

# LAKESHORE PARK MASTER PLAN



**SMITHGROUP**

**DECEMBER 2019**

Prepared for:

City of Oshkosh, Wisconsin

In cooperation with:

City of Oshkosh Parks Department

City of Oshkosh Engineering Department

City of Oshkosh Department of Community Development and Planning Department

Acknowledging the guidance and vision of:

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Advisory Parks Board

Pedestrian and Bicycling Advisory Committee

Sustainability Advisory Board

The Oshkosh Community

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# 1. PROJECT SUMMARY

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In January 2018, the Common Council approved the sale of approximately 33 acres of the former Lakeshore Golf Course to the Oshkosh Corporation. Shortly thereafter, Council chartered a new path for Lakeshore, determining that the golf course's remaining 70 acres would be redeveloped as a community park.

Beginning in January of 2019 the City of Oshkosh initiated a three-part planning process for Lakeshore Park. The first steps in that process included data collection, meetings with city staff, and site analysis. This process of collecting quantitative site-specific information was followed by a robust public outreach process consisting of an online Polco survey and a Public Visioning Meeting. These channels were leveraged to ascertain subjective input, and the community was invited to help shape big picture goals for the Lakeshore Park Master Plan.

Based upon public input, it became clear that the community's vision tended toward a park focused on passive recreation and characterized by restored native habitats and ecosystems; a place where park users could engage with nature. Those who participated in the public engagement process also clearly articulated the importance of art, history, culture, and community in shaping the form and function of Lakeshore's next iteration.

Together with input from Parks Department Staff, the Advisory Park Board, the Pedestrian and Bicycling Advisory Committee, and the Sustainability Advisory Board, the community's feedback was translated into three Conceptual Design Alternatives. These initial concepts varied with respect to: required monetary investment; strategy for handling and ultimately reorganizing/restoring existing water bodies; scale of flexible/open gathering spaces such as lawns and plazas; locations, types, and sizes of buildings; parking locations and counts; pathway network hierarchy and extents; shoreline restoration treatments; water access; landform manipulation; and means of acknowledging the site's important cultural history.

Feedback from the Advisory Park Board, and ongoing coordination with Parks and Engineering Staff resulted in a hybrid plan that borrowed preferred plan components from each of the three Conceptual Design Alternatives. This hybrid plan reimagines the former Lakeshore Golf Course as a community destination with two distinct halves. The West Park is introverted and focused on a Great Lawn, and its earthworks mitigate freeway noise and focus the attention of park patrons on the network of restored and connected ponds rather than traffic and Oshkosh Corporation parking areas. The largest of these earthworks is also leveraged as a lookout and a location for an art installation in an effort to create an iconic community identifier at Oshkosh's front door.



Figure 1.1. Lakeshore Park Master Plan.

The East Park is more developed and extroverted, focused on Lake Butte des Morts and extending to physically and programmatically connect to and complement its neighbors, Mary Jewell Park and Rainbow Memorial Park. This half of the park includes the catalytic phase one improvements, including a four-season multipurpose building for community and private events, a splash pad, plaza, and water access by way of a fishing/personal watercraft pier and a cobble beach. The East Park includes parking areas that are intended to serve its neighboring parks, and it includes an area dedicated to recognizing and honoring the site's rich cultural history, and a nature play playground.

# 2. SITE ANALYSIS

The first step in the Lakeshore Park master planning process was an inventory and analysis of the property's unique features, defining characteristics, and practical limitations. The planning team processed city-provided files, county GIS data, NOAA bathymetry, related city planning documents, and other sources to build a comprehensive picture of Lakeshore's potential and understand the nuance of the project site.

While a great many sets of data and maps were processed and reviewed with Parks Department staff, the most relevant analyses concerned the site's history, its physical characteristics, and its water resources.

## HISTORY

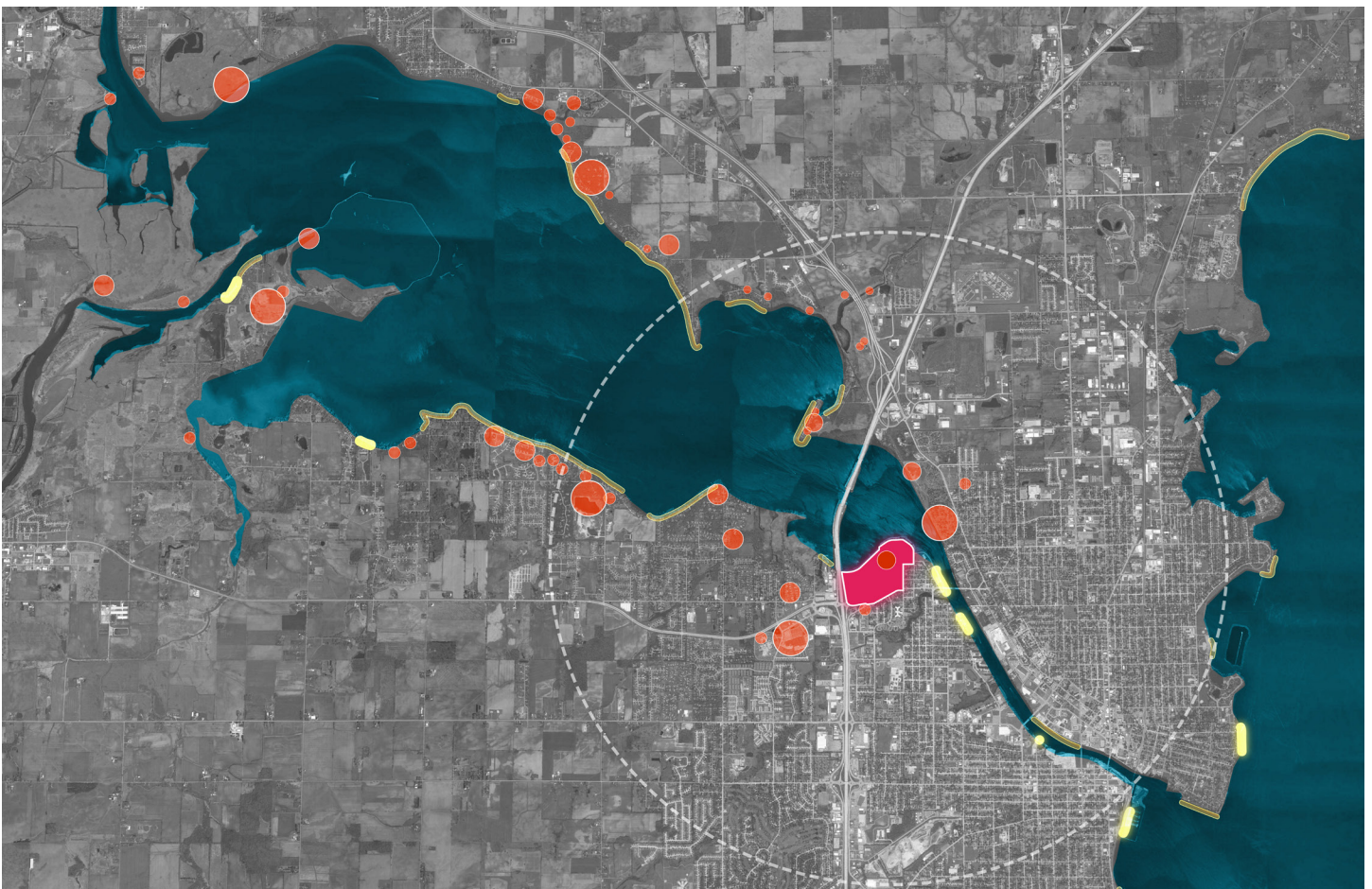
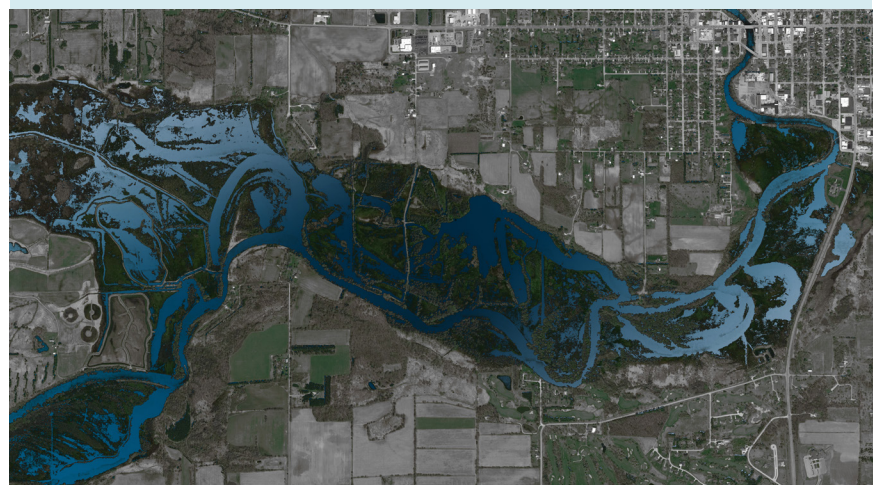


Figure 2.1 Archaeological sites around the Fox and Wolf River confluence. The map above is derived from Figure 2.39, "Previously reported archaeological and burial sites along Lake Buttes des Morts," in Archaeological Investigations at 47WN0049 (BWM-0210) Golf Course, Winnebago County, Wisconsin.

Like many sites scattered around the confluence of the Wolf and Fox River systems, the project site was important to pre-settlement Native American cultures and holds significance for those communities today. Archaeological sites at the margins of Lake Butte des Morts are shown in orange on page six. The Lakeshore Park property contains portions of one such site, which is primarily located on high ground at the northeast corner of the Oshkosh Corporation property but extends east into the northwest corner of the East Park. This site has yielded both artifacts and burial features, some of which were inadvertently encountered and documented but most of which, presumably, have been preserved in place.

The Fox River, and the lakes around its confluence with the Wolf, have long held significance to Native Americans and early settlers thanks, in part, to the travel route the Fox affords. Prior to the development of railways and roadways, the Fox provided an almost continuous water route connecting Lake Michigan to the Mississippi River by way of Green Bay, the Lower Fox, Lake Winnebago and Lake Butte des Morts, the Upper Fox, and the Wisconsin River.

The 13 ponds that were part of the former golf course appear to be remnants of a "slough" or "meander scar" created by the Fox River. Prior to the construction of the Doty Island dams in 1850, Lake Butte des Morts was a combination of wetland and braided river channels similar to the aerial view of a portion of the Upper Fox shown below.

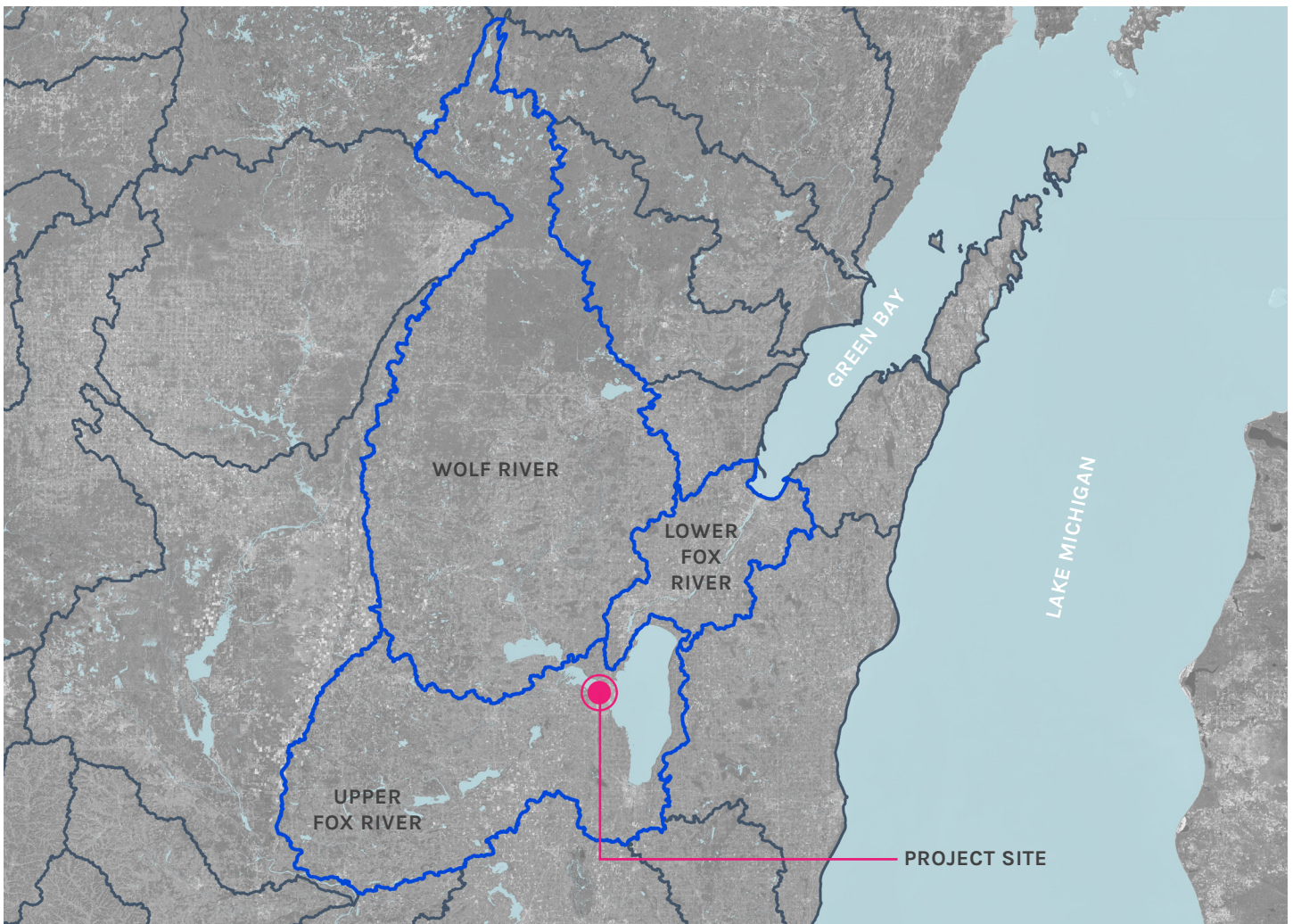


Figures 2.3 and 2.4. 1938 aerial photograph of Lakeshore Park (top); the Fox River near Berlin, Wisconsin (bottom) .

# WATER

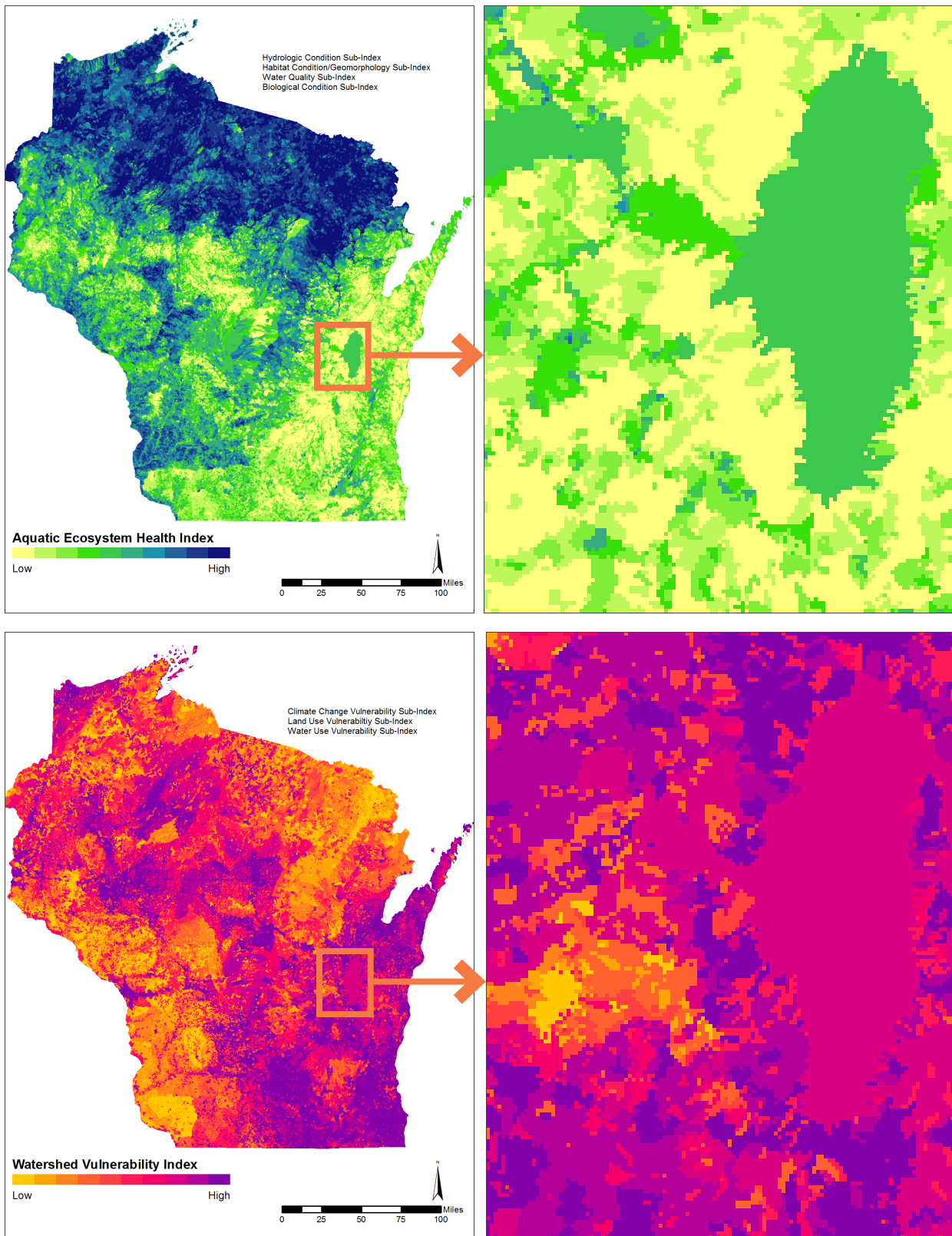
Lakeshore Park resides at the confluence of two watersheds – the Wolf River and The Upper Fox River Watersheds. These watersheds drain vast portions of the state and contribute to the quality of the water in Oshkosh’s lakes. While the Wisconsin DNR considers the quality of Lake Winnebago’s water "fair" for a shallow lowland lake, and rates its aquatic ecosystem health as average (see map on page nine), it none-the-less recognizes that the lake system is highly vulnerable to climate change related influences (see map on page nine).

The scale of the project site, the fact that it has extant water bodies that are former meanders of the Fox, and the fact that the project site possesses 4,550 linear feet of Lake Butte des Morts shoreline all suggest that Lakeshore Park can play a significant role in contributing to the health of the watershed, especially if it leads by example.



Figures 2.5. Regional watersheds in the vicinity of the project site.





Figures 2.6 and 2.7. WI DNR's Aquatic Ecosystem Health Index and Watershed Vulnerability Index maps (top and bottom, respectively) with inset enlargements of the project area.

## SITE CHARACTER + USER EXPERIENCE

The existing park's character, and one's experience of the park, is still very much defined by its former life as a golf course. Existing vegetation types are very limited, with a pastoral golf course landscape (mown turf and trees) yielding to delineated wetland at the margins of the existing ponds, and feral brush along the west half of the park's Lake Buttes des Morts shoreline.

Due to the former golf course layout and the locations of trees that once framed fairways, one's attention and the orientation of the park's view corridors parallel the waterfront rather than engage it.



Figure 2.8. Existing landscape types.



Figure 2.9. The orientation of space and the alignment of views follows the former fairways and parallels, rather than engages, the Lake Buttes des Morts shoreline.

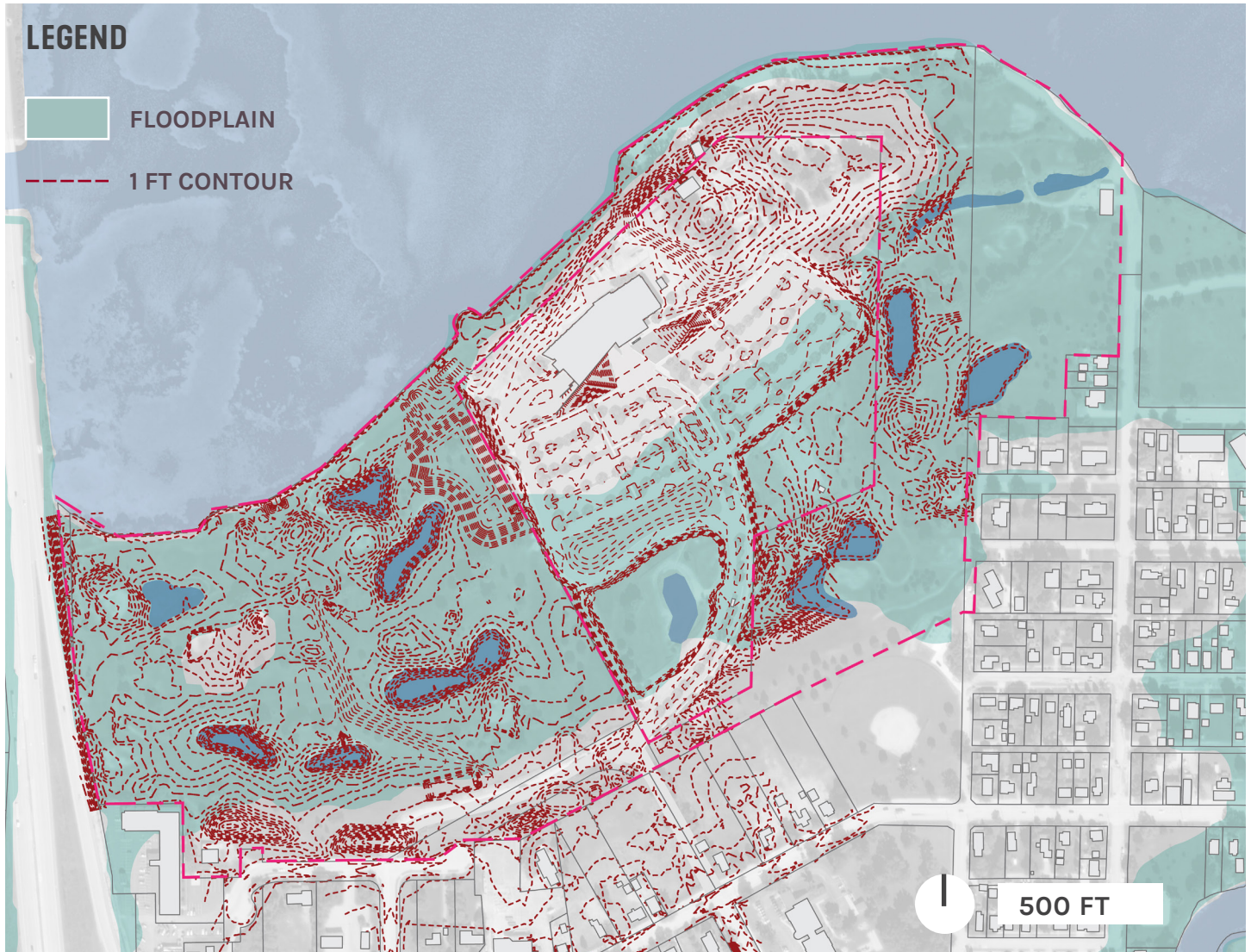


Figure 2.10. Existing park topography.

The site's proximity to the Interstate 41 corridor has a significant impact on the experience of the West Park. During the team's initial site walk, their route through the park began by scaling a berm at the south edge of the West Park; the noise at that location was intense and had a significant impact on the team's experience of the space. However, as the team descended the berm and walked north to the West Park ponds, the freeway noise became much less intrusive and no longer dominated the experience of the park. This first hand observation, tied to the site's topography and its relationship to the adjacent freeway, informed the development of an earthworks concept for the West Park.

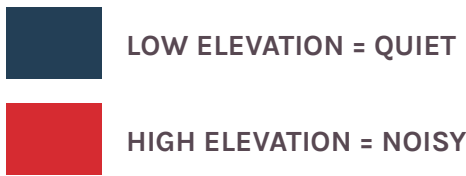
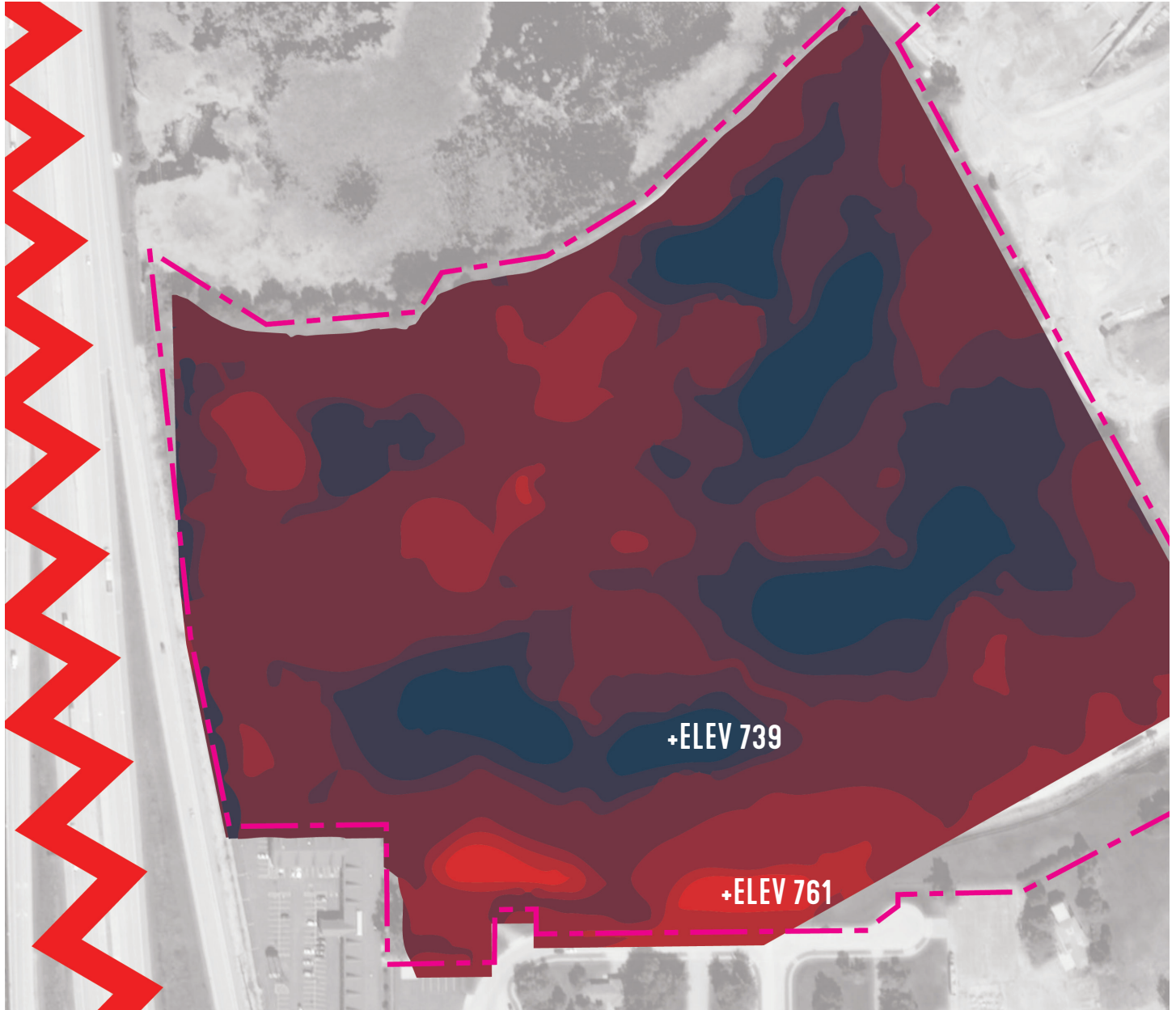


Figure 2.11. Mapping experience of freeway noise as a function of elevation.

# 3. PUBLIC PROCESS

## POLCO SURVEY

The project’s robust public engagement process has utilized three avenues – an online Polco survey, a Public Visioning Meeting, and public dialog at all committee and board meetings. The Polco survey was opened for input on May 17th, 2019, and collected data for two and half weeks from over 420 individuals, closing on 5 June. For each survey taker, the line of questioning was intended to solicit data on user demographics, current park use, and desired park program. The Polco results summarized and excerpted here align with input collected on sticky notes, comment cards, and boards during the Public Visioning Meeting. Specifically, the community clearly and collectively articulated a desire for a passive recreational park built around restored habitats and ecosystems and focused on art, community, and cultural history.

## CURRENT PARTICIPATION IN OUTDOOR ACTIVITIES

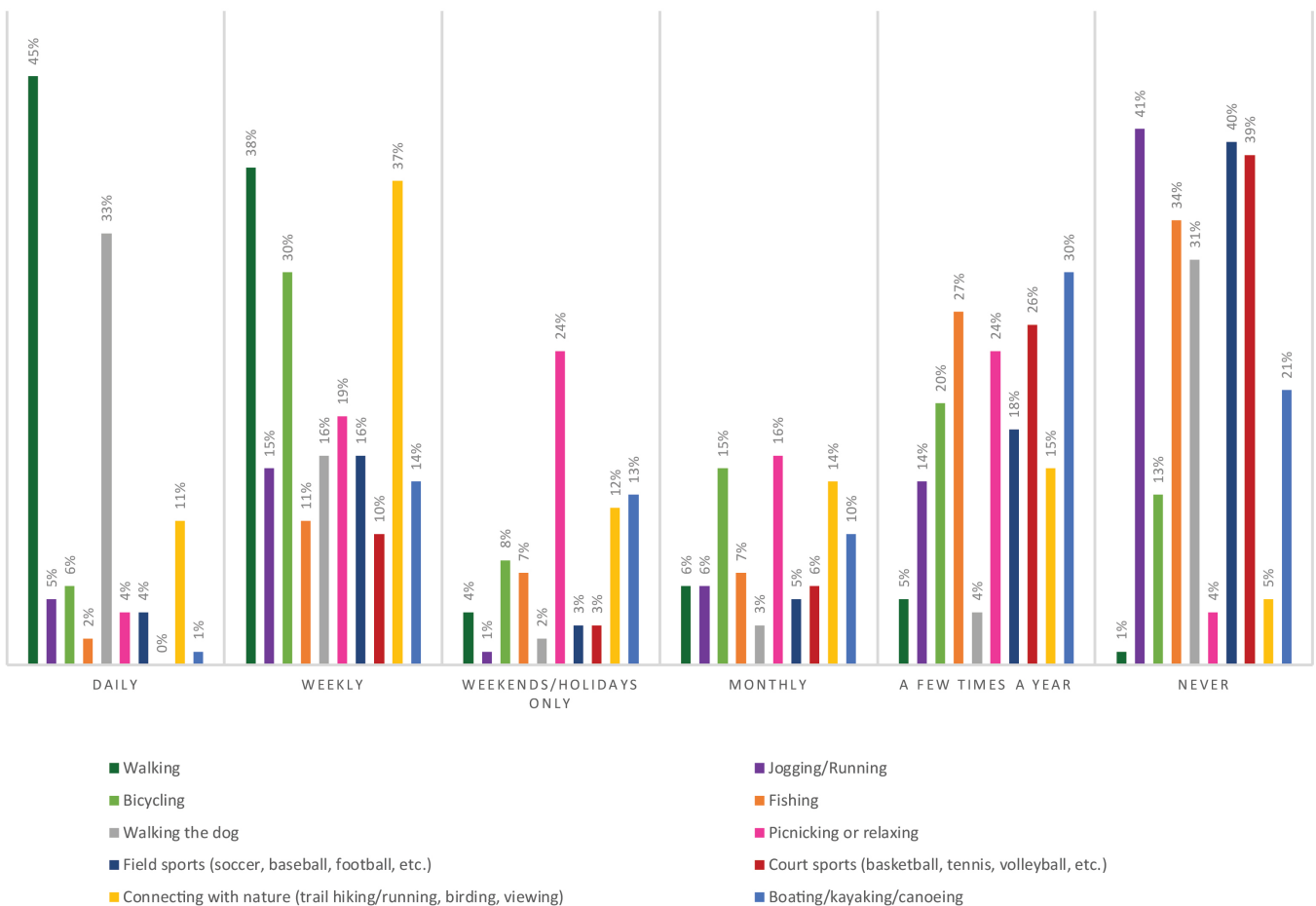


Figure 3.1. Question: How often do you currently participate in the following outdoor activities?

# PREFERENCE FOR ACTIVITIES IN NEW LAKESHORE PARK

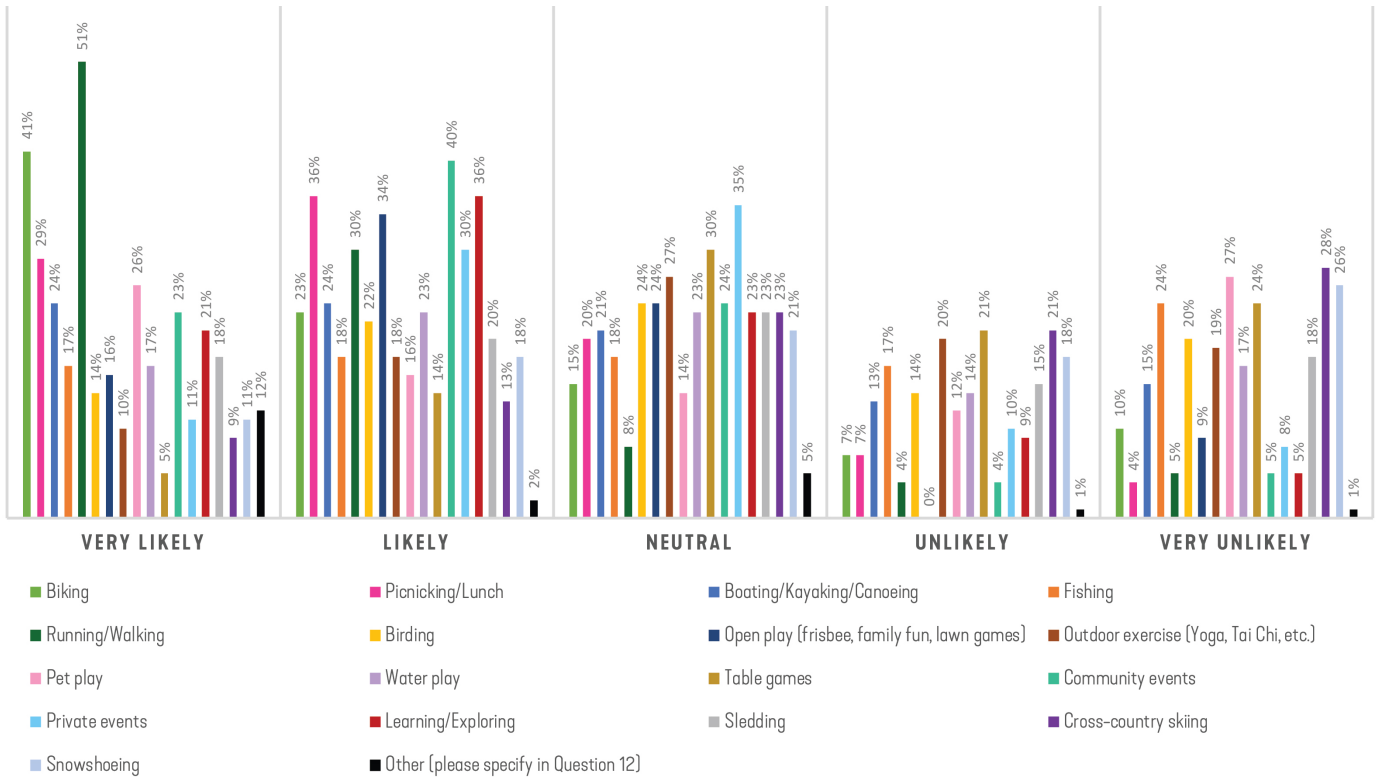


Figure 3.2. Question: If they were available, how likely are you to use Lakeshore Park for the following activities?

# IMPORTANCE OF ACTIVITIES IN NEW LAKESHORE PARK

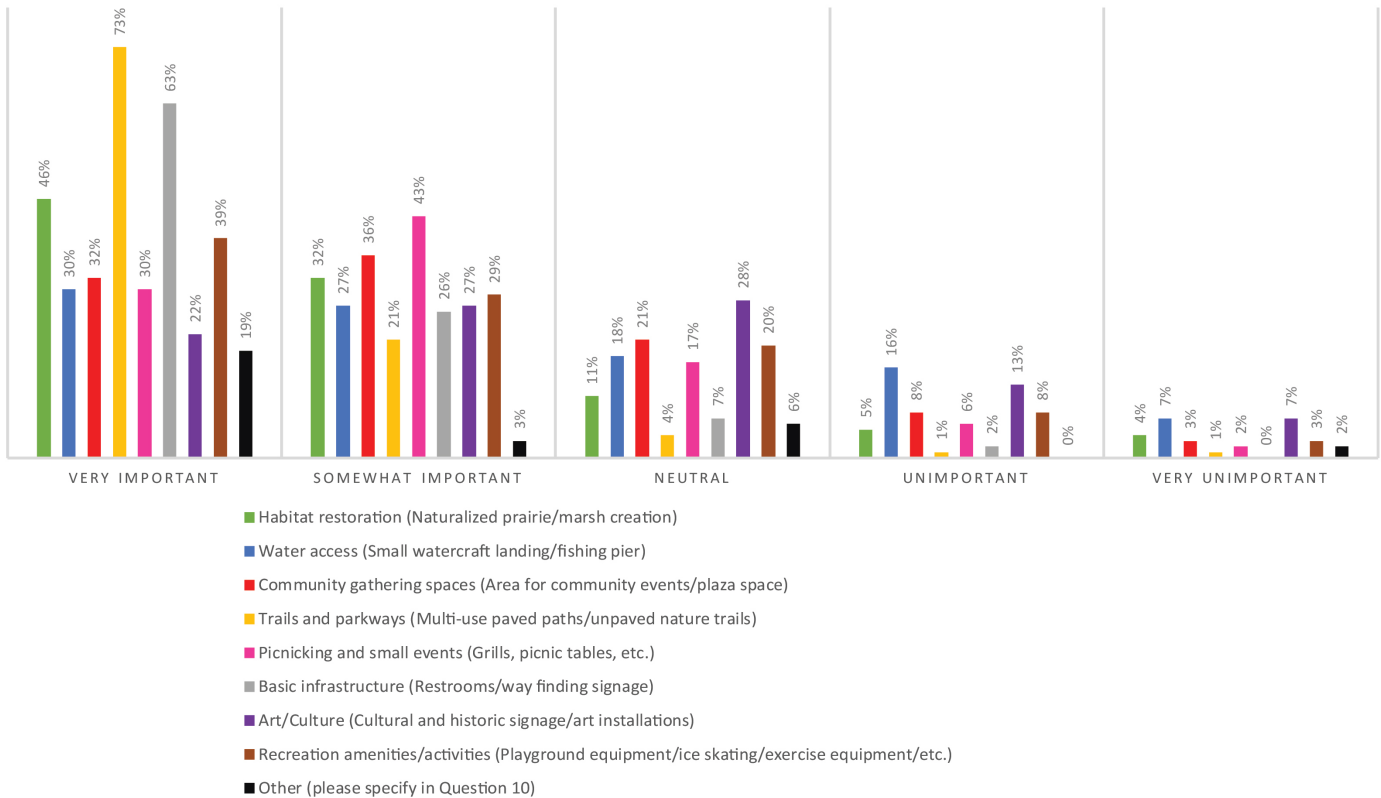


Figure 3.3. Question: How important are the following activities/features in the new Lakeshore Park?

# PUBLIC VISIONING MEETING

## LAKESHORE PARK MASTER PLAN

### GUIDING PRINCIPLES

A quality strategy or plan is grounded in clearly defined principles. We want to understand what's important to you as we develop the master plan for Lakeshore Park. Please help us by contributing ideas below.

#### HOW CAN A PARK CHART THE FUTURE OF A COMMUNITY?

include some visible sustainability deck like solar panels or small wind turbines etc...

Natural Plantings along shoreline

Keep the park easily maintained  
Yes 15 people

#### WHAT DOES IT MEAN TO YOU TO RESPECT THE PAST?

An art display exploring the history of the area

It is critical the AM bridge continue and that people who should continue here

respect + promote native american culture + Oshkosh history

Important to tell the history of this land - especially since it is an archeological site

Local Artists  
FFA school home  
for nature - plants

#### WHAT IS A PARK'S ROLE IN FOSTERING BEAUTY WITHIN A COMMUNITY?

Preserve grasses & promote distinct views

Don't do above what we can maintain well. If we can only maintain a certain well then we shouldn't have baby steps

feature local visual art

Public art  
Trails

enhance nature (focus on lake/river)

#### HOW SHOULD A PARK IMPROVE CONNECTIONS?

Make great use of the riverwalk system and pull the riverwalk system into the program

Fluid connection to Rainbow Falls  
Disability access to playground

Providing a park that is available for multi-generational things & activities

Need a lot of parking close to water & both sides

Connect to the awesome other trails/overwalks/parks

Community space & seating on multi levels

Some try to do OF Amplatz for walking and shows

Trails for walking/biking from main one park on side park for safety

Public Visioning Meeting

Figure 3.4. One of four Public Visioning Meeting boards used to solicit and record public input. Excerpted quotes are included below.

- "SUSTAINABLE TECH" / "NATURAL PLANTINGS"
- "RESPECT & PROMOTE NATIVE AMERICAN CULTURE"
- "ENHANCE NATURE"
- "MULTIPLE TRAILS FOR WALKING AND BIKES"
- "PRESERVE OPENNESS AND ENHANCE DISTINCT VIEWS"
- "EASILY MAINTAINED"



During the Public Visioning Meeting, the planning team solicited less program-focused input with the intent of identifying guiding principles, goals, and aspirations. Several boards were stationed throughout the meeting room, and meeting participants added comments and ideas to those boards directly and with sticky notes. Meeting participants also provided input via comment cards; comment card subjects are tallied below.

## COMMENT CARD SUBJECTS

SUBJECT (# OF INSTANCES NOTED)

**PUBLIC ART (10)**

**TRAILS (7)**

**NATURE (6)**

**PLAY/ACCESSIBLE PLAY/GAMES (4)**

**BOTANICAL GARDEN (3)**

**CONCESSIONS+RENTALS (3)**

**WINTER ACTIVITIES (3)**

**NATIVE AMERICAN HISTORY (3)**

**DISC GOLF (2)**

**GATHERING SPACE (2)**

**ALL OTHERS (1 EACH):**

**GOLF / WATER PLAY / PARKING / PICKLEBALL / QUIET SPACE / COMMUNITY GARDEN**

# 4. MASTER PLAN



Figure 4.1. Lakeshore Park Master Plan.



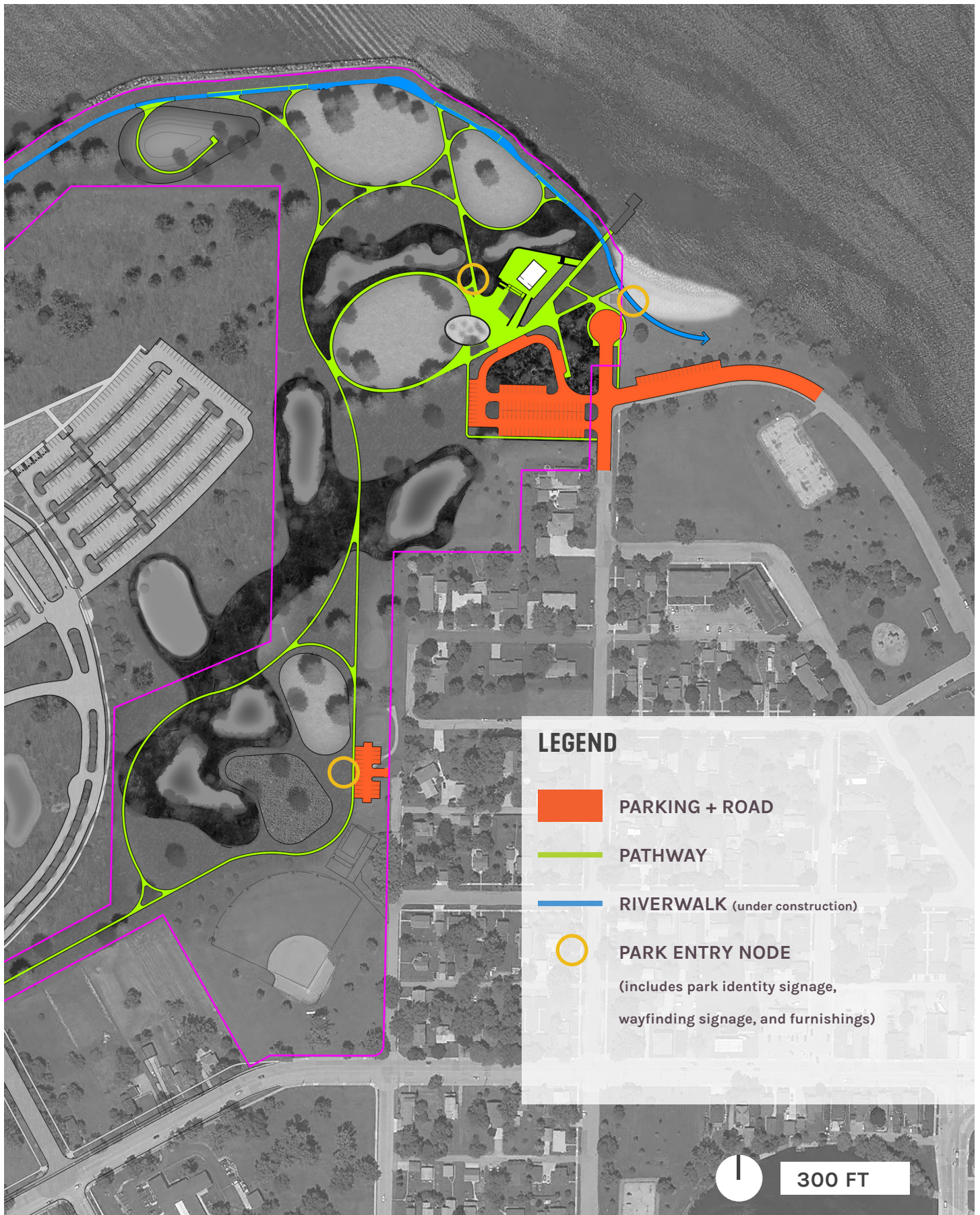
The Lakeshore Park Master Plan reflects the community's vision for a primarily passive park that affords parkgoers an opportunity to experience nature. It is comprised of an East and West Park connected by the Riverwalk and a restored and renaturalized Lake Butte des Morts shoreline along the north edge of the Oshkosh Corporation property, and a green corridor at the southernmost boundary of the Oshkosh Corporation property. Both halves of the park leverage the existing golf course ponds, restoring and reshaping their margins and linking them with wetland corridors to form a functioning ecological backbone for the park. The relatively homogeneous golf course topography is resculpted to reinforce this wetland spine, define space, orient views, and mitigate the presence of the adjacent freeway. At the West Park the improved topography takes the form of significant earthworks, which are intended to block noise from Interstate 41 and views to the Oshkosh Corporation parking lot and create an opportunity for an iconic hilltop feature – an art installation, overlook, or other community identifier.

300 FT

# CIRCULATION NETWORK



Figure 4.2. Master plan circulation.



# WATER SYSTEM + LANDSCAPE FRAMEWORK



Figure 4.2. Master water and landscape framework.



Large lawns are distributed throughout the park to provide flexible, functional space for picnicking, events, play, and sport. Sweeping pathways provide a hierarchy of accessible routes through the park, creating multiple loops for walking, running, accessing the park's shoreline and restoration areas, and connecting to amenity buildings, parking areas, and regional trails.

The Master Plan includes five structures. The West Park contains a hilltop overlook structure at the west earthworks, two open-air picnic shelters at the Great Lawn, and a restroom building at the southwest corner of the park. The East Park contains a single, larger multipurpose building. Unlike the West Park structures, this is a conditioned, four-season building sized to accommodate a large multi-purpose room for public and private functions. The East Park building also includes public restrooms and storage space.

Parking for the West Park is accessed via Rath Lane; it includes space for approximately 40 cars. Parking for the East Park is distributed across three areas. A main lot, at the north end of Punhoqua Street, serves the four-season building, accommodates approximately 80 vehicles, and includes two drop-off zones. A smaller +/- 20-car lot off of North Eagle Street, near the lift station/restroom building at the northern edge of Mary Jewell Park. And approximately 20 parking spaces are included off of Veterans Trail, at the north end of Rainbow Memorial Park. These latter two lots are strategically located to serve both Lakeshore Park and the contiguous Mary Jewell and Rainbow Memorial Parks, whose ballfields are not currently served by off-street parking.

Additional park amenities include: an occupiable, stepped shoreline revetment at the shoreline connector north of the Oshkosh Corporation property; a nature play playground north of Mary Jewell Park, a splash play area adjacent to the four-season building, a fishing and personal watercraft pier near the north end of Punhoqua Street; and a combination cobble and perched sand beach where the Lakeshore Park and Rainbow Memorial Park shorelines meet.

An area dedicated to the recognition of the park's cultural history is located at the northwest corner of the East Park, near the boundary between the Oshkosh Corporation property and the city-owned parkland.





Figure 4.4. Key plan.



Figure 4.5. West Park plan enlargement.

# PLAN COMPONENTS

- 1 SHORELINE REVETMENT
- 2 RESTORED, VEGETATION-STABILIZED SHORELINE
- 3 EARTHWORKS (TYP)
- 4 EXISTING PONDS WITH RESTORED MARGINS (TYP)
- 5 GREAT LAWN
- 6 OPEN-AIR PICNIC SHELTER
- 7 MULTIPURPOSE LAWN
- 8 RESTROOM BUILDING
- 9 +/- 40-CAR PARKING LOT
- 10 TRAILHEAD
- 11 WETLAND CONNECTOR LANDSCAPE (TYP)
- 12 LANDSCAPE RESTORATION (TYP)
- 13 HILLTOP ICON + OVERLOOK STRUCTURE

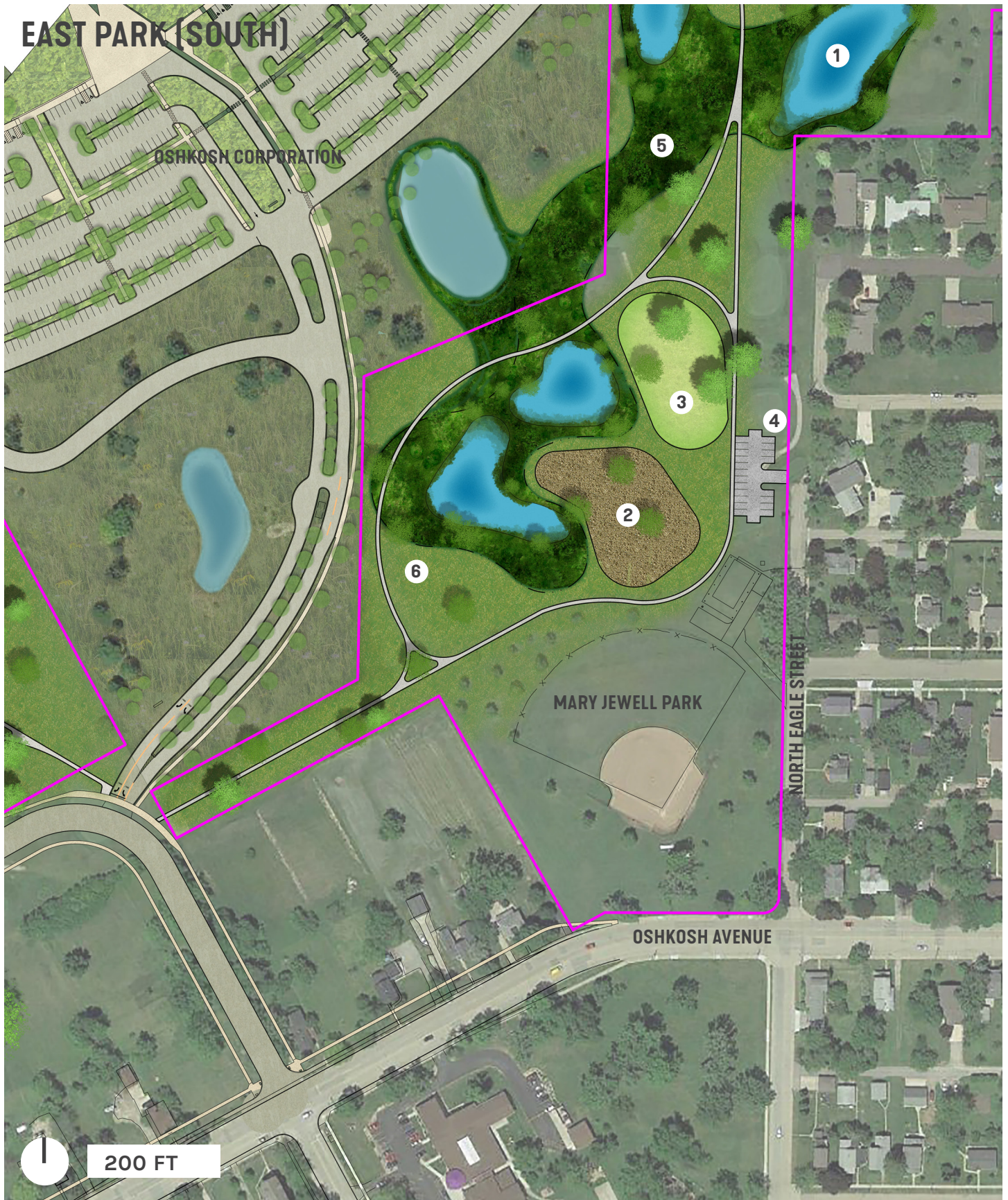


Figure 4.6. East Park (south) plan enlargement..

# PLAN COMPONENTS

- 1 EXISTING POND WITH RESTORED MARGINS (TYP)
- 2 NATURE PLAY PLAYGROUND
- 3 MULTIPURPOSE LAWN
- 4 +/- 20-CAR PARKING LOT
- 5 WETLAND CONNECTOR LANDSCAPE (TYP)
- 6 LANDSCAPE RESTORATION (TYP)



Figure 4.7. East park (north) plan enlargement.

# PLAN COMPONENTS

- 1 CULTURAL HISTORY RECOGNITION AREA
- 2 MULTIPURPOSE LAWN
- 3 SHORELINE REVETMENT
- 4 RESTORED, VEGETATION-STABILIZED SHORELINE
- 5 EXISTING POND WITH RESTORED MARGINS
- 6 SPLASH PAD
- 7 PUBLIC PLAZA
- 8 FOUR-SEASON BUILDING WITH TERRACES
- 9 FISHING/PERSONAL WATERCRAFT PIER
- 10 COBBLE BEACH WITH PERCHED SAND BACK-BEACH
- 11 PUNHOQUA CUL-DE-SAC WITH ON-STREET PARKING
- 12 DROP-OFF
- 13 +/- 80-CAR PARKING LOT
- 14 +/- 20-CAR PARKING LOT
- 15 WETLAND CONNECTOR LANDSCAPE (TYP)
- 16 LANDSCAPE RESTORATION (TYP)

# 5. PHASING + BUDGET TARGETS

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## PHASING THE MASTER PLAN

The implementation of the Master Plan is coarsely portioned into five phases. Phase One is tied to existing funds, which were secured via the sale of the land to the Oshkosh Corporation. Phase One is thus more immediate and will be implemented following the adoption of the Master Plan, though the full cost of the Phase One implementation, as indicated in this section, is contingent on fundraising efforts for select improvements (such as the splash play area).

The latter phases (phases two through five) are intended to create sets of priorities and sequence those priorities such that critical infrastructure – parking, trailheads, and connecting pathways – is established and ready to support future park improvements such as multipurpose lawns, picnic structures, and pier. The priorities represented by these phases may be built out as identified herein, or each phase may be built out as funding or staff resources are available. The budgeting exercise is intended to guide a logical implementation sequence, prioritize the community's values (as ascertained during the planning process), and define the baseline targets for public investment required to execute the Master Plan.



## PHASE ONE

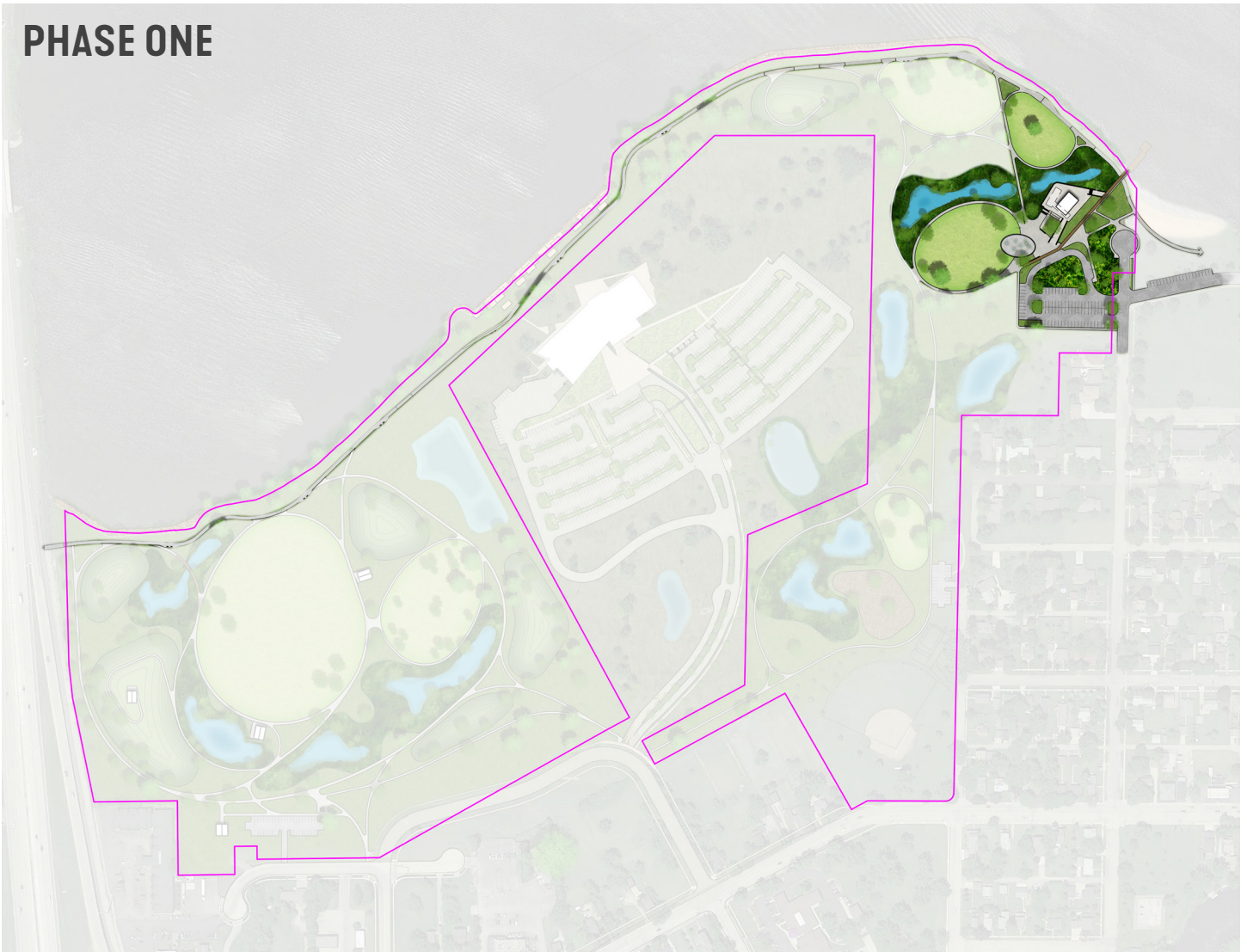


Figure 5.1. Phase one extents.

The catalytic Phase One project includes the Punhoqua Terminus improvements at the East Park. These improvements are intended to create a flexible, year-round community space, leverage existing infrastructure, and complement the adjacent park program. Phase One includes:

- a four-season multipurpose building and associated terraces and outdoor spaces
- a public plaza
- a splash pad
- +/- 80-car parking lot and drop-off, and a cul-de-sac with on-street parking at the north end of Punhoqua Street
- two large multipurpose lawns
- pathways defining and connecting the Phase One improvements to one another and to the Riverwalk
- the articulation and restoration of the ponds north of the four-season building
- a +/- 20-car parking lot at Veterans Trail, at the northwest corner of Rainbow Memorial Park

## PHASE TWO



Figure 5.2. Phase two extents..

Phase Two is understood as the West Park complement to Phase One: an initial investment meant to establish access for and create activity within the west half of Lakeshore Park. These improvements provide vehicle access to the West Park and establish a trailhead/ orientation point for the Lakeshore Park connections to the Riverwalk and the Tribal Heritage Crossing of the Wiouwash Trail. Phase two also includes the West Park's Great Lawn, a flexible space for picnicking, lounging, sport, and community activities.

Importantly, phase two also creates a setting for the recognition of the parkland's rich cultural history. Whereas the specific physical definition of this site and the interpretive message it will carry will require its own process of community engagement and outreach, research, and design, phase two includes a home for this piece of the Master Plan as the community clearly articulated its importance..

## PHASE THREE



Figure 5.3. Phase three extents..

The third phase of the Master Plan implementation is focused on water. The existing golf course ponds are revamped, their margins regraded and reconfigured to increase the amount of pond-wetland ecotone, visually link the water bodies, and create wetland restoration areas which link the ponds thematically without altering their underground infrastructure or decreasing their capacity.

Phase three includes the removal of the concrete rubble rip rap along the Lake Butte des Morts shoreline. In its place, a combination of stone revetment, stepped stone revetment, and vegetation-stabilized shoreline provides necessary protection by reducing the amount of hardened edge and introducing water-edge habitat in lieu of broken concrete and feral vegetation.

The final water-centric phase three master plan component is the fishing/personal watercraft pier. This extension of the phase one overlook may include fishing platforms, seating, side/tie dockage for canoes, kayaks, and other personal watercraft, and an accessible kayak launch.

## PHASE FOUR



Figure 5.4. Phase four extents..

Phase four includes the build-out of the remainder of the West Park, including the small multipurpose lawn, earthworks, landscape restoration, the hilltop icon, and the remaining West Park pathways. Phase four also includes three structures – a restroom building west of the West Park parking lot and two open-air picnic shelters at the Great Lawn. Phase four leverages the phase two investment (West Park access) and reinforces the Great Lawn as a place and destination. The earthworks improve the quality and experience of the West Park core, while prairie, savanna, and oak woodland habitat restoration transforms the remaining golf course turf into functional habitat.

## PHASE FIVE



Figure 5.5. Phase five extents. .

The final phase of the Master Plan implementation completes the East Park. Phase five includes the remaining East Park pathways and multipurpose lawns, as well as the restoration of the East Park acreage that wasn't revamped in phase one. Lakeshore Park's complement to Mary Jewell Park is also included in phase five. The last remaining parking area - the lot off North Eagle Street for approximately 20 cars - is completed in this phase of work, as is the nature play playground. The grouping of playground, parking, and lawn just north of Mary Jewell Park and the lift station/restroom building is meant to expand the combined program offerings of the two parks in the vicinity of an existing amenity building.

# BUDGET TARGETS

The coarse grain nature of a master plan or concept-level design, and the number of unknowns at this point in the planning and design process, create challenges for accurately estimating construction costs for improvements described in Sections Four and Five of this document. Consequently, the Master Plan proposes budget targets rather than opinions of probable construction cost. These targets are based upon plan-derived quantities (takeoffs) and associated unit costs but, in some cases, they are also the result of reasonable assumptions, or placeholder allowances. Where assumptions are made, unknown costs omitted, or allowances used, they are clearly noted. The numbers that follow exclude design and engineering fees, and costs for mobilization and site preparation. A 35% design contingency has been included with the phase-by-phase targets that follow.

Moving forward, the phased implementation of the Master Plan should target funding partnerships to ensure public dollars are fully leveraged and to expedite the implementation process. Numerous programs are available that could provide funding support for the design and construction of key master plan components such as infrastructure, water access, shoreline stabilization and restoration, stormwater management, and habitat restoration.

## Phase One: Punhoqua Terminus Improvements

### **Four-season Building: \$1,250,000**

The phase one four-season building is budgeted at \$500/SF. It is projected to contain a large multipurpose event room for 120 - 150 people, two sets of restrooms (one accessible from the interior of the building, the other from the exterior), and mechanical/storage space.

### **Terraces at Four-season Building: \$310,000**

The terraces at the four-season building are assumed to be concrete pavement with cast-in-place concrete walls, stairs, and ramps. Associated planting areas are included in the above cost, and the budget accounts for a high level of finish.

### **Public Plaza: \$250,000**

The public plaza is primarily pavement with planting areas and cast-in-place concrete seatwalls at the perimeter of the space.

**Splash Pad: \$300,000**

Splash pad costs vary greatly contingent on their complexity, whether or not water is recirculated, and the degree to which lighting, stepped walls, or other site features are integrated into the water play area. The \$300,000 allowance is intended to cover in-grade water jets and associated infrastructure.

**East Parking Lot, Drop-off, Punhoqua Cul-de-sac: \$217,000**

All vehicular pavements area assumed to be asphalt pavement. Curbing is limited to Punhoqua and the drop-off loop.

**Multipurpose Lawns: \$53,000**

Seeded lawn.

**Pathways: \$210,000**

Concrete pavement.

**Articulation and Restoration of Ponds: \$226,500**

The ponds are maintained in place, and the recently upgraded pond pipe network remains. The budget was generated by projecting a grading work area (30 feet wide) and depth (6 feet deep) along the length of the pond edges. To account for edges that will remain as-is, the total volume was reduced by 50%.

**On-Street Parking at Rainbow Memorial Park: \$16,000**

Asphalt pavement.

**Phase One Budget Target: \$2,800,000**

**Phase One Budget Target + Contingency: \$3,800,000**

## **Phase Two: West Park Access and Cultural History Recognition Area**

### **West Parking Lot: \$65,000**

Asphalt pavement, no curbing.

### **Trailhead: \$75,000**

An allowance for an information kiosk, benches, and bicycle racks.

### **Large Multipurpose Lawn: \$138,000**

Seeded lawn.

### **Pathways: \$465,000**

Asphalt pavement.

### **Cultural History Recognition Area: \$150,000**

Any means of recognizing the site's rich cultural history will require an in-depth process of outreach, engagement, and design. The budgeting exercise contains an allowance for this important Master Plan component, but the figure offered above should be reassessed when the scope and scale of the Cultural History Recognition Area project is defined.

### **Grading Allowance: \$100,000**

Create a level, functional lawn and prepare the site for parking and pathways.

Assume a balanced site: earthwork cut = earthwork fill.

### **Phase Two Budget Target: \$1,000,000**

### **Phase Two Budget Target + Contingency: \$1,300,000**



## **Phase Three: Pond Network Enhancement + Shoreline Restoration**

### **Articulation and Restoration of West Park Ponds: \$760,000**

Consistent with the phase one pond restoration, the remaining ponds are maintained in-place, and the recently upgraded pond pipe network remains. The budget was generated by projecting a grading work area (30 feet wide) and depth (6 feet deep) along the length of the pond edges. To account for edges that will remain more or less as-is, the total volume was reduced by 50%.

### **Removal of Rubble Revetment: \$628,000**

This figure assumes the entire 4,550 linear feet of shoreline is consistently revetted with a 3-foot depth of concrete rubble. The budget figure above accounts for the removal of this rubble, as well as the additional excavation required for a new revetment profile.

### **Shoreline Stabilization and Restoration: \$1,902,000**

Without the benefit of a coastal analysis of the Lakeshore Park shoreline, the Master Plan budget exercise assumes that 25% of the total 4,550 LF of shoreline will be protected with new stone revetment. The remainder of the shoreline – which averages 30 feet between the water's edge and the new Riverwalk – will be stabilized by vegetation and restored to promote fish and wildlife habitat. \$1,650,000 of the total cost of shoreline protection is stone revetment.

### **Stepped Revetment at Center Reach of Shoreline: \$750,000**

Approximately 500 LF of stepped stone revetment is proposed at the center of the restored Lake Butte des Morts shoreline. This revetment is comprised of large rectangular blocks of stone, quarried to roughly consistent dimensions, that are stacked to form an edge that can be occupied or used for water access.

### **Fishing/Personal Watercraft Pier: \$250,000**

Allowance for a permanent structure with accessible fishing platforms, seating, side-tie dockage, and kayak launch.

### **Phase Three Budget Target: \$4,300,000**

### **Phase Three Budget Target + Contingency: \$5,800,000**

## **Phase Four: West Park Amenities**

### **Restroom Building: \$200,000**

Small building with a minimum of two unisex restrooms and an extended roof that creates 400 SF of sheltered/shaded space.

### **(2) Open-air Picnic Shelters: \$350,000**

Permanent structures with large roof overhangs that create 1,200 SF of sheltered/shaded space. Includes partial windbreak walls. Budget target based on \$150/SF.

### **Remaining West Park Pathways: \$250,000**

Concrete pavement.

### **Earthworks: \$230,000**

Primarily imported fill for geometric mounds ranging from ten to thirty feet tall.

### **Hilltop Community Icon: \$100,000**

An allowance for public art and/or overlook. This park feature will require a thorough community engagement process to ensure a clear vision and to further define the parameters driving construction cost.

### **Small Multipurpose Lawn: \$52,000**

Seeded lawn.

### **Landscape Restoration: \$325,000**

Allowance for native seeding and tree planting.

### **Phase Four Budget Target: \$1,500,000**

### **Phase Four Budget Target + Contingency: \$2,000,000**

## **Phase Five: East Park Amenities**

### **Remaining East Park Pathways: \$240,000**

Concrete pavement.

### **Nature Play Playground: \$150,000**

Allowance for nature play area. Playgrounds of this type are typically built using stones, logs, sand pits, hills, ropes, and other features with a minimum of manufactured play structures.

### **Parking Lot at North Eagle Street: \$31,000**

Asphalt pavement.

### **Remaining Multipurpose Lawns: \$53,000**

Seeded lawn.

### **Landscape Restoration: \$250,000**

Allowance for native seeding and tree planting.

### **Phase Five Budget Target: \$720,000**

### **Phase Five Budget Target + Contingency: \$975,000**



