23-0264

PROPOSAL TO PROVIDE

Coastal Wetland Aviary Design at Lincoln Park Zoo

Prepared for:
City of Manitowoc and
Lincoln Park Zoological Society
March 17, 2023

MSA

March 17, 2023

Curt Hall, City Parks and Recreation Division Manager
City of Manitowoc
900 Quay Street
Manitowoc, WI 54220

Andy Janicki, LPZS Coordinator
Lincoln Park Zoological Society
1215 N. 8th Street
Manitowoc, WI 54220

Re: Lincoln Park Zoo Aviary Design Proposal

Dear Curt and Andy,

Thank you for the opportunity to provide a proposal to the City of Manitowoc for the Lincoln Park Zoo Aviary Design project. We understand the City seeks to upgrade and enhance a long underutilized asset at the Lincoln Park Zoo. The Zoo's proximity to the Little Manitowoc River is an undeniable asset and the development of a Costal Wetland Aviary would allow for greater visibility and educational opportunities which align with the Zoo's strategic plan.

Having worked with the City on the Lincoln Park Zoo Master Plan project, MSA Professional Services, Inc. (MSA) is well positioned to efficiently work with the City and Lincoln Park Zoological Society — as we are familiar with the City's planning and design process. We recognize this is an important public space to Manitowoc and are excited for the opportunity to continue our work improving your park and recreation program. One of the many reasons communities turn to MSA to assist with the development of outdoor public spaces, trail, park and recreation improvements is the breadth of our planning and design experience across the upper Midwest. Our Parks and Recreation Community of Practice (CoP) is eager to work with you to develop a great plan that combines best management practices with a sound vision and attainable goals.

For your project MSA and Native Range Ecological are partnering to provide a depth of experience in wetland and habitat restoration, waterfront and coastal recreation planning and design to develop an exciting, sustainable coastal habitat exhibit. Our team is comprised of skilled landscape architects, engineers and ecologists, and is further supported by MSA's deep bench of architects, planners, environmental and funding specialists, all of whom are committed to the success of your project. At MSA, we work hard to enable people to improve communities and are dedicated to seeing visions come to fruition.

We look forward to refining our approach collaboratively with you and developing a path through all phases of the project that fits the City's timing and budgeting needs. We welcome the opportunity to further discuss your needs and our approach. Please do not hesitate to contact me directly at (608) 216-2059 or dschmitt@msa-ps.com.

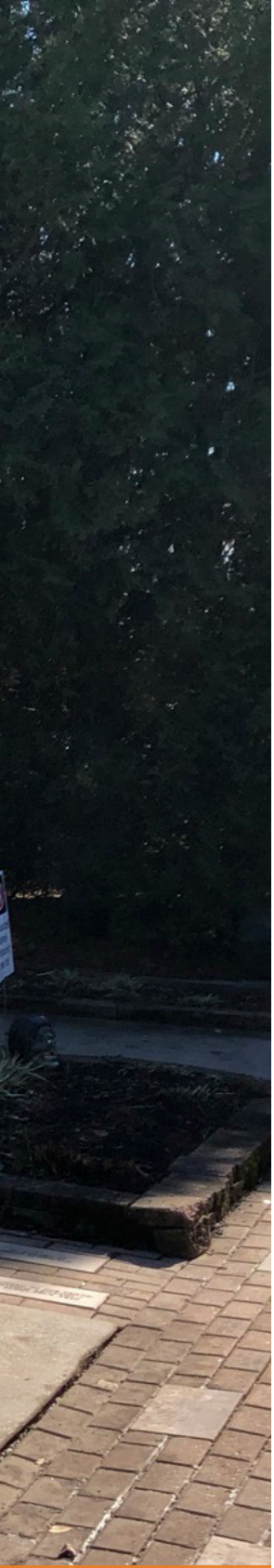
Sincerely,
MSA Professional Services, Inc.

Dan Schmitt, PLA, ASLA, CPSI, CPO
Project Manager

Raine Gardner, PE
Parks and Recreation Team Leader | QA/QC

MAIN OFFICE & CONTACT

1702 Pankratz Street Madison, WI 53704
Contact: Dan Schmitt, PLA, ASLA, CPSI, CPO
Phone: (608) 216-2059
Email: dschmitt@msa-ps.com



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OUR PURPOSE:

ENABLING PEOPLE TO POSITIVELY IMPACT THE LIVES OF OTHERS.
IN EVERY PROJECT. IN EVERY PLAN.

WHO WE ARE

MSA Professional Services, Inc. (MSA) specializes in the sustainable development of communities. We achieve this by building honest, open relationships that go beyond the project to become a trusted source of expertise and support for immediate challenges and long-term goals. Big or small, we do whatever it takes to meet each need, working to make communities stronger in the process. **It's more than a project. It's a commitment.**

HISTORY

MSA's roots reach back to 1919. Once a rural land survey company, **our firm now consists of more than 380 engineers, architects, planners, funding experts, surveyors, GIS experts and environmental scientists.** MSA excels at helping clients identify grant and funding sources and then delivering high-quality, cost-effective solutions.

OWNERSHIP

Our professionals think like owners because they are owners. When you partner with MSA, your team will be comprised of individuals who are invested in your success and committed to a high standard of performance. We're proud to be 100% employee owned.

TEAM

Our 380+ planners, landscape architects, engineers, architects, surveyors, funding specialists, and environmental professionals are dedicated to your success. While you know the faces behind your projects, we are a team that works as one to support our clients. When you work with MSA, you're not just working with individuals—you're working with all of us.

RECOGNITION

Since 2017, we've been recognized throughout the Midwest with more than 33 industry awards. And, we're just getting started. When you partner with MSA you know you're in good hands.

POSITIVE IMPACT

Finding funding for projects is what we do. We know projects and plans are no good to you if they don't work toward implementation. We get creative. And, it's led to securing over $500 Million in grants and low-interest loans to offset costs for our partner communities.

CLIENT EXPERIENCE

The pillar of our success is seeing our clients succeed. The graphic below shows the percentage of clients who say MSA met or exceeded their expectations based on the following categories.

98% ACCURACY

96% HELPFULNESS

99% QUALITY

98% RESPONSIVENESS

98% SCHEDULE

97% SCOPE & FEES

NATIVE RANGE ECOLOGICAL | FIRM OVERVIEW

Native Range Ecological (NRE) was founded in October of 2022. Prior to starting Native Range Ecological, Clay Frazer and Dan Fuhs worked together for ten years managing and building Eco-Resource Consulting (ERC) one of Wisconsin's most reputable ecological consulting and restoration businesses at the time. Clay and Dan started NRE in the fall of 2022 with a single guiding principle in mind; "Truly sustainable restoration designs, specifications, and ecological restoration plans can only come from those who have actually done the work".

Managing a small ecological consulting business means more than just offering a higher level of responsiveness and customer service than large engineering-based firms. It also means getting out of the office and rolling up your sleeves in the field whenever you get the chance. This keeps field skills sharp and lends itself to restoration plans, specifications, and designs that are more practical, realistic, pragmatic, straightforward, and economical for our clients. Truly viable and sustainable restoration plans are written by those who have actually been in the trenches and done the work they are describing on paper. This seems intuitive, but in today's world, larger firms tend to "replicate and boilerplate" their plans and specifications, and restoration plan authors rarely have a solid background in the implementation, management, and monitoring of complex ecological restoration projects.

Approach and Philosophy

NRE's singular goal is to foster biodiversity. Species richness and diversity are under attack from every possible angle in many of today's ecological landscapes. Native Range Ecological embraces an "ecosystem approach" to restoration, carefully considering every part of the complex web that comprises ecological landscapes.

Once a restoration plan is finalized and approved by the client, our real work begins. We write realistic and attenable plans. This is not done by climbing an ivory tower, writing a plan in a vacuum, and then handing off the deliverable plan to the client and running.

Once a plan is completed, we facilitate each step of implementation. By tapping into our extensive network of partners, we can oversee restoration projects from the pre-permit meeting and the first day of site preparation to the final permit sign-off and complete establishment of the project. Beyond the establishment phase of a project, we offer annual vegetation monitoring and reporting services to ensure project longevity and regulatory compliance (if applicable).

Native Range Ecological (NRE) is built on a single foundational principle: time in the field equates to more valuable ecological planning. Continuous work in the field keeps our botany and ecological restoration skills sharp which lends itself to better restoration plans, specifications, and designs that are more practical, pragmatic, and economical for our clients. This "from the trenches" experience allows NRE to write attainable management plans. While this seems intuitive, many restoration firms often recycle plans and specifications instead of creating a new and customized plan for each specific project. Even though there might be similarities between projects, each project presents unique challenges and ecological attributes that must be addressed specifically. Developing management and restoration plans which outline specific actions for specific sites is critical to foster truly sustainable restoration.

One of NRE's main goals is to foster biodiversity. Ecological landscapes are at the mercy of innumerable negative impacts that result in reduced species richness and diversity. Now, more than ever, there is a need for true resiliency in ecological systems. Native Range Ecological embraces an "ecosystem approach" to facilitate natural process-based restoration. We carefully consider every part of the complex environment that comprises ecological landscapes.

Once a restoration plan is completed, NRE can facilitate and oversee each step of project implementation, or we can train landowners/land managers to implement restoration work on their own. NRE has a vast network of natural resource partners that conduct work under our oversight. Part of the implementation process includes the oversight and monitoring of restoration projects throughout the implementation phase, until the project is completed, established, and approved.

Services Provided

- Ecological and Wildlife Habitat Assessments
- Vegetation Surveys
- Rare and Threatened Species Surveys
- Prescribed Fire Planning
- Invasive Species Management
- Wetland, Pond, and Stream Restoration
- Planning, Permitting and Designing for Prairie, Wetland, and Forestry Restoration
- Geographic Information Systems (GIS)
- Drone Surveying
- Stormwater and Erosion Control Inspections and Management
- Beaver Coexistence

ORGANIZATIONAL CHART

Our team is staffed to handle the needs of your project. We are a group of experienced landscape architects, engineers and surveying specialists backed by more than 380 other technical specialists who are accustomed to working together on similar projects. Our familiarity with each other allows for seamless communications and enables us to meet your workload and timeline requirements. **Specifically for this project, we have chosen a team that reflects the needs for this project, including familiarity with similar-sized projects, and the expertise to explore all viable alternatives.**

Dan Schmitt, PLA, ASLA, CPSI, CPO
Project Manager

Raine Gardner, PE
Parks and Recreation
Team Leader | QA/QC

Jeff Felland, PE, AWD
Wetland Delineation
Hydraulic Modeling

Emma Wenman, ASLA
Landscape Designer

Subconsultant
Native Range Ecological

Daniel L. Fuhs
Principal Ecologist

Clayton M. Frazer
Principal Ecologist

Dan Schmitt, PLA, ASLA, CPSI, CPO

PROJECT MANAGER

Years Experience: *12*

Project Role: *Dan will be primary contact for the project team and lead the planning and design efforts, leveraging experience developing the Zoo master plan in 2020.*

Dan is a professional landscape architect and plays a key role in each of our recreation-based projects. His experience with on-site construction management provides a valuable understanding of construction detailing and construction workflow including permitting and local code and zoning requirements. His academic focus was to design enriching outdoor spaces for children and he enjoys working on playground projects and exploring techniques for implementing Natural Play. His experiences provide a comprehensive knowledge of site inventory, concept development, landscape plans, planting design and construction details. Dan is currently serving as chair of MSA's Parks and Recreation Community of Practice, a mechanism whereby professionals practicing the same discipline gather to share knowledge and best practices, ensuring our clients benefit from the collective expertise of our entire firm.

Education

M.A., Landscape Architecture
University of Wisconsin-Madison

B.S., Landscape Architecture
University of Wisconsin-Madison

Registration | Certifications

Professional Landscape Architect, WI, IL, MN
American Society of Landscape Architects
Certified Playground Safety Inspector (CPSI)
Certified Pool & Spa Operator (CPO)

Selected Project Experience

- Lincoln Park Zoo Master Plan, Manitowoc, WI
- Mandt Park Master Plan, Stoughton, WI
- Racetrack Park Master Plan, Stoughton, WI
- 51 West Development Parks Master Plan, Stoughton, WI
- Virgin Lake Trail, Stoughton, WI
- Riverfront Park, Sauk City, WI
- Fireman's Park, Verona, WI
- Lowe Park, Marion, IA
- Jones Park, Appleton, WI
- Riverfront Pocket Park, Sauk City, WI

Raine Gardner, PE

PARKS AND RECREATION TEAM LEADER
QA/QC

Years Experience: *18*

Project Role: *Raine will serve as technical quality control and lead design of boardwalk structures.*

As our Parks and Recreation Practice Leader, Raine leads a team of landscape architects, waterfront development specialists and project engineers. She has worked on a variety of projects including recreational parks and trail projects, waterfront development/access, river corridor planning, stormwater, water main, and sanitary sewer design, roadway reconstruction, lake dredging, and streetscaping plans. In addition to project planning and design, Raine has aided in construction management, right of way and easement acquisition, project permitting, wetland mitigation work, and GIS mapping. She helps clients apply for local, state, and federal funding grants and assistance. Clients also rely on Raine for project planning/concepts and estimating assistance, project considerations to lower maintenance and operational costs, zoning administration and guidance.

Education

M.S., Civil Engineering
University of Wisconsin-Madison

B.S., Civil Engineering
Michigan Technological University

Registration

Professional Engineer, WI, MI, IA, MN, OH

Selected Project Experience

- Swan Park Master Plan and Development, Beaver Dam, WI
- Mandt Park Master Plan, Stoughton, WI
- Racetrack Park Master Plan, Stoughton, WI
- 51 West Development Parks Master Plan, Stoughton, WI
- Wisconsin Rapids Recreation Complex, Wisconsin Rapids, WI
- Riverside Park, Mauston, WI
- Vilas Park Master Plan, Madison, WI
- Riverside Park and Riverwalk Multi-Use Trails, Mauston, WI
- Fireman's Park Improvements, Verona, WI
- Splash Park at Mead Field, Wisconsin Rapids, WI
- Marathon County CORP, Marathon County, WI
- Village Forest Park, West Baraboo, WI
- Erb Park & Pool, Appleton, WI
- Thomas G. Rowe Park Master Plan, Onalaska, WI
- Sauk City Riverfront Park, Sauk City, WI

Jeff Felland, PE, AWD

WETLAND DELINEATION
HYDRAULIC MODELING
Years Experience: *10+*

Project Role: *Jeff will will lead the hydraulic modeling efforts to make sure the proposed improvements meet DNR/ACOE requirements.*

Jeff is a member of MSA's dedicated water resources engineering team and has more than 10 years of experience as a civil engineer. He has worked on many stream assessment and restoration projects throughout the Upper Midwest. Jeff is experienced with stormwater modeling and design, environmental permitting, open channel hydraulic modeling, AutoCAD, GIS and surveying. Jeff is also a WDNR recognized wetland delineator.

Education

B.S., Civil and Environmental Engineering; Zoology & Conservation
University of Wisconsin-Madison

Registration | Certifications

Professional Engineer, WI
WDNR Assured Wetland Delineator

Selected Project Experience

- Vilas Park Master Plan Environmental, Madison, WI
- Wisconsin Rapids Recreation Complex, Wisconsin Rapids, WI
- Fireman's Park, Verona, WI
- Witter Park, Wisconsin Rapids, WI
- Middleton Hills Park Trail, Middleton, WI
- August Derleth Park Redevelopment Project, Sauk City, WI
- Green Lake Water Quality Master Plan, Green Lake, WI
- Pheasant Branch Creek Repair at Park Street, Middleton, WI
- Searles Creek Bank Stabilization, Brodhead, WI
- Baraboo River Bank Stabilization, Sauk County, WI
- Stormwater Management Facility Retrofit, Middleton, WI
- Regional Stormwater Facility Study, Middleton, WI
- Stormwater Management Facility Retrofit, Cleveland, WI
- Public Library Stormwater Management Plan, Belleville, WI
- Water Tower Court Site Stormwater Management Plan, Watertown, WI
- Main Street Culvert Sizing, Omro, WI
- CTH D Storm Sewer Design, Princeton, WI
- Spruce Street Storm Sewer Design, Abbotsford, WI
- Stormwater Master Plan, Stockton, IL

Emma Wenman, ASLA

LANDSCAPE DESIGNER
Years Experience: *1*

Project Role: *Emma will provide design assistance to the project team.*

From site-specific design to master planning, Emma has a wide interest in landscape architecture. At MSA, she continues to build her experience developing project inventory and analyses, conceptual designs, landscape planting plans, and master planning documents.

Education

B.A., Landscape Architecture
University of Wisconsin-Madison

Certification

American Society of Landscape Architects

Selected Project Experience

- 51 West Development Parks Master Plan, Stoughton, WI
- Crawford Park Master Plan, Caledonia, WI
- Oak Street Overlook, Baraboo, WI
- Park Master Plans, Ripon, WI
- Senior Capstone: Downtown Redevelopment Plan, Campbellsport, WI*
- Rice Lake Master Plan, Rice Lake, WI*
- Wisconsin Historical Society Downtown Development, Madison, WI*
- Neighborhood House Community Center Rain Garden, Madison, WI*

**Denotes experience prior to MSA.*

Daniel L. Fuhs

PRINCIPAL ECOLOGIST

Years Experience: *12*

NATIVE RANGE ECOLOGICAL

Project Role: *Daniel will lead development of the vegetation management plan and habitat recommendations.*

Daniel Fuhs is a Co-owner and Principal Ecologist with Native Range Ecological, LLC, based in Wisconsin. Mr. Fuhs has over 12 years of wildlife research and ecological restoration experience with various employers. Mr. Fuhs was employed as a Senior Biologist with Eco-Resource Consulting, Inc. for 10 years, a Restoration Technician with Applied Ecological Services, a Field Technician with the USFWS, a Biological Science Technician with UW-Madison, and a Wildlife Technician with Texas Tech University. Mr. Fuhs' areas of expertise include prairie, wetland, woodland, streambank restoration, and other natural community restoration and management. Mr. Fuhs has experience conducting vegetation monitoring, environmental report drafting, wildlife habitat/land resource assessments, endangered resources reviews, vegetation monitoring, GPS data collection, and permit applications. Mr. Fuhs is also a fully licensed and insured drone pilot. Mr. Fuhs currently manages projects across the Midwest. Mr. Fuhs' field expertise includes ecological restoration planning, vegetation assessments, GIS & Spatial Data Analysis, drone surveys, performance standard attainment, and ecological monitoring. Mr. Fuhs has managed native and non-native species, timber stand improvement projects, drone surveys, and resource mapping.

Education

B.S., Biology/Wildlife Ecology
University of Wisconsin-Stevens Point

Areas of Specialization

- Wildlife Monitoring
- Vegetation Surveys
- Ecological Restoration and Management
- Streambank Restoration
- Native Prairie Adaptive Management
- Native Vegetation Restoration, Enhancement, Maintenance, Monitoring, & Assessment
- Terrestrial Vegetative Invasive Species Management and Eradication
- Wildlife Habitat Restoration and Enhancement on Landscape Scale
- Land Management Planning, Plan Implementation and Ecological Monitoring
- GIS, Spatial Analysis & Remote Sensing

Clayton M. Frazer

PRINCIPAL ECOLOGIST

Years Experience: *20+*

NATIVE RANGE ECOLOGICAL

Project Role: *Clayton will assist with development of the vegetation management plan and habitat recommendations.*

Mr. Frazer has worked in the natural resources management field for more than 20 years for federal and state agencies, non-profit organizations, and within the private sector as a consultant and professional project manager. Mr. Frazer has proposed, planned, budgeted, implemented, overseen and monitored hundreds of land enhancement or ecological restoration projects. These projects have been implemented for a wide array of clients on a broad spectrum of land classifications and ecological landscapes including private, corporate, municipal, and non-profit owned lands. Projects that Mr. Frazer has coordinated and managed have been focused on native plant restoration (landscape scale cropland conversions, bio-infiltration/storm water retention, and riparian shoreline stabilization), woodland restoration (ecological based harvesting, re-forestation and timber stand improvement) and invasive species abatement (control, eradication, and replacement with sustainable native species). Mr. Frazer's field expertise includes project logistics coordination, project specification drafting, on-time and on-budget implementation, performance standard attainment, and ecological monitoring.

Education

B.S., Science Wildlife Ecology/Botany
Southern Illinois University Carbondale

Areas of Specialization

- Ecological Assessment
- Ecological Restoration Planning
- Invasive Species Management
- Native Vegetation Restoration, Enhancement, Maintenance, Monitoring, and Assessment
- Wildlife Habitat Assessment, Restoration and Enhancement
- Shoreline, Wetland, and Streambank Restoration
- Steep Slope Stabilization
- Land Management Planning, Permitting, Environmental Compliance, and Restoration Monitoring
- Stormwater Management and Erosion Control
- Green Infrastructure Development
- Prescribed Fire Planning and Implementation
- Fire Ecology
- Restorative Agriculture
- Human-Beaver Conflict Resolution

PARKS AND WATERFRONT MASTER PLANS

How residents perceive the quality of life within their community can be attributed to the quality of parks and recreational facilities available to them. As new recreational opportunities emerge, and the population and age of Americans continues to diversify, the demand for both traditional and non-traditional recreational facilities surges. In addition, recreational-based tourism continues to proliferate as an important component of local and state economies.

In short, whether fueled by a love of the great outdoors or determination to choose a healthier lifestyle, more Americans are utilizing a wider variety of park and recreational resources. MSA has helped numerous clients meet this growing demand through the planning, development and revitalization of recreational amenities, including parks, waterfront developments, marinas, aquatic facilities, multi-use paths and athletic facilities. Our park master plan experience includes the following projects.

PARK MASTER PLANNING EXPERIENCE

- Carson Park Master Plan, Eau Claire, WI
- Birch Lake Park Master Plan, Barneveld, WI
- 22-Acre Park Master Plan, Cottage Grove, WI
- Village Forest Park, West Baraboo, WI
- Park Master Plan, Germantown, WI
- Racetrack Park Master Plan, Stoughton, WI
- Mandt Park Master Plan, Stoughton, WI
- Vilas Park Master Plan, Madison, WI
- Erb Park, Appleton, WI
- Riverfront Park, Wisc. Rapids, WI
- Wisconsin Rapids Aquatic Center, Wisc. Rapids, WI
- Webb Park, Reedsburg, WI
- Baraboo River Corridor Water Trail Planning Project, (Reedsburg, Wonewoc, Hillsborough, Union Center, LaValle, Hillsboro, Rock Springs, Elroy, WI)
- Kautzer Park Master Plan Update, Nekoosa, WI
- Swan Park Master Plan, Beaver Dam, WI
- Rowe Park Master Plan, Onalaska, WI
- Gramercy Park Master Plan, East Dubuque, IL
- Fireman's Park Master Plan Update, Verona, WI
- Mitchell Park Master Plan, Guthrie Center, IA
- Park Master Plan and CORP, North Freedom, WI
- Lowe Park, Marion, IA
- Memorial Park Master Plan, Lexington, MN
- Park Master Plan, Annawan, IL
- Ellen Kort Peace Park Master Plan, Appleton, WI
- Blood Run National Historic Landmark Master Plan, Larchwood, IA*
- Hawn's Bridge - Terrace Mountain Resort Master Plan, Raystown Lake, PA*
- Muskingum Watershed Conservation District Master Plan, New Philadelphia, OH*
- Ashland Waterfront Master Plan, Ashland, WI*
- Bolz Conservancy Master Plan, Waunakee, WI*
- Chicago Parks District Harbors Master Plan, Chicago, IL*
- Liberty Park Master Plan, Clarksville, TN*
- Crossridge Park Master Plan, Milton, WI*
- Dillon Waterfront Master Plan, Dillon, CO*
- Cherry Creek State Park Marina Master Plan, Denver, CO*
- Chatfield State Park Marina Master Plan, Littleton, CO*
- Green Bay Botanical Garden Master Plan, Green Bay, WI*
- Greens Coulee Park Master Plan, Onalaska, WI*
- Honey Creek Resort State Park Master Plan, Rathbun, IA*
- Kohl Park Master Plan, Milwaukee, WI*
- Lakeshore State Park Master Plan, Milwaukee, WI*
- Prophetstown State Park Master Plan, West Lafayette, IN*
- Sand Island Recreational Area Master Plan, Honolulu, HI*
- Northern Great Lakes Regional Visitor Center, Ashland, WI*

*Denotes experience of Dan Williams prior to MSA.

LINCOLN PARK ZOO MASTER PLAN

MANITOWOC, WI

MSA assisted the City and Lincoln Park Zoological Society with creation of a master plan for the Lincoln Park Zoo. The plan included an evaluation of existing site features, development of two area relationship diagrams, one concept drawing with character images, and planning level cost estimates. MSA provided strategic planning to assist the City in planning for future improvements, including the Zoo as well as the proposed RV campground on parcels adjacent to the Zoo and adventure park within the existing Lincoln Park Property. The final master plan aids the City in the development of the future budgets to identify project phasing including projects such as the aviary and mountain lion exhibit. The plan provides the foundation for identifying key projects and supports future funding initiatives for the improvements as approved by the City.

REFERENCE

Curt Hall, City Parks and Recreation Division Manager
City of Manitowoc
(920) 686-3060
chall@manitowoc.org

PROJECT TIMEFRAME

2020-2021

FINAL COST OF PLAN

$14,800

ORIGINAL COST OF PLAN

$14,800

KEY STAFF

Dan Schmitt, Raine Gardner

51 WEST DEVELOPMENT PARKS MASTER PLAN

STOUGHTON, WI

MSA assisted the City of Stoughton with the development of master plans for two proposed neighborhood parks in the 51 West Development (Outlots 3 and 6). The final master plan for Outlot 3 captures active and passive opportunities for neighborhood and other site users, including a central shelter with restrooms, park benches, bike racks, basketball and pickleball courts, multi-use sports fields and yard games, an accessible playground, and a shaded area for picnic tables. These site elements were connected through a series of pathways, and a multi-use path circles the park, connecting to a wider City of Stoughton bike path plan. The final master plan for Outlot 6 displays more passive forms of recreation, including sprawling paths and trails, native prairie plantings, a playground with natural play elements, benches and bike racks. Continuing the Virgin Lake Trail, a bike and pedestrian pathway winds through the site, intersecting site amenities, prairie walking trails and a small shelter. Near the shelter, this park will include a bike repair station. Finally, in the northeast part of the site, stormwater detention basins are set aside for development stormwater management.

REFERENCE

Dan Glynn, Parks & Recreation Director
City of Stoughton
(608) 873-6746
dglynn@ci.stoughton.wi.us

PROJECT TIMEFRAME

2022 - 2023

FINAL COST OF PLAN

$42,500

ORIGINAL COST OF PLAN

$42,500

KEY STAFF

Dan Schmitt, Raine Gardner, Emma Wenman

ADDITIONAL STOUGHTON PROJECTS

PROJECT NAME
Mandt Park Master Plan

PROJECT TIMEFRAME
2019-2020

FINAL COST OF PLAN
$27,770

ORIGINAL COST OF PLAN
$27,770

KEY STAFF
Dan Schmitt, Raine Gardner

PROJECT NAME
Racetrack Park Master Plan

PROJECT TIMEFRAME
2020-2021

FINAL COST OF PLAN
$30,000

ORIGINAL COST OF PLAN
$30,000

KEY STAFF
Dan Schmitt, Raine Gardner

PROJECT NAME
Virign Lake Trail Extension Deisgn

PROJECT TIMEFRAME
2022-current

FINAL COST OF PLAN
In progress

ORIGINAL COST OF PLAN
$49,100

KEY STAFF
Dan Schmitt, Raine Gardner, Emma Wenman

REFERENCE
Dan Glynn, Parks & Recreation Director | City of Stoughton | (608) 873-6746 | dglynn@ci.stoughton.wi.us

SWAN PARK

BEAVER DAM, WI

Swan Park in the City of Beaver Dam, Wisconsin, is the community's most heavily used park. Encompassing 10.5 acres and containing a play area, amphitheater/ bandshell, wading pool, picnic shelters, lagoons, sport courts and the beautiful 1880s-era Vita Spring Park Pavilion, it is a favorite destination for summer concerts, fairs and recreation.

Today, Swan Park is undergoing a significant restoration to help revitalize the historic property. Upgrades are being constructed in stages, all stemming from the Swan Park Master Plan developed by MSA in 2019-2020. MSA landscape architects and park and recreation specialists conducted a comprehensive analysis of the park and led a robust public engagement program to collect resident opinion about the future of Swan Park. It was clear; the community wanted to restore the crumbling lagoons and funnel park users back to the water's edge for a more intimate experience. It also wanted to decommission the deteriorating public pool and replace it with a new splash pad, extend trails throughout the property, improve ADA access, and make future upgrades to the park's pavilion and shelter.

As of December 2022, restoration of the lagoons is nearly complete. Visitors will find a beautiful new aesthetic to replace the crumbling masonry stone lagoon walls. Stepping stones bring park goers down to the water's edge and a cascading stone waterfall now inhabits the central island of the western lagoon. The waterfall replaces a fountain that had fallen to disrepair and provides a new aesthetic focal point, while also improving lagoon aeration and water quality. Within the eastern lagoon, a floating fountain has been added to assist with aeration, as the prior lagoons were prone to unhealthy algae and weed growth. Two new launch ramps are available for those interested in kayaking or canoeing through the lagoons' waters, and (weather permitting) the community intends to open the lagoons for ice skating once again in the winter. The upgraded park landscape has been thoughtfully planted with sod and native perennials. And the infrastructure improvements have also been fully wired with electric to support ambient lighting, holiday and event lighting display opportunities.

Phase two of the project consists of constructing a new splash pad at the site of the old public wading pool. The splash pad is a recirculating design, which provides the ability to reuse water in a more environmentally friendly and cost-effective way. In addition, because splash pads have a zero-depth entry (as opposed to a pool), they provide communities members of all ages and abilities the means to have a safe and refreshing aquatic experience. Phase three will improve and extend trails throughout the property and will make upgrades to Swan Park's playground, park pavilion and shelter. Construction of the first two phases is scheduled to be complete in 2023.

REFERENCE

Todd Janssen, Director of Engineering,
(920) 887-4600 x326
tjanssen@cityofbeaverdam.com

PROJECT TIMEFRAME

2019-ongoing

FINAL COST OF PLAN

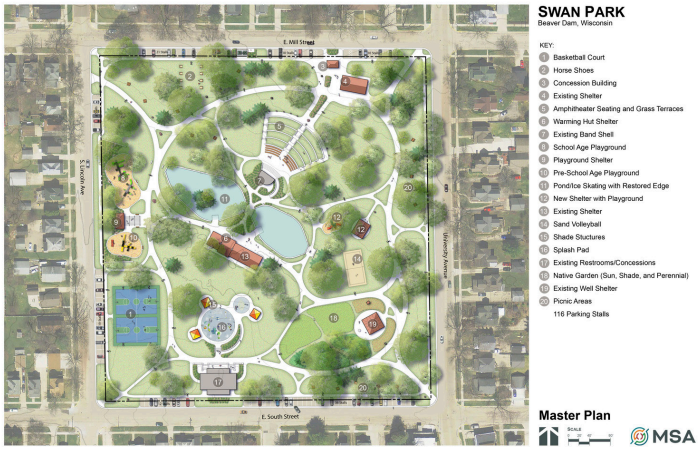
Ongoing, estimated $993,000 - owner approved scope additions

ORIGINAL COST OF PLAN

$960,000

KEY STAFF

Dan Schmitt, Raine Gardner



ADDITIONAL BEAVER DAM PROJECTS

PROJECT NAME
Rotary Park Wall Replacement

PROJECT TIMEFRAME
2022

FINAL COST OF PLAN
Ongoing

ORIGINAL COST OF PLAN
$250,000

KEY STAFF
Dan Schmitt, Emma Wenman

PROJECT NAME
Edgewater Park & Crystal Lake Park Master Plan

PROJECT TIMEFRAME
2022-2023

FINAL COST OF PLAN
$23,675

ORIGINAL COST OF PLAN
$23,675

KEY STAFF
Dan Schmitt, Raine Gardner, Emma Wenman

PROJECT NAME
Swan Park Splash Pad

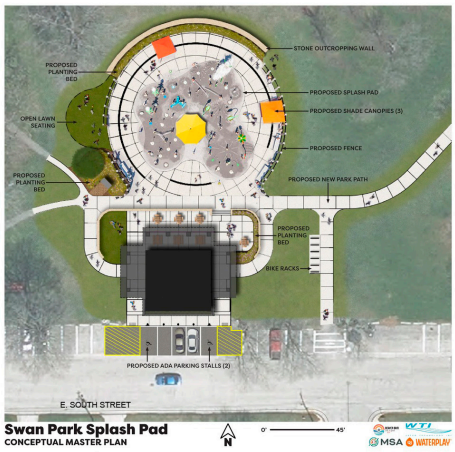
PROJECT TIMEFRAME
2022-2023

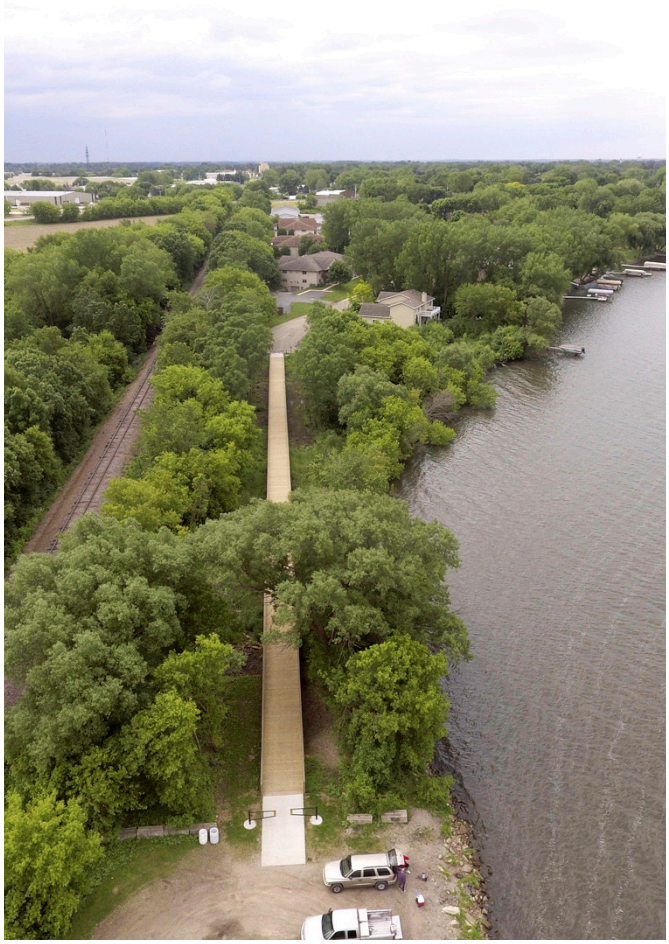
FINAL COST OF PLAN
Ongoing

ORIGINAL COST OF PLAN
$1,528,000

KEY STAFF
Dan Schmitt, Raine Gardner, Emma Wenman

REFERENCE
Todd Janssen, Director of Engineering | City of Beaver Dam | (920) 887-4600 x326 | tjanssen@cityofbeaverdam.com





Having led the development of the 2021 Lincoln Park Zoo Master Plan alongside the City and Lincoln Park Zoological Society (LPZS) MSA is uniquely suited to understand the operational and functional needs of the Zoo both as an asset of the City Parks System and as an educational tool. The aviary project fulfills several of the strategic goals for the Zoo including opportunities to 1) Provide Exceptional Habitat and Animal Care, and 2) Expand Opportunities for Learning Strategies - specifically through expanding animal exhibits that are native to Lake Michigan and the Little Manitowoc River. This could include fish, birds or other wildlife.

The team of MSA and Native Range Ecological (NRE) provide experience in developing unique, ecologically sensitive projects across Wisconsin. From boardwalk design and hydraulic modeling to habitat restoration and vegetation management plans, our team can plan and design an exhibit that provides a functional habitat combined with exceptional educational tool for Zoo staff to expand outreach to the community through understanding of local plants and animals as outlined in the strategic plan.

Specific to the restoration and enhancement of wetland habitat, our team embraces an “ecosystem approach” to facilitate natural process-based restoration, carefully considering every part of the complex environment that comprises ecological landscapes.

Looking towards construction, once a restoration plan is completed, our team can facilitate and oversee each step of project implementation, additionally providing training to landowners/land managers to implement restoration work on their own.

Main Exhibit Area

PROJECT APPROACH | SCOPE OF SERVICES

A. PROJECT DESCRIPTION:

The proposed site for the Coastal Wetland Aviary is unused exhibit space directly adjacent to the Little Manitowoc River which has an outlet into Lake Michigan within one half mile. The land has been neglected for several years and contains an array of outdated infrastructure, including a water drainage system that travels through two man-made exhibit ponds before discharging directly into the Little Manitowoc River. This drain often clogs, particularly during large precipitation events, which leads to flooding on pedestrian paths and within current exhibits.

The specific scope of work includes the following activities:

- Assessment of current site conditions.
- Modeling of the Little Manitowoc River for associated shoreline and built improvements.
- Upgrading fencing.
- Coastal wetland restoration and habitat development.

B. SERVICES TO BE PROVIDED BY MSA/NRE:

- **Site Survey & Geotechnical Exploration**
  - MSA will perform field topographic survey and data collection of the existing project area including the entire area shown on the proposed master plan. Survey work will extend beyond limits of proposed improvements to allow for proper evaluation of utilities, drainage and pavement transitions.
  - MSA will solicit quotes from up to three (3) geotechnical firms to preform soil borings at the site and develop a geotechnical report to assist MSA with the overall design. The City will select a quote to award the work and directly contract with the selected firm for the work. **Cost for geotechnical investigation and analysis is not included in the MSA fee**.
  - City to provide MSA any applicable information pertaining to the existing site, such as existing site/building plans, wetland delineations, utility maps/information and any other information that could be helpful to the design/ development of the site.

- **Wetland Delineation Services**
  - Per DNR Surface Water Data Viewer (SWDV) online mapping data, the area between the existing sidewalk bordering the old deer enclosure and the Little Manitowoc River shoreline has mapped wetlands present and other areas with high potential for wetlands as indicated by the wetland indicators on the DNR SWDV. Additionally, the entire area designated for wetland enhancement lies within the Regulatory Floodway (Zone AE). Given the wetland rehabilitation and enhancement proposed as part of the creation of the Coastal Wetland Aviary, any wetlands present are expected to be functionally lifted, and potentially additional wetlands created. Therefore, a wetland delineation may potentially not be required as part of this project.
  - MSA will confirm with DNR staff whether a wetland delineation is required at the project onset. Should a wetland delineation be required MSA's DNR-recognized Assured Wetland Delineator, Jeff Felland, will conduct a wetland delineation for the portion of the site where the Coastal Wetland Aviary is proposed as well other areas pertinent to the overall project scope where wetland potential is present as indicated on the SWDV mapping. The field delineated boundaries will be mapped using a Trimble R2 device (sub-meter accuracy) and field findings summarized in a wetland delineation report submitted to the DNR. This report will serve as a vital component to DNR and U.S. Army Corps of Engineer (USACE) permitting. Wetland boundaries will not be marked/flagged in the field.

- **Flood Extent & Inundation Depth Determination**
  - MSA will review the FEMA FIS hydrologic and hydraulic (H&H) model of the Little Manitowoc River. The currently available model from the DNR SWDV — or a more current version created by the City consultant working on the pedestrian bridge crossing of the river just upstream of the Zoo — will be reviewed to determine the flood extents and depth of inundation associated with different flood event recurrence intervals (ie storm events).
  - Assumptions: The City will provide the H&H model from the pedestrian bridge crossing consultant.

- **Stormwater Management & Erosion Control Design**
  - MSA will analyze existing site drainage and evaluate capacity of the existing storm sewer system, inclusive of existing ponds, outlets and culvert crossings at the east sidewalk to determine current capacity. Site hydrology via watershed delineations, land uses and soil types will be developed to determine flow rates to analyze existing storm sewer capacity and, if necessary, size new culverts, inlets or storm sewer components.
  - MSA will design post-construction stormwater management features to enhance runoff water quality and provide peak runoff rate control to the maximum extent practicable. Best efforts will be taken to design features that will ensure the long-term functionality of

the stormwater management system under challenging conditions within a floodway, and which can be incorporated into the Coastal Wetland Aviary design.
- *Assumptions:* No specific post-construction stormwater management quantitative requirements by any local, state or federal government agencies apply.

- **Vegetation Management Plan**
  - Conduct a site visit to determine the current shoreline and vegetation status and what would be required to manage the vegetation properly.
  - Following the assessment, development a management plan detailing the re-vegetation of the aviary.
  - *Assumption:* City to provide direction on desired species/ habitat to inform overall design and plant selection.

- **Construction Document Phase**
  - **Meeting #1: Kick-Off Meeting** with the Owner to review the project goals and objectives. Review the master plan and updated public comments. Review the field survey and develop conceptual plan based on the Master Plan already developed and refine the overall project scope. All features will be developed for ADA compliance and compliance with applicable Zoological design guidelines.
  - The construction drawings shall consist of the following:
    - Title Sheet
    - Existing Conditions
    - Erosion Control and Stormwater Management Plan and Details
    - Site Plan
    - Grading Plan
    - Site Details
    - Boardwalk Plans and Details
    - Vegetation Management Plan
    - Habitat Plans and Details
  - Conference calls and e-mail with the Owner to coordinate project development.
  - Coordinate with needed site utilities for electrical, sewer and water.
  - **Meeting #2** at 40% completion to review the developed design with Owner.
  - Develop a Project Specifications Manual.
  - Revise and further develop the construction documents as per the City's review comments.
  - **Meeting #3** at 90% with the Owner to review progress construction documents.
  - Revise and further develop the final construction documents as per the City's review comments.
  - Complete and submit the electronic construction documents to the City in PDF format.
  - Within all phases of the project, a QC of all the deliverables will be completed.

- **Develop Permit Applications & Supporting Documents**
  - MSA will prepare the following permits:
    - DNR Construction Site Stormwater Permit (NOI).
    - DNR General Intake or Outfall Structure Permit.
    - DNR Chapter 30 Individual Waterway Permit.
      - Dredging Streams
      - Stream Bank Erosion Control
    - DNR Wetland General Permit.
    - U.S. Army Corps of Engineers 404 General Permit - Aquatic Habitat Restoration, Enhancement and Establishment Activities.
    - Manitowoc County Floodplain or Shoreline Zoning Permits.
    - City of Manitowoc Erosion Control Permit.
  - Assumptions
    - Zoo/City will submit and pay all permit fees.
    - Temporary wetland impacts will not require a DNR Individual Wetland Permit.
    - DNR Wildlife Habitat Structure General Permit may be necessary for any Wildlife Nesting Structures that are proposed. Costs associated with this permit are not included here.

- **Bidding Phase**
  - Prepare Advertisement for Bids and forward to City for publishing in local newspaper (advertising costs to be paid by the City).
  - Electronic distribution of drawings and specifications using Quest.
  - Answer bid questions and issues addendums as needed.
  - Electronic Virtual Bid Opening. **Meeting #4**
  - Review and evaluate the bids.
  - Provide a recommendation on the award of the project bid.
  - Develop the Owner/Contractor agreement for processing.

Deliverables (submitted in PDF format):
- Meeting Minutes from MSA-led meetings.
- 40%, 90%, and Final Construction Plans.
- Construction Specifications and final Bid Documents.
- Construction Cost Estimates at each plan review interval.
- Award Recommendation Letter.
- Notice of Award, Owner/Contractor Agreement, and Notice to Proceed.

Items supplied or completed by the City for the Project:

- City Standard Details and Specifications to be used as part of the project if applicable.
- Pay for any applicable permit fees. Most WDNR permit fees should be waived due to obtaining and utilizing the WDNR Stewardship Grant.
- Direct contract and pay geotechnical firm for borings and report.
- Direct contract and pay archeological firm for site review and report.
- Pay for reproduction of final construction documents.
- Provide local contacts for various coordination of work at the site.
- Attend local planning and zoning meetings.
- Project developed into multiple bid packages.
- Design within the flood plain, permitting, and WDNR coordination.
- Applications for other permits not outlined in the scope above.
- Construction staking (by contractor).
- Public engagement (beyond attending meetings for plan review/updates).
- Grant administration.
- Camera, security, sound system and equipment selection and procurement.
- Work outside the identified construction limits.
- Wetland delineation of the site, WDNR for concurrence.

Services Not Included:

The basic services of this proposal do not include providing the following services. If these services are needed they can be provided upon request from the City as additional services.

- **Construction Administration and Observation – TBD at a later date and added as amendment to the scope of services when needed.**

ESTIMATED DESIGN AND ENGINEERING FEES

MSA shall perform the above stated services as follows as lump sum fee:

TASK	COST
Site Topographic Survey	$5,500
Flood Modeling (H&H)	$2,000
Vegetation Management Plan	$8,000
Construction Documents	$22,250
Permitting	$8,000
Bidding	$4,000
Total Fee	**$49,750**

IT'S MORE THAN A PROJECT. IT'S A COMMITMENT.

COASTAL WETLAND AVIARY DESIGN AT LINCOLN PARK ZOO | MANITOWOC, WI | MARCH 17, 2023

MSA

www.msa-ps.com