



CITY OF NEENAH

LITTLE LAKE BUTTE DES MORTS PARK PROPERTIES
MASTER PLAN

DECEMBER 2008

INTRODUCTION

Community livability is largely affected by conditions in the public realm, by places where people naturally interact with their community and by public policy and planning decisions. Public parks and open spaces represent an important measure of livability and directly benefit people who live in, work in or visit a community.

The City of Neenah identified an opportunity to undertake planning of City-owned shoreline acreage for future park uses, thereby promoting the improvement of environmental conditions, the quality of social interactions, and opportunities for recreation. Three public properties located near the southern terminus of the Lake, representing approximately 29.5 acres, are the focus of this study. While the majority of this acreage has been in public ownership for over a half century, it has not been considered publically accessible or useable for outdoor recreation uses. This planning effort has assisted in the reappropriation of public acreage for the benefit and enjoyment of future generations.

PURPOSE OF THE PLAN

This *Park Master Plan* represents a guide for programming and accommodating recreation facility development and landscape restoration for public acreage that conjoins Little Lake Butte des Morts. It considers both immediate and future concerns relevant to environmental issues and permitting, ecological restoration, adjacent redevelopment within the downtown area, and public access.

Recommendations outlined in the *Master Plan* address specific physical elements that could potentially be funded through a variety of competitive grants and other public monies. As such, the Plan serves as a valuable budgetary and policy tool that will allow the City to focus its efforts on specific items identified within the Plan.

PLANNING PROCESS

This *Master Plan* has entailed a planning process designed to assist the City and Department of Parks and Recreation in formulating short- and long-range improvements of public recreational space. The Master Plan was developed through a collaborative effort by City residents and stakeholders, the Park and Recreation Commission Committee, and private consultants.

Two community outreach efforts were sponsored to gather ideas and opinions related to existing conditions, potential recreational programming and proposed design concepts. Issues, goals, objectives and recommendations identified in this Master Plan directly reflect public input and dialogue, and guidance provided by the Commission and City Staff.

DESCRIPTION OF STUDY AREA

CONTEXT

This planning effort examined three individual yet contiguous shoreline properties (29.5 acres) at the southern terminus of Little Lake Butte des Morts in the vicinity of Neenah's downtown commercial district. The study area is broadly defined to the west by industrial uses (paper manufacturing industries), to the south by residential neighborhoods and the east by the historic city center. At present, the public park acreage is not formally accessible for recreation uses, although portions of the shoreline are unofficially utilized for recreational fishing.

PARKS

As previously mentioned, three parcels (Park Sites 1, 2, and 3) were of varied scales were investigated for their future potential to accommodate public recreation in the City of Neenah. The majority of the park acreage was dedicated to the City during the early 1950s, and successive efforts to assemble conjoining lands (Park Site No.1 and 3) has occurred more recently. Parcel information related to former environmental audits and historic records is limited, especially concerning Park Site No. 3.

The majority of the land that comprises Park Sites 1 and 2 (26.6 acres total) is classified as a "historic landfill." Commonly referred to as "Arrow Head Park", this area once formed the lakebed within the southernmost portion of Little Lake Butte des Morts. A Lakebed Grant issued by the Wisconsin Legislature (1951) in permitted submerged lands to be filled and reclaimed for public purposes. The reclaimed land was dedicated to the City of Neenah.

A stone dike that extended into the lakebed was constructed in phases, while the landward area to the south of the dike was subsequently filled with manufacturing waste (sludge) generated by the neighboring Bergstrom-Glatfelter (Glatfelter) Paper Mill and other paper manufacturers from 1952 to the mid-1970s.

Subsequent leases of portions of the reclaimed land (1951-1995) made possible the construction of water and wastewater treatment facility and a vitrification/steam plant (Minergy / Thermagen) on the City-owned property.

Historic aerial photographs of the park properties dating between 1950 and 2003 reveal the transformation of the lakebed and subsequent evolution of the park acreage. In 1950, the shoreline of Little Lake Butte des Morts roughly coincided with the rail line that traverses the outer boundary of the parkland. By 1959, the majority of Park Site No. 1 was back-filled, and waste treatment facilities operated by the Bergstrom Corp. (Glatfelter) had been constructed on the landfill. Extension of the dike and subsequent filling continued through the early- to mid-1970s. By 1981, the landfill supported a vegetation layer of grass.

The landfill site was not engineered in accordance with current standards and regulations outlined by the Wisconsin Department of Natural Resources. Although environmental assessments of the properties have not been conducted in recent years, it is reported that the site is capped by a 1-foot-thick clay layer and covered with 6-8 inches of topsoil. Additional information asserts that the thickness of the sludge material is approximately 11 feet in some areas, although the southern, landward side of the landfill that borders the rail corridor may be constructed of locally-obtained clay. The sludge has been determined to contain polychlorinated biphenyls (PCBs) during previous groundwater sampling.

Additional industrial uses bordering the parkland include active rail operations that border the property. These physical barriers hinders access by vehicles and non-motorized uses, although opportunities to establish limited crossings have been proposed in this *Plan*.

In 1995, a 4-acre tract within Arrow Head Park was subleased by Glatfelter for the construction of a vitrification and steam power plant (Minergy/Thermagen). The plant originally produced steam through vitrification of paper sludge provided by Glatfelter and other local paper mills. The energy and incineration of industrial waste was viewed as a public benefit as it reduced landfill wastes for the City. As the paper manufacturing facilities, such as Glatfelter, have closed in the downtown area, the Thermagen plant has explored other options to fuel their operations.

PARK SITE 1 (7.65 ACRES)

As previously described this 7.65-acre site is characterized as a historic landfill that formerly accommodated the Glatfelter wastewater and water treatment plant. Although detailed environmental assessments of the property have not been conducted to determine soil conditions, it may be assumed that compacted sludge wastes as well as soil comprise the subsurface material.

Approximately 30 structures, including aeration and settling basins, above grade chemical materials tanks and silos were constructed on the site over the course of approximately 40 years. The facility was demolished during the summer of 2008, following closure of the neighboring Glatfelter Mill (2006). No above grade structures of the former treatment plant were salvaged during demolition. The site remains in a level, open and barren condition.

At present, the rail line that circumnavigates Park Site No. 1 receives infrequent and rail use that is limited to between two and four trains daily. Access to the park acreage is currently gained via the driveway entrance of the Thermagen facility (Millview Drive).

PARK SITE 2 (19.0 ACRES)

Commonly referred to as Arrow Head Park, this 19.0-acre parcel comprises the largest park property, and is characterized by grassy vegetation. Woody vegetation within the site is sparse, and tree vegetation is limited to small clusters of native poplar trees along the water's edge. The parkland terrain slopes gently from east to west, and retains a fairly level grade along the dike. Over time, the subsurface material has settled, and minor surface depressions that retain insignificant volumes of stormwater runoff have emerged. Although no known ecological assessment of the site has been conducted in recent history, the current vegetation comprises native and non-native flora. Wildlife, including fox, have been reported visiting the acreage.

The park site is bordered to the south by an active heavy rail transportation corridor, thereby restricting access to a narrow strip of land along the shoreline from the east (Park Site No. 1). The massive Thermagen facility dominates the viewshed along the eastern perimeter of the site, and conceals views to the downtown area or to Park Site No. 1.

PARK SITE 3 (2.9 ACRES)

This site represents remnant acreage that lies between an active rail corridor and the shore of Little Lake Butte des Morts. The park site is bounded by dense development of manufacturing facilities to the west. A modest level of sound generated by neighboring industrial facilities, and rail/ truck traffic is audible throughout the park site.

The elongated parcel is bisected by an open channel drainage that leads from a subgrade culvert that daylights near the rail line. Access to the parcel is located at the northwest corner that is adjacent to Lake Street. The park acreage is characterized by both natural and built qualities. The northern portion is generally exposed, and presently accommodates a vacant building and covered storage. Concrete wall-supports for oil tanks (non-extant) and wellheads are located near the buildings. While the majority of the northern portion of the parcel has undergone neglect, a grove of mature trees that lie along the shoreline area remain a significant natural feature. It is anticipated that the existing buildings and affiliated infrastructure will be obliterated prior to park design implementation.

The southern portion of the parcel is characterized by dense, overgrown vegetation represented by a mix of native, invasive and ornamental shrubs and trees. The overhead tree canopy is well established, although clearings in the woodland allow for views to the shoreline. Remnants of a cabin/fishing hut, outbuilding and two-track road are still observable near the southernmost area of the acreage. This 2-acre woodland accounts for the majority of tree canopy throughout the 29-acre parkland.

PARKLAND DESIGN CHALLENGES

Historic uses, development patterns, accessibility and other conditions inherent to the Little Lake Butte des Morts park properties influence decisions related to park and facility design, recreational uses and ecological restoration efforts. Planning challenges potentially affecting future park development were assessed to ensure that environmental, infrastructural and other important issues were considered prior to developing conceptual park plans. The following list summarizes key concerns.

SITE CONDITIONS

- Potential load bearing weakness of the soil and subsurface material may limit facility construction.
- Potential high costs associated with excavation and disposal of soil and subsurface material may regulate the ability to significantly alter terrain.
- Shoreline fortification may be unalterable due to engineering and cap constraints.
- Existing dike infrastructure along park sites 1 and 2 may represent a costly constraint to redevelopment or redesign of portions of the shoreline.
- The shoreline area of Park Site No. 3 has undergone erosion, and efforts to stabilize the water's edge are limited in their effectiveness.
- PCB's that are likely present in subsurface matter could potentially undergo exposure if the existing cap material is breached or disrupted.

- Strategies for stormwater collection and infiltration on site may be limited due to the need for positive drainage away from the site.
- The stormwater drainage channel that bisects Park Site No. 3 diverts untreated stormwater that potentially diminishes water quality in Little Lake Butte des Morts in the vicinity of the park shoreline.
- Acreage that comprises Park Site No. 3 may require formal platting and surveying to ensure accuracy of affiliated easements, rights of way and ownership.

PUBLIC USE

- Parks uses and facility development are potentially restricted to passive or nature-based recreation due to limited points of access, infrastructure costs and environmental conditions.
- Water-based recreation may be limited due to shallow water depths, arduous physical access to the water's edge, and dike infrastructure along the majority of the shoreline area.
- Circumnavigation of park sites by active rail corridors, water bodies and streams limits vehicular and pedestrian access.
- Limited (existing) vehicular crossing (one) shared with industry-affiliated truck traffic (Energy Facility) will require coordination with neighboring industrial uses.
- The boundary of the current lease held by the Thermagen plant divides park sites 1 and 2, thereby limiting the physical connection to a narrow "strip" of land adjacent to the shoreline

SITE ECOLOGY

- Shallow depth of topsoil and presence of clay cap (park sites 1 and 2) may limit the viability woody vegetation (trees and shrubs).
- Potential damage to the integrity of the clay cap may occur by penetrating vegetation roots without topsoil amendments.
- Levels of environmental contamination within subsurface material may prevent healthy and normal vegetation growth (park sites 1 and 2).

- Existing shoreline infrastructure appears to discourages establishment of wetland vegetation within the littoral zone.
- Undesirable urban wildlife could potentially inhabit the parkland if restoration efforts or facility development encourages refuge, nesting and feeding.

VISUAL AND SOUND QUALITY

- Visual dominance of the Thermagen Facility (western terminus of the Wisconsin Avenue site line) remains a design challenge.
- Open and poorly maintained condition of contiguous railroad corridors do not contribute to aesthetics of the site.
- Tall vegetation that serves to screen adjacent manufacturing or industrial facilities within Park Site No. 3 is absent.
- Temporal noise generated by rail activities within the western “branch” of the rail line remains a design challenge.
- Consistent noise generated by the Energy Facility and affiliated transport operations will likely not be abated through design solutions.

MAINTENANCE AND OPERATIONS

- Costs affiliated with public electrical uses should be considered if necessary.

PROJECT GOALS & OPPORTUNITIES

This section includes a series of goals and opportunities that are designed to guide the development of Park Master Plan concepts, and outline implementation strategies for park enhancement.

GOAL 1: RECREATIONAL USES AND PROGRAMMING

Recreational opportunities emphasize non-motorized and non-programmed forms of recreation that are generally “passive” in nature.

Opportunities

- 1.a. Promote recreational pursuits that include walking, running, bicycling, scenic and wildlife viewing, picnicking, nature-based education, fishing, and non-motorized boating.
- 2.a. Develop facilities that accommodate desired uses while recognizing the natural and ecological values of the park acreage.
- 3.a. Promote recreation and enjoyment by individuals, small groups and large group special events through facility design.

GOAL 2 : PATH ACCESS AND CONNECTIVITY

Pedestrian and bicycle connectivity between parks, public facilities and local destinations is established through improved access, trail development and year-round trail maintenance.

Opportunities

- 2.a. Promote logical pedestrian and bicycle linkages that navigate the park sites and joins existing pathways within the downtown area of Neenah.
- 2.b. Provide for a diversity of trail experiences through the location, configuration, design and surfacing of pathways.
- 2.c. Utilize trails and pathways to promote environmental education and appreciation of natural resource values.
- 2.d. Physically join Park Sites Nos. 2 and 3 via a boardwalk system to encourage greater use and connectivity between park units.
- 2.e. Activate the shoreline area of the park units by establishing the primary “spine trail,” boardwalks and piers proximate to the water’s edge.

GOAL 3 : DYNAMIC AND INTERACTIVE PARK AMENITIES

The parks include “signature” features that are dynamic in their appeal and entice repeat visitation.

Opportunities

- 3.a. Encourage user interaction with site features and outdoor exhibits that rotate seasonally and serve as a drawing-card for park users.
- 3.b. Consider installation of overscaled public sculpture that draws inspiration from natural or local industrial history through the use of materials and forms.
- 3.c. Consider park features that are interact with wind, solar or wave power.
- 3.d. Explore artistic design of site furnishings that relate to the cultural and natural history of the site.

GOAL 4 : DESIGN STANDARDS

The standards of park and recreational facility design achieve a high level of aesthetic and functional quality.

Opportunities

- 4.a. Promote a unified design theme throughout the parks that is represented by construction materials and techniques, signage, fencing, furnishings, lighting, and landscape treatment that is consistent.
- 4.b. To the greatest extent possible, ensure that the design of landscape and park features is of high quality and durable natural materials that remain timeless in their appeal.
- 4.c. Elevate aesthetic appeal, wildlife benefits, and visual interest of the ground plane through the selection and use of a consistent native plant palette.

GOAL 5 : NATURAL ENVIRONMENT

Ecological values and natural processes are established, enhanced, and protected through environmental restoration efforts.

Opportunities

- 5.a. Ensure viability of restoration efforts through the addition and regrading of topsoil material throughout Park Sites 1 and 2.
- 5.b. Establish sizeable berms of no less than a 4:1 ratio within select locations for the primary purpose of establishing groves of trees.
- 5.c. Restore ecological health of park acreage through planting of native species that contribute to aesthetic qualities and benefit wildlife.
- 5.d. Actively promote and fund removal and obliteration of non-native and invasive flora in park areas.
- 5.e. Ensure that recreational facilities are designed so that their normal use does not degrade natural resource components.

GOAL 6 : SUSTAINABILITY

Park sites are designed and managed as sustainable public venues.

Opportunities

- 6.a. Reduce impervious surfaces by using porous concrete, porous asphalt and permeable pavements.
- 6.b. Utilize recycled and salvaged materials where feasible in the construction of landscape features.
- 6.c. Make use of water wise landscape principles, such as using low water demand plants, installing efficient irrigation systems and improving soil with adequate organic material.
- 6.d. Limit the use of park features that require electric power to operate.
- 6.e. Explore the potential of installing renewable energy devices (wind turbines, solar panels) that generate on-site power for park operations.

GOAL 7 : SAFE FACILITIES

Park sites are perceived as safe environments.

Opportunities

- 7.a. Evaluate the need for night lighting of park and pathway facilities to ensure that the perception of safety is augmented.
- 7.b. Concentrate evening and nighttime park uses within areas of Park Site No. 1 that are proximate to the downtown area.
- 7.c. Involve the City Police Department in the review of park and trail design plans to ensure that safety issues have been addressed.

GOAL 8: PARK MAINTENANCE

Maintenance of facilities, natural resources and the trail system that do not require significant long-term costs, yet are supported through appropriate levels of staffing and funding.

Opportunities

- 8.a. Ensure that sufficient municipal funds are allocated for long-term maintenance of park sites.
- 8.b. Evaluate maintenance staffing levels and increase as required to ensure that proper care of park facilities.

GOAL 9: FUNDING

Economic sustainability and stability of parks is afforded through efficient use of financial resources.

Opportunities

- 9.a. Ensure that sufficient funding of park improvements is allocated as a component of the Tax Incremental Financing strategy.
- 9.b. Aggressively seek matching funding sources for non-motorized transportation (trails) and nature-based recreation facilities from state and federal sources.
- 9.c. Seek appropriate private and not-for-profit sponsorship opportunities for developing specific features within parks.
- 9.d. Investigate the feasibility of establishing a not for profit foundation to seek and receive funds for the support of park development and maintenance.

MASTER PLAN CONCEPTS

OVERALL PARK MASTER PLAN CONCEPT

The design concepts for the Little Lake Butte des Morts park properties support the establishment of a natural refuge within an urban environment. The *Master Plan* focuses on advancing three primary objectives:

1. Restore the landscape to enhance ecological values.
2. Augment the quality of visitor experience and social interaction through trail development and destination points.
3. Encourage visual and physical access to water resources.

PARK VISION

The open condition of the parkland will support limited recreational facilities that encourage access and discovery of the site, promote views to the lake, and foster a connection between park users and nature. To accomplish this, the principle that governs park design aims to restore and preserve natural resources and ecological systems, and enhance the park's natural qualities.

The majority of the parkland will be characterized by its level terrain and indigenous tall grass prairie environment that serves as a habitat for native wildlife communities. Multiple-use trails that afford a 1.5-2 mile circuit route will facilitate exploration of the park acreage, and care will be exercised to minimize impacts on the natural systems. Park visitors will be afforded opportunities to access the water both visually and physically through various shoreline features.

NARRATIVE

Park Site No. 1

Park Site No. 1 represents the primary staging area for civic events and local users due to its proximity to the downtown commercial area. The concept endeavors to guide park users from off-site or peripheral locations to the Lake's shoreline, and to emphasize 'water element' via boardwalks, piers and seating wall features along the water's edge. A system of pathways affords direct access to the shoreline while providing a choice of routes. The majority of the site will be restored and managed as a 'natural area' that supports tall native prairie grasses and limited maintained turf. A portion of the existing stone dike that buttresses the shoreline would be reconfigured as a seating wall, and limited areas along the dike would be restored to support wetland vegetation.

Lighted, paved paths would direct visitors from two points at the parks periphery: (1) the 'upper plaza' that occurs at the western terminus of Wisconsin Ave. and (2) the small parking lot at the south end of the park. The driveway / park entry (Millview Drive) would accommodate a sidewalk alongside the curb for pedestrians and bicyclists that access the park via Main Street.

A visual axis extending from the off-site plaza would direct views to water from the downtown area. A forested berm (5' high) would circumnavigate the west boundary of Park Site No. 1 along the existing fence line of the Thermagen facility to help screen and buffer the large edifice.

Park Element	Description
Vegetation	<ul style="list-style-type: none">6.0 acres restored to support a tall grass prairie0.75 acre maintained (bluegrass) turfOne forested berm (5' high), accommodating 30 canopy trees (double row along berm crest)
Paths	<ul style="list-style-type: none">10' paved paths, leading from Main Street (across rail corridor) and from south parking area to waterfront (total of 1600 linear feet)Secondary soft-surface 6'-wide pedestrian path leading from the parking area to waterfront (300 linear feet)
Parking	<ul style="list-style-type: none">Paved parking, 15 stalls (1000 sq. ft. surface area; 650 linear feet curbing)

Natural Features	<ul style="list-style-type: none"> ▪ Stormwater retention / wetland to east of parking area in existing surface depression ▪ Emerging wetland vegetation along shoreline, to east and west of shoreline seating wall (in tandem with reconfigured shoreline edge)
Forested Berm	<ul style="list-style-type: none"> ▪ A 5'-foot tall berm (gentle 4 : 1 slope) along the western edge of the site, forested with 30 canopy trees (berm to provide 'backdrop' to west portion of park and screen the Thermagen facility) ▪ Ends of berm to be reinforced by corten steel (rusted, industrial appearance) retaining walls that provide a 'gateway 'into the park
Lighting	<ul style="list-style-type: none"> ▪ Limited lighting along gathering areas near waterfront and along paved paths (80' off center spacing)
Boardwalks	<ul style="list-style-type: none"> ▪ Two boardwalks / overlooks allow park users to interface more directly with the Lake. One boardwalk provides for viewing of the canal outlet, while the other extends over the lake water (140 linear feet)
Sculpture Walk	<ul style="list-style-type: none"> ▪ Sculpture to be displayed along the main pathway axis between the shoreline and off-site plaza
Pavilion	<ul style="list-style-type: none"> ▪ A modest covered pavilion with a shared restroom facility located proximate to the parking lot (300 sq. ft.)
Seating Wall	<ul style="list-style-type: none"> ▪ A two-tier (row) seating wall and viewing deck afford an opportunity for park users to access the shoreline area in a direct manner. The seating wall feature includes accessible ramps, and represents a centerpiece of the park (2750 sq. ft.)
Labyrinth	<ul style="list-style-type: none"> ▪ A turf-and-stone labyrinth established near the primary path.
Viewing Overlook	<ul style="list-style-type: none"> ▪ A 5'-high overlook along the northern crest of the forested berm accessed through a switchback trail system (ADA compliant) or stairs
Park Entry	<ul style="list-style-type: none"> ▪ Entry drive to divert northward from the existing entrance to the Thermagen facility (Millview Drive) ▪ Native vegetation (wildflowers) and low gabion walls to add interest and sense of entry along east side of driveway

Park Site No. 2

The concept for Park Site No. 2 emphasizes a ‘natural component’ and would be managed as a tall grass prairie environment. Pedestrian and bicycle circulation is accommodated through two trail types: (1) a paved 10’wide path located near the shoreline and a (2) secondary gravel path that affords an opportunity to traverse the interior of the site. Two stormwater retention basins / wetland environments would be established within existing low areas of the site.

Other features of the park include a boardwalk option that allows access over the water’s edge, oversized sculptural “frames” strategically placed along the pathways thereby serving to deliberately enframe specific views internal and external to the park, and three small covered (open air) shelters.

Five sizeable earthen berms (6’-high) would be reinforced with a corten steel retaining wall along their north face support limited tree vegetation. The design of the berms would serve as sculptural elements within the park, and function as an ecological feature for avian and small mammal wildlife. The front (north) portion of the berm could potentially support a feature, such as small energy-producing wind turbines or sculpture, thereby establishing a whimsical-yet-functional element in the park.

Park Site No. 2 is physically linked to Site No. 1 via the continued path system and via a trestle boardwalk (360’ in length) to Site No. 3.

Park Element	Description
Vegetation	<ul style="list-style-type: none"> ▪ The majority of the site (17 acres) is restored to support a tall grass prairie ▪ 0.75 acre seasonally-maintained native turf ▪ Five (5) forested berms (see below)
Paths	<ul style="list-style-type: none"> ▪ 10-wide’ paved pathway along the shoreline (1675 linear feet) ▪ 6’-wide, gravel path providing access into the interior of the site (1700 linear feet) ▪ Linkages to Park Sites No 1 and 3 via continuation of pathway system along the shoreline area
Lighting	<ul style="list-style-type: none"> ▪ Limited lighting along paved paths (100’ o.c. spacing)

Natural Features	<ul style="list-style-type: none"> ▪ Two stormwater retention / wetland in southern (lower topography) area of the park
Forested Berms	<ul style="list-style-type: none"> ▪ Five 6'-foot tall berms (drumlins, gentle 4 to 1 slope) oriented in a north-south direction ▪ North ends of berms to be reinforced by corten steel (rusted, industrial appearance) and stone retaining walls
Boardwalks	<ul style="list-style-type: none"> ▪ Two 6'-wide boardwalks allow park users to interface more directly with (1) the Lake (150 linear feet) and (2) a created wetland (175 linear feet) ▪ A 360'-long boardwalk to link Park Site No. 2 and 3 (see Park Site No. 3)
Shelters	<ul style="list-style-type: none"> ▪ Two open-air, covered shelters clustered near the shoreline in the vicinity of the boardwalk. The shelters are surrounded by native short grass turf to be maintained seasonally.

Park Site No. 3

Park Site No. 3 accommodates pedestrian and bicycle travel via a 10'-wide paved path, and serves as both a 'terminus' to the chain-of-parks along Neenah's lakefront, as well as a 'springboard' for continuing a bicycling circuit that includes the trestle trail in Menasha. The park offers substantially greater tree canopy cover and foot-access to the shoreline compared with the other park sites. Paramount to the park's success as a public destination is a physical connection to Park Site No. 2 via a 360'-long trestle boardwalk.

The southern three-quarters of the park site would remain in a natural condition, albeit one in which ecological restoration would occur. The northern one-quarter of the park would be maintained as an open turf and non-programmed recreation area that provides physical and visual access to the shoreline. A modest covered shelter and restrooms would be constructed in the 'developed' area of the park. Additionally, a seating area overlooking the shoreline and ADA-accessible fishing pier would encourage users to view the water.

A vertical wall (3'-high) would be established along the northern shoreline and backfilled to create a more even and level turf surface. Wetland vegetation would be established at the base of the wall.

A small parking area (8 stalls) would allow for limited vehicular access along the western periphery of the park. Existing buildings and affiliated infrastructure that are located within the site would be removed.

Park Element	Description
Vegetation	<ul style="list-style-type: none">1.7 acres is restored to support existing and enhanced woodland vegetation0.45 acres maintained (bluegrass) turf
Paths	<ul style="list-style-type: none">A 10'-wide lighted paved path (900 linear feet) traverses the length of the site, from north to southA 6'-wide soft-surface secondary pathway (200 linear feet) diverts from the primary path and leads to the water's edge
Lighting	<ul style="list-style-type: none">Limited lighting along the pathway and pavilion

Parking	<ul style="list-style-type: none"> ▪ Paved parking, 8 stalls (4450 sq. ft. surface area)
Natural Features	<ul style="list-style-type: none"> ▪ Wetland-shoreline vegetation established along base of 3'-high retaining wall within the 'developed' area of the park (300 linear feet) ▪ Woodland restoration to occur within majority of the site (40 canopy trees)
Bridges	<ul style="list-style-type: none"> ▪ Two bridges that allow access over water or channels: (1) 75'-long bridge to span urban drainage and (2) a 360'-long boardwalk to link Park Site No. 2 and 3
Seating Area	<ul style="list-style-type: none"> ▪ Pedestrian / bicyclist seating would constructed near the pier feature and overlook the shoreline area to the east
Bicycle Parking Area	<ul style="list-style-type: none"> ▪ A bicycle parking facility be constructed near the northern terminus of the boardwalk that extends southward to Park Site No. 2
Pier / Kayak Facility	<ul style="list-style-type: none"> ▪ An ADA-accessible 75'-long pier (8'-wide) extended from the seating area near the shoreline into the lake. Kayak and canoe users that launch watercraft from the inlet (north of the picnic shelter) would be afforded an opportunity to anchor vessels to the pier
Shelter/Restroom	<ul style="list-style-type: none"> ▪ A covered shelter (1 250 sq. ft.) and restroom facility located in the northern area proximate to the parking lot and pier

PHASING

The phasing plan for implementing park development of the Little Lake Butte des Morts properties is outlined in three stages:

The Phase I plan includes approximately 7.65 acres that comprises Park Site No.1. Grading, topsoil improvements, berm-development and shoreline reconstruction represent primary undertakings prior to facility development. Subsurface infrastructure required for lighting and restroom facilities would be implemented in tandem with construction of hardscape components, such as the entry drive, parking lot and paved paths. Structures resting on piers or pads, such as boardwalks, trestle bridges, the pavilion and the tiered seating wall would likely be erected following pavement construction. Site restoration of native vegetation species represents the final component of the implementation plan.

The Phase II plan would consist of earthworks and grading of Park Site No. 2. The topsoil layer would be amended to encourage healthy and long-term establishment of native vegetation. The paved pathway and lighting infrastructure would be constructed following site grading. Additional features, such as the gravel-surfaced trail, boardwalks and shelters would be constructed in the final phase.

The Phase III plan focuses on development of Park Site No. 3. Demolition of existing buildings and development of the northern portion of the site comprises the first stage of park development for this parcel. This would include site grading, path and parking lot construction and development of pier and shelter features. Access and development the southern portion of Park Site No. 3 would require construction of the 360-foot-long bridge that links Park Sites Nos. 2 and 3. Once the bridge is constructed, pathways and ecological restoration of the southern area of the site would occur.

OPINION OF PROBABLY COSTS

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COSTS PARK PROPERTIES REDEVELOPMENT

PARK SITE 1

02.17.2009

Park Site 1	ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
	1-A1	Excavation and Grading	C.Y.	45370	\$ 3.50	\$ 158,800.00
	1-A2	Native Grass	S.Y.	27949	\$ 1.50	\$ 41,900.00
	1-A3	Maintained Turf	S.Y.	4373	\$ 0.80	\$ 3,500.00
	1-A4	Shoreline Reconfiguration/Emergent Wetland Vegetation (OPTIONAL)	S.Y.	444	\$ 100.00	\$ 44,400.00
	1-A5	Deciduous Canopy Tree	EA.	30	\$ 300.00	\$ 9,000.00
	1-A6	Storm Water Management Ponds	S.F.	9800	\$ 5.00	\$ 49,000.00
	1-A7	Sanitary Service	L.F.	320	\$ 45.00	\$ 14,400.00
	1-A8	Water Service	L.F.	320	\$ 70.00	\$ 22,400.00
	1-A9	Pedestrian Path -Gravel	C.Y.	33	\$ 30.00	\$ 975.00
	1-A10	Pedestrian Path - Paved (2" asphalt, 4" CABC) (approx 22,654 sq. feet)	L.S.	1	\$ 49,992.62	\$ 49,992.62
	1-A11	Pedestrian Path - Boardwalk	L.F.	190	\$ 310.00	\$ 58,900.00
	1-A12	Two Tier Concrete Seating Wall	C.Y.	310	\$ 12.00	\$ 3,720.00
	1-A13	Asphalt Parking Lot (3" asphalt, 12" CABC)	L.S.	1	\$ 36,700.00	\$ 36,700.00
	1-A15	Corten Steel Wall (OPTIONAL)	L.F.	210	\$ 100.00	\$ 21,000.00
	1-A16	Pedestrian Solar Light	EA.	22	\$ 4,000.00	\$ 88,000.00
	1-A17	Pillar - Archway (OPTIONAL)	EA.	2	\$ 10,000.00	\$ 20,000.00
	1-A18	Floating Dock (Seasonal) (OPTIONAL)	EA.	1	\$ 5,000.00	\$ 5,000.00
	1-A19	Labyrinth Feature	EA.	1	\$ 2,000.00	\$ 2,000.00
	1-A20	Pavilion & Restrooms	EA.	1	\$ 40,000.00	\$ 40,000.00
					TOTAL	\$ 579,288
					15% Contingency	\$ 86,893
					Park Sites Grand Total	\$ 666,181

* Total excludes optional elements shown in yellow

 OPTIONAL DESIGN ELEMENTS

**ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COSTS
PARK PROPERTIES REDEVELOPMENT**

PARK SITE 2

02.17.2009

	ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Park Site 2	1-B1	Excavation and Grading	C.Y.	92300	\$ 3.50	\$ 323,100.00
	1-B1	Drumlin Excavation and Grading	EA.	5	\$ 12,000.00	\$ 60,000.00
	1-B2	Native Grass	S.Y.	81483	\$ 1.50	\$ 122,200.00
	1-B3	Deciduous Canopy Tree	EA.	30	\$ 300.00	\$ 9,000.00
	1-B4	Storm Water Management Ponds/Wetland Plantings	S.F.	34348	\$ 2.00	\$ 68,700.00
	1-B5	Pedestrian Path - Gravel	C.Y.	136	\$ 30.00	\$ 4,065.00
	1-B6	Pedestrian Path - Paved (2" asphalt, 4" CABC) (approximately 14625 sq. ft)	L.S.	1	\$ 32,000.00	\$ 32,274.27
	1-B7	Pedestrian Path - Boardwalk	L.F.	330	\$ 310.00	\$ 102,300.00
	1-B8	<i>Corten Steel Wall (OPTIONAL)</i>	<i>L.F.</i>	<i>800</i>	<i>\$ 100.00</i>	<i>\$ 80,000.00</i>
	1-B9	Pedestrian Solar Light	EA.	9	\$ 5,000.00	\$ 4,000.00
	1-B10	<i>Sculpture Platform (OPTIONAL)</i>	<i>EA.</i>	<i>5</i>	<i>\$ 1,000.00</i>	<i>\$ 5,000.00</i>
	1-B11	Shelter	EA.	2	\$ 5,000.00	\$ 10,000.00
					TOTAL	\$ 735,639
					15% Contingency	\$ 110,346
					Park Sites Grand Total	\$ 845,985

** Total excludes optional elements shown in yellow*

 OPTIONAL DESIGN ELEMENTS

**ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COSTS
PARK PROPERTIES REDEVELOPMENT**

PARK SITE 3

02.17.2009

Park Site 3	ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
	1-C1	Excavation and Grading	C.Y.	13650	\$ 3.50	\$ 47,800.00
	1-C2	Building Demolition	S.F.	3200	\$ 7.00	\$ 22,400.00
	1-C3	Native Grass	S.Y.	2590	\$ 1.50	\$ 3,900.00
	1-C4	Maintained Turf	S.Y.	2926	\$ 0.80	\$ 2,300.00
	1-C5	Shoreline Reconfiguration/Emergent Wetland Vegetation (OPTIONAL)	S.Y.	2399	\$ 10.00	\$ 24,000.00
	1-C6	Deciduous Canopy Tree	EA.	36	\$ 300.00	\$ 10,800.00
	1-C7	Sanitary Service	L.F.	200	\$ 45.00	\$ 9,000.00
	1-C8	Water Service	L.F.	200	\$ 70.00	\$ 14,000.00
	1-C9	Pedestrian Path - Mulch	C.Y.	10	\$ 10.00	\$ 100.00
	1-C10	Pedestrian Path - Paved (2" asphalt, 4" CABC) (approximately 9350 sq. ft.)	L.S.	1	\$ 21,000.00	\$ 21,000.00
	1-C11	Pedestrian Path - Boardwalk	L.F.	450	\$ 310.00	\$ 139,500.00
	1-C12	Pedestrian Path - Concrete	S.F.	720	\$ 2.60	\$ 1,900.00
	1-C13	Bridge	EA.	1	\$ 40,000.00	\$ 40,000.00
	1-C14	Asphalt Parking Lot (3" asphalt, 12" CABC)	L.S.	1	\$ 16,100.00	\$ 16,100.00
	1-C15	Gabion Wall (OPTIONAL)	L.F.	650	\$ 100.00	\$ 65,000.00
	1-C16	Pedestrian Solar Light	EA.	13	\$ 4,000.00	\$ 52,000.00
1-C17	Picnic Shelter & Restrooms	EA.	1	\$ 75,000.00	\$ 75,000.00	
					TOTAL	\$ 455,800
					15% Contingency	\$ 68,370
					Park Sites Grand Total	\$ 524,170

* Total excludes optional elements shown in yellow

 OPTIONAL DESIGN ELEMENTS

FUNDING OPPORTUNITIES

There are a number of potential funding sources available to help finance implementation of recreation facilities for the park properties. Grant programs managed by the State of Wisconsin Department of Natural Resources (WDNR) represent a viable means due to the focus on funding of nature-based recreation facilities proposed by this Plan. The WDNR defines “nature-based” outdoor recreation as activities where the primary focus or purpose is the appreciation or enjoyment of nature. Such activities include hiking, bicycling, wildlife or nature observation, camping, nature study, fishing, hunting, picnicking, cross-country skiing, canoeing, and multi-use trail activities. Support facilities such as access roads, parking, signs, utility and restroom buildings, and habitat restoration are also eligible for funding under the some programs.

Additionally, transportation-enhancement monies, such as those administered by the Wisconsin State Department of Transportation (WISDOT), may assist with financial support of alternative transportation facilities, such as bicycle and pathways proposed in this plan. Finally, grant funding to sponsor environmental cleanup and remediation of sites may facilitate cost-sharing for preliminary site work and field investigations.

In addition to extramural funding, costs associated with recreation facility improvements and maintenance should be incorporated in City Capital Improvement plans and programs.

NATURE-BASED RECREATION FACILITIES & RESTORATION GRANTS

The **Knowles-Nelson Stewardship Program** was established by the Wisconsin Legislature in 1989 for a ten-year period. The program was renewed for an additional ten years as part of the 1999-2001 Wisconsin State Budget. The goals of the Stewardship Program are to *protect and restore nature-based outdoor recreation areas and areas having scenic or ecological value*. Nature-based can best be described as activities where the primary focus or purpose is the appreciation or enjoyment of nature. The Wisconsin Department of Natural Resources (DNR) administers the Stewardship Program. The Stewardship Program is an umbrella for a number of subprograms, each with its own goals, priorities, and criteria, which are summarized below. Projects submitted for grants under the Stewardship Program must be included in a locally-adopted park plan.

Aids for the Acquisition and Development of Local Parks (ADLP) is a regional allocation program which provides up to 50 percent matching grants to local and county units of government and nonprofit conservation organizations (NCOs) to provide assistance for the acquisition and development of local and county parks. *NCOs can use these funds for the acquisition of land or easements only*. County and local governments may use ADLP funds for the purchase of land and easements and the development of outdoor recreation areas for nature-based outdoor recreation purposes. [Application deadline - May 1 of each year; \$4.0 million distributed annually statewide]

Urban Green Space (UGS) is a Statewide program which provides up to 50 percent matching grants to local and county units of government and NCOs *to acquire or protect scenic, ecological, or other natural features within or near urban areas and provide land for nature-based outdoor recreation*, including noncommercial gardening. These funds can be used for the acquisition of land only. [Application deadline - May 1 of each year; \$1.6 million distributed annually statewide]

Urban Rivers (URGP) is a Statewide program which provides up to 50 percent matching grants to local and county units of government and NCOs to purchase land or easements, or *to develop shoreline enhancements on or adjacent to rivers that flow through urban or urbanizing areas*. This program is intended to preserve or restore urban rivers or riverfronts for the purpose of revitalization and nature-based outdoor recreation activities. NCOs can use these funds for the acquisition of land or easements only. [Application deadline - May 1 of each year; \$1.6 million distributed annually statewide]

The Land and Water Conservation Fund (LAWCON) program was established by the U.S. Congress in 1964 to provide funding for the acquisition of land for park or open space preservation purposes and the development of outdoor recreation facilities. In Wisconsin, LAWCON funds are administered by the DNR. Up to 50 percent of project costs are eligible for funding under this program. For the 2005 fiscal year, *a portion of this amount is available to local and county units of government for the acquisition of land and the development of parks and trails.* The “nature-based” restriction in the Stewardship Program does not apply to LAWCON funds. [Application deadline - May 1 of each year; \$1.6 million to the State of Wisconsin allocated by Congress, 2005]

The National Recreational Trails Act (RTA) grant program provides funds through the transfer of Federal gas taxes paid on fuel used by off-highway vehicles. These funds are used to develop and maintain recreational trails and trail-related facilities for both motorized and non-motorized trail uses. The program is administered by the DNR. Funds are available to county and local units of government, State and Federal agencies, school districts, and qualified trail organizations. Motorized and non-motorized projects have been allocated \$202,500 each and diversified trail projects have been allocated \$270,000 in fiscal year 2005. *Matching grants for up to 50 percent of the cost of a recreational trail project are available.* [Application deadline - May 1 of each year]

The Urban and Community Forestry Grant Program provides grants of up to 50 percent to county and local units of government and nonprofit conservation organizations *for urban forestry activities.* Eligible activities include development of an urban forestry plan or urban open space program, development of a tree ordinance, development of a public awareness program, conducting street tree inventories, and tree planting and maintenance. Reimbursement is limited to \$25,000 per project. [Application deadline - October 1 of each year; \$0.6 million distributed annually statewide]

TRAIL DEVELOPMENT GRANTS

The Federal Transportation Equity Act for the 21st Century (TEA-21), (formerly ISTEA) continues the integration of bicycling and walking into the transportation mainstream. *It enhances the ability of communities to invest in projects that can improve the safety and practicality of bicycling and walking for everyday travel.* TEA-21 provides funding, planning, and policy tools to create more walkable and bicycle-friendly communities.

TEA-21 provides funding for bicycle and pedestrian facilities under a variety of programs. Bicycle projects must be principally for transportation, rather than recreational, purposes, and must be designed and located pursuant to the transportation plans required of the State and Metropolitan Planning Organizations. The following programs are administered by the Wisconsin Department of Transportation. Each program is summarized below:

1. Transportation Enhancement Program. (part of the Statewide Multi-modal Improvement Program (SMIP) Transportation Enhancements (TE) are transportation-related activities that are designed to strengthen the cultural, aesthetic, and environmental aspects of transportation systems. The transportation enhancements program provides up to 80 percent matching grants for the implementation of a variety of non-traditional transportation projects, including the restoration of historic transportation facilities, bicycle and pedestrian facilities, landscaping and scenic beautification, and mitigation of water pollution from highway runoff. Most of the requests and projects awarded in Wisconsin have been for bicycle facilities. Examples of bicycle projects include multi-use trails (in greenways and former rail trails, for example), paved shoulders, bicycle lanes, bicycle route signage, bicycle parking, and overpasses or underpasses.

Transportation enhancement activities must relate to surface transportation. Federal regulations restrict the use of Federal funds on trails that allow motorized vehicles, except snowmobiles. TEA-21 expanded the definition of transportation enhancement eligibility to specifically include the provision of safety and educational activities for pedestrians and bicyclists, which had not been clearly stated under ISTEA. [\$8.97 million distributed annually Statewide between this program and the Surface Discretionary Program].

2. Surface Discretionary Grant Program. (part of the Statewide Multi-modal Improvement Program (SMIP). This program provides up to 80 percent matching grants to local governments and transit commissions in communities with a population of 5,000 or more residents. Priority is given to projects that promote alternatives to single-occupancy vehicle trips. Funding has gone evenly to transit and bicycle/pedestrian projects in past years. Nearly every bicycle project eligible under the Transportation Enhancement program is also eligible for this program, unless the project

will clearly not reduce single-occupant vehicle trips. Funding for bicycle and pedestrian planning is also eligible under this program. [\$8.97 million distributed annually Statewide between this program and the Transportation Enhancements Program (as previously described).]

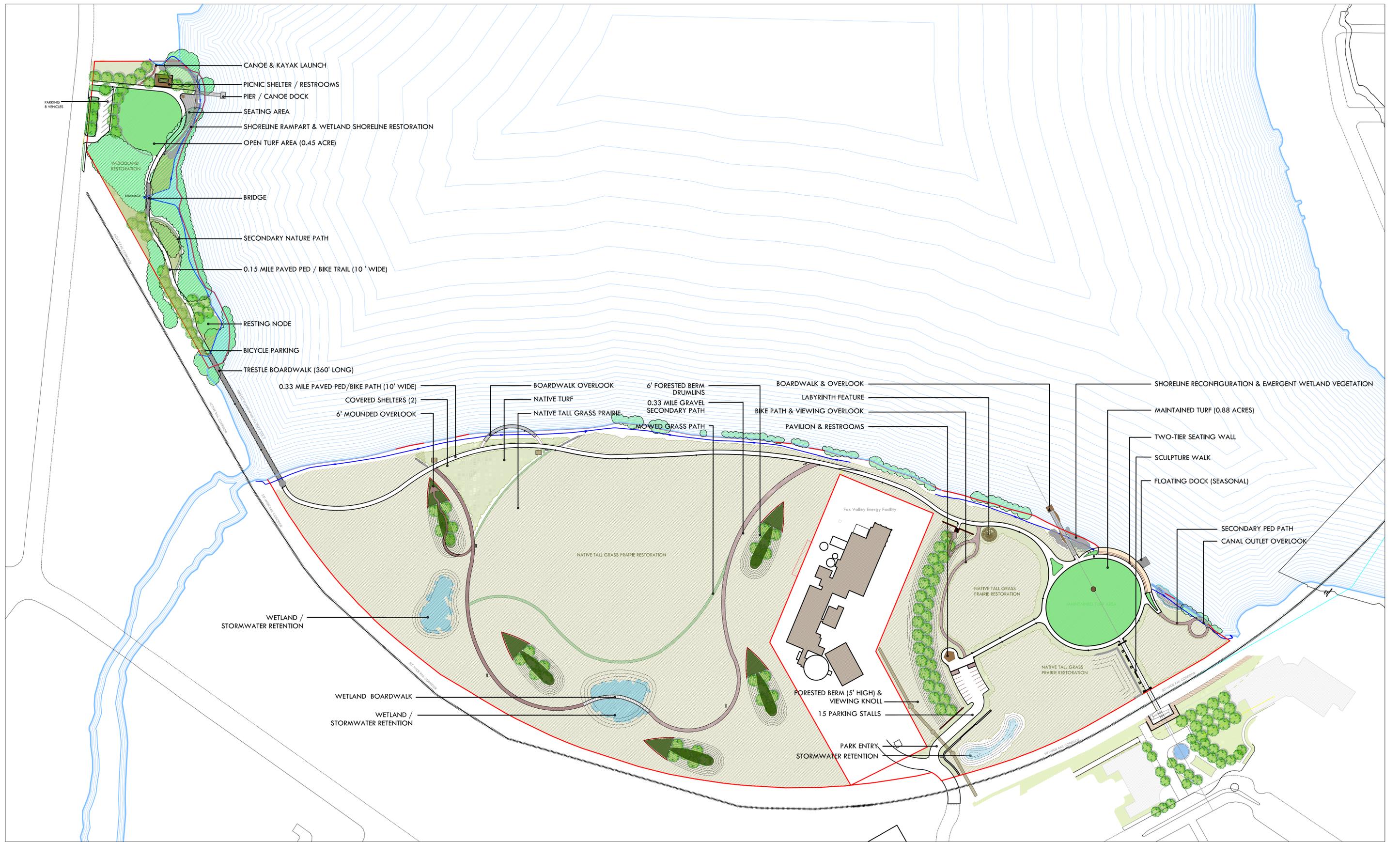
3. Congestion Mitigation and Air Quality Improvement Program. (CMAQ). The purpose of the CMAQ program is to provide up to 80 percent matching grants for projects and programs that reduce motor vehicle travel and/or emissions in areas that have failed to meet air quality standards for ozone, carbon monoxide (CO), or small particulate matter. Bicycle and pedestrian projects are eligible for CMAQ if they reduce the number of vehicle trips and vehicle miles traveled. Almost all bicycle projects eligible for Transportation Enhancement and the Surface Discretionary grant programs are likely to be eligible, but a higher burden of proof that the project will reduce air pollution is required. Non-construction activities such as maps and brochures are also eligible for funding. [\$12.5 million distributed annually to non-attainment areas].

4. Surface Transportation Funds. (Urban) These funds provide up to 80 percent matching grants and can be used on a variety of improvement projects, including bicycle and pedestrian projects. ***These funds have generally been used to provide bicycle and pedestrian improvements when streets or highways are constructed or reconstructed.*** [\$947,236 for urban areas with a population from 20,000-50,000 persons; allocated and distributed annually.].

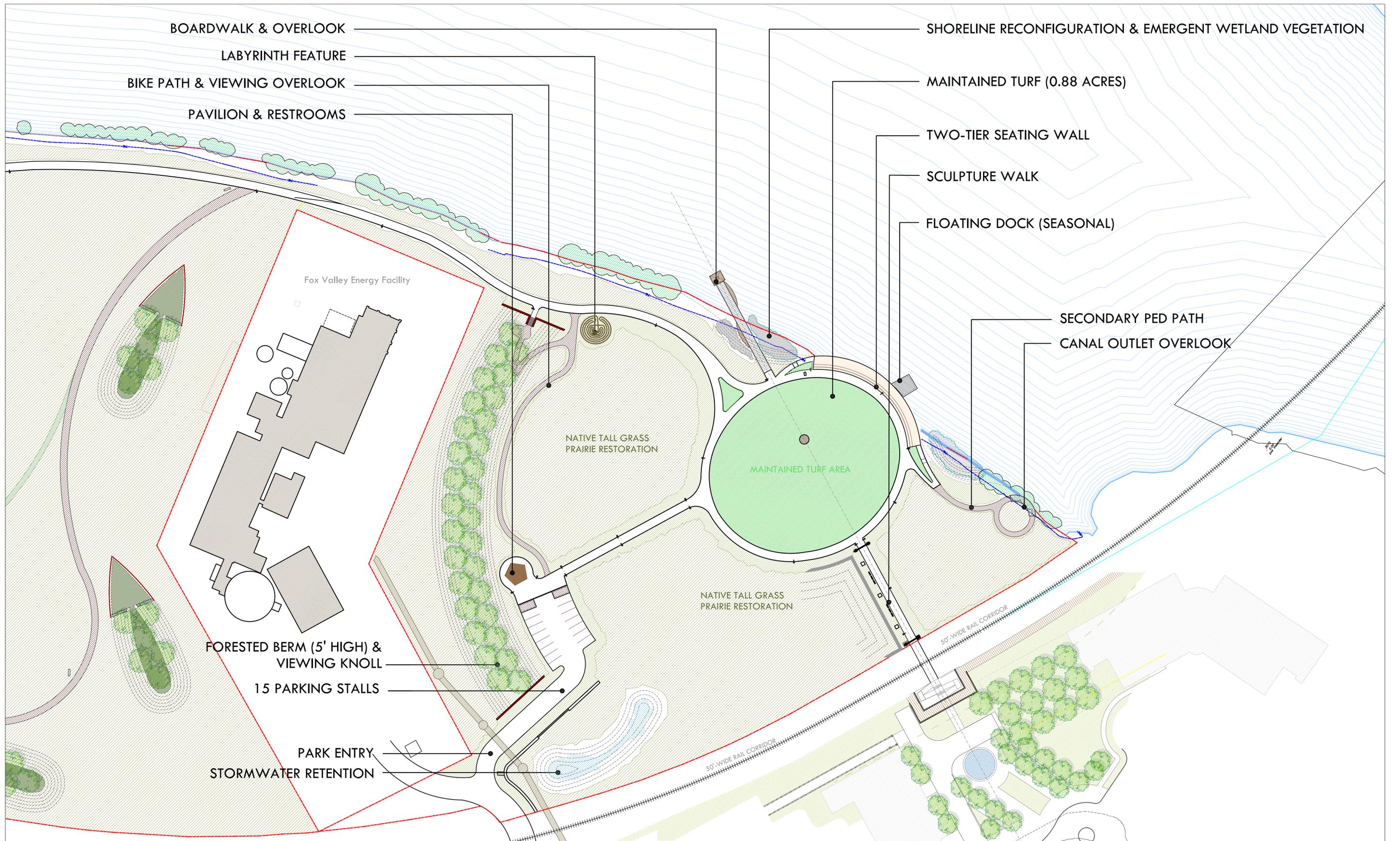
5. Incidental Improvements. Bicycle and pedestrian projects are broadly eligible for funding from most of the major Federal-aid programs. One of the most cost-effective ways of accommodating bicycle and pedestrian improvements is to incorporate them as part of larger reconstruction, new construction, and some repaving projects. Generally, the same source of funding can be used for the bicycle and pedestrian accommodation as is used for the street or highway improvement, if the bicycle and pedestrian accommodation is “incidental” in scope and cost to the overall project. Most bicycle and pedestrian accommodations within Wisconsin are made as incidental improvements.

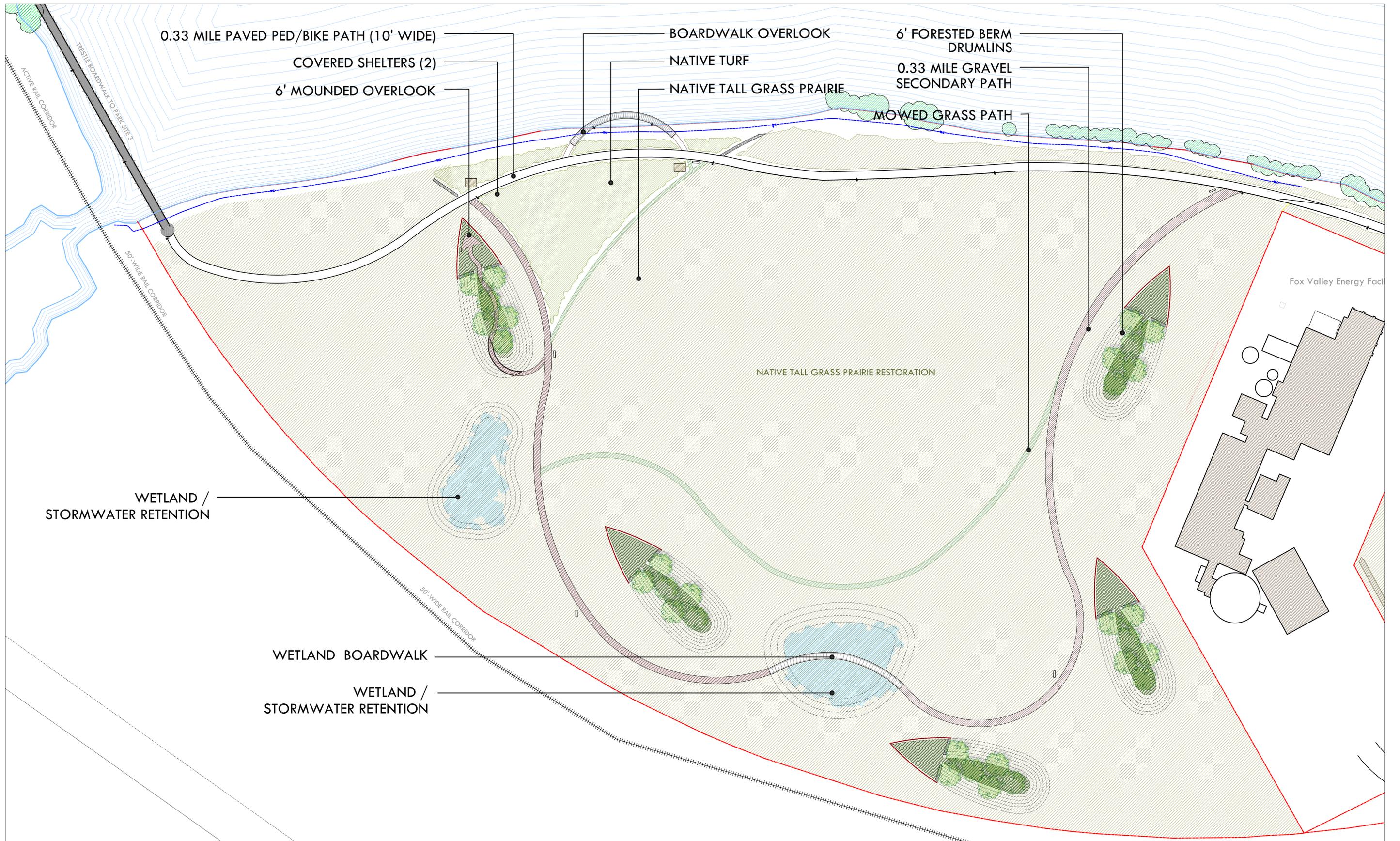
POTENTIAL FUNDING SUMMARY

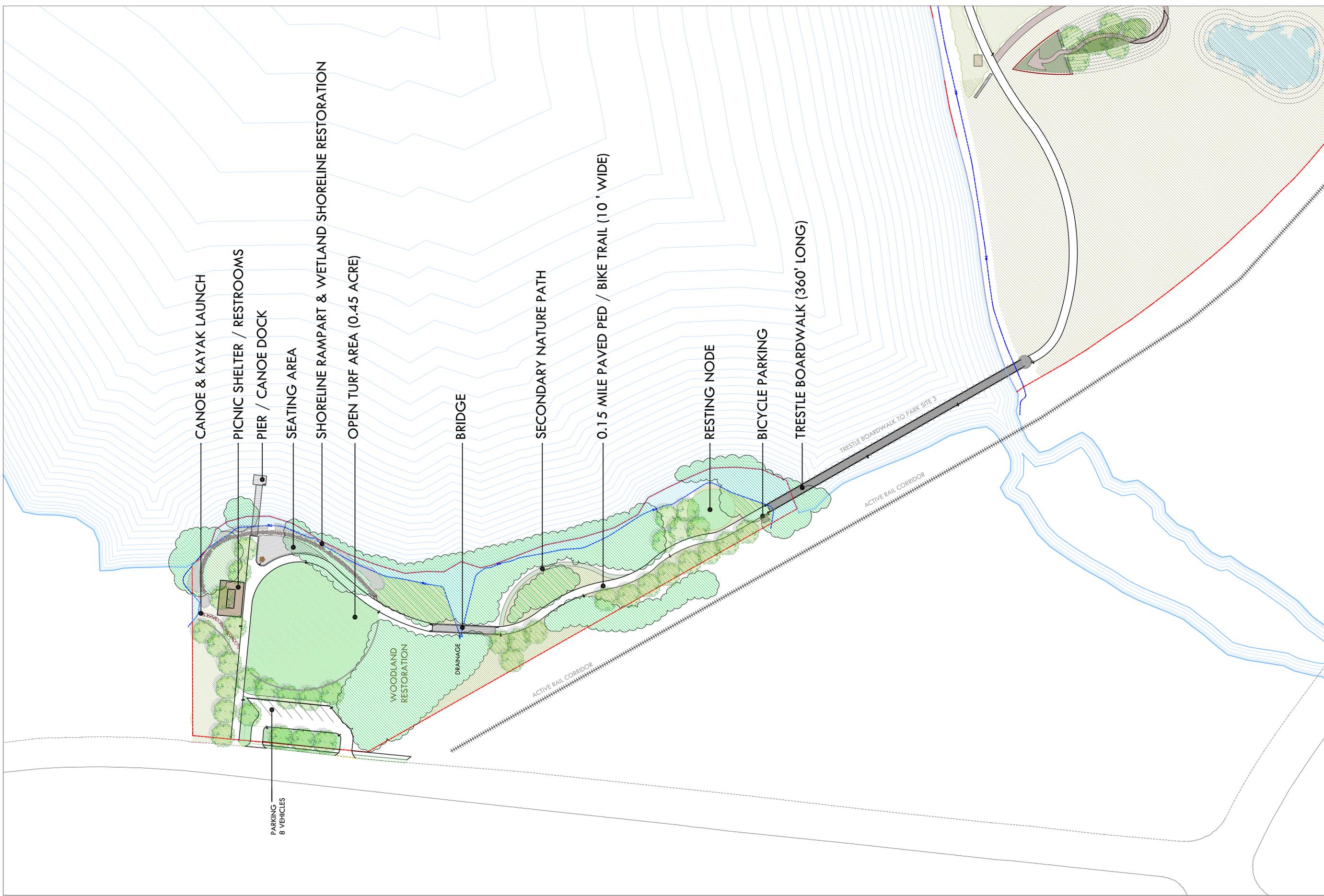
Grant Program	Potential Project Element to be Funded	Park Site No.	Admin.
Knowles-Nelson Stewardship Program	Multiple project elements that accommodate nature-based outdoor recreation facilities	All	WDNR
Aids for the Acquisition and Development of Local Parks (ADLP)	Acquisition of land or easement	Park Site No. 3 <i>(if land or easements need to be acquired to the north or within the site)</i>	WDNR
Urban Green Space (UGS)	Ecological restoration efforts	All	WDNR
Urban Rivers (URGP)	Shoreline enhancements along Neenah Slough and Little Lake Butte des Morts	All	WDNR
The Land and Water Conservation Fund (LAWCON)	All park facilities, including trails	All	WDNR
The National Recreational Trails Act (RTA)	Recreational trails; potentially boardwalks	All	WDNR
The Urban & Community Forestry Grant Program	Tree planting	All	WDNR
The Federal Transportation Equity Act for the 21st Century (TEA-21)	Commuter trails and pathways	All	WISDOT
Transportation Enhancement Program	Recreational Trails	All	WISDOT
Surface Discretionary Grant Program]	Commuter trails and pathways	All	WISDOT
Congestion Mitigation and Air Quality Improvement Program. (CMAQ).	Commuter trails and pathways	All	WISDOT
Surface Transportation Funds (Urban)	Recreational and Commuter Trails (along reconstructed streets)	Park Site No. 1 Entrance Main Street	WISDOT
Incidental Improvements		Park Site No. 3 (Lake Street)	



ALL PARK SITES
• Little Lake Butte des Morts Properties •







CANOE & KAYAK LAUNCH

PICNIC SHELTER / RESTROOMS

PIER / CANOE DOCK

SEATING AREA

SHORELINE RAMPART & WETLAND SHORELINE RESTORATION

OPEN TURF AREA (0.45 ACRE)

BRIDGE

SECONDARY NATURE PATH

0.15 MILE PAVED PED / BIKE TRAIL (10' WIDE)

RESTING NODE

BICYCLE PARKING

TRESTLE BOARDWALK (360' LONG)

PARKING
8 VEHICLES

WOODLAND
RESTORATION

DRAINAGE

ACTIVE RAIL CORRIDOR

TRESTLE BOARDWALK TO PARK SITE 3

ACTIVE RAIL CORRIDOR

