



## NEW SERVICE YARD BUILDING PLANS STANDARDIZATION Project No.: WP56901

ARCHITECTURE/ENGINEERING SERVICES PROPOSAL

Barrientos Design & Consulting, Inc.  
Graef

July 12, 2023



414.271.1812 • [www.barrientosdesign.com](http://www.barrientosdesign.com)  
205 W Highland Avenue  
Milwaukee, WI 53203

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July 12, 2023

Ms. Sarah Toomsen  
Manager of Planning and Development  
Milwaukee County Parks  
9480 W Watertown Plank Road  
Wauwatosa, WI 53226  
Tel: 414-257-7275

**RE: PARKS NEW SERVICE YARD BUILDING PLANS & STANDARDIZATION**  
**PN: 2P56902**  
**Proposal of Architectural Services & Transmittal Letter**

Dear Sarah,

Barrientos Design & Consulting is pleased to present this proposal for the development of design standards for the County Park's 35 Service Yards. Included in this is our proposal for the Final Design of the Washington Park Service Yard.

We have assembled a team of design professionals with national level of experience in service facilities including yard operations. Barrientos Design will be Prime and Architect, with Graef as our Engineer for all disciplines involved, including Landscape Architecture.

Both of our firms have a strong working relationship with the County, including Parks facilities at Grant Park, McKinley Marina and North Point Lighthouse. In addition, we have designed field operations and maintenance facilities for other County Departments including Highway and the Airport.

Our goal will be to engage and inform County participants with viable industry standards so all can make well-informed decisions. We will be clear in our communication, inclusive in our data gathering, creative in our options generation, and sustainable in our design approach.

Barrientos Design is unique in our intense focus on the operations and service facilities. We have executed designs on over 72 service centers and shops and 80% of our overall company work is with service shops and their yards. Through this we have gained specific industry knowledge to properly layout heavy vehicle parking, bulk materials storage, parts storage, repair shops, fueling stations and truck washing bays.



With the Barrientos Design and Graef team, our staff of professional will bring commitment, intent, focus and creativity to the County Parks design team. We are prepared to start work on this immediately upon award and we look forward to the County's positive review of our proposal.

**TRANSMITTAL INFORMATION**

Firm name: Barrientos Design & Consulting, Inc.  
Address: 205 W. Highland Avenue  
Milwaukee, WI 53203  
Telephone: 414-271-1812  
Lead contact: Norman Barrientos, AIA, Principal

Sincerely,

**BARRIENTOS DESIGN & CONSULTING, INC.**

A handwritten signature in black ink that reads 'Norman Barrientos'. The signature is written in a cursive style with a long horizontal flourish extending to the right.

Norman Barrientos, AIA, LEED AP, President

## **3. DESCRIPTION OF THE ORGANIZATION'S EXPERIENCE**

### **A. FIRM BACKGROUND**

Barrientos Design specializes in the planning and design of field operations and service center that involve the functions of equipment maintenance, heavy equipment garages repair shops, parts and bulk storage, crew support, field supervision offices, and yard facilities. We are Wisconsin's experts and leaders in the design of service and operations garages, and we will provide this for the benefit for County's long-term operational goals.

The firm was founded in 1997 by Norman Barrientos, AIA, and has since gone on to design many of Wisconsin's newest public works service centers. These projects have involved space needs, facility assessments, expansion analysis, new site selection, city planning, utility design, stormwater management applications, building design and finally construction administration.

Our expertise in service center design has positioned us to provide seminars to many professional industry associations such as WCHA, NACE and APWA, both locally and nationally. We have distilled seven design principles that govern for effective outcome of an operations and yard facility. These principles are, robust facility definition, operational efficiency and flow, staff productivity and safety, asset control, lines of communications, building performance, sustainability and future trends integration.

Our service centers have many complex and process driven functions including heavy equipment parking, truck washing, vehicle repair bays, welding and fabrication shops, parts storage, bulk warehousing, fueling, salt storage shed, brine making tanks, truck scales and general yard bulk storage. For each of these areas, Barrientos Design has established industry guidelines and practices that will better serve your daily field operations.

### **B. LIST OF SIMILAR PROJECTS**

Other similar park and service facilities we have developed facility needs, site selection and design include:

1. **Milwaukee County Parks**, Grant Park Beach House
2. **Milwaukee County Parks**, McKinley Marina Picnic Pavilion

3. **Milwaukee County Parks**, North Point Lighthouse Renovation
4. **WI DNR**, Harrington Beach Welcome Center
5. **WI DNR**, Regional Ranger Stations at Three Locations
6. **City of Racine** Public Works Garage, space needs and new site evaluation
7. **City of Cudahy** Public Works Garage, space needs and replacement Garage plans
8. **WI DNR**, Mirror Lake State Park Toilet & Shower Building
9. **Franklin Croatian Federation**, Soccer & Picnic Pavilion
10. **Racine County** Highway Department Garage, space needs, condition assessment and remodeling plans
11. **Milwaukee County DOT** Central Fleet Maintenance Garage, site realignment and new site analysis
12. **Milwaukee County DOT**, North Shop Highway Operations Garage
13. **City of Milwaukee** Electric Services Garage, space needs and existing site expansion evaluation
14. **City of Pewaukee**, space needs, existing site expansion options, new site analysis
15. **New Berlin Utilities** Garage, space needs and expansion design for existing Garage
16. **City of Waupaca** Public Works, space needs and new site assessment
17. **City of Wausau** Public Works Garage, space needs assessment, existing site expansion evaluation new site selection
18. **City of Sun Prairie** Public Works Garage and Fleet Garage, space needs, new site expansion planning
19. **Marathon County** Public Works Garage, multi-department consolidated facility, space needs, new site selection, concept planning.
20. **Village of Deerfield** Municipal Hall & Garage, space needs assessment and site evaluations for expansion
21. **Kewaunee County** Highway Garage, space needs assessment, existing site redevelopment, and new site analysis
22. **Village of Cleveland** Municipal Hall & Garage, space needs assessment, existing site evaluation and new site concepts.
23. **Eau Claire County** Highway Department Garage, space needs, facility conditions, and new site selection
24. **Village of Bellevue**, Municipal Hall and Public Works Garage, space needs, existing site evaluation and concept planning
25. **Jefferson County** Highway Department Garage, space needs and site selection.
26. **City of Milwaukee**, Fire Dept. Maintenance Shop, space needs and existing site expansion options
27. **Walworth County** Public Works Garage, space needs and existing site expansion planning



## GRANT PARK BEACH PAVILION

Milwaukee, WI

As architects for the Grant Park Beach Pavilion, Barrientos Design created an architectural characteristic design that compliments the existing turn-of-the-century clubhouse located near the site.

The Pavilion contains a concession area covered by both the roof and a spiral trellis latticework. The scope of work also included beach restoration site work near the Pavilion.



**Cost:** 00000

**Completion:** 2002

**Client:** South Milwaukee, Dept. of Park Facilities



## MCKINLEY MARINA PARK PAVILION

Milwaukee, WI

Barrientos Design provided the structural engineering and design for this park structure along the shores of Lake Michigan. The steel structure is covered with wood and stone and the white columns and trim give the building a classic parks and recreation building look.



**Completion:** 2008

**Client:** Milwaukee County Parks



## THREE DNR RANGER STATIONS

Prentice, Plover, Tomah, WI

The Department of Natural Resource's Ranger Stations, located in the cities of Prentice, Plover, and Tomah, are three distinct iterations of one design. Strategic programmatic organizational decisions, environmental responses and material choices were used to deliver a cohesive design within all locations.

Building materials were kept minimal with two pervasive materials: burnished concrete masonry units and natural cedar wood with a transparent stain. This earthy and industrial palette creates a strong, yet casual, feel on both the exterior and interior of the stations. The cool tones of the storage unit's masonry shell contrasts with the warm cedar wood, which is prevalent on the domestically scaled office spaces.

**Cost:** \$5.5M

**Completion:** 2014

**Client:** Department of State Facilities





## CITY OF PEWAUKEE PUBLIC WORKS GARAGE

Pewaukee, WI

The objective of this design was to build a new Public Works Garage facility for the City of Pewaukee. The Facility includes: vehicle repair garage, heated parking garage, truck wash, crew quarters, parts storage, salt storage, recycling and yard waste, stockpile bins, parking and fueling.

The new site involved a 9 acre site development effort with parking, grading, stormwater, new access road and landscaping.

The modern exterior design employs metal panels, burnished brick and concrete precast panels that act as load bearing walls as well.

**Size:** 50,000 SF

**Cost:** \$14 Million

**Client:** City of Pewaukee





## SHORWEWOOD DPW FACILITY & SITE Shorewood, WI

For the Village of Shorewood, Barrientos Design is designing two public works facilities: the Utilities Garage and the Streets/Parks/Building's Garage. Barrientos Design developed a space needs and master plan for implementing both facilities by reusing the existing sites.

The recommended plan consists of a combined Streets/Parks/Buildings Garage of 74,000 SF along with a central repair garage. The Utilities Garage is a separate 30,000 SF building which involves partial demolition of the existing structure and creating a significant addition in place.

Size: 58,000 SF

Cost: \$20M

Client: Village of Shorewood

### C. CLIENT REFERENCES

Barrientos Design establishes a “trusted advisor” approach to our client relationships to shepherd through project goals into a working reality. Many of our municipal client relationship last over numerous years and budget cycles as we build toward the final recommendations.

1. **Village of Fox Point Public Works Garage** space needs study and redevelopment.
  - a. Barrientos Design led the planning process for assessing the Village municipal complex which contains the Village Hall, Police Station, DPW Garage and the Community Pool. Our study developed a plan to demolish portions of the DPW Garage, rebuild a new vehicle storage garage, remodel the existing Hall and portions of the existing Garage, and various site realignments. Recently, a developer has come forward and offered to purchase the DPW facility and in return build a new one on an arterial road.
  - b. Scott Brandmeier, Public Works Director
  - c. [sbrandmeier@vil.fox-point.wi.us](mailto:sbrandmeier@vil.fox-point.wi.us)
  - d. 414-351-8900
2. **City of Sheboygan, Public Works Garage** space needs & redevelopment
  - a. Barrientos Design conducted space needs for this 1950’s garage located on a small triangular parcel. From there we developed renovation and expansion plans for the eventual replacement of the Garage. Barrientos recommended purchasing additional residential lots in order to expand the Garage and improve traffic flow.
  - b. Dave Biebel, Public Works Director
  - c. [dbeibel@ci.sheboygan.wi.us](mailto:dbeibel@ci.sheboygan.wi.us)
  - d. 920-459-3443
3. **Village of Shorewood Public Works** space needs study and site relocation
  - a. Barrientos Design conducted onsite interviews and observations of DPW’s existing operations then created a facility needs statement. From there Barrientos reviewed six sites around the Village and assessed their compatibility for a new Garage. In the end, the Village decided to move to one of the recommended sites.
  - b. Leeann Butschlick, Public Works Director
  - c. [lbutschlick@villageofshorewood.org](mailto:lbutschlick@villageofshorewood.org)
  - d. 414-847-2650

**Sustainability Principles.** Please see our Section 9 for details on this.

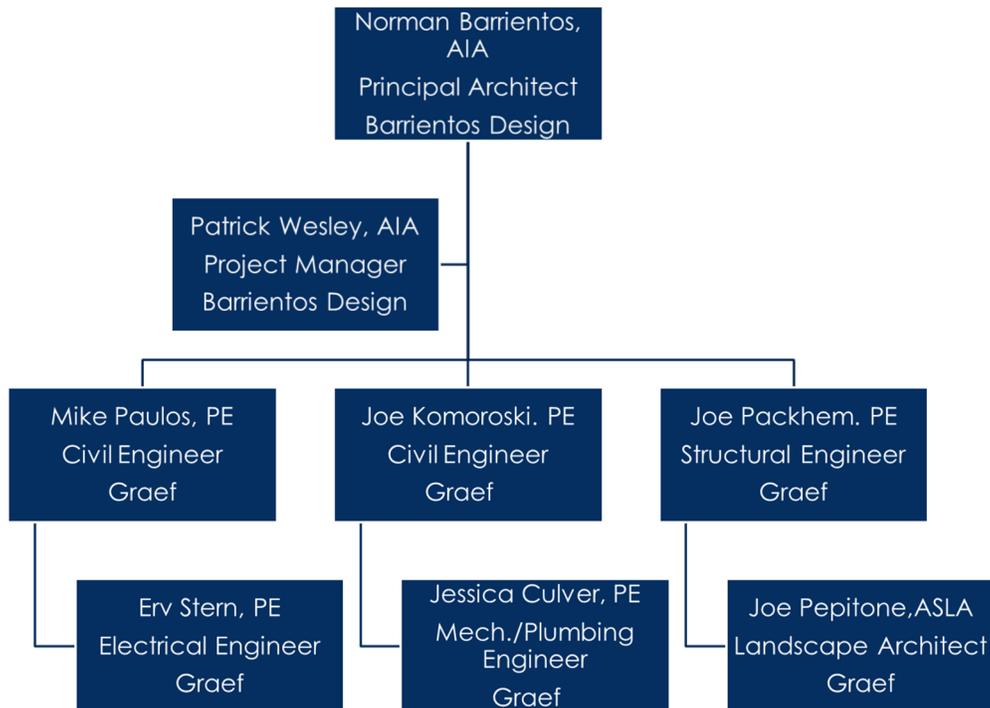
## 4. DESCRIPTION OF PROJECT TEAM RESUMES

### A. Organizational Structure of the Team

Barrientos Design will be the Prime Consultant on this project with Norman Barrientos as the Principal-in-Charge and the Lead Architect for the project.

Graef will provide all the engineering and landscape architecture services for the project.

Our team organization is expressed as follows:



Subconsultant information regarding Graef and the Team's resumes are attached in the following pages.

Barrientos Design will provide an architectural team that is focused and specialized with service facilities. With 80% of our design work being with operation and maintenance garages, our full staff work continuously on the analysis, planning, construction and long-term facility performance of operations

and maintenance facilities.

Through our many interactions we have come to understand the key facility principles that make for an efficient, sustainable service center. In addition, our Principal Architect, Norman Barrientos, AIA, has dedicated most of his career and professional development to this area. The result being that Mr. Barrientos now provides seminar content to various national associations related to public works and fleet maintenance.

What we believe is key to completing this study successfully, is having the architectural team not only understand the basic design approaches to planning for a service facility, but also foresee into the future as to what the Parks Department may become over the next few decades. Key to this is our understanding of industry trends and updates on best practices, truck size and equipment changes, the electrification of fleets soon.

Barrientos Design staff also have the knowledge base of following up on our many service centers and seeing how they are currently performing. From these post-occupancy evaluations, we learn of new methods and practices that could better enhance the working environment.

Impactful changes in facility standards can enhance your service yards' operational efficiency, worker safety and attraction, asset management, sustainability, energy efficiency and its adaptability to future trends. For this Park project our industry two key architects will be:

**Principal-in-Charge, Norman Barrientos, AIA, LEED AP**

Architect with 40 years of experience and specializing in the design of operations and maintenance facilities. Track record of executing studies on over 70 garages. Will lead the planning process and our team.

**Project Architect, Patrick Wesley, AIA.**

Architect with 11 years of practice with experience on multiple garages including Marshfield, Stevens Point, Milwaukee and Wood garages. Patrick will lead the design process and oversee the development of construction documents.

Staff with specific sustainability experience includes Norman Barrientos, who has had his USBGC accreditation as LEED professional since 2005. He has developed many sustainability analysis for public facilities including his work with the City of Sun Prairie's DPW Campus Master Plan.



## STATEMENT OF QUALIFICATIONS

### Firm History

For more than 26 years, award-winning Barrientos Design & consulting has specialized in architectural design, planning and consultation. The company is in its second generation of family ownership. It was founded in 1972 by Julian Barrientos and in 1997 Norman Barrientos took over full ownership. The company is registered as a corporation in the State of Wisconsin and maintains professional licenses to practice architecture.

We are a Milwaukee-based design firm that has worked extensively with public works, county engineering, transportation, parks and utility departments. Our specialty is the design of operation garages where efficiency, safety and order are key for enhancing operations.

### Experience

Barrientos Design's has designed many operations garages including for these clients:

- Milwaukee County
- City of Milwaukee
- City of Sun Prairie
- Jefferson County
- Polk County
- We Energies
- Madison Gas & Electric
- City of Madison Parks
- Manitowoc County
- City of New Berlin





## Organization & Resources

Norman Barrientos, AIA is the lead designer and Principal-in-Charge for all projects. The company has a professional staff of eight with one interior designer. The design staff all have project experience with higher education facility design. We have three senior project managers in the office that are fully capable of executing and overseeing your design projects from start to finish.

Our resources beyond our staff include our working studio in downtown Milwaukee where each team member has a Revit license. All of our projects are designed within a BIM framework allowing us to model out the architecture and engineering for comprehensive coordination.

## Teamwork

At Barrientos Design we believe that every great design project starts with great teamwork. We engage committee members, user groups and consulting engineers early in the process to get a comprehensive understanding of the project. Defining the scope early with the entire team allows us to understand the challenges and work together to find the most appropriate solutions.

Working with your internal team and other external consultants we will aim to develop a plan that creates a functional and aesthetic design that fits within your designated budget. We understand that each individual team member brings a unique perspective to a project and we search to find balance in a project that will meet the needs of all stakeholders.





Polk

# Operations Garage Design Expertise



New Berlin



Calumet



Jefferson



Menominee

- Building Programming & Sizing
- Operations Analysis
- Equipment Selection
- Site Facilities Definition
- Site Selection
- Building Design & Engineering
- Governmental Reviews, Approvals & Permits
- Cost Estimating
- Visualization & Renderings
- Construction & Bid Documents
- Construction Administration
- Facility Move-in Assistance

Barrientos Design & Consulting is a leader in the design of Field Operations Garages. We focus on the operational, planning and logistical needs of Operations Garages for the betterment of our client's needs.

Since the 1980's, our firm has developed planning and design documents for over 60 Garage operations including:

- Public Works Garages
- Highway & Transportation Garages
- Parks Maintenance Shops
- Utility Garages
- Field Operation Centers
- Trades Shops
- Fleet Repair Garages
- Buildings Maintenance Shops

The design of Operation Garages involves understanding the operations of repair of heavy vehicles, fabrication, parts storage and warehousing, fueling, truck washing and crew support and training areas.



**NORMAN BARRIENTOS**  
president, principal architect

Norman Barrientos brings 40 years of architectural design experience focusing on the design of fleet maintenance facilities which involve fleet repair garages, fabrication shops, parts storage, heavy vehicle parking, crew quarters and extensive Yard facilities. The first building Mr. Barrientos designed under his licensed supervision was a maintenance facility for a water utility. That was back in 1988 and since then he has gone onto design and plan over 70 maintenance facilities. He has become Wisconsin's leading expert on the design of fleet facilities and he has delivered seminars on the subject at professional trade events.

norman@barrientosdesign.com



**registration**

Professional Architect:  
AIA, NCARB, LEED AP

**education**

Bachelor of Architecture  
University of Minnesota, 1984  
Business Administration Graduate Certificate  
Harvard University Extension School, 1993

**project experience**

- Shorewood Village DPW Garage
- Pepin County Highway Garage
- Pewaukee Public Works Garage
- Port Milwaukee Office Renovations
- Vernon County Central Highway Garage
- Polk County New Central Maintenance Garage
- Jefferson County Central Maintenance Facility
- Village of Fox Point Hall & Public Works Garage
- Milwaukee County North Garage
- City of West Allis City Hall & Public Works Garage
- Manitowoc County New Maintenance Facility
- City of Sun Prairie New Fleet Repair Garage
- Milwaukee Electric/Traffic Operations Garage
- Door County New Maintenance Facility
- Menominee County New Maintenance Facility
- Milwaukee County Central Fleet Garage, Master Plan

**years experience**

40 years in the profession

**awards & seminars**

- AIA WI Design Excellence, La Causa Charter School
- APWA National Conference Seminar 2019, 7 Principle of Highly Effective Garage

**PATRICK WESLEY**  
project architect

Patrick Wesley is a project architect with ten years experience with the capacity to handle a complete project from design through construction. He has worked on a diverse range of architectural projects including; highway garges, municipal offices, hospitality, secondary and higher education, large-scale healthcare facilities, and campus master plans. He values developing collaborative relationships with clients and other experts while working on a project. Patrick has led the planning of multiple banks, churches, and high schools across Wisconsin. He works in Revit BIM modeling software and also develops rendered imagery.

[pwesley@barrientosdesign.com](mailto:pwesley@barrientosdesign.com)



**education:**

Masters of Architecture, 2015  
University of Wisconsin - Milwaukee

B.S. Architecture, 2014 University of Wisconsin - Milwaukee

**project experience**

- Port Milwaukee Office Renovations
- Shorewood Village Public Works Garage
- Waupaca Public Works Garage
- PG&E Utilities Fleet Garage
- Pewaukee Public Works Garage
- Milwaukee County North Garage
- Pepin County Highway Garage
- La Crosse County Highway Garage St. Joe's
- Stevens Point DPW Garage
- City of Marshfield DPW Garage
- Wood County Highway Garage
- Advocate Mequon Clinic Pharmacy
- Advocate Grafton IV Therapy Room
- Milton High School
- North Shore Bank
- Educator's Credit Union
- Lumen Christi Parish
- Madison Area Technical College
- Beaver Dam High School
- Maine Veterans Homes
- Saint Stanislaus

**years experience**

10 years in the profession

**ISABELLE JARDAS**  
design architect

Isabelle is a design architect with 4.5 years of experience in building planning, studies, design and documentation, and operations of public facilities. She has worked on a variety of projects, at every stage of the design process. Her experience includes Highway and Public Works Garages, Education Facility Planning, and Fleet Yard Functions. She has experience representing building and spatial conditions for analysis and is versed in Revit BIM software and Adobe Suite, allowing her to develop a variety of visualization techniques. She has special connections to public facilities from past work experience and is passionate about bringing her experiences into her architectural and marketing work.

ijardas@barrientosdesign.com



**education:**

B.S. Architecture, 2022 University of Wisconsin - Milwaukee

**project experience**

- City of Milwaukee Salt Brine Shed
- South Milwaukee DPW Yard
- South Milwaukee Fuel Station
- Stevens Point DPW Garage
- MPS Space Utilization
- Franklin Park Pavilion
- Wausau DPW Garage
- New Glarus Town Hall & DPW Garage

**years experience**

4.5 years in the profession

**NEIL BIERWIRTH**  
design architect

Neil is a design architect with 1.5 years of experience in building planning, studies, and design and documentation. He has worked on a variety of projects, at every stage of the design process. His experience includes Highway and Public Works Garages, Education Facility Planning, Fleet Yard Functions, and Housing Developments. He has experience representing building and spatial conditions for analysis and is versed in Revit BIM software and Adobe Suite, allowing him to develop a variety of visualization techniques.

[nbierwirth@barrientosdesign.com](mailto:nbierwirth@barrientosdesign.com)



**education:**

B.S. Architecture, 2021 University of Wisconsin - Milwaukee

**project experience**

- Racine DPW Garage
- Sheboygan DPW & Transit Garage
- UC Davis Fleet Garage
- Waupaca DPW Garage
- Fabick Cat Garage Addition
- MPS Space Utilization
- Wausau DPW Garage
- WI Dells Housing Complex

**years experience**

1.5 years in the profession

**JOSH KOCH**  
design architect

Josh is a design architect with 1.5 years of experience in building planning, studies, and design and documentation. He has worked on projects including Highway and Public Works Garages, Education Facility Planning, Fleet Yard Functions, and Housing Developments, among others. Josh is experienced in representing building and spatial conditions for analysis, which has allowed him to develop a keen eye for detail and a comprehensive understanding of the built environment. He is also well-versed in Revit BIM software and Adobe Suite, allowing him to develop a variety of visualization techniques that enable him to communicate his design ideas effectively.

[jkoch@barrientosdesign.com](mailto:jkoch@barrientosdesign.com)



**education:**

B.S. Architecture, 2022 University of Wisconsin - Milwaukee

**project experience**

- Sheboygan DPW & Transit Garage
- Shorewood DPW Study
- Waupaca DPW Garage
- MPS Space Utilization
- WI Dells Housing Complex
- Waukesha City DPW
- Lincoln County DPW Study

**years experience**

1.5 years in the profession

**our core purpose**  
 To improve the  
 physical environment  
 for the benefit  
 of society in a  
 sustainable manner.

GRAEF is a multi-discipline, planning, design, and engineering firm dedicated to serving public and private clients throughout the United States. For 61 years, our ability to excel has been driven by integrity, quality, and our commitment to customer service. GRAEF began as an individual partnership structural engineering firm in 1961. Today, with 300 employees in ten offices in the Midwest, Florida, and Turks and Caicos Islands, GRAEF offers our clients a full range of consulting services.

GRAEF is ranked in Engineering News-Record (ENR) Top 500 Largest Design Firms and is ranked 36<sup>th</sup> in Building Design + Construction's (BD+C) list of the nation's Top Engineering-Architecture firms.



**WE PROVIDE  
 QUALITY  
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 Structural Engineering  
 Mechanical Engineering  
 Electrical Engineering  
 Plumbing and Fire  
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 Traffic/Transportation  
 Engineering

Landscape Architecture  
 Sustainable Design  
 Planning  
 Urban Design  
 Parking Consulting  
 Environmental Engineering  
 Surveying and Field Services  
 Commissioning



Milwaukee  
 Chicago  
 Green Bay  
 Madison  
 Miami  
 Minneapolis  
 Orlando  
 Sarasota  
 Turks & Caicos Islands

**CONTACT US**

414 / 259 1500  [www.graef-usa.com](http://www.graef-usa.com)

 275 West Wisconsin Avenue, Suite 300  
 Milwaukee, WI 53203



**Professional Registration**

Professional Engineer – WI

**Education**

M.S., Civil Engineering, 2011,  
University of Wisconsin-Milwaukee,  
Milwaukee, WI

B.S., Civil Engineering, 2009,  
University of Wisconsin-Milwaukee,  
Milwaukee, WI

**Professional Affiliations**

American Society of Civil Engineers

*Joe has led design teams and has managed a wealth of civil projects within the public and private development sectors throughout his time at GRAEF. Joe has an extensive background in site development and municipal engineering. He has worked with clients that include various counties and municipalities located throughout Wisconsin, as well as the Wisconsin Department of Transportation. Joe provides project management; design for sanitary sewer, water main, and storm sewer utilities; roadway design for municipal road programs; and site/civil design, opinion of probable cost, specification development, and bidding and construction administration professional services. Joe's knowledge, background, and experience allows him to encompass the needs and desires of the owner/client to successfully complete any public or private project.*

**Milwaukee County Dretzka Park Sanitary Sewer Relay, Milwaukee, WI - Project Manager:** Provided project management on 2,700 LF of 8-inch sanitary sewer and abandonment of existing force main sanitary sewer manholes. Project management included coordination with Milwaukee County (client) and City of Milwaukee. Managed project design schedule, opinion of probable cost, sanitary sewer calculations, permit submittal requirements, technical specifications, bidding documents, and construction administration.

**Milwaukee County Mill Pond Sanitary Sewer Relay, Milwaukee, WI - Project Manager:** Provided project management on 52 LF of 6-inch gravity sewer and 165 l.f. of 4-inch sanitary pressure sewer and proposed lift station being relocated outside of existing building. Design included existing lift station and control panel and abandonment of existing force main sanitary sewer. Project management included coordination with Milwaukee County (client) and City of South Milwaukee. Managed project design schedule, opinion of probable cost, sanitary sewer calculations, permit submittal requirements, technical specifications, bidding documents, and construction administration.

**Milwaukee County Oakwood Golf Course Sanitary Sewer Relay, Milwaukee, WI - Project Manager:** Provided project management on 3,700 LF of 4-inch sanitary pressure sewer and abandonment of existing force main sanitary sewer. Design included valve vault, combination air release structures, clean-out structures, and existing lift station rehabilitation. Project management included coordination with Milwaukee County (client) and City of Franklin. Managed project design schedule, opinion of probable cost, sanitary sewer calculations, permit submittal requirements, technical specifications, bidding documents, and construction administration.

**Hales Corners Department of Public Works Facility, Village of Hales Corners, WI – Civil Engineer:** The Village of Hales Corners partnered with GRAEF to redevelop the existing public works yard and construct a new facility with associated parking and storage lots, access drives, as well as landscaping. Joe provided site civil design, which included erosion control, grading, site layout, pavement design, storm sewer, sanitary sewer, and water main design, stormwater management, technical specification development, and bidding and construction administration assistance.



**Professional Registration**  
Professional Engineer – WI

**Professional Certifications**  
LEED Accredited Professional  
Construction Documents  
Technologist - The Construction  
Specifications Institute

**Education**  
B.S., Civil Engineering, 1993, *cum  
laude*, Michigan Technological  
University, Houghton, MI

**Continuing Education**  
Corrosion Control and Failure  
Analysis in the Water Utilities  
Water Storage Tanks Course,  
University of Wisconsin  
Risk Assessment Methodology for  
Water Utilities (RAM-WSM) Training  
Workshop

**Professional Affiliations**  
American Society of Civil Engineers  
American Public Works Association  
Wisconsin Rural Water Association  
Wisconsin Water Association

*Mike is a principal and the Municipal Market Leader at GRAEF with experience on a variety of public works projects. For 30 years, he has managed projects involving site development, water distribution system modeling and design, sanitary sewer and storm sewer design, and roadway design.*

**Germantown Department of Public Works Facility Site Evaluation and Design, Village of Germantown, WI - Project Manager:** GRAEF partnered with Germantown to develop a solution for their currently outdated and undersized Public Works Garage. After completing an assessment and inventory of the Village's site, vehicles, and equipment as part of the programming phase, it became apparent that the current DPW site was not large enough to accommodate the new building and outside spaces required for the present and into the future as Germantown grows. GRAEF assisted the Village to evaluate other potential properties within the Village to find a home for their new DPW building. In addition to the typical DPW yard functions, the Village was also interested in including the recycling center functions within the same site.

**New Berlin Department of Public Works Facility Needs Analysis, City of New Berlin, WI - Project Manager:** The City of New Berlin determined it had outgrown its current Street Department facility. GRAEF completed a site evaluation and a detailed report identifying all the department's needs and space requirements. A complete equipment breakdown was also included in the final report. Design schemes with possible construction costs were also included in the report. The City was provided with the design considerations, solutions, and costs for their evaluation on how two sites were needed to fulfill their overall project goal.

**St. Francis Municipal Highway Garage Needs Study, City of St. Francis - Project Manager:** GRAEF assisted St. Francis in determining the needs of the Highway Department site and buildings for functionality and regulatory compliance. This included reviewing the placement of existing buildings for functionality of mobility, outdoor storage, and safety. In addition, new layouts for buildings, outdoor storage, and mobility within the site, including a fueling and recycling center, were provided.

**Franklin Water and Wastewater Facility, City of Franklin, WI - Project Manager:** The existing single story sewer and water building was approximately 3,500 square feet. Due to community growth over the last decade, the structure was deficient in meeting the service and business needs of the department. The proposed addition increased the overall facility to over 20,000 square feet. It included large vehicle storage and service bay, mezzanine parts storage, offices, conference room, clerical work rooms, break room, toilet/locker rooms, and remodeling of the existing building. The project team consisted of the following GRAEF disciplines: architectural, structural, civil, landscaping, mechanical, electrical and plumbing.

**Hales Corners Department of Public Works Facility, Village of Hales Corners, WI – Project Manager:** The Village of Hales Corners partnered with GRAEF to redevelop the existing public works yard and construct a new facility with associated parking and storage lots, access drives, as well as landscaping. GRAEF provided all the technical services in-house, including civil, site, mechanical, electrical, planning, architecture, landscape architecture, structural, surveying, environmental, and fire protection.



**Professional Registration**  
Professional Engineer – WI

**Education**

M.S., Civil Engineering with  
a specialization in Structural  
Engineering & Structural  
Mechanics, 2016  
Marquette University,  
Milwaukee, WI

B.S., Civil and Environmental  
Engineering, 2013  
Marquette University,  
Milwaukee, WI

**Volunteer Affiliations**

Marquette University Senior Design  
Lead Mentor - Spring 2020  
Marquette University Engineers  
Without Borders (EWB) Structural  
Engineering, Mentor 2019 - Present

**Awards**

Participated in a National Science  
Foundation Grant at Marquette to  
assist with the African Engineering  
Dean's Council Conference in  
Ethiopia

*Joe has 10 years of experience in structural engineering with experience in utility, freezer, industrial, crane, storage, multifamily, and senior living buildings. He has experience with rehabilitation/reinforcement/analysis of existing buildings, forensic analysis/report writing, retaining wall design, steel connection design, tenant improvements and food, water, and steam distribution system design.*

**Komatsu Mining Corp. South Harbor Campus, Milwaukee, WI – Structural Engineer:** New corporate campus including a 285,000-square-foot office building, four-story parking garage, and a 440,000-square-foot manufacturing plant. The 60-acre campus sits on a vacant brownfield site overlooking Milwaukee's inner harbor on Lake Michigan. To aid in the goal for a "net zero facility," the manufacturing plant includes roof-mounted solar panels, as well as reclaiming 40 percent of its water consumption.

**EPIC Utility Building 12, Verona, WI - Structural Engineer:** Structural design for a utility building on the EPIC campus, which includes contractor and design team offices.

**Waukesha Water Booster Station, Greeley & Hansen, Waukesha, WI – Structural Engineer:** New 10,000-square-foot potable water distribution for the City of Waukesha's 71,000 residents. The project transfers water from Lake Michigan with pipe lines to the booster station where it is stored in water towers for distribution to the city. The project has a depressed concrete area with precast walls, cranes and roof trusses above grade.

**Various Projects, Milwaukee Regional Medical Center - Thermal, Wauwatosa, WI – Structural Engineer:** Campus includes two miles of steam and chilled water lines that feed the campus. The Thermal division runs the plant that distributes the steam and chilled water. Plant includes industrial cranes, steel framing, concrete framing and thrust resisting structures.

**108 West Grand Avenue Commercial Building Renovation, Hendricks Commercial Properties, Beloit, WI - Project Manager:** Completed structural renovation design and inspection of an existing building which was converted into a restaurant/coffee shop in downtown Beloit, Wisconsin.

**Freezer Building, Confidential Client, Wauwatosa, WI – Structural Engineer:** New 18,000-square-foot freezer structure inside an existing industrial building with 4 degree low temperatures. This project reinforced and replaced portions of the existing roof and foundations to support high rack storage systems. The project includes in floor heating and soil improvements.



**Professional Registration**

Professional Engineer (PE) – CO,  
IL, ND, RI, SD, WI

**Education**

B.S. Architectural Engineering  
– Building Mechanical Systems  
& Building Electrical Systems  
Design, 2012, Milwaukee School of  
Engineering, Milwaukee, WI

**Professional Affiliations**

American Society of Heating,  
Refrigeration, and Air Conditioning  
Engineers (ASHRAE)

American Society of Plumbing  
Engineers (ASPE)

*With 11 years of experience as a Mechanical Engineer, Jessica has a broad range of experience with clients, different building types, and varied mechanical systems. She has experience in mechanical system design, plumbing system design, fire protection design, and has some experience in electrical power and lighting system design. She has experience coordinating with other disciplines to provide critical information that drives design of power systems and interior design and has experience with various mechanical systems in different building occupancy types. Experience includes completing load calculations, sizing equipment, preparing specifications and designing mechanical distribution systems, and plumbing and fire protection systems for housing, commercial, retail, education, and industrial projects.*

**Germantown Department of Public Works Facility Site Evaluation and Design, Village of Germantown, WI - Mechanical/Plumbing Engineer:** GRAEF partnered with Germantown to develop a solution for their currently outdated and undersized Public Works Garage. After completing an assessment and inventory of the Village's site, vehicles, and equipment as part of the programming phase, it became apparent that the current DPW site was not large enough to accommodate the new building and outside spaces required for the present and into the future as Germantown grows. GRAEF assisted the Village to evaluate other potential properties within the Village to find a home for their new DPW building.

**City of New Berlin Recycling Center Cold Storage Buildings - Mechanical/Plumbing Engineer:** The project included the design of two prefabricated steel buildings at New Berlin's recycling center site. GRAEF provided full services for the two approximately 22,000 square feet buildings.

**De Pere Aquatic Center at VFW Park, De Pere, WI – Mechanical Engineer:** New \$7.14 million aquatic center with a 5,330-square-foot recreational pool with diving boards, a body slide, a separate 1,800-square-foot tot pool, a 6,150-square-foot bathhouse and a 1,250-square-foot mechanical building. The main pool will be designed to accommodate families as well as lap swimming.

**Southwire Company, Various Locations – Mechanical Engineer:** Condition Report for 24 manufacturing plants nationwide. Work included the review of each building's Mechanical, Plumbing, and Fire Protection systems to determine condition and remaining life, and a written summary report with construction costs. Also performed a systems analysis of the plant's compressed air and process water systems to provide recommendations for system improvements and reliability.

**Village of Germantown Building Assessments, Germantown, WI – Mechanical Engineer:** Condition report for 15 buildings owned by the Village of Germantown. Work included the review of each building's Mechanical, Plumbing, and Fire Protection systems to determine condition and remaining life. A written summary report of findings was provided with photos and construction costs for necessary improvements and upgrades.

**Forest County Potawatomi Community Summer Camp Facility Assessment, Various Locations – Mechanical Engineer:** GRAEF was hired to provide condition reports on the property, which includes approximately 30 buildings of varying sizes and uses. In general, the facility has buildings used to support summer camp programs, including sleeping quarters, cafeteria, storage, recreation, and other appropriate summer camp support structures.



**Professional Registration**  
Registered Professional Designer  
– WI

**Education**  
B.S., Criminal Justice, 1985,  
University of Wisconsin -  
Milwaukee, Milwaukee, WI

**Professional Affiliations**  
Illuminating Engineering Society of  
North America (IESNA), 2008-09  
President—Milwaukee Section

*Ervin is a senior electrical designer and project manager with 38 years of consulting experience. He is GRAEF's Electrical Group Manager, overseeing the internal team of electrical engineers, as well as manages multi- and single-discipline projects of all sizes. He specializes in municipal buildings and financial institutions.*

**Milwaukee Public Schools, ESSER II Funds – Electrical Designer:** Provided assessment of (40) existing MPS schools and administrative buildings to identify required scope of work for available funding. Design includes major HVAC system replacements at two high schools, service upgrades, miscellaneous MEP system improvements in other buildings, design for outdoor classrooms and fire alarm system upgrades.

**Forest County Potawatomi Rec Center, Crandon, WI – Electrical Project Manager:** Electrical engineering design for the Forest County Potawatomi's Community Recreation Center. The 110,000 square foot facility includes a basketball court, wedding/event spaces, a swimming pool, locker rooms, training wood and metal shops, administrative offices, and a full kitchen. Design included "tune-able" lights that change color temperature as the day progresses, lightning protection throughout, and a state-of-the-art voice evacuation system for the fire alarm.

**Washington County Fairgrounds, Washington County, WI – Electrical Designer:** This 16 million dollar project provided a new site and buildings to accommodate Washington County's annual fair as well as other events throughout the year. Buildings, both enclosed and open-air, included: A 40,000 square foot multipurpose building for year-round use for expositions, trade shows, meetings, and conventions, an open air free stage, a covered and open-air show arena, separate barns for dairy, beef, sheep, swine, and small animal exhibitions. Site design included; ornamental street and walkway lighting, decorative building lighting, electrical distribution for the RV and carnival areas, phone and public address cabling between the buildings, a permanent flexible power distribution system for temporary tents and structures, An underground conduit and hand hole system. The electrical construction cost for this project was approximately \$1 million dollars.

**Elkhorn Public Works Department, Elkhorn, WI – Electrical Designer:** This project consisted of a new single-story building of approximately 34,300 square feet. It will be built on an undeveloped site that only contained a salt building which must be re-fed from the new DPW building. A generator was added for egress lighting and optional loads.

**Wauwatosa Public Works Facility, Wauwatosa, WI – Electrical Designer:** This project consisted of a partial remodel, approximately 12,000 square feet for office space in the existing Public Works building. A complete new service and switchgear were required along with new down-stream distribution



**Professional Registration**  
Professional Land Surveyor – WI

**Education**  
Associate Degree, Civil  
Engineering, Milwaukee Area  
Technical College, Milwaukee, WI

**Professional Associations**  
Wisconsin Society of Land  
Surveyors (WSLS) – State Chapter  
  
Society of Southeastern Wisconsin  
Land Surveyors Inc. – Milwaukee  
Chapter

*Dave has 30 years of comprehensive survey experience. Dave's field experience includes topographic, boundary, control, and construction surveys. Utilizing conventional, LiDAR, GPS, and robotic technologies, Dave has expertise in sewer, water, building, bridge, highway, athletic field, deformation, natural gas pipeline, utility, power plant, tunnel, and off shore layout projects. Dave's office experience includes WisDOT transportation design plan development, Natural Gas Pipeline plan development, plat reviews and preparation, condominium plats, standards implementation, software upgrades, and technology exploration. Additional responsibilities include overseeing and scheduling the day-to-day activities of the survey crews, updating and maintaining the survey equipment, platting, and implementing standards within the survey department.*

**S. 13th Street (CTH V) Milwaukee County/WisDOT - Project Surveyor/Right-of-Way Plat:** Completed survey and a right-of-way plat with legal descriptions for the pavement replacement of South 13th Street (CTH V) from West Drexel Avenue to West Rawson Avenue (CTH BB).

**West National Avenue, City of West Allis/WisDOT - Project Surveyor/Right-of-Way Plat:** Conducted survey using LiDAR technology to obtain detailed topographic features and elevations of the existing pavement, curb and gutter, numerous building stoops, entryways, stairs, and retaining walls within this highly developed urban corridor. Separate right of way plats were developed for the four project ID's (consisting of 36, 24, 37, and 25 parcels respectively).

**CTH M (North Avenue), Waukesha County/WisDOT – Project Surveyor/Right-of-Way Plat:** Completed 116 parcel ROW plat for this project on which GRAEF worked as a subconsultant to Jacobs/CH2M. The project included the reconstruction of three miles of W. North Avenue (CTH M) from Calhoun Road to 124th Street, located in the City of Brookfield and adjacent to the Village of Elm Grove.

**County O - Moorland Road, I-94 to US 18, Waukesha County/WisDOT - Survey QA/QC:** The project included roadway improvement plans for Moorland Road (CTH O) from I-94 to Bluemound Road. Project components include replacing the roadway pavement, intersection geometric improvements, installing sidewalk, traffic signals, pavement marking, roadway signing and storm sewer modifications in the project corridor. Existing right-of-way was established throughout the heavily urbanized corridor. This was completed via review of field monumentation, lines of occupation, legal descriptions, and inputted easements, which were provided from approximately 5,000 pages of title documents. Right of way plat was completed, including writing legal descriptions of acquisitions and detailing all survey related data shown.

**WisDOT Master Survey Contract - Project Manager:** Completion of topographic surveys, right-of-way plats, cross sections, DTMs, utility surveys, control surveys, structure survey reports, staking of right-of-way, and completion of CSMs. Provided engineering and ground control in support of aerial mapping, and planning (reconnaissance, monumentation (type 2, 3 or 4), target placement, and network/loop configuration). All projects were completed in accordance with WisDOT's FDM and the AASHTO Roadside Design Guide.

**Joseph F. Pepitone Jr.** PLA, LEED AP  
Senior Landscape Architect



**Professional Registration**  
Registered Landscape Architect –  
WI, CA, MN, NV  
CLARB National Certification

**Education**  
B.S., Landscape Architecture, 1986  
University of Wisconsin-Madison,  
Madison, WI

**Professional Certification**  
LEED Accredited Professional

**Professional Affiliations**  
American Society of Landscape  
Architecture  
Council of Landscape Architects  
Review Board  
Society for College and University  
Planning  
American Sports Builders  
Association

*Joe is a licensed landscape architect who brings 30 years of professional experience in project management expertise, landscape architectural design and planning to GRAEF and has won numerous design awards for his work. Joe has been involved in master planning and design for corporate office, industrial, commercial/retail, recreational facilities, urban design, multi-family residential, senior housing, healthcare and educational campuses of all sizes. His expertise includes master planning to incorporate building(s) and site program elements in a functional and cohesive manner. His thorough knowledge of all aspects of site development allow him to provide complete and thorough documentation which includes site planning, detailed design, landscape design and details, planting design, construction documentation, specifications and on-site construction administration.*

**I-794 Lakefront Gateway, Milwaukee County, WI – Project Landscape Architect:** Designed concepts for improvements to roadway infrastructure east of Lincoln Memorial Drive, enhancements to Urban Park, and creation of four concepts for the Gateway Plaza, an area bordered by Lincoln Memorial Drive, Michigan Street, Art Museum Drive, and East Clybourn Street. Streetscape designs include pervious pavers in the terrace and parking areas; planters; decorative stone mulch; biofiltration areas; and landscaped medians to highlight the boulevards along each roadway. Landscape design includes shade trees, ornamental trees, limestone boulders, ornamental grasses and perennials. Careful attention was given to the selection of plants and trees that are minimum maintenance and can survive the salt that is prevalent in an urban environment.

**University of Wisconsin-Milwaukee Innovation Campus Infrastructure, Wauwatosa, Milwaukee County, WI – Project Landscape Architect:** Managed the landscape design for the 88-acre technology and education campus of the University of Wisconsin-Milwaukee in the City of Wauwatosa. Also included design for multi-trailhead locations and trail design for a portion within the Milwaukee County Parks District. Landscape design included large areas of native plant community restoration, butterfly habitat development, native planting for 22 bio-filtration basins and a large multi-level gabion wall/landscape entry feature at the main entrance to the project.

**Germantown Department of Public Works Facility Site Evaluation and Design, Village of Germantown, WI – Landscape Architect:** Provided landscape planning associated with the development of a new public works facility and recycling center. Coordinated site layout with engineers and architect for best layout for site circulation, yard location, access for public and staff. Landscape design included enhanced storm water ponds with native plantings, future trail access adjacent to the site and design of monument signage.

## 5. PROJECT SCOPE OF WORK

Barrientos Design understands the scope of work involved two main tasks, Conceptual/Space Needs Evaluation for 35 Service Yards, and then the production of Construction Documents for the Washington Park Service Yard.

For the Final Design Phases, the A/E will provide services in the Phases of: Design Development, and Construction Documents. The terms, responsibilities, definitions and phases generally will follow the modified AIA B101 contract proposed by the County in this RFP.

The A/E will provide these professional design services:

1. Architecture
2. Landscape Architecture, not including any retaining walls
3. Civil Engineering, the extent of work being to the tree line of the delineated Yards.
4. Structural Engineering
5. HVAC Engineering
  1. Plumbing,
  2. Electrical Engineering
  3. Topographic Survey

Not included in Consultant's scope are:

1. Wetland delineation
2. Endangered species review
3. Fire Protection Design
4. Geotechnical borings and analysis
5. Environmental and hazardous material investigations
6. Selection of loose equipment, telephones, AV, security equipment, data systems.
7. Traffic studies

The project will be delivered via a single General Contractor in a single bid package.

The Topographic Map will provide the following:

- Conduct field observations of topographic and utility features of the site, to include:

- Visible permanent features.
- Utility markings and appurtenances.
- Individual trees over 6", vegetated areas will be outlined.
- Spot elevations and break lines at a density to allow the generation of one-foot contour intervals.
  
- Prepare a Topographic Map of observed permanent topographic and utility features. This mapping will be used for the design process as base mapping for the preparation of construction plans. This map will include the following information:
  - Date, scale, legend, and north arrow
  - Project name, property owner name and address
  - Description of ground surfaces (concrete, bituminous asphalt, grass, etc.)
  - Description and location of existing improvements including but not limited to, fences, walls, buildings, walks, drives, or any other existing visible site improvements.
  - Significant trees will be located; wooded areas will be outlined.
  - Spot elevations on an approximate 50-foot grid including all break lines so as to accurately generate 1-foot contour intervals
  - Underground utilities marked by the Diggers Hotline PLANNING LOCATE ticket will be shown on the map. Supplemental utilities based on the Diggers Hotline PLANNING PRINTS ticket will also be shown for utilities that have not been marked. In the case of private utilities, the owner shall be responsible for the marking of all private utilities or furnishing mapping of the private utilities.
  - As-built measurements of storm and sanitary sewer rim and invert locations and elevations.
  - Electric, telephone, and cable TV poles and overhead wires, hydrants and water valves, gas valves, pedestals, transformers, and other utility appurtenances.
  - Existing ground contours (1-foot interval)
  - Survey Control information including coordinate system, datums, locations, and descriptions.
  - All boundary information shall be based on GIS parcel mapping.

## **SCOPE OF WORK BY PHASE**

The first phase, Conceptual/Space Needs will establish the building and site design criteria including; defining the Service Yard's workflow of operations, facility needs definition, future trends integration, benchmarking with industry standards, optimal building and site plan arrangement, and establishing site selection criteria.

This activity will be conducted through interviews with a County-selected committee of Parks representatives who will provide the A/E team with facility data.

We are assuming that up to five types of Yard facilities will be programmed for space needs.

Specific tasks and deliverable for each of these Phases are as follows:.

### **TASK 1 – CONCEPTUAL/SPACE NEEDS REPORT, for General Service Yards Application**

1. Conduct a Kick-off Workshop focusing on the facility vision for the Parks Service Yards, the organizational structural, operational delivery methods, current facility usage and overview of building and yard needs. Also review past architectural and management studies and facility condition assessments
2. Conduct up to ten onsite walk-throughs with key Parks staff on the operations, equipment parking, parts storage, staff support and administrative areas..
3. Intake facility data on: fleet composition, major fixed equipment, parts and bulk storage, fueling, salt storage, public interface, field crews, supervisors and administration offices, site security, deliveries, staging, stocking, landscape and screening needs, lighting, and security.
4. Assess the optimal flow of operations, traffic, material, deliveries, staging and personnel. Document the sequence of Yard events throughout the day. Recommend the best relationship the yard functions should have to each other along with grouping into compatible zones.
5. Create bubble diagrams that diagrammatically document the flow of operations and their adjacency requirements.
6. Assess the future growth of Park's activities along with equipment, shop, storage and staffing changes. A percent increase in growth over the next twenty years will be developed.

7. Develop an Recommended Facility Program that identifies the needed space and configuration for Yard type. Compare recommended square feet against existing square feet and identify percent increases.
8. Create a sustainability program identifying design opportunities that can be readily achieved.
9. Create a Recommended Site Plan that expresses the sizing, relationships and operational flow required for the Service Yards. For key buildings, create recommended building plan diagrams.
10. Conduct a 90% review presenting field data taken into date and present initial analysis. Gather feedback and input from key users and update program.
11. Update and finalize the Recommended Yard program and plan diagrams. Recommend minimal acreage and site development features.
12. Document the Facility Program report into an 8 ½ x 11 booklet and provide an electronic file copy.

## **TASK 2 – SCHEMATIC DESIGN**

1. Conceptual plans that show building footprints, paved areas, site structures, driveways and potential detention areas.
2. Note visible utilities, zoning setback and surrounding features.
3. Review municipal engineering aspects including, utility locations and capacity, roadway capacity, traffic impact, topography, soils conditions, potential hazardous uses, titled easements, land use restrictions along with traffic management issues.
4. Review the concept plans with County staff as to how they meet their operational needs and update the concepts.
5. Identify benefits and shortfalls for each of the three candidate sites including: number of trucks parked in the Heated Parking, number parked in Cold Storage, square footage obtained versus Optimal Program size, traffic flow and circulation allowances, and area for the Yard functions.
  - a. Note how Garage improvements tie into County's operational study goals.
6. Develop cost estimates for the development for each of the three concept plans.
7. Quantify each candidate site's ranking in a Site Selection Decision Matrix and numerically tally their features.
8. Meet with Village staff for updates and progress reports, up to three meetings
9. Present findings to the County in a report format and visual presentation in a workshop format.

### **TASK 3 - DESIGN DEVELOPMENT**

Following the County's review and acceptance of the Schematic Design, the A/E will proceed with Design Development phase of the Washington Service facility. The Design Development will fix and describe the size and character of major building assemblies, major building engineering systems and provide a preliminary site design. Specific tasks include:

1. Issue an RFP for geotechnical services and integrate soils information into foundation design.
2. Finalize the selection of the building assembly, materials and finishes.
3. Create building sections and typical wall sections.
4. Developed detailed floor plan layouts for all rooms showing fixtures, equipment and furnishings.
5. Sizing, selection and layout of engineering systems: structural, HVAC, Plumbing and Electrical
6. Selection and specification of specialized fixed equipment including the truck wash.
7. Building engineering preliminary design: structural, HVAC, electrical, plumbing.
8. Preliminary technical specifications.
9. Conduct preliminary building code and local zoning ordinance review. Meet with local zoning officials for an informal review of the plans.
10. Correspond with utility officials and determine size, location and approvals required for building service.
11. Develop a conceptual grading, stormwater management, utility layout and paving plans. Along with architectural plans, submit site and building plans for and Plan Commission review. Prepare design documents for Agency hearings and attend meetings.
12. Finalize site engineering of grading, paving, stormwater, erosion control, paving, site lighting along with agency required submittals.
13. Submit Design Development Package to the County for review.
14. Provide a technical presentation of the Design Development documents to the County.

### **CONSTRUCTION AND BIDDING DOCUMENTS**

Following approval of the Design Development plans and budget, the A/E will proceed with Construction Documents consisting of drawings, schedules and specifications that set forth in detail the quality levels of materials, systems and other requirements of the Work for the construction Contract. Specific activities will include:

1. Finalize all discipline's selection, sizing, layout and quantities.
2. Finalize selection of all products, materials and equipment. Provide a Final Specification by Division of Work.
3. Provide a finish board of interior products.



4. Develop construction cost estimates
5. Submit plans, calculations and applications for State Building Plan Review.
6. Finalize any site permits from local and State agencies.
7. Submit the Construction Document package to the County for a final review.

## **PROJECT SCHEDULE**

Barrientos Design will provide this scope of work in this timeline.

Task 1. Service Yard Design Standards – 8/15/23 through 11/1/23

Task 2. Washington Park Schematic Design – 10/1/23 through 11/15/23

Task 3. Washington Park Design Development – 11/15/23 through 2/15/23

Task 4. Washington Park Construction Documents – 2/15/23 through 4/15/23

# 7 DESIGN PRINCIPLES OF HIGHLY EFFECTIVE SERVICE CENTERS



1. ROBUSTLY  
DEFINED  
FACILITY  
PROGRAM

2. WORKFLOW  
EFFICIENCY

3. PRODUCTIVITY  
& SAFETY

4. ASSET  
CONTROL  
& SECURITY

5. SUPERVISORY  
&  
COMMUNICATION

6. PERFORMANCE  
& SUSTAINABILITY

7. FUTURE TRENDS  
INTEGRATION

## 1. ROBUSTLY DEFINED FACILITY PROGRAM



Align the facility needs with your objectives



Identify the type maintenance program



Identify the main operating functions of the garage



Integrate all department's needs and identify issues



Define facility needs of each function, building, and yard



Analyze fleet composition

## 2. WORKFLOW EFFICIENCY

A facility that supports operations of garages includes:

- Logical sequence of activities
- Proper location of equipment
- Direct movement through building and yard
- Provide sufficient space for equipment and staff
- Allows for proper circulation, clearances, and heights



## 3. PRODUCTIVITY & SAFETY

Increase work output and worker safety with:

- Equipment that leverages output
- Technology deployment
- Safe & healthy work environments
- Ergonomic workstations



## 4. ASSET CONTROL & SECURITY

Maintain, track, preserve, and distribute equipment and bulk assets on site with defined areas for:

- Vendor loading
- Receiving and assembly
- Ordering and distribution
- Tracking and monitoring



## 5. SUPERVISORY & COMMUNICATION

Support and enhance managerial communication, tracking, and information gathering with:

- Collaboration area for supervisors
- Crew counters and assembly areas
- View Lines from offices to crew areas
- Lines of sights and open views to vendors and public



## 6. PERFORMANCE & SUSTAINABILITY

A building and yard that will last over 70 years and is environmentally sustainable includes:

- Durability and impact resistance
- Corrosion resistance
- Ease of maintenance and cleaning
- Sustainable principles



## 7. FUTURE TRENDS

Key garage building trends include:

- Technology and equipment
- Governmental and regulatory
- Pandemics and social distancing
- Social and community



# OPERATION DESIGN STANDARDS

## SPACE ALLOCATION STANDARDS:

### PARKING GARAGE:

Allot 1000 square feet per truck  
Include heavy, medium, and light parking stalls

### PARTS STORAGE:

Allot 75 square feet per vehicle parked in heated garage

### REPAIR BAY:

Allot minimum 2 bays per technician  
Allot 2000 square feet per bay

## IMPORTANT PROGRAM ELEMENTS



HEATED  
PARKING



PARTS & BULK  
STORAGE

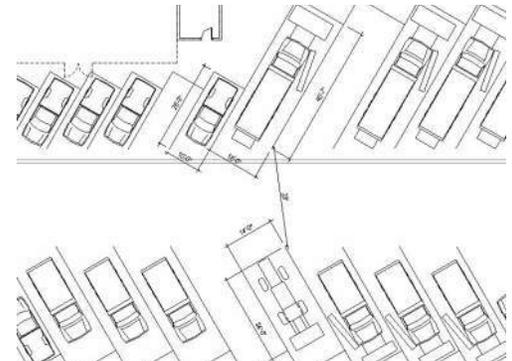
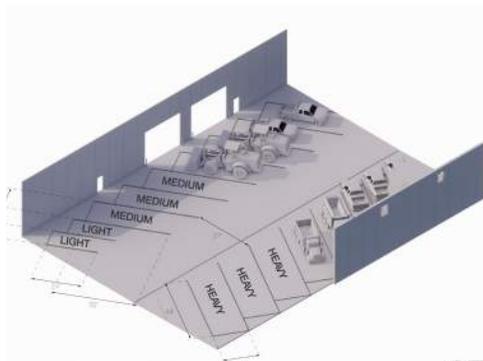


WASH BAY

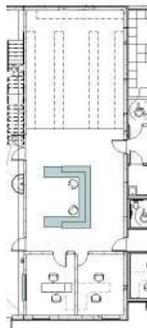
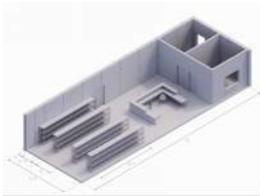


REPAIR  
GARAGE

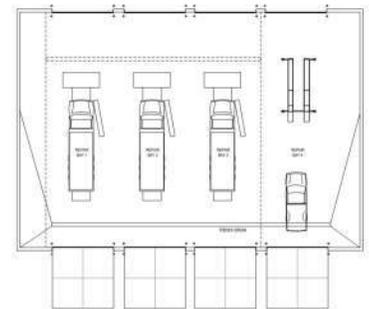
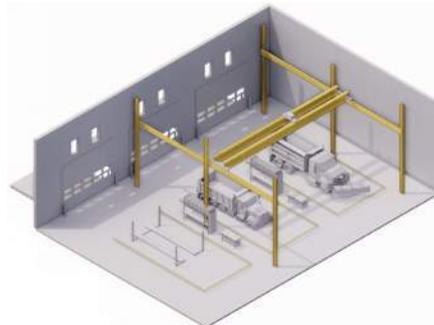
### HEATED PARKING



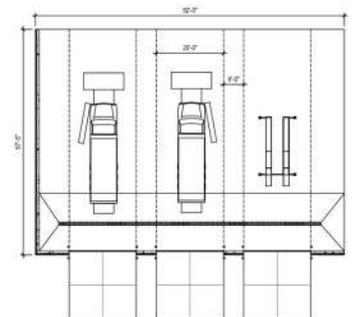
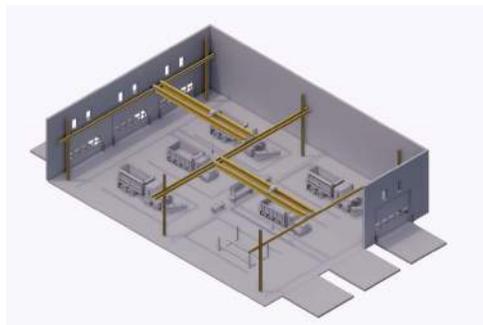
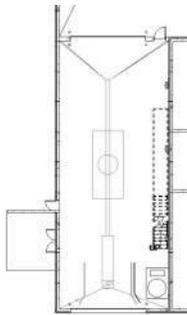
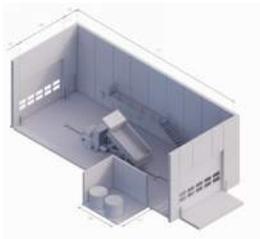
### PARTS & BULK STORAGE



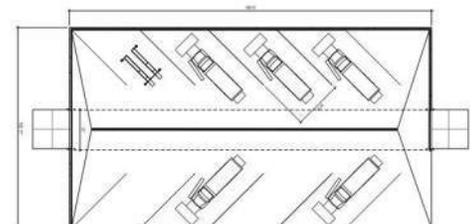
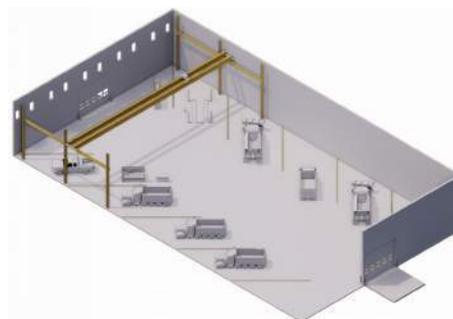
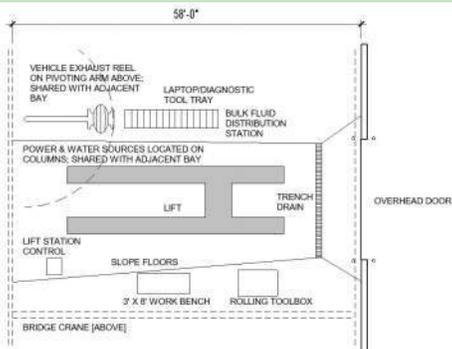
### REPAIR GARAGE



### WASH BAY



### REPAIR GARAGE EQUIPMENT



## 6. CONSTANT EFFORT SPREADSHEET

<b>Level of Effort &amp; Fee</b>							
<b>Milwaukee Co. Parks Building Plans &amp; Standardization</b>							
Architectural/Engineering Services							
	Principal	Sr. Archt /Eng	Archt /Eng	Design Archt/Eng	Admin	Total Hours	Costs
<b>Tasks by Firm</b>	\$225.00	\$150.00	\$125.00	\$102.00	\$88.00		
<b>Task 1. Service Yard Facility Standards</b>							
Barrientos Design	44	82	86	64	12	288	\$40,534
Graef	24	48	46	24	4	146	\$18,702
<b>Task 1 Total</b>						0	\$59,236
<b>Task 2. Wash. Pk SD</b>							
Barrientos Design	24	80	60	40	8	212	\$29,684
Graef	20	48	72	40	4	184	\$25,132
<b>Task 2 Total</b>						396	\$54,816
<b>Task 3. Wash Pk DD</b>							
Barrientos Design	32	112	124	64	6	338	\$46,556
Graef	24	148	152	80	4	408	\$55,112
<b>Task 3 Total</b>						408	\$101,668
<b>Task 5 Wash Pk CD</b>							
Barrientos Design	32	182	172	158	6	550	\$72,644
Graef	28	210	184	188	4	614	\$80,328
<b>Task 4 Totals</b>						1,164	\$152,972
<b>All Tasks Totals</b>	Principal	Sr. Archt /Eng	Archt /Eng	Design Archt/Eng	Admin		
Barrientos Design	132	456	442	326	32	1,316	\$189,418
Graef	96	454	454	332	16	1,206	\$181,722
<b>All Tasks Hourly Detail &amp; Costs</b>	228	910	896	658	48	2,522	\$371,140
<b>Direct Consultant Costs</b>							
Reimbursable Budget							\$5,000
<b>Direct Consultant Costs Total</b>							\$5,000
<b>Total Effort &amp; Fee</b>	<b>228</b>	<b>910</b>	<b>896</b>	<b>658</b>	<b>48</b>	<b>2,522</b>	<b>\$376,140</b>

## 7. TBE GOALS

Barrientos Design positively states and affirms that we will meet and exceed the TBE spend goal of 17% for this contract. Barrientos Design & Consulting is registered as a TBE/DBE firm and as Prime for this contract, we will lead this project and have a significant portion of the consultant fees. We hold this registration with the Wisconsin DOT and Milwaukee County.

Our company was formed in 1997 and founded by Norman Barrientos, AIA, an architect of Hispanic heritage, born and raised in Madison, WI. We provide architectural design services to communities throughout Wisconsin, both large and small, rural and urban.

As architects and specialists in operations and service facilities, we prime 95% of our projects, putting us in public interface to represent the entire design team. Through our professional services, we seek to make a positive architectural impact for our client communities. With our effective and advanced facility solutions, balancing and forwarding community priorities, and advancing economic justice through our sustainable and an environmental just design approach, Barrientos Design is committed to social justice in Milwaukee

Finally, we bring diversity to your planning and solutions team by seeing the world of issues and solutions from both our professional lenses and our personal experiences. While our architectural work is highly technical, our outlook, life experiences and viewpoints, will help Milwaukee County reach a more equitable solution.

With Barrientos Design at the helm, we will keep our minds open, our perspectives flexible and our solutions sensitive and beneficial for all community stakeholders.

As Principal of the contract, I affirm that our company is DBE and MBE registered, I accept the commitment to contract to the dollar amount specified, that the services will be rendered by our company's forces, and that I will notify the County of any contractual changes to this spend structure.



# OFFICE OF ECONOMIC INCLUSION (OEI) MILWAUKEE COUNTY

## COMMITMENT TO CONTRACT WITH TBE

PROJECT No.: WP56901 PROJECT TITLE: NEW SERVICE YARD BUILDING PLANS & STANDARDIZATION, including detailed design for Washington Park Service Yard

TOTAL CONTRACT AMOUNT (less allowances) \$ \_\_\_\_\_

TBE Goal: **17%**

Name & Address of TBE	Scope of Work Detailed Description	1) TBE Contract Amount	2) % of Total Contract
Barrientos Design & Consulting, Inc. 205 W. Highland Avenue, Milwaukee, WI 53203	Architecture, Prime project Management	189,418	50%

- 1) The total project contract amount is an estimate based on the outcome of negotiation between the Prime and Milwaukee County. In some situations the TBE sub-contract amount **might NOT** be based on the total project contract amount.
- 2) The **percentage** is based on the eligible scope of services that TBE participation can reasonably be obtained; which might not be based on the total project contract amount. The commitment percentage is the key indicator of TBE participation. The **Pass/Fail** determination is based on the percentage stated in the RFP/BID. If the Prime is using one or multiple TBE companies the sum of the percentages **MUST** satisfy the minimum percentage stated in the RFP/BID. Note the percentage indicated on this document will be viewed by OEI the Prime's **COMMITMENT** to the TBE company.

### **Bidder/Proposer Commitment (To be completed by firm committing work to TBE)**

I certify that the TBE firm quoted the identified service(s) and cost(s). I further acknowledge our firm having negotiated with, and having received confirmation, on partnering, pricing and delivery from the TBE firm listed herein.  
 Prime Contractor/Consultant Barrientos Design & Consulting, Inc. Phone 414-271-1812, or one of our subs, will enter into contract with the TBE firm listed, for the service(s) and amount(s) specified when awarded this contract. The information on this form is true and accurate to the best of my knowledge. I further understand that falsification, fraudulent statement, or misrepresentation will result in appropriate sanctions under applicable law.

Norman Barrientos Signature of Authorized Representative  
 Norman Barrientos, AIA, President Name & Title of Authorized Representative  
 July 12, 2023 Date

### **TBE Affirmation (To be completed by TBE Owner/Authorized Representative)**

- I affirm that our company is certified as (check all certifications that apply)
  - DBE by the Wisconsin Unified Certification Program certifying partners
  - MBE by State of Wisconsin DOA
  - WBE by State of Wisconsin DOA
  - SBE by SBA Federal Size Standards, NAICS and registered in SAM
  - SBE by Milwaukee County
- I acknowledge and accept this commitment to contract with my firm for the service(s) and dollar amount(s) specified herein. I understand and accept that this commitment is for service(s) to be rendered in completion of the project specified herein and all work is to be completed with my own forces. I affirm that approval from OEI will be obtained prior to subletting any portion of this work awarded to my firm on this project. I affirm that our company meets one of the following requirements: Certified as DBE and listed in the Wisconsin UCP Directory, certified as MBE or WBE with the State of Wisconsin DOA, or SBE firm certified by Milwaukee County or meets the SBA size standards and is listed in the SAM directory.

Norman Barrientos Signature of Authorized TBE Representative  
 Norman Barrientos, AIA President Name & Title of Authorized TBE Representative  
 414-271-1812 Phone Number  
 July 12, 2023 Date

### **FOR OEI USE ONLY**

Commitment number \_\_\_ of \_\_\_ Participation: \_\_\_\_\_ Project Total: \_\_\_\_\_

\_\_\_\_\_  
Authorized Signature Date

## 8. QUALITY CONTROL POLICY

### BARRIENTOS DESIGN QUALITY CONTROL PROCESS

For each design project, Barrientos Design staff will adhere to the following QC policy. On every project, a staff member will be assigned the role of independent QC reviewer. The QC Reviewer will establish clear and measurable quality standards for the firm. These standards will be measurable so that the QC Reviewer can track their progress and identify areas where improvement is needed.

By following these steps, the QC Reviewer will help to ensure the quality of the design and design documents, ascertain that the project is completed on time and within budget, and that the client is satisfied with the final product.

- The QC Reviewer will be an experienced architect who is familiar with the firm's quality standards.
- The QC Reviewer will be independent of the design team so that they can provide an objective assessment of the quality of the work.
- The QC Reviewer will communicate with the design team throughout the quality control process.
- The QC Reviewer will document the quality control process so that the firm can track its progress and identify areas where improvement is needed.
- The QC Reviewer will review the design drawings and specifications against the quality standards. This will be done independently of the design team, so that the QC Reviewer can provide an objective assessment of the quality of the work.

The QC Reviewer will create a quality control checklist for each design project. This checklist will include the following:

- Accuracy of the design drawings and specifications
- Coordination of the design with other disciplines

- Responsiveness to the client's needs
- Readability of the design documents

The QC Reviewer will identify any potential errors or omissions in the design drawings and specifications. This could include things like:

- Errors in calculations
- Inconsistencies between the drawings and specifications
- Items that are not compliant with the client's requirements

The QC Reviewer will correct any errors or omissions in the design drawings and specifications. This could involve:

- Communicating with the design team to get the errors corrected
- Making the corrections themselves

The QC Reviewer will document the quality control process. This could include:

- Keeping a log of the items that were reviewed
- Recording any errors or omissions that were found
- Documenting the corrections that were made

The QC Reviewer will track quality control results.

- Reviewing the quality control checklist to see if all of the items were reviewed
- Keeping a record of the errors or omissions that were found
- Analyzing the results to identify areas where improvement is needed

## 9. SUSTAINABILITY APPROACH

For the County Parks Service Yard Design Standards, Barrientos will apply these approaches.

- **Use sustainable materials.** When choosing materials we will consider the environmental impact of those materials. Some sustainable materials that can be used in public park facilities include:
  - Wood: Wood is a renewable resource that can be harvested sustainably.
  - Concrete: Concrete can be made with recycled materials, such as fly ash and ground granulated blast furnace slag.
  - Steel: Steel can be recycled indefinitely.
  - Glass: Glass can be made from recycled materials and is recyclable itself.
- **Design for energy efficiency.** Service facilities should be designed to be as energy efficient as possible. This can be done by using energy-efficient lighting, insulation, and HVAC systems.
- **Use renewable energy sources.** Explore energy sources, such as solar panels and wind turbines, to generate their own electricity.
- **Reduce water consumption.** Explore reducing water consumption by using water-efficient fixtures, such as low-flow toilets and faucets.
- **Incorporate green infrastructure.** Green infrastructure is a way of managing stormwater runoff that uses natural features, such as trees, shrubs, and rain gardens. Green infrastructure can help to improve water quality, reduce flooding, and create a more sustainable environment.
- **Encourage active transportation.** Park facilities can encourage active transportation by providing bike racks, walking paths, and other amenities that make it easy for people to get to and from the park without using a car.
- **Educate the public about sustainability.** Public facilities can educate the public about sustainability by providing information about sustainable materials, energy efficiency, and other sustainability topics.

By following these principles, we will design park facilities that are sustainable, environmentally friendly, healthier and more enjoyable for all users to enjoy.



## **10. FEE PROPOSAL**

Barrientos Design proposes to provide this work for a not-to-exceed fee of \$376,140 on a time and materials basis.

Our fee breakdown by task is as follows:

Fee Breakdown	
Task 1. Service Yard Facility Standards	\$59,236
Task 2. Wash. Pk SD	\$101,668
Task 3. Wash Pk DD	\$152,972
Task 5 Wash Pk CD	\$371,140
Reimbursables	\$5,000
Total Fee	\$376,140



## SUN PRAIRIE DPW FLEET REPAIR FACILITY Sun Prairie, WI

Barrientos Design & Consulting was commissioned by the City of Sun Prairie to assist in the building of a new fleet repair maintenance facility with administration wing. The facility, with a steel frame and pre-cast panels, covers 15,000 square feet. The garage portion of the building features a mezzanine over the one-story facility. The administration wing includes lockers, bathroom facilities, washers and dryers, and lunch room/training space.

Barrientos Design provided a Siting Study, Master Planning, Schematic Design, Design Development, Construction Documentation, Bidding, Construction Administration and Management for the project.

**Size:** 15,000 SF

**Cost:** \$7.2M

**Completion:** 2007

**Client:** City of Sun Prairie

**Contact:** J.R. Brimmer 608-837-0712





## POTAWATOMI CULTURAL MUSEUM ADDITION

Crandon, WI

Barrientos Design provided architectural and interior design services as well as structural and civil engineering to the Potawatomi Community for the addition of a bi-level, 10,000 square foot addition to the existing 5,800 square foot cultural center. The addition houses a library, reading corral, storage, a gift shop, class room, meeting space, climate controlled archive space and work rooms.

Interior design features include clerestory windows for effective daylighting and glass doors leading to an observation deck overlooking the surrounding forest.

Exterior features implement tribal inspiration with the frieze designed by the client, an outdoor fireplace used for gatherings and story telling, and the "ribs" made of glue-lam replicates a historical wigwam motif.



**Size:** 10,000 SF

**Cost:** \$2.5M

**Completion:** 2007

**Client:** Forest County Potawatomi Community  
Mike Alloway, Museum Director  
715.478.7474



## JEFFERSON COUNTY CENTRAL HIGHWAY GARAGE

### Jefferson, WI

The new main shop of 83,500 facility was designed to house 40 plow trucks and other field equipment. In addition, the building also includes 8 repair bays, a sign & carpentry shop, crew lockers, a lunchroom for a staff of 45 people and offices for the entire department.

Site facilities include: 30,000 SF Cold Storage Building, 8,000 ton salt shed, 4,000 SF Salt Brine Building, 20K gallon fueling station and canopy, outdoor stock storage, and truck scales. Barrientos Design was hired to design full architectural plans and oversee construction administration.

A video-surveillance system, key card access system, site fencing and overall building design provide security for this project.

**Size:** 133,500 SF

**Cost:** \$19.2M

**Client:** Jefferson County Highway Department

**Contact:** Bill Kern, County tel 920-674-7390





## CITY OF WAUPACA DEPARTMENT OF PUBLIC WORKS

### Waupaca, WI

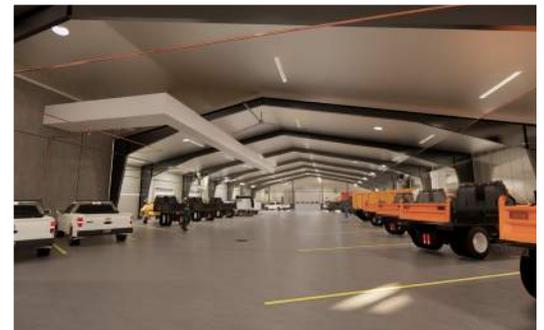
Barrientos Design was hired by the City of Waupaca to develop a new Department of Public Works facility. Their functions are being relocated to an abandoned sports field, and construction will begin May 17th 2023. Barrientos teamed up with Harwood Associates who provided engineering & structural services.

The Garage includes a Parking Garage with 25 stalls, a Repair Garage with 4 bays, a Manual Wash Bay, Administrative wing, and other functions including a Sign Shop and Water Meter Testing area. Pre-Cast Structural Concrete was used for the Repair Garage and Pre-Engineered Metal Construction was used for the Parking Garage and Administration. Barrientos hope the City of Waupaca will benefit from this new building for the next 50+ years.

**Completion:** In progress

**Client:** City of Waupaca

**Contact:** Justin Berrens





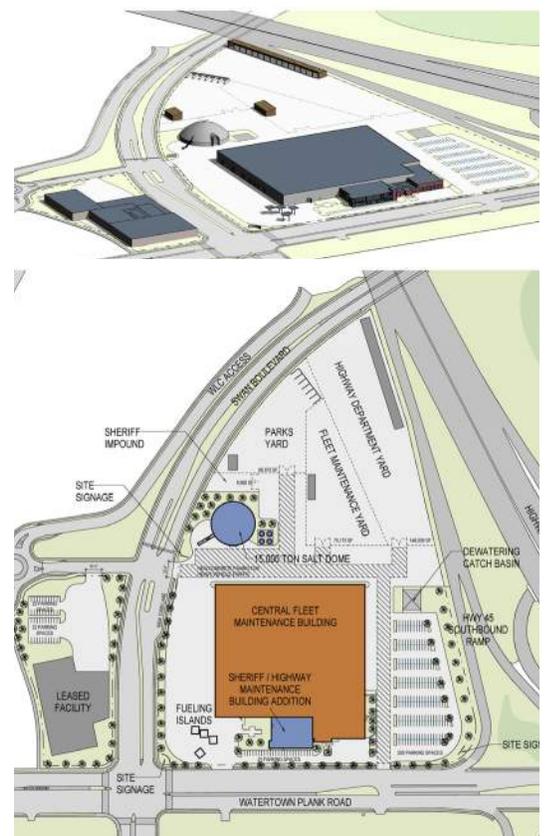
## COUNTY FLEET MAINTANANCE STUDY Milwaukee, WI

Barrientos Design was retained by Milwaukee County as experts in the design and planning of Fleet Maintenance Facilities to conduct an intensive study of the existing Milwaukee County Maintenance Facility. The intent of the study was to assess the before-and-after status of the Watertown Plank Road Facility in Wauwatosa, as affected by the Wis DOT Zoo Interchange Reconstruction project.

As part of the Zoo Interchange project a significant portion of site will be taken by WisDOT for the realignment of Swan Boulevard and the reconstruction of the Highway 45 off ramp to Watertown Plank Road. Due to the land taking several of the key structures on the site are affected and needed to be relocated. In addition, access to the site needed to be reconfigured to allow for efficient access to the freeway by County Sheriff and Highway Maintenance vehicles. Barrientos Design explored several options for reconfiguration of the site structures and site access. Cost estimates and space allocation recommendations were made in a detail report to County officials.

**Client:** Milwaukee County

**Contact:** Greg High, (414) 278-4943





## POLK COUNTY HIGHWAY GARAGE

### Balsam Lake, WI

Polk County's new Highway Garage consists of a new 60,000 SF Main Shop, a 45,000 remodeled storage and shop building, a fueling station and a salt shed. The complex is located on 9 acres of land situated in an industrial park near the County Courthouse

Within the new main shop a heated parking garage houses 40 plow and field trucks and other field equipment. In addition, the shop will house a repair garage with 6 repair bays, part storage, truck wash, crew lockers, a lunchroom for a staff of 40 people and offices for the entire department.

Barrientos Design developed the construction documents in a fast-track approach with a foundation package being developed within seven weeks. Following that, the remainder of construction documents were issued three weeks later.

Size: 60,000 SF new, 45,000 remodeled

Cost: \$12M

Client: Polk County Highway Department





## MILWAUKEE COUNTY DEPARTMENT OF TRANSPORTATION NORTH GARAGE

Milwaukee, WI

The existing MCDOT garage on the north side of Milwaukee was old and undersized. The County was also interested in combining the Parks Forestry Division into the DOT building. Barrientos provided space planning, schematic-level drawings, and cost estimates for both scenarios. Option 1 was a 48,000 s.f. garage with 28 parking stalls and three repair bays, just for the DOT. Option 2 was a 72,000 s.f. garage for both Parks and DOT.

The challenge was to fit the garage, a 21,000 s.f. cold storage building, fuel island, an existing 12,000 ton salt shed, and yard storage for both departments on an eight acre site. An adjacent property purchase would be required. Barrientos was able to produce a site option with adequate vehicle circulation as well as accommodating all of the programmatic requirements.

Client: Milwaukee County





## SHORWEWOOD DPW FACILITY & SITE Shorewood, WI

For the Village of Shorewood, Barrientos Design is designing two public works facilities: the Utilities Garage and the Streets/Parks/Building's Garage. Barrientos Design developed a space needs and master plan for implementing both facilities by reusing the existing sites.

The recommended plan consists of a combined Streets/Parks/Buildings Garage of 74,000 SF along with a central repair garage. The Utilities Garage is a separate 30,000 SF building which involves partial demolition of the existing structure and creating a significant addition in place.

**Size:** 58,000 SF

**Cost:** \$20M

**Client:** Village of Shorewood



## NEW BERLIN STREETS & UTILITIES GARAGE

### New Berlin, WI

For the City of New Berlin, Barrientos Design is designing two public works facilities: the Utilities Garage and the Streets/Parks/Building's Garage. Barrientos Design developed a space needs and master plan for implementing both facilities by reusing the existing sites.

The recommended plan consists of a combined Streets/Parks/Buildings Garage of 74,000 SF along with a central repair garage. The Utilities Garage is a separate 30,000 SF building which involves partial demolition of the existing structure and creating a significant addition in place.



**Size:** 30,000 SF (Utilities Building)

**Cost:** \$6M

**Client:** City of New Berlin



## CALUMET COUNTY HWY MAINTENANCE FACILITY

### Chilton, WI

Barrientos Design and Consulting Inc. was hired to develop a complete site master plan, building programming and the design of a 52,770 sf highway maintenance facility for Calumet County.

Site functions include: salt shed, fueling station, outdoor stock storage, cold storage building, and a truck scale. The site will also have a rain garden for storm water management.

Building functions include: heated storage for 29 vehicles, 4 vehicle service bays, 2 truck wash bays, welding shop, sign shop, striping shop, carpentry shop, tire storage, bulk fluid storage, parts storage, lunch room, locker rooms, and administrative offices.

**Size:** 52,770 SF

**Cost:** \$13.9M

**Client:** Calumet County Highway Commission,

**Contact:** Brian Glaeser (920) 849-1463





## PEPIN COUNTY HIGHWAY DEPARTMENT PRELIMINARY DESIGN

### Durand, WI

Barrientos Design created Preliminary architectural and engineering designs for a new Highway Garage that will be approximately 53,000 square feet in size and house the following functions: Heated vehicle storage garage, Repair Garage, Welding Shop, Truck Wash, Parts Storage, Crew support, Administration.

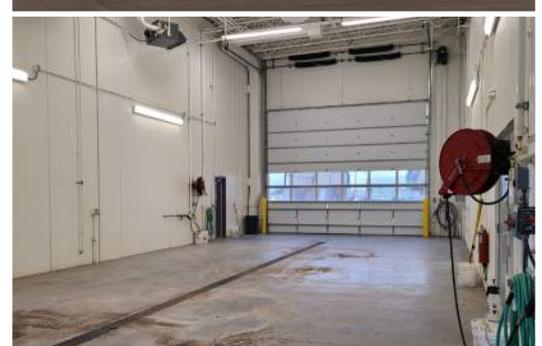
Yard facilities will include: Cold Storage, Salt Shed, Fuel Station, Truck Scale, parking and general site development.

This Preliminary Design effort advanced the Schematic Design into 30% architectural and engineered plans where major design elements are sized, selected, located and quantified.

**Size:** 53,000 SF

**Cost:** \$13 M

**Client:** Pepin County





## MENOMINEE COUNTY MAINTENANCE FACILITY

Keshena, WI

Barrientos Design completed the design of a new 35,000 square foot fleet maintenance facility that houses patrol trucks in heated parking, three mechanic's bays, truck wash, parts storage, lube fluids, staff lockers and a lunch room.

Administrative areas include: Commissioner's office, County Meeting Room, lobby and administrative offices. Site functions include: cold storage building, salt shed, fueling station, truck scale, stockpile bins and separate parking for staff and visitors.

Barrientos Design was hired to design full architectural plans and oversee construction administration.

**Size:** 35,000 SF

**Cost:** \$12M

**Completion:** 2003

**Client:** Menominee Highway Dept.

**Contact:** Jeremy Weso, (715) 799-3369







## MANITOWOC COUNTY MAINTENANCE FACILITY

### Manitowoc, WI

Barrientos Design completed the design of this 76,000 square foot Highway Maintenance Facility located at a new site that previously functioned as a gravel quarry. Barrientos Design was hired to develop a complete site master plan to delineate all the ultimate facilities on the site over a three-year period.

Site functions include: operations building, salt dome, fueling station, compost pad, outdoor stock pile storage, equipment storage buildings, truck scales and asphalt plant machinery layout areas.

Building functions include: 7 vehicle service bays, steam wash bay, welding shop, sign shop, tire storage, fluid storage, parts storage, steel storage, lunchrooms, locker rooms and administrative offices.

**Cost:** \$15M

**Client:** Manitowoc Highway Dept.





## DOOR COUNTY MAINTENANCE FACILITY Sturgeon Bay, WI

The Barrientos Design team completed the design and structural engineering for the Door County Fleet Maintenance Facility that was designed to house 41 trucks, field equipment storage, bulk fluids and house lockers and a lunchroom for a staff of 45 people.

Site functions include: salt shed, fueling station and canopy outdoor stock storage, equipment storage buildings and truck scales. Barrientos Design was hired to design full architectural plans, complete structural engineering of the facility, and oversee construction administration.

**Size:** 90,000 SF

**Cost:** \$14M

**Client:** Door County Highway Dept.





## WINNEBAGO CTY VEHICLE STORAGE ADDITION

Oshkosh, WI

Barrientos Design was hired to design full architectural plans and oversee construction administration for a 15,000 SF Storage Addition designed to house 15 trucks.

The building utilizes insulated metal panels for walls and roof. The existing building was analyzed and reinforced for additional snow drift loadings. Water and air are available at every other stall for convenient use.

**Size:** 15,000 SF

**Cost:** \$1.4M

**Completion:** 2002

**Client:** Winnebago Highway Dept.  
John Haese, Hwy Commissioner  
Tel: 920-232-1700





## FOX POINT VILLAGE HALL & PUBLIC WORKS GARAGE CONCEPT DESIGN

### Fox Point, WI

The Barrientos Design team conducted a Space Needs Analysis and a Facility Conditions Assessment for the combined facility of Village Hall and DPW at the Village of Fox Point. Upon completion of these studies, conceptual design options were generated based on Village needs.

The renovation includes an addition of designated truck wash and repair bay, as well as a drive aisle in the garage that will gain the Department of Public Works efficiencies in their daily operations.

Expansion of the Village Hall offices and addition of a pre-function area will allow for efficiencies in daily tasks, as well as special events.

**Cost:** \$14M

**Completion:** 2019

**Client:** Village of Fox Point

**Contact:** Scott Brandmeier

