constant. The guiding principles of this Framework Plan emerged from an intention to honor and integrate multiple past legacies while staying true to 21st century values - many of which seek to evolve past the last century's decision-making to a more equitable, healthy future.

This Framework Plan imagines a revival for Lake Monona - one that honors layers of the past while embracing a powerful long-term vision for all of the community.



A Healthy and Functional Ecosystem

The first foundational move of this Framework Plan is to establish a living shoreline for the entire 1.7 miles of the site. A living shoreline is an ecologically restored and dynamic edge that provides multiple benefits, including water quality enhancement, improved habitat value, and more seasonal beauty. Across the country and around the world, communities are reclaiming the water's edge in this way - providing a great wealth of demonstrated success, even in dynamic and ice-prone environments.



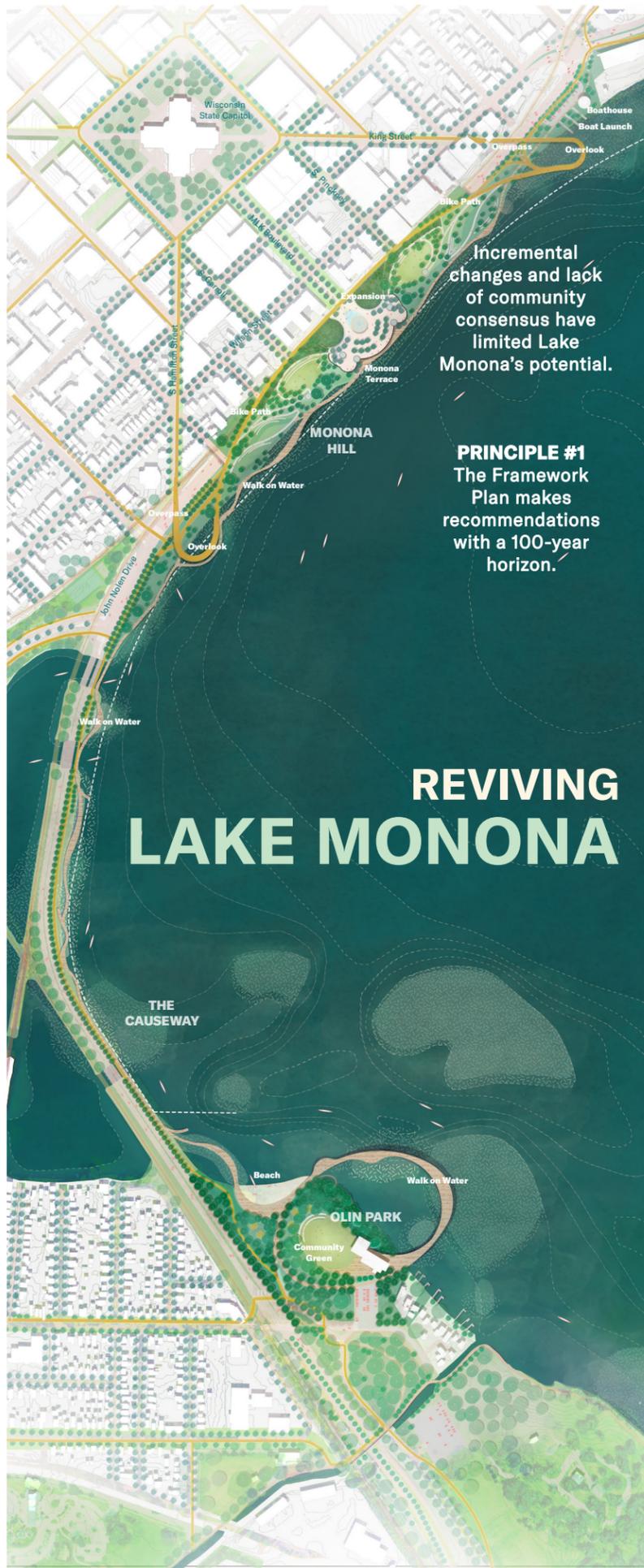
Safe and Welcoming Paths for All

The highest need reported by the Madison community in all feedback is for safe access to, from, and along the Lake Monona waterfront. This Framework Plan delivers on the desire for multiple, separated paths that allow for different types of movement. Importantly, the paths offer equitable access to different users - from commuters on John Nolen Drive and the bicycle path to neighbors looking for a slow, nature-engaged stroll. Frequent overpasses and underpasses allow for safe passage across John Nolen Drive.

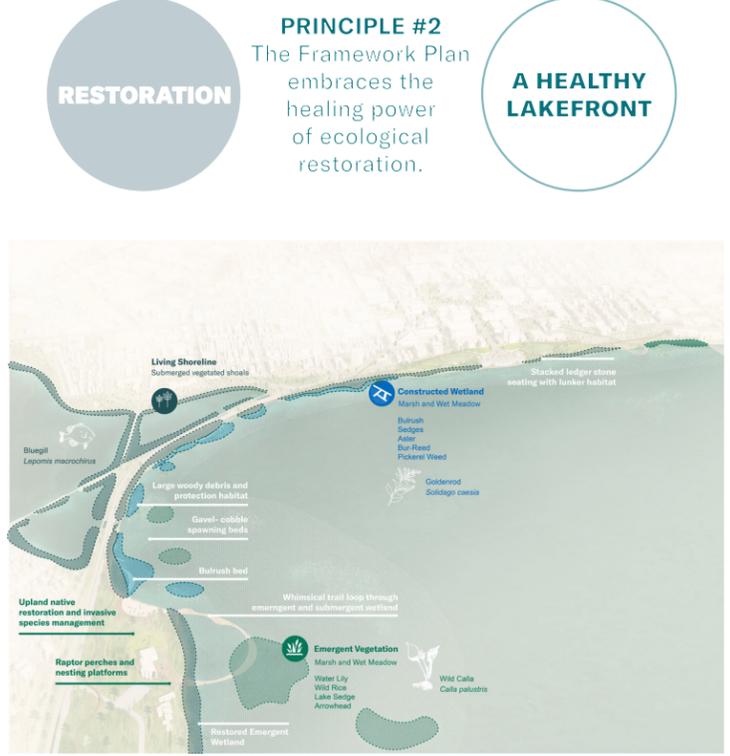


Vital and Active Through the Seasons

The Monona Lakefront comprises three districts, each offering distinct activities appropriate to the location, ecology, and community values. The City District offers a signature, urban waterfront, hilltop park with event spaces, active fitness, play, and extensive lake viewing areas. The Causeway District provides a nature-engaged journey along the Lake's restored marsh edge with fishing, bird-watching and meditation. The Park District balances new uses at the existing Olin Park with desires to respect the park's neighborhood qualities, providing the Southside a lakefront of its own.

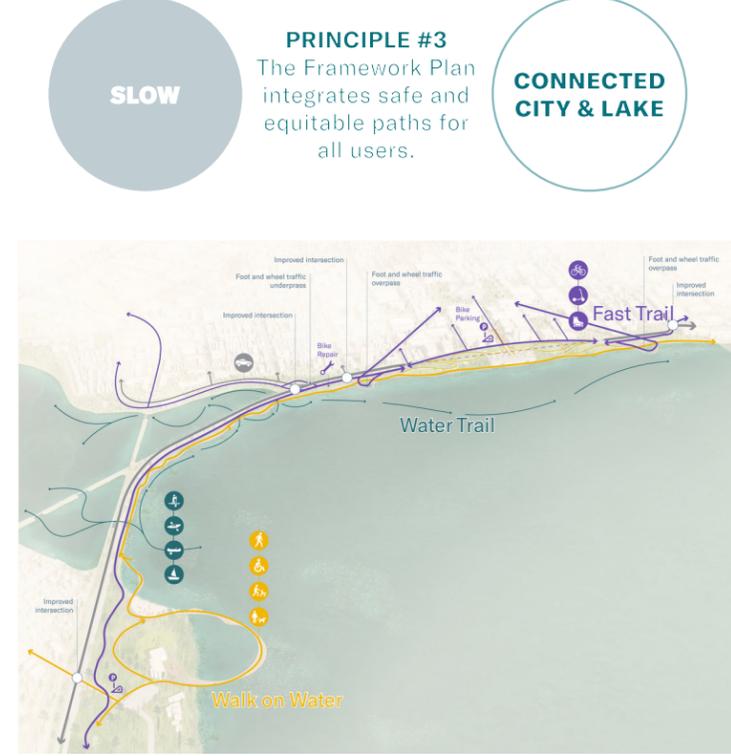


REVIVING LAKE MONONA



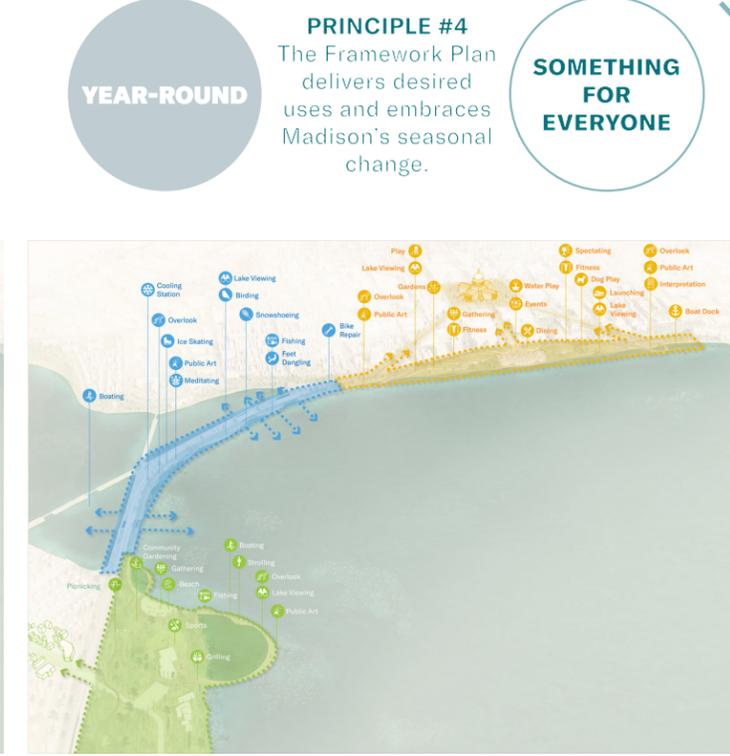
Restoring the Edge

In ecology, the edges between environments - land to water, field to forest, etc - are often the richest. The Framework Plan outlines a strategy for the lake edge that restores ecological function. The diversified environments include restored emergent wetlands, bird nesting spaces, upland native forests, living shorelines and constructed wetlands. The diagram above outlines where these strategies occur and a sample of the plant species of each.



Safe and Accessible for All

A wide array of users have different needs for access to the lakefront. The Framework Plan outlines a series of paths: a connected Bicycle Path with continuous access through the site without a single at-grade roadway crossing, the Walk on Water interpretive trail for slow movement, fishing and pausing, Water Trails adjacent to the marsh and strolling paths through the park on Monona Hill. All at-grade intersections are shown transformed with traffic calming and pedestrian safety measures.



Three Vital Districts

The Framework Plan lands each of the desired programs from the Preliminary Report in one of three districts. The district framework builds on the existing character and context of the site while allowing for diverse experiences. The Park District focuses on neighborhood-scaled amenities like family gathering, passive experience and viewing. The Causeway provides nature-engagement and places to pause on the journey along the lake. The City District focuses on delivering signature waterfront park experiences to complement a thriving downtown.

The Southside's Neighborhood Park OLIN PARK

A "Green Gateway" to the City, Olin Park is a beloved gem in the Madison park system. The Framework Plan envisions enhancements that complement the park's existing character while building on the high aspirations shared by nearby communities, adjacent planning initiatives, and active park advocates.



The Concept

Change is in the Air

Change is afoot at Olin Park, and in South Madison neighborhoods. The newly relocated Madison Parks' downtown offices, moved to Olin Park in 2022, presents an opportunity to broaden the community face of this indoor facility to provide a new community hub and increase user-comfort, experience and programs. The Southside's Master Plan outlines clear aspirations to support a thriving neighborhood that builds community and enables people to stay. Longer term, the Destination District offers opportunities to catalyze change including more equitable access to park space and wealth-creation for the Southside neighborhoods. Among these distinct efforts, we see a way to create a landmark lakefront experience at Olin Park that realizes and balances their shared goals.

A Green Gateway to the City

Proposed improvements amplify Olin Park's identity as a natural, green living room on the Lake while increasing environmental and cultural performance. These include a whimsical "Walk on Water" with fishing and lingering overlooks, a Community Green adjacent to the recreational facility, enhanced planting and stormwater management.

The Journey Starts at Olin Park

Offering both intimate views of the Lake and long views to Downtown, Olin Park - the former site of a Ho-Chunk wigwam village - is the perfect launching point for a 2-mile long interpretive, cultural trail. Olin Park's identity as a natural and cultural hub on the Lakefront is reinforced by the trail, which links to improved crossings to safely bring the community to the park and water. Interpretive pause places offer intimate spaces and time for reflection alongside a protected shoreline gathering space for families to play, relax and cook.

Related Community Feedback

"Fishing is an important aspect that doesn't always get the attention it needs. Think about how it can be celebrated."

- AdHoc Meeting with EqT by Design

"We like expanding the pedestrian walkway portion of John Nolen with cutouts or piers for folks to sit, fish... and the floating wetlands concept, great improvement for water quality, habitat, and aesthetics."

- Input from Friends of Olin Turville

"There is potential growth on the Alliant Center campus, deepen connection to South Madison and beyond."

- Friends of Nolen Waterfront Meeting

"A network and system of enriching recreational activities, experiences and cultural spaces. An active, healthy lakefront playground for all."

- AdHoc Meeting with the Destination District

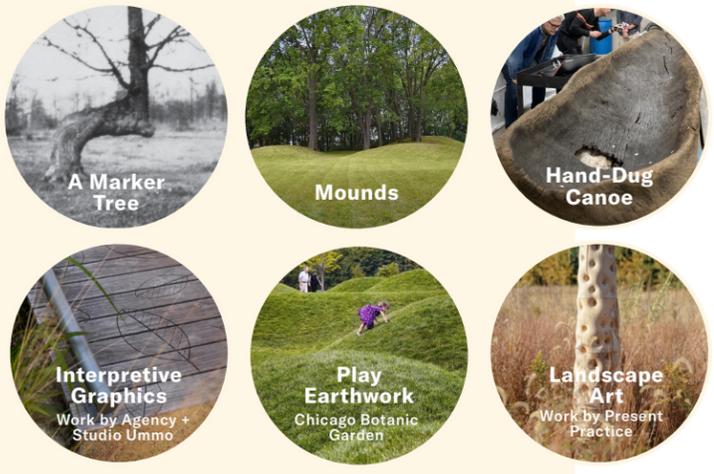
"Develop an interconnected system of parks, greenways, and trails to take advantage of the close proximity to the natural resources within the neighborhood..."

- South Madison Plan report

"In 100 years, I'm biking around with my great great grand children. They look on in amazement at the sustainable infrastructure"

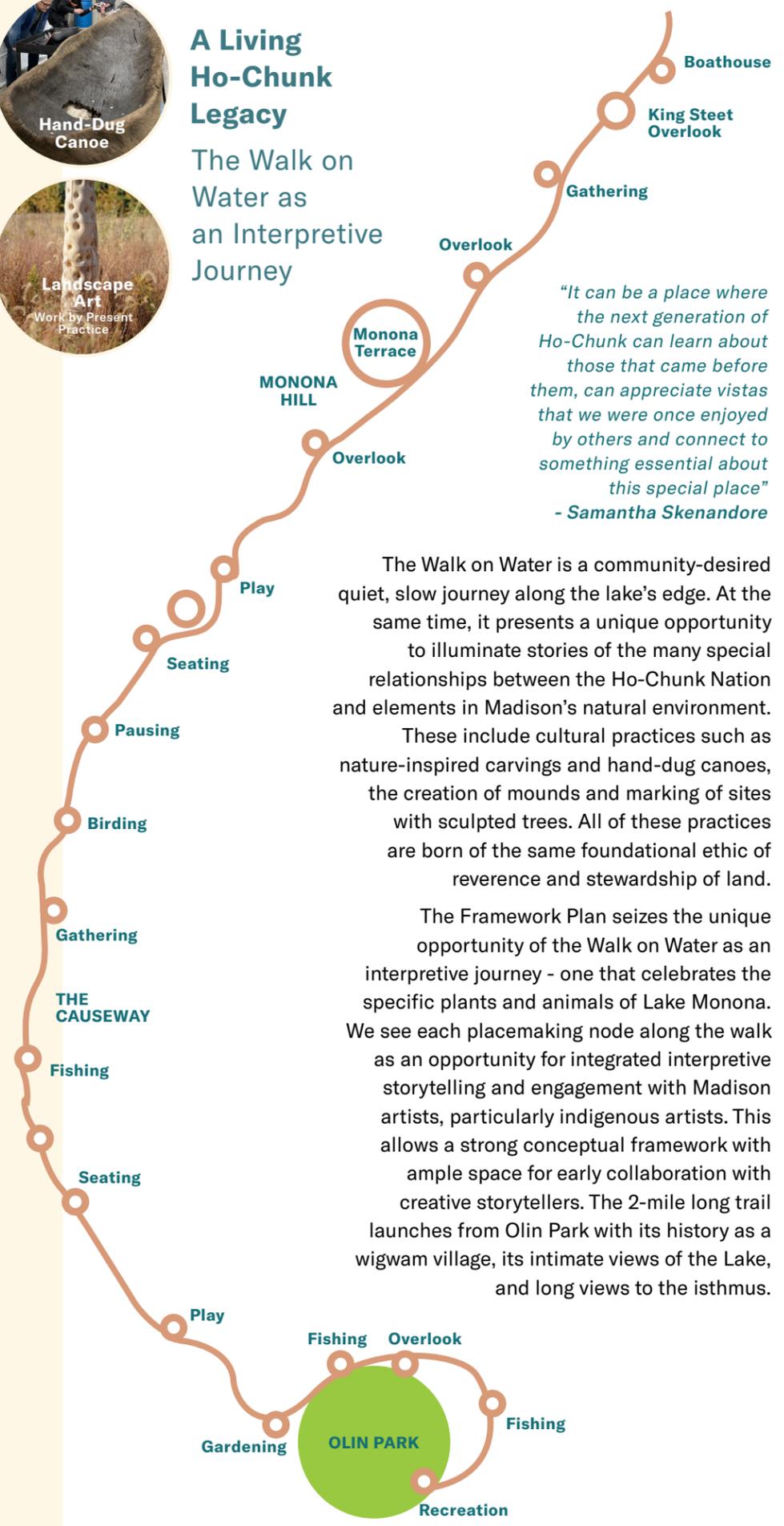
- Postcard Comment from Design Check-In





A Living Ho-Chunk Legacy

The Walk on Water as an Interpretive Journey



"It can be a place where the next generation of Ho-Chunk can learn about those that came before them, can appreciate vistas that we were once enjoyed by others and connect to something essential about this special place"
 - Samantha Skenandore

The Walk on Water is a community-desired quiet, slow journey along the lake's edge. At the same time, it presents a unique opportunity to illuminate stories of the many special relationships between the Ho-Chunk Nation and elements in Madison's natural environment. These include cultural practices such as nature-inspired carvings and hand-dug canoes, the creation of mounds and marking of sites with sculpted trees. All of these practices are born of the same foundational ethic of reverence and stewardship of land.

The Framework Plan seizes the unique opportunity of the Walk on Water as an interpretive journey - one that celebrates the specific plants and animals of Lake Monona. We see each placemaking node along the walk as an opportunity for integrated interpretive storytelling and engagement with Madison artists, particularly indigenous artists. This allows a strong conceptual framework with ample space for early collaboration with creative storytellers. The 2-mile long trail launches from Olin Park with its history as a wigwam village, its intimate views of the Lake, and long views to the isthmus.



Oblique Birds-eye of Olin Park



Morning View of Olin Beach



Evening View of Olin Beach

Aspirational Projects

Where else this has been accomplished?



Sarasota Bay Park, Sarasota, Florida

"Sarasota's bayfront will be an iconic, public destination that welcomes the diversity of Sarasota, enhances our status as a cultural capital and serves as a venue for multi-generational, inter-neighborhood, broad-based enjoyment of our bayfront." - <https://www.thebaysarasota.org>



West Detroit Riverfront, Detroit, Michigan

"The Ralph C. Wilson Centennial Park is the final part of the Detroit Riverfront Conservancy's master plan of revitalizing 5.5 miles along the river. The park, a \$75 million investment, is stationed on the west side of the riverfront near the site of the former Joe Louis Arena and will consist of 22 acres of landscapes and recreational spaces." - Detroit Free Press

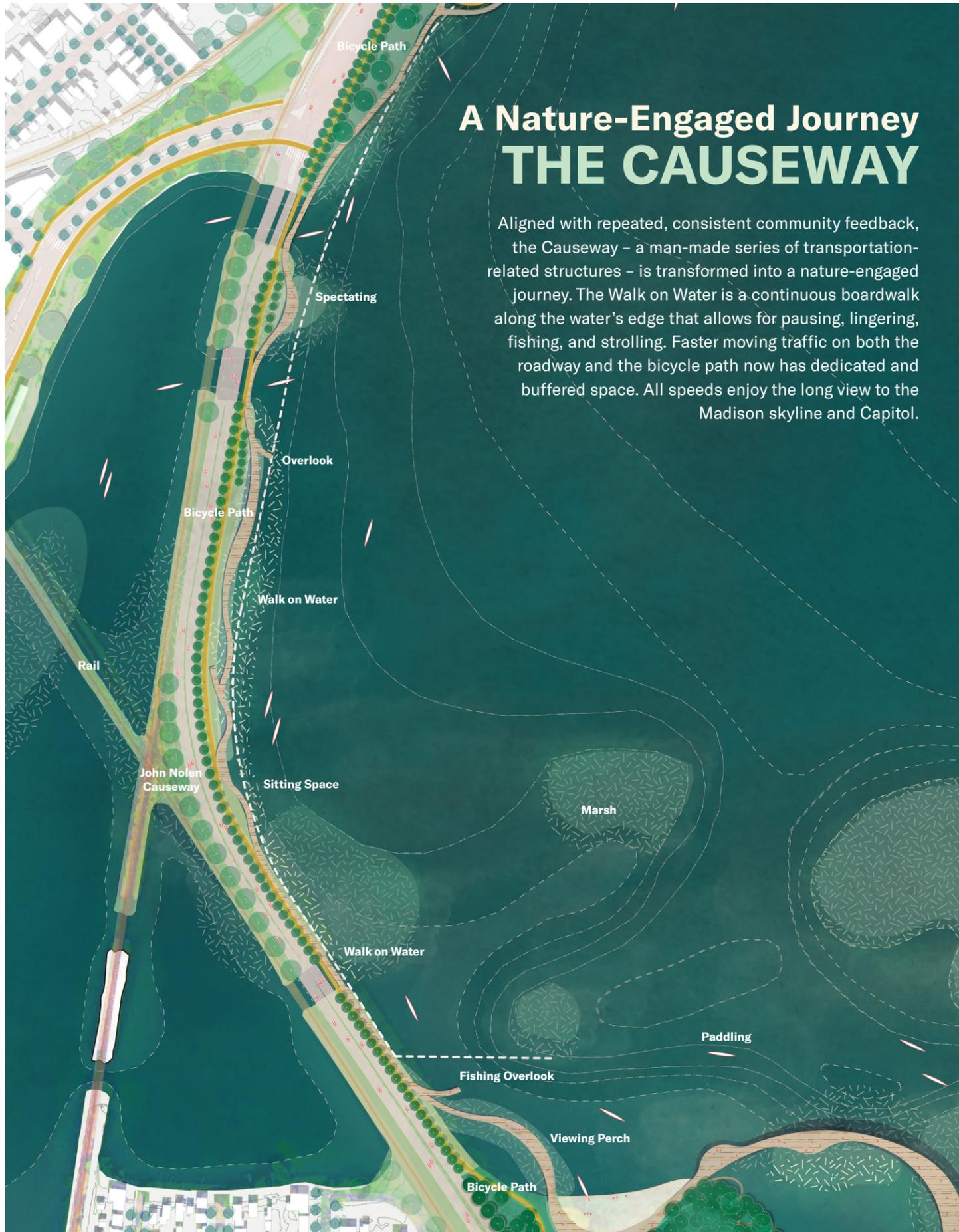


River's Edge Park, Council Bluffs, Iowa

"Tom Hanafan River's Edge Park is home to five acres of great lawn, built-in amphitheater-style seating, public art, a sand area, access to the Council Bluffs Trail System and Bob Kerrey Pedestrian Bridge, a light show, River's Edge Pavilion and rooftop deck, and a splash pad and interactive water features. The park features stunning views of the Omaha skyline and the Missouri River." - Council Bluffs Visitors and Convention Bureau

A Nature-Engaged Journey THE CAUSEWAY

Aligned with repeated, consistent community feedback, the Causeway – a man-made series of transportation-related structures – is transformed into a nature-engaged journey. The Walk on Water is a continuous boardwalk along the water's edge that allows for pausing, lingering, fishing, and strolling. Faster moving traffic on both the roadway and the bicycle path now has dedicated and buffered space. All speeds enjoy the long view to the Madison skyline and Capitol.



The Concept

Reviving the Marsh



Historically, the shoreline of Lake Monona would have been a dynamic and ever-changing marsh. Ho-Chunk mounds and villages co-existed with the natural fluctuations of the Lake. The proposed re-creation of a marsh edge aims to restore both a healthy ecological function and celebrate a connected cultural lifeway.

The Big Squeeze



Today, the noise and risk of fast-moving traffic dominates the experience of the Causeway. An imminent reconstruction project is a needed catalyst for a new and more inclusive way forward! The Plan's approach expands on the proposed vehicular-oriented changes, using this moment of construction to clarify and broaden spaces for more types of movement, improve pedestrian and biking safety, and leverage the Causeway's location along the lake to create a continuous linear trail with unparalleled views.

Multiple Paths of Discovery



An ecologically-restored edge offers a dynamic setting for various paths of different speeds. The Walk on Water is an interpretive trail and continuous boardwalk, prioritizing space for slower moving users and offering places to pause, stroll and dangle feet. It connects the entirety of the Monona Lakefront from Olin Park to Law Park, with improved crossings along the way to enable access for commuters or casual users alike.

Related Community Feedback

"Safety is the top priority. 80% would like to see barriers or spaces between modes of travel."

- Feedback via John Nolen Causeway Reconstruction Project

"We like expanding the pedestrian walkway portion of John Nolen with cutouts or piers for folks to sit, fish, etc. Like the floating wetlands concept, great improvement for water quality, habitat, and aesthetics."

- Input from Friends of Olin Turville

"Includes pedestrian-only spaces better separated from roadway and bike lanes."

- Preliminary Report

"Multiple ways to get to the water, the more the better. Creative use of boardwalks, fishing piers. Creative and attractive ways down to and enjoying the water."

- Ad Hoc Meeting, Clean Lakes Alliance

"100 years in the future, I hope that people are experiencing a clean lakeshore with abundant thriving urban wildlife."

- Postcard Comment from Design Check-In





Proposed Cross-Section near Broom Street



Oblique Birds-eye of Causeway



Summer View of Walk on Water



Winter View of Walk on Water



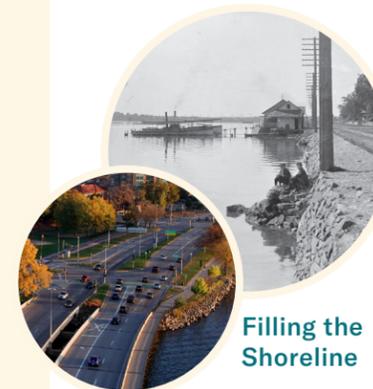
A Living Shoreline A Unifying Green + Blue Edge



Cultural Continuity

Water Has Memory

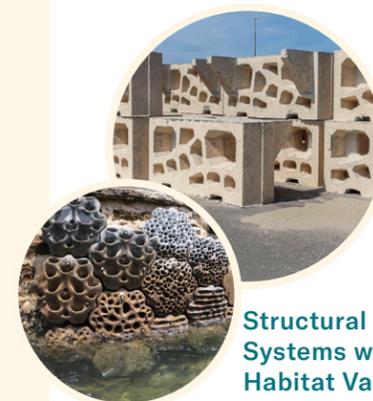
Madison is one of the richest American cities when it comes to archaeology. Recent excavations include hand-dug canoes - a practice that continues today - used by members of the Ho-Chunk Nation from over 12,000 years ago.



Filling the Shoreline

A Flat Landscape

In the 20th Century, practices such as filling and armoring the lake edge allowed for railroad and roadway development but severely compromised the rich and dynamic ecological function. Further, the current condition minimizes access and engagement.



Structural Systems with Habitat Value

An Innovative, Living Shoreline

The Walk on Water is supported by a structural system that mimics a breakwater or an artificial reef, minimizing wave and ice flow impacts to shoreline. These structures are multi-beneficial, providing support for people and wildlife.

Aspirational Projects

Where else this has been accomplished?



Tampa Riverwalk, Tampa, Florida

"By all measures, it has completely transformed our city, and it may be one of the single-most important events that has occurred in our community in probably the last 50 years." - Tampa Mayor Buckhorn.



Gray's Lake, Des Moines, Iowa

"More than one million people use Gray's Lake Park each year, whether to eat lunch during the weekday, walk dogs, connect to local and regional trails, attend outdoor yoga classes, or boat and fish. A place for all seasons, Gray's Lake is the crown jewel of Des Moines's park system — the epitome of an ideal public space." - The American Planning Association.



Schuylkill Banks, Philadelphia, Pennsylvania

"Philadelphia's boardwalk exhilarates us with its limitless vista." -Inga Saffron, Philadelphia Architecture Critic.



A Signature Waterfront Park MONONA HILL

Monona Hill is a land bridge that unites Law Park, creating seamless paths that connect the City to the Lake. This signature 8-acre park, a green hill, embraces Monona Terrace and its future expansion. Imagined as a place for downtown workers, visitors to Madison, and residents alike, it offers places to gather, pause, view, bike, and stroll while also being a perfect place for Madison's large community events.

The Concept

A Beloved Island

Monona Terrace is a well-loved public space, but it sits as an island within a sea of parking, asphalt and service. The community loves the big events held here, but wishes for more access between the City and Lake, and laments the lack of everyday amenities that would draw people back again and again.

Monona Terrace sits at the center of Law Park, a park in two parts. From above, the Terrace consists of a multi-level parking garage with multiple access roads and ramps, John Nolen Drive (tunneled under the facility) and two service courts near the Lake's edge. While the Terrace offers two or so acres of public open space, it is tenuously connected to the City via footbridge and is surrounded by functional, paved surfaces (which occupy 95% of the site).

Monona Terrace is an architectural gem, appreciated by the community and attributed in concept to Madsonian and celebrated architect Frank Lloyd Wright. Conceived within Wright's "organic" period, Monona Terrace's forms are tied to geometries - mostly circular - Wright considered meaningful.

From Grey to Green

The future Monona Hill takes advantage of the planned expansion of Monona Terrace and integrates building program, park uses and needed connectivity into one unifying gesture. It gracefully ties into the fabric of the city, connecting all city streets and sidewalk directly to the Lakefront.

By transforming 8 acres of downtown public space from grey hardscape to green terraces, Monona Hill will deliver more ecological function and support urban heat island mitigation.

The resulting 8 acres of open space form a signature urban waterfront park for Madison.

Related Community Feedback

"Transform Law Park to make it a signature park for the City including a boathouse or enclosed activity center reflecting a Frank Lloyd Wright inspired design..."

- 2012 Downtown Plan

"Access was stated as major point of concern for Law Park, both for people who live in the downtown area and other parts of the city."

- Preliminary Report

"Terraced seating in the greenspace, a stage with some sort of amphitheater could be used by community for a variety of things. Water as the backdrop"

- AdHoc Meeting, MAD CAP Ski Team

"Walkable, multicultural, filled with art, affordable, accessible, safe for youth, elderly, and disabled."

- Preliminary Report

"Highway covers/caps, reductions to boulevards, and complete removal are all possibilities. This is our last chance to look at the city we want for the next 100 years."

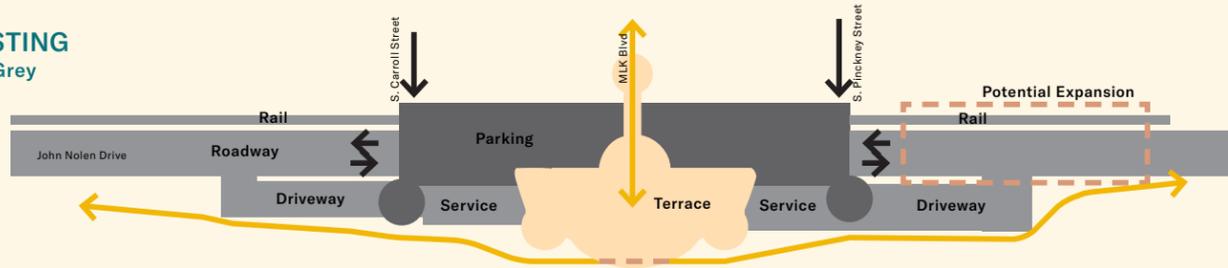
- Ad Hoc Meeting, Madison Bikes

"Lake Monona is the ultimate outdoor classroom where the community can come together to enjoy the lake and learn."

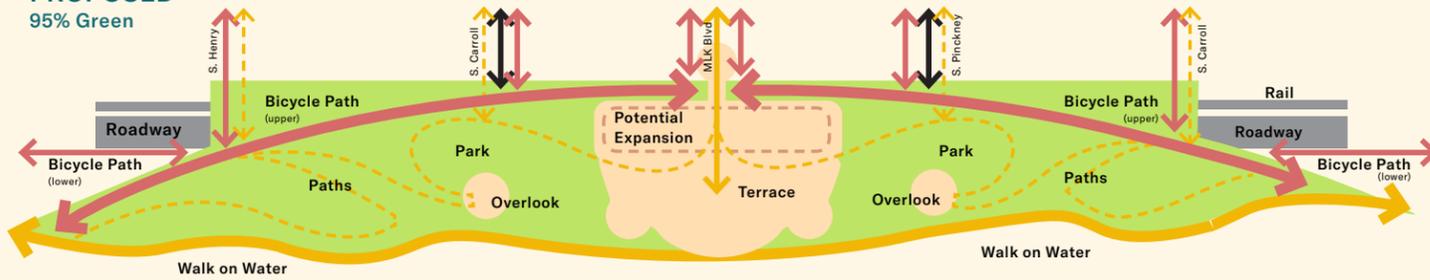
- Postcard Comment from Design Check-In



EXISTING
95% Grey



PROPOSED
95% Green



Oblique Birds-eye of Monona Hill



Everyday View from Monona Hill



Large Event at Monona Hill

A Signature Waterfront Park

With 6 additional acres of centrally located, lakefront open space, Monona Hill provides a downtown park that mirrors and complements Lake Mendota's James Madison Park. While similar in scale, Monona Hill will offer new uses that are more civic in nature and connected to the convention center use, with a mix of events spaces, destination play, incredible views, and amenities like fitness and a dog run that support both large gatherings and downtown living with a high quality of urban life.

Lack of parking, traffic, and pedestrian barriers ranked as the highest challenges for accessing Law Park identified by the community through earlier engagement processes. Monona Hill accomplishes adding significant downtown park acres without removing any parking spaces - something that would be a challenge in nearly any other urban location.

Aspirational Projects

Where else this has been accomplished?



Klyde Warren Park, Dallas, Texas

"Since opening in 2012, the Park has become a catalyst for ongoing transformation in the area and helped establish Dallas as a world-class city that provides inspiration around the country." - Natural Texan



The Stitch, Atlanta, Georgia

"This creates over 14 acres of new greenspace with quality civic infrastructure, interconnected open spaces, as well as new development pad sites both atop and adjacent to the platform." - Atlanta Downtown



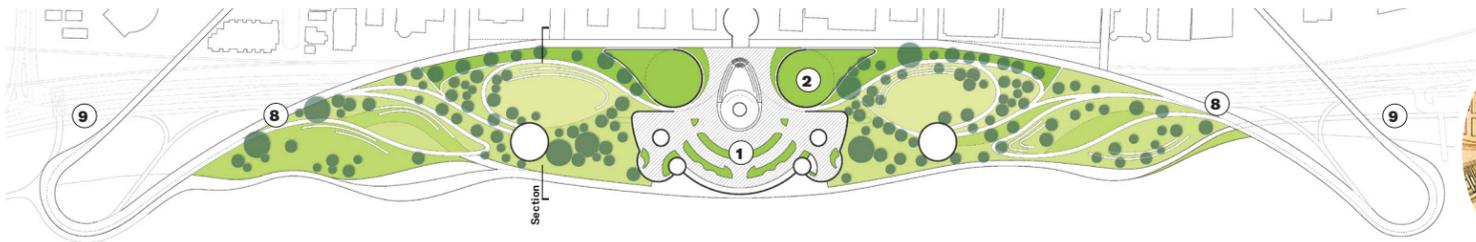
Tunnel Tops, San Francisco, California

"Presidio Tunnel Tops is a 14 acre new parkland on the tops of the Doyle Drive Tunnels. The site adds new visitor amenities such as a natural playground, fire circle, food court, gardens, paths and overlooks with stunning views of the Golden Gate Bridge, the Bay and the City." - The Presidio

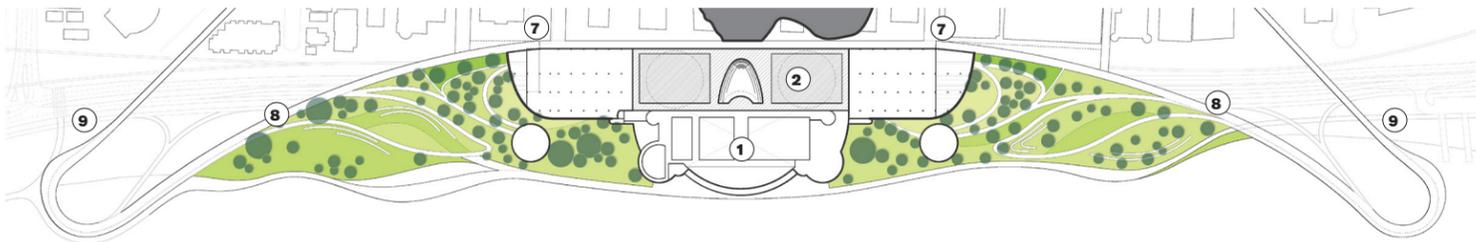


Potential Signature Park Programs

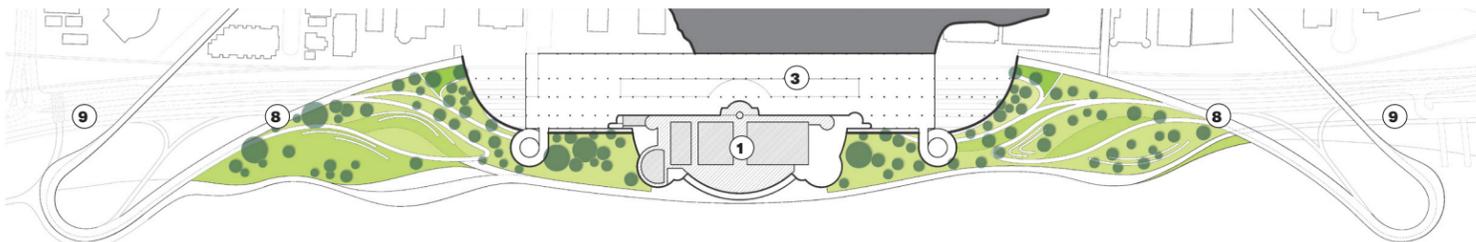
While further design study and community engagement can solidify its form and program, the Framework Plan identifies a series of places and uses that are appropriate to known community need and similar parks of this scale. This includes flexible community lawns, amphitheater-like spectator spaces, fitness amenities, a dog run and multiple destination play environments. The examples to the left were led by Agency designers!



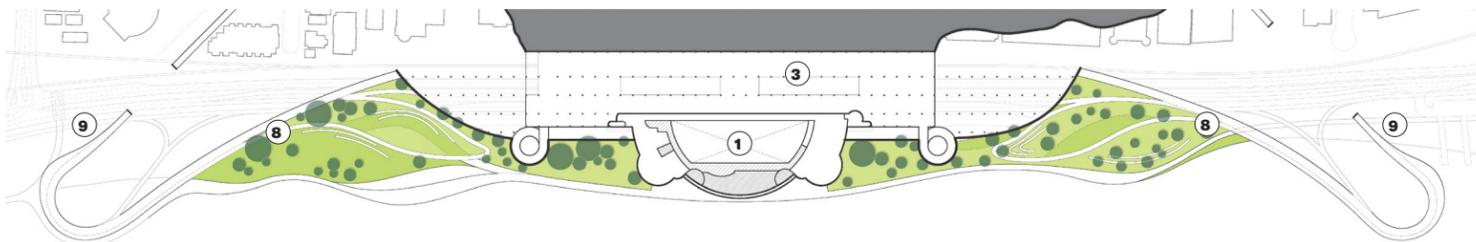
+913 Level Floor Plan



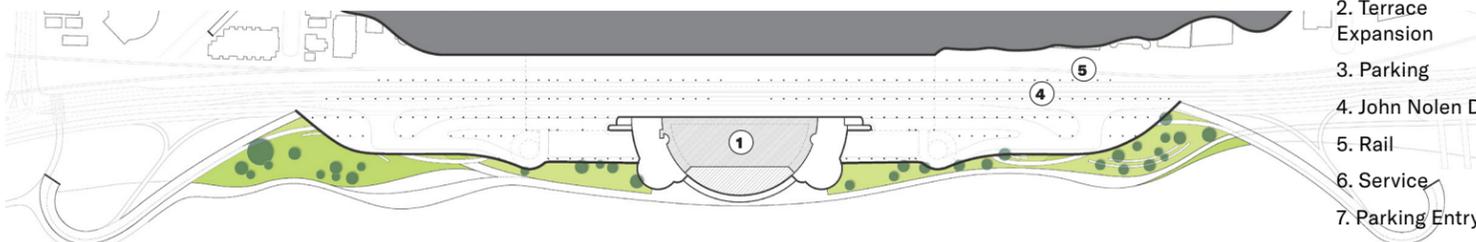
+898 Level Floor Plan



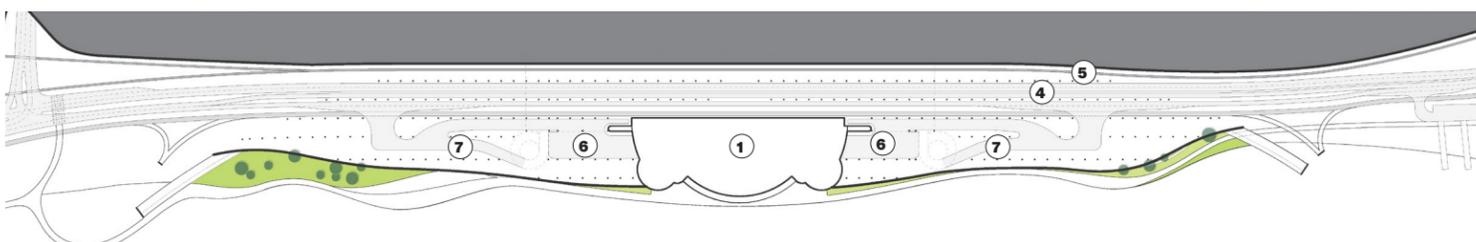
+888 Level Floor Plan



+878 Level Floor Plan

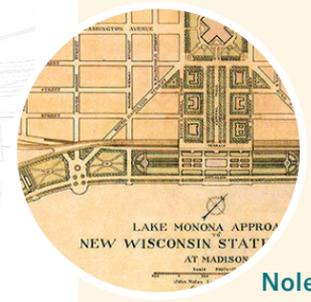


+868 Level Floor Plan

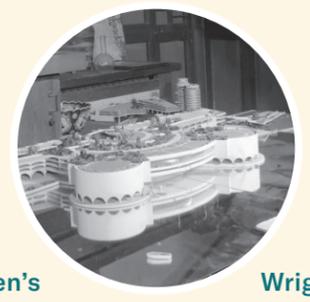


+850 Level Floor Plan

- 1. Monona Terrace
- 2. Terrace Expansion
- 3. Parking
- 4. John Nolen Drive
- 5. Rail
- 6. Service
- 7. Parking Entry
- 8. Bicycle Path
- 9. Overpass



Nolen's Legacy



Wright's Legacy

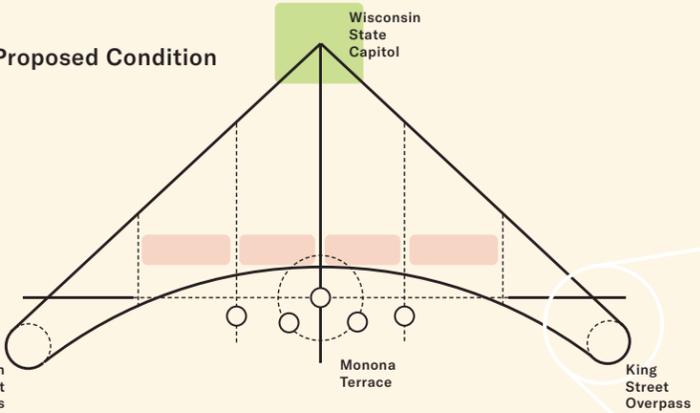
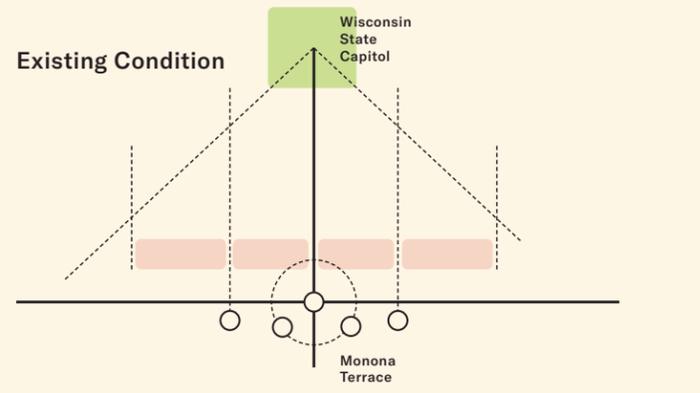


Legacies of Planning and Design United

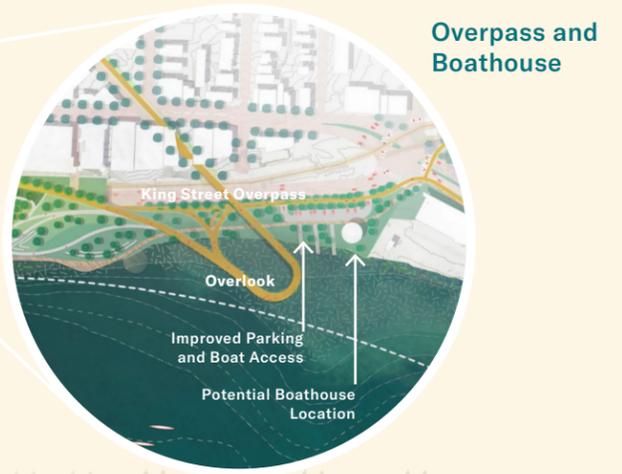
I knew well that no house should ever be on a hill or on anything. It should be of the hill. Belonging to it. Hill and house should live together each the happier for the other.
 - Frank Lloyd Wright

Monona Hill unites the two planning legacies of John Nolen (a grand green terrace on the lakefront) and Frank Lloyd Wright (a great civic overlook) into one unifying gesture. The Hill also unites the future planned expansion more directly to the existing Terrace, simplifying circulation and connectivity while staying true to Wright's foundational principles of symmetry and geometry.

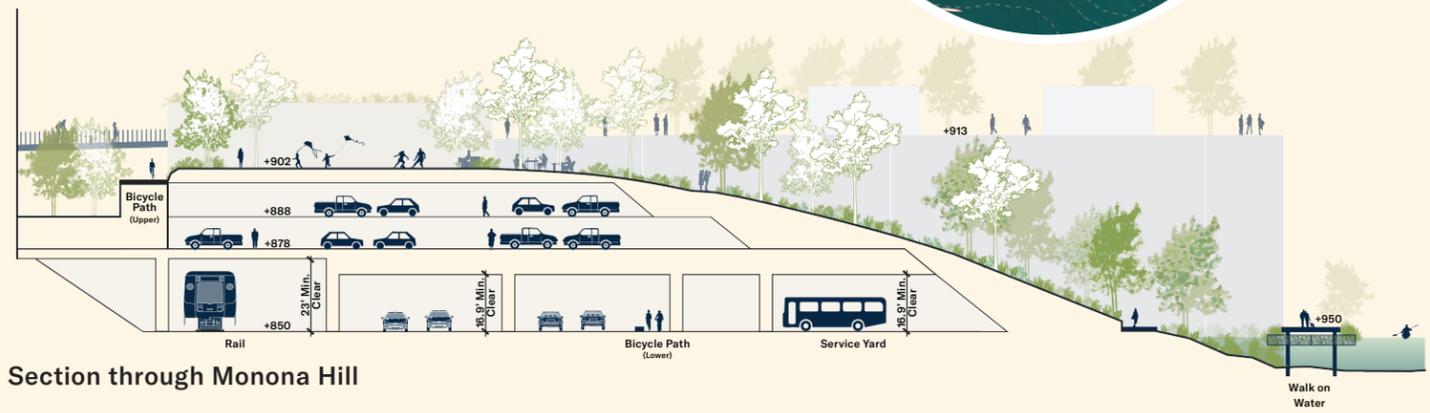
Care has been taken in this early framework vision to ensure of the technical feasibility of this idea. The floor plans demonstrate the accommodation of the existing parking, service and indoor space programming. The section illustrates the needed clearances for the rail, roadway and service access.



"Geometric forms also held symbolic significance. The circle, he said, suggested infinity; the triangle, structural unity; the spire, aspiration; the spiral, organic progress; and the square, integrity."
 - The Guggenheim on Frank Lloyd Wright



Overpass and Boathouse



Section through Monona Hill

Phasing

Phasing for long-term change along Lake Monona is conceived via the three districts of the Framework Plan. Each district has a future “catalyst” project that can provide momentum and partnership. The Framework Plan offers immediate, mid-term and long-term actions. The cost model provided creates an achievable annual construction cost target aligned with comparable efforts by communities like Madison.



Monona Hill

District Catalyst

“Monona Terrace representatives have indicated the need for convention space in downtown Madison has increased with the recent influx of hotel rooms. An expansion would help the convention center remain competitive with similar centers in other cities.” - Preliminary Report

This master plan recommends leveraging this 2-acre expansion for broader connectivity and placemaking goals.

0-2 Years

Goal: Address immediate safety conflicts
Project: Broom Street intersection traffic calming and Hamilton Street pedestrian and bicycle bridge

2-10 Years

Goal: Improve access to the Lake and undertake enabling work for future phase
Project: Law Park East improvements including potential boathouse construction, and lake edge including Walk on Water

10+ Years

Goal: Create a signature waterfront park in conjunction with the Monona Terrace expansion
Project: Monona Hill including bicycle path, expanded plaza and signature park elements and program

Causeway

District Catalyst

“The pending 2026 John Nolen Drive Causeway Reconstruction Project includes street reconstruction of the causeway from Broom Street through to Olin Park. The City of Madison Engineering Division is initiating the project and the scope also includes reconstruction of the Lake Monona shoreline stone revetment, widening of the bike path and reconstruction of all three bridges.” - Preliminary Report

This master plan recommends leveraging this construction catalyst for broader ecological, safety and placemaking goals.

0-2 Years

Goal: Address immediate safety conflicts, equitably increase access to the Lake and pilot Walk on Water
Project: North Shore Drive Underpass, 1,000 linear feet of the Walk of Water and entirety of the Causeway’s bicycle path improvements

2-10 Years

Goal: Complete the Causeway
Project: Complete Walk on Water

Olin Park

District Catalyst

Olin Park has both a short-term and a long-term catalyst project. In 2022, Madison Parks’ downtown offices moved to the Recreation Facility in Olin Park. This Framework Plan positions this as an opportunity to provide a new community hub at the park to increase user-comfort, experience and program.

Longer term, the Destination District offers opportunities to catalyze more change including more equitable access to park space and wealth-creation for the Southside neighborhoods.

0-2 Years

Goal: Address immediate safety conflicts
Project: Bicycle path improvements and traffic calming at Lakeside Street crossing

2-10 Years

Goal: Create Community Hub and improve programing and recreational opportunities
Project: Improve outdoor spaces associated with the recreation building, create a new beach and associated community spaces and streamline parking.

10+ Years

Goal: Provide a signature park experience of the Lake via the Walk of Water
Project: Create the Walk on Water loop including multiple fishing places and scenic overlooks