

**RESOLUTION NO. 2022-126
(12/19/2022)**

**A RESOLUTION OF THE VILLAGE OF CALEDONIA APPROVING A
PROFESSIONAL SERVICES AGREEMENT WITH CLARK DIETZ, INC. FOR
ENGINEERING SERVICES AT CRAWFORD PARK.**

The Village Board of the Village of Caledonia, Racine County, Wisconsin do resolve as follows:

WHEREAS, the Village Board approved Village Staff to acquire Engineering Services for the creation of the Master Grading and Drainage Plan for Crawford Park via Resolution 2022-109 and

WHEREAS, the Village of Caledonia Engineering Department requested proposals from 5 consulting firms for the creation of a Master Grading and Drainage Plan for Crawford Park to be received on December 5, 2022 and

WHEREAS, Village Staff has reviewed all submitted proposals for conformance to the RFP standards, including each firm's experience, qualifications, methodology, timeframe, and proposed costs and

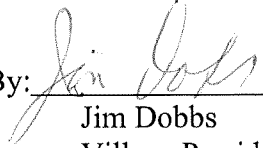
WHEREAS, Village Staff recommend that Clark Dietz, Inc be utilized for Professional Engineering Services and the creation of the Master Grading and Drainage Plan and

WHEREAS, the Professional Engineering Services will be utilized per the total contract amount of \$30,250. Any additional work would be charged on a Time & Material basis according to the General Billing Rates but not to exceed the approved total of \$40,000 in Park Impact Fees. Professional Engineering Services that are identified outside of General Engineering will be scoped and authorized.

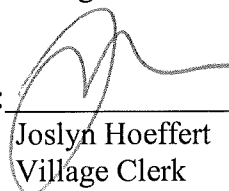
NOW THEREFORE BE IT RESOLVED THAT, the Board of Trustees of the Village of Caledonia approves the Professional Services Agreement set forth in **Exhibit B**.

Adopted by the Board of Trustees of the Village of Caledonia, Racine County, Wisconsin, this 19 day of December, 2022.

VILLAGE OF CALEDONIA

By: 

Jim Dobbs
Village President

Attest: 

Joslyn Hoeffert
Village Clerk

MEMORANDUM

Date: December 14, 2022

To: Finance Committee
Village Board

From: Ryan Schmidt, P.E.
Village Engineer

Re: Crawford Park – Professional Engineering Services – Master Grading Plans

Background Information

The Crawford Park Master Plan was approved on October 3, 2022 and as part of that final plan, a construction phasing schedule was recommended by MSA Professional Services, Inc. During the October 10th Parks Committee Meeting, Staff recommended acquiring Professional Engineering Services for the creation of a Master Grading and Drainage Plan as the first phase into the overall development of the park. This was approved by the Parks Committee and then approved by the Village Board on October 17, 2022.

The Engineering Department created an RFP for engineering services and reached out to 5 consulting firms for the creation of the Master Grading and Drainage Plan that was due on December 5th, 2022. The RFP was approved to utilize Park Impact Fees not exceeding \$40,000. The 5 firms contacted were: Nielsen, Madsen & Barber, Stantec, Clark Dietz, Foth, and MSA Professional Services. Of these 5, the Village received 3 proposals in total. NMBSC respectfully declined providing a proposal for this work and Stantec did not respond at all. The following results came from the 3 proposals:

- MSA Professional Services: \$110,000.
- Foth: \$66,650
- Clark Dietz: \$30,250.

After Staff review of the 3 proposals, Clark Dietz has provided the only proposal to come within budget while also meeting all requirements of the RFP. The other two proposals from MSA and Foth met the requirements of the RFP but have a significant cost increase compared to Clark Dietz. In addition, Clark Dietz has proposed to complete the work by the end of March while the other two have plans being completed by June/July. This timeline benefits the Village because it allows the possibility for work to be out for bid in 2023 for possible Fall construction.

Recommendation

Move to approve Village Staff to enter into an agreement for professional engineering services for the creation of the Master Grading and Drainage Plans for Crawford Park with Clark Dietz.

PROFESSIONAL SERVICES AGREEMENT

Project Name ("Project")

CRAWFORD PARK MASTER GRADING AND DRAINAGE PLAN SERVICES

This Agreement is by and between

Village of Caledonia ("Client")
5043 Chester Lane
Caledonia, WI 53402

and

Clark Dietz, Inc. ("Clark Dietz")
759 North Milwaukee Street, Suite 624
Milwaukee WI 53202

Who agree as follows:

Client hereby engages Clark Dietz to perform the services set forth in PART I - SERVICES BY CLARK DIETZ, and Clark Dietz agrees to perform the Services for the compensation set forth in PART III - COMPENSATION. Clark Dietz shall be authorized to commence the Services upon execution of this Agreement and written or verbal authorization to proceed from Client. Client and Clark Dietz agree that this signature page, together with Parts I - IV and attachments referred to therein, constitute the entire Agreement between them relating to the Project.

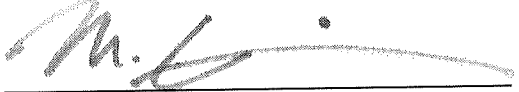
Agreed to by Client

By: _____
Kathy Kasper

Title: Village Administrator

Date: _____

Agreed to by Clark Dietz

By:  _____
Mustafa Emir

Title: Executive Vice President

Date: December 14, 2022

**PART I
SERVICES BY CLARK DIETZ**

A. Project Description

1. The "Client" is retaining Clark Dietz to create a Master Grading and Drainage plan for Crawford Park based on the approved Master Park Plan. The grading and drainage plan shall encompass the entire area of the park while utilizing the plans from the on-going construction of the Public Safety Building on site.

B. Scope

1. A thorough evaluation of the Crawford Park Master Plan (Exhibit A), including its vision statement, purpose, and recommendations.
2. A full survey of the park including the existing facilities and any infrastructure adjacent to the site that would be helpful to the overall design.
3. Analysis, design and preparation of final grading plans and modifications of the entire park. This will include the distribution of the existing material on site, re-planting of trees, cut/fill requirements, and phased grading recommendations. The park road and Public Safety Building driveway shall be part of the overall grading design, but road design sheets and subgrade prep are not required for the mass grading plans.
4. Storm Water Management Plan for the entire park build-out, including BMP recommendations, incorporation of the SWMP requirements into the grading plan, and ability to utilize or expand existing facilities. The full build out calculations shall include the paved park road and the future Public Safety Driveway.
5. Effective coordination with staff, the Park & Recreation Advisory Committee, and Village Board.
6. Final deliverable construction plans, special conditions and estimate of costs (digital and hardcopy) for the mass grading of the site as a whole and in interim phases.

C. Deliverables

- 5 Hard Copies and 1 Digital Copy of the stamped and approved grading and drainage plan set.
- 1 Digital Copy of special conditions for the grading and drainage plans.
- 1 Digital Copy of cost analysis / estimate of costs for the proposed work.
- 1 Hard Copy and 1 Digital Copy of the SWMP.
- 1 Digital Copy of the modeling files used for the SWMP.
- 1 Digital CAD file including survey point files.
- Meetings with Village Staff as needed.
- Meetings with Village Board and Parks Committee for assistance with final presentation of the grading and drainage plans.

D. Schedule

1. The intent of the Project is to be bid in late Spring 2023 with construction occurring in summer/fall of 2023.

E. Assumptions/Conditions

This agreement is subject to the following assumptions/conditions:

1. This Agreement and any legal actions concerning its validity, interpretation and performance shall be governed by the laws of the State of Wisconsin.

**PART II
CLIENT'S RESPONSIBILITIES**

Client shall, at its expense, do the following in a timely manner so as not to delay the Services:

A. Information/Reports

Provide Clark Dietz with reports, studies, site characterizations, regulatory decisions and similar information relating to the Services that Clark Dietz may rely upon without independent verification unless specifically identified as requiring such verification.

B. Representative

Designate a representative for the project who shall have the authority to transmit instructions, receive information, interpret and define Client's requirements and make decisions with respect to the Services. **The Client representative for this Agreement will be Ryan Schmidt, PE, Village Engineer.**

C. Decisions

Provide all criteria and full information as to Client's requirements for the Services and make timely decisions on matters relating to the Services.

PART III

COMPENSATION

A. Compensation

1. Total compensation to Clark Dietz for services rendered on the Project in accordance with PART I, SERVICES of this Agreement will be \$30,250, to be invoiced on an hourly basis.
2. The hourly rates billed includes salaries, payroll taxes and insurance, employee fringe benefits, general overhead costs, profit, and project related expenses.

B. Billing and Payment

1. Timing/Format
 - a. Invoices shall be submitted monthly. Invoices shall be considered past due if not paid within 45 calendar days of the date of the invoice. Such invoices shall be prepared in a form supported by documentation required by the Client.
2. Billing Records
Clark Dietz shall maintain accounting records of its costs in accordance with generally accepted accounting practices. Access to such records will be provided during normal business hours with reasonable notice during the term of this Agreement and for 3 years after completion.

**PART IV
STANDARD TERMS AND CONDITIONS**

1. **STANDARD OF CARE.** Services shall be performed in accordance with the standard of professional practice ordinarily exercised by the applicable profession at the time and within the locality where the services are performed. No warranty or guarantee, express or implied is provided, including warranties or guarantees contained in any uniform commercial code.
2. **CHANGE OF SCOPE.** The Scope of Services set forth in this Agreement is based on facts known at the time of execution of this Agreement, including, if applicable, information supplied by Clark Dietz and Client. Clark Dietz will promptly notify Client of any perceived changes of scope in writing and the parties shall negotiate modifications to this Agreement.
3. **DELAYS.** If events beyond the control of Clark Dietz, including, but not limited to, fire, flood, explosion, riot, strike, war, process shutdown, act of God or the public enemy, and act or regulation of any government agency, result in delay to any schedule established in this Agreement, such schedule shall be extended for a period equal to the delay. In the event such delay increases the cost or time required for Clark Dietz to perform its services, Clark Dietz shall be entitled to an equitable adjustment in compensation and extension of time.
4. **TERMINATION/SUSPENSION.** Either party may terminate this Agreement upon 30 days written notice to the other party in the event of substantial failure by the other party to perform in accordance with its obligations under this Agreement through no fault of the terminating party. Client shall pay Clark Dietz for all Services, including profit relating thereto, rendered prior to termination, plus any expenses of termination.
5. **REUSE OF INSTRUMENTS OF SERVICE.** All reports, drawings, specifications, computer data, field data notes and other documents prepared by Clark Dietz as instruments of service shall remain the property of Clark Dietz. Clark Dietz shall retain all common law, statutory and other reserved rights, including the copyright thereto. Reuse of any instruments of service including electronic media, for any purpose other than that for which such documents or deliverables were originally prepared, or alteration of such documents or deliverables without written authorization or adaptation by Clark Dietz for the specific purpose intended, shall be at Client's sole risk.
6. **ELECTRONIC MEDIA.** In accepting and utilizing any drawings, reports and data on any form of electronic media generated and furnished by Clark Dietz, the Client agrees that all such electronic files are instruments of service of Clark Dietz, who shall be deemed the author, and shall retain all common law, statutory law and other rights, without limitation, including copyrights.

The Client agrees not to reuse these electronic files, in whole or in part, for any purpose other than for the Project. The Client agrees not to transfer these electronic files to others without the prior written consent of Clark Dietz. The Client further agrees that Clark Dietz shall have no responsibility or liability to Client or others for any changes made by anyone other than Clark Dietz or for any reuse of the electronic files without the prior written consent of Clark Dietz.

Any changes to the electronic specifications by either the Client or Clark Dietz are subject to review and acceptance by the other party. If Clark Dietz is required to expend additional effort to incorporate changes to the electronic file specifications made by the Client, these efforts shall be compensated for as Additional Services.

In addition, the Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless Clark Dietz, its officers, directors, employees and subconsultants (collectively, Clark Dietz) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from any changes made by anyone other than Clark Dietz or from any use or reuse of the electronic files without the prior written consent of Clark Dietz.

The Client is aware that differences may exist between the electronic files delivered and the printed hard-

copy construction documents. In the event of a conflict between the signed construction documents prepared by Clark Dietz and electronic files, the signed or sealed hard-copy construction documents shall govern.

7. **OPINIONS OF CONSTRUCTION COST.** Any opinion of construction costs prepared by Clark Dietz is supplied for the general guidance of the Client only. Since Clark Dietz has no control over competitive bidding or market conditions, Clark Dietz cannot guarantee the accuracy of such opinions as compared to contract bids or actual costs to Client.

8. **SAFETY.** Clark Dietz specifically disclaims any authority or responsibility for general job site safety and safety of persons other than Clark Dietz employees.

9. **RELATIONSHIP WITH CONTRACTORS.** Clark Dietz shall serve as Client's professional representative for the services and may make recommendations to Client concerning actions relating to Client's contractors. Clark Dietz specifically disclaims any authority to direct or supervise the means, methods, techniques, sequences or procedures of construction selected by Client's contractors.

10. **THIRD PARTY CLAIMS.** Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or Clark Dietz. Clark Dietz's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against Clark Dietz because of this Agreement or the performance or nonperformance of services hereunder. The Client and Clark Dietz agree to require a similar provision in all contracts with contractors, subcontractors, subconsultants, vendors and other entities involved in this Project to carry out the intent of this provision.

11. **MODIFICATION.** This Agreement, upon execution by both parties hereto, can be modified only by a written instrument signed by both parties.

12. **PROPRIETARY INFORMATION.** Information relating to the Project, unless in the public domain, shall be kept confidential by Clark Dietz and shall not be made available to third parties without written consent of Client, unless so required by court order.

13. **INSURANCE.** Clark Dietz will maintain insurance coverage for Professional, Comprehensive General, Automobile, Worker's Compensation and Employer's Liability in amounts in accordance with legal, and Clark Dietz business requirements. Certificates evidencing such coverage will be provided to Client upon request. For projects involving construction, Client agrees to require its construction contractor, if any, to include Clark Dietz as an additional insured on its commercial general liability policy relating to the Project, and such coverages shall be primary.

14. **INDEMNITIES.** Clark Dietz agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Client, its officers, directors and employees against all damages, liabilities or costs, to the extent caused by Clark Dietz' negligent performance of professional services under this Agreement and that of its subconsultants or anyone for whom Clark Dietz is legally liable.

The Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless Clark Dietz, its officers, directors, employees and subconsultants against all damages, liabilities or costs, to the extent caused by the Client's negligent acts in connection with the Project and that of its contractors, subcontractors or consultants or anyone for whom the Client is legally liable.

Neither the Client nor Clark Dietz shall be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence.

15. **LIMITATIONS OF LIABILITY.** In recognition of the relative risks and benefits of the Project to both the Client and Clark Dietz, the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of Clark Dietz and their officers, directors, partners, employees, shareholders, owners and subconsultants for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert-witness fees and costs, so that the total aggregate liability of Clark Dietz and their officers, directors, partners,

employees, shareholders, owners and subconsultants shall not exceed Clark Dietz's total fee for services rendered on this Project, or \$ 250,000 , whichever is greater. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

16. **CONSEQUENTIAL DAMAGES.** Notwithstanding any other provision of this agreement, and to the fullest extent permitted by law, neither the Client nor Clark Dietz, their respective officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation and any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both the Client and Clark Dietz shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

17. **ACCESS.** Client shall provide Clark Dietz safe access to the project site necessary for the performance of the services.

18. **ASSIGNMENT.** The rights and obligations of this Agreement cannot be assigned by either party without written permission of the other party. This Agreement shall be binding upon and insure to the benefit of any permitted assigns.

19. **HAZARDOUS MATERIALS.** Clark Dietz and Clark Dietz' consultants shall have no responsibility for discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances. If required by law, the client shall accomplish all necessary inspections and testing to determine the type and extent, if any, of hazardous materials at the project site. Prior to the start of services, or at the earliest time such information is learned, it shall be the duty of the Client to advise Clark Dietz (in writing) of any known or suspected hazardous materials. Removal and proper disposal of all hazardous materials shall be the responsibility of the Client.

20. **REMODELING AND RENOVATION.** For Clark Dietz' services provided to assist the Client in making changes to an existing facility, the Client shall furnish documentation and information upon which Clark Dietz may rely for its accuracy and completeness. Unless specifically authorized or confirmed in writing by the Client, Clark Dietz shall not be required to perform or have others perform destructive testing or to investigate concealed or unknown conditions. The Client shall indemnify and hold harmless Clark Dietz, Clark Dietz' consultants, and their employees from and against claims, damages, losses and expenses which arise as a result of documentation and information furnished by the Client.

21. **CLIENT'S CONSULTANTS.** Contracts between the Client and other consultants retained by Client for the Project shall require the consultants to coordinate their drawings and other instruments of service with those of Clark Dietz and to advise Clark Dietz of any potential conflict. Clark Dietz shall have no responsibility for the components of the project designed by the Client's consultants. The Client shall indemnify and hold harmless Clark Dietz, Clark Dietz' consultants and their employees from and against claims, damages, losses and expenses arising out of services performed for this project by other consultants of the Client.

22. **NO WAIVER.** No waiver by either party of any default by the other party in the performance of any particular section of this Agreement shall invalidate another section of this Agreement or operate as a waiver of any future default, whether like or different in character.

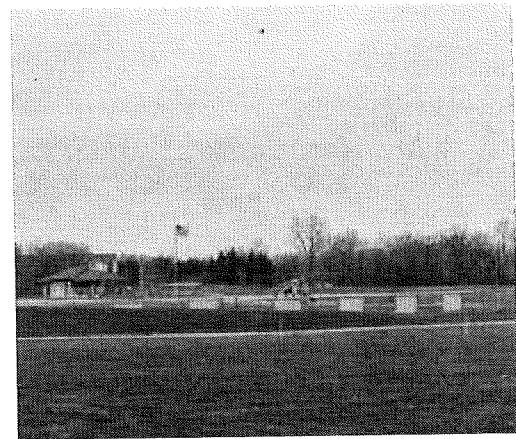
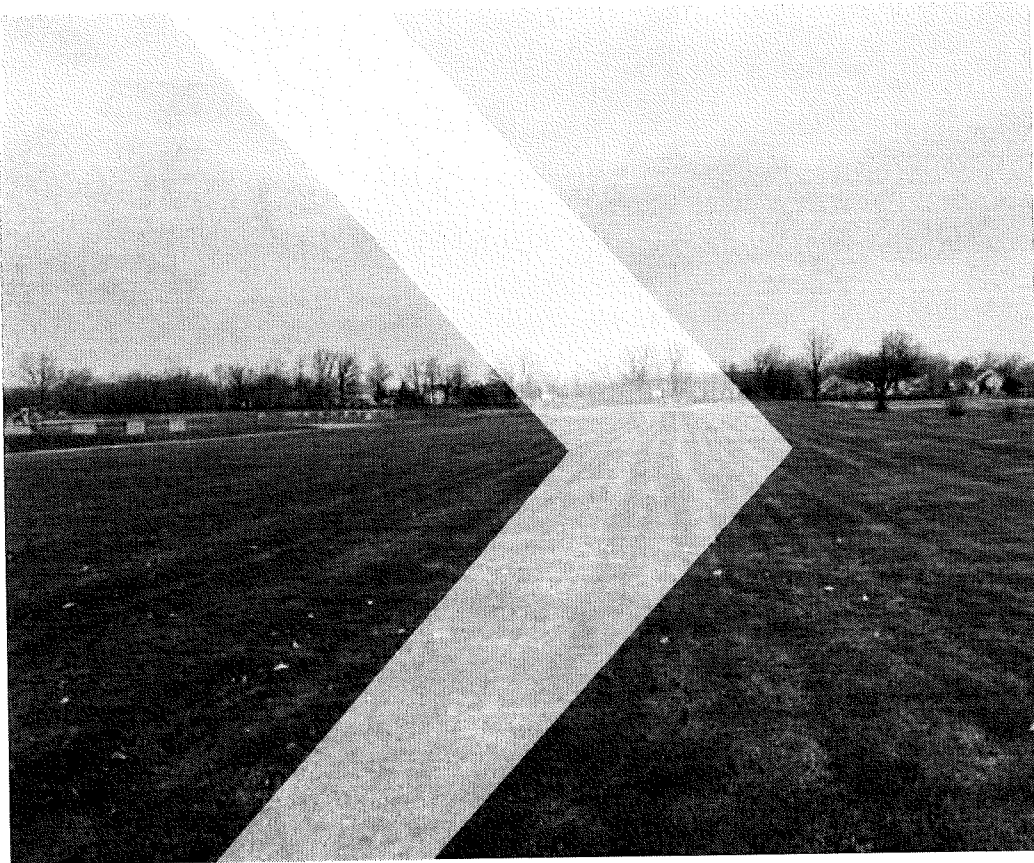
23. **SEVERABILITY.** The various terms, provisions and covenants herein contained shall be deemed to be separate and severable, and the invalidity or unenforceability of any of them shall not affect or impair the validity or enforceability of the remainder.

24. **STATUTE OF LIMITATION.** To the fullest extent permitted by law, parties agree that, except for claims for indemnification, the time period for bringing claims under this Agreement shall expire one year after Project Completion.

25. DISPUTE RESOLUTION. In the event of a dispute arising out of or relating to this Agreement or the services to be rendered hereunder, Clark Dietz and the Client agree to attempt to resolve such disputes in the following manner: First, the parties agree to attempt to resolve such disputes through direct negotiations between the appropriate representatives of each party. Second, if such negotiations are not fully successful, the parties agree to attempt to resolve any remaining dispute by formal nonbinding mediation conducted in accordance with rules and procedures to be agreed upon by the parties.

PROPOSAL

Crawford Park Master Grading and Drainage Plan



Village of Caledonia, WI
December 5, 2022

Proposal Contact:

Mustafa Emir, PhD, PE
759 N. Milwaukee Street
Ste. 624, Milwaukee, WI 53202
414.315.1933
mustafa.emir@clarkdietz.com

ClarkDietz

Engineering Quality of Life®



December 5, 2022

Ryan Schmidt, PE
Village Engineer
Village of Caledonia
5043 Chester Lane
Caledonia WI 53402

RE: Proposal – Crawford Park Master Grading and Drainage Plan

Dear Mr. Schmidt:

This proposal presents a summary of Clark Dietz's professional qualifications to execute the 2 Crawford Park Master Grading and Drainage Plan. Clark Dietz has successfully delivered the 2022 Maintenance Project and we have maintained the same team of professionals to serve you once again.

Wherever we work, we strive to deliver meaningful projects, and we pride ourselves in being accountable to the government and the public. We believe we were able to demonstrate that during the planning and design of the Public Safety Building.

I hope you would agree that our Civil Engineering staff, led by our Team Leader CJ Beyer, demonstrated our values and attention to quality while treating you and the Village with utmost respect. This is the way we will approach our work if we are selected for the Crawford Park Master Grading and Drainage project.

Our team is super familiar with Crawford Park, having worked at the south end. In addition, our experience and familiarity with this parcel goes back many years, to the time of the 2006 Stormwater Management Plan. Our approach to this project rests on three foundations:

- 1. Situational Awareness:** This is a multi-year project, and the community has high expectations. We must give the Village financial flexibility while demonstrating progress in the park. Drainage challenges are significant – flat topography, nearby residential neighborhoods, and portions of the parcel adverse to BMP flexibility.
- 2. Disciplined Project Management:** We know that you would prefer to direct your money to construction. We are sensitive to the price pressures you are experiencing and will focus on managing our work to deliver our promises with no amendments or fee increases.
- 3. No surprises: Absolutely none.** Our way is to be responsive, fast acting, and honest. We look to getting this grading plan done in such a way that, 2 years from now, when the 4-season shelter is being built, nobody hits a drain tile or finds that the finished-floor elevation is off by a foot.

Thank you for your consideration of our proposal. We remain 100 percent committed to maintaining your trust.

Sincerely,
Clark Dietz, Inc.

Mustafa Emir, PhD, PE
Executive Vice President
414.315.1933
mustafa.emir@clarkdietz.com

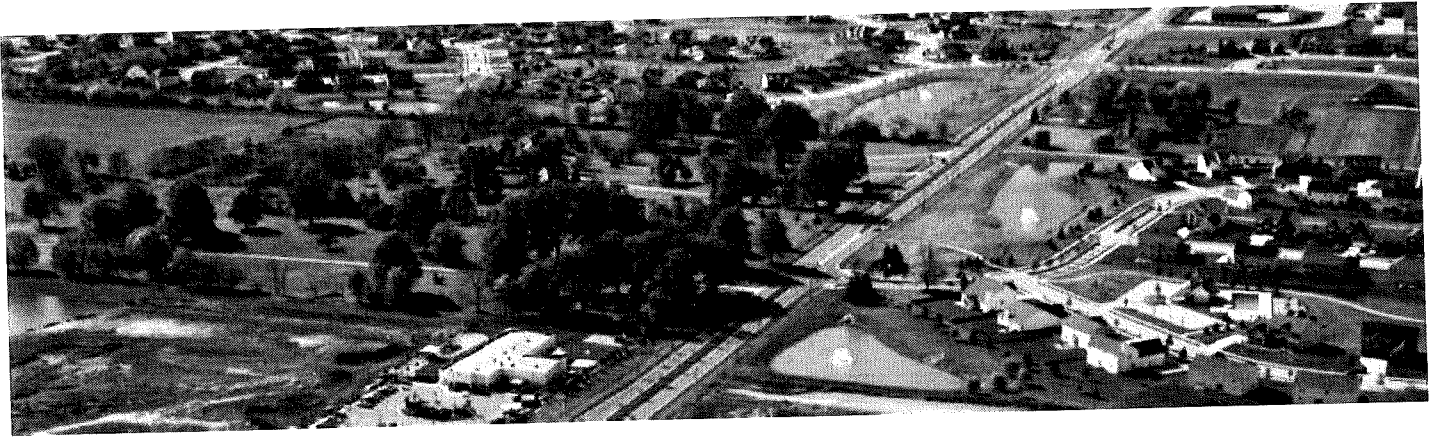
CONTENTS

1	Firm Background	4
2	Project Team	21
3	Work Samples	27
4	Methodology and Approach	29
5	Timeframe	34
6	References	36
7	Firm Capacity and Project Team	38
8	Cost Breakdown	40
9	Supporting Information	44

Section 1



Firm Background



ABOUT US

Clark Dietz, Inc. is a multi-disciplined consulting engineering firm operating from offices in Illinois, Indiana, Kentucky and Wisconsin. Our primary areas of service include civil and environmental infrastructure, transportation, structural, mechanical, and electrical engineering.

OUR PHILOSOPHY

As experienced consultants, we serve as trusted advisors to our clients. As partners, we become fully vested in achieving their goals. We believe in serving our clients to our utmost capacity, period. We operate with integrity, foster collaboration, and expect excellence in all we do. For more than 60 years we have built a reputation for the integrity of our work, our actions, and our results. With an unwavering commitment to our clients, we stand behind everything we do.

DIVERSITY

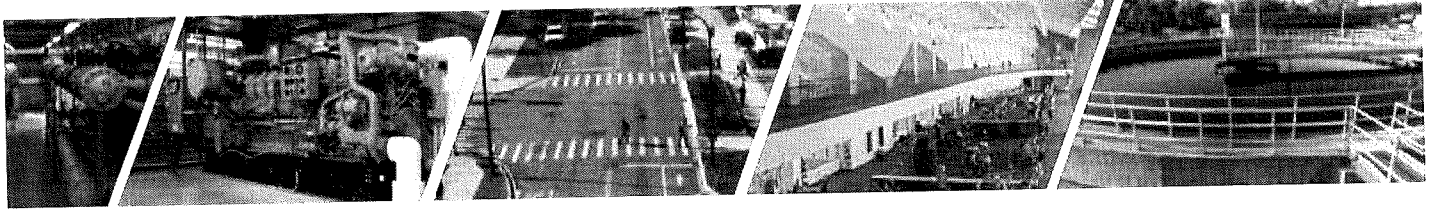
We are proud of our diverse professional staff. Approximately 30 percent of our workforce consists of minority or female employees; they also represent over 30 percent of our shareholders. Additionally, we have established annual scholarships for minorities with the University of Illinois at Urbana-Champaign, University of Illinois at Chicago, University of Wisconsin-Platteville, Purdue University-IN, and the Rose-Hulman Institute of Technology.

SUSTAINABILITY

Nature's most precious assets need our protection and we take this responsibility seriously. Our specialists in environmental science, green infrastructure, and our LEED Accredited professionals thoroughly assess the impact a design may have on energy consumption, waterways, habitat, vegetation, and water quality. At Clark Dietz, we are fully committed to optimizing the benefits of sustainability in every solution we design.

OUR HISTORY

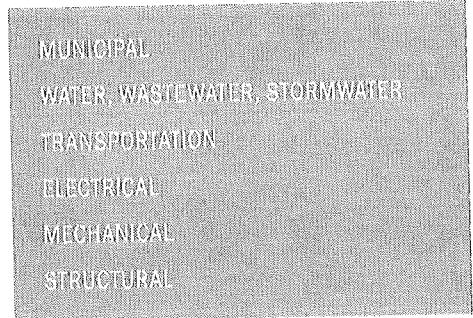
Our roots go back to the 1940's to three University of Illinois Engineering professors; James Clark, Eugene Daily, and Jess Dietz. These three formalized their association by incorporating in 1953. By the late 1970s Clark Dietz was a recognized leader among Midwest-based civil engineering companies serving clients from seven regional offices. The original owners sold the firm and it was ultimately owned by CRS Sirrinc, one of the nation's largest engineering and architectural firms. Through an employee buy-out of the Champaign office and the name, Clark Dietz again became a privately held corporation in 1987. Employee ownership has been a key factor in the success of the firm, with approximately 30 percent of current employees now owning stock in the company and all employees participating through an ESOP. Today Clark Dietz employs more than 120 professionals in 10 offices.



OUR SERVICES

Infrastructure goes beyond the functional. It is the foundation that connects people, revitalizes communities, spurs economic growth, and protects the environment.

It is what we do, who we are, and why we serve.



OUR LOCATIONS

MILWAUKEE, WI
759 N. Milwaukee Street, Suite 624
Milwaukee, WI 53202
414.727.4990

KENOSHA, WI
625 57th Street, 6th Floor
Kenosha, WI 53140
262.657.1550

WAUSAU, WI
500 N. 3rd Street, Suite 703
Wausau, WI 54403
715.845.1333

OAKBROOK TERRACE, IL
1815 S. Meyers Road, Suite 470
Oakbrook Terrace, IL 60181
630.413.4130

CHAMPAIGN, IL
125 W. Church Street
Champaign, IL 61820
217.373.8900

CHICAGO, IL
118 S. Clinton Street, Suite 570
Chicago, IL 60661
312.648.9900

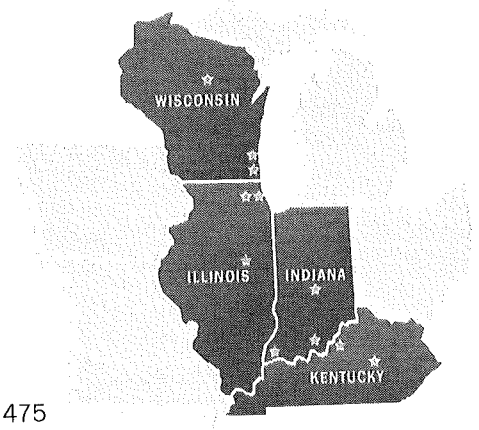
EVANSVILLE, IN
21 SE 3rd Street, Suite 200
Evansville, IN 47708
812.471.4802

INDIANAPOLIS, IN
8900 Keystone Crossing, Suite 475
Indianapolis, IN 46240
317.844.8900

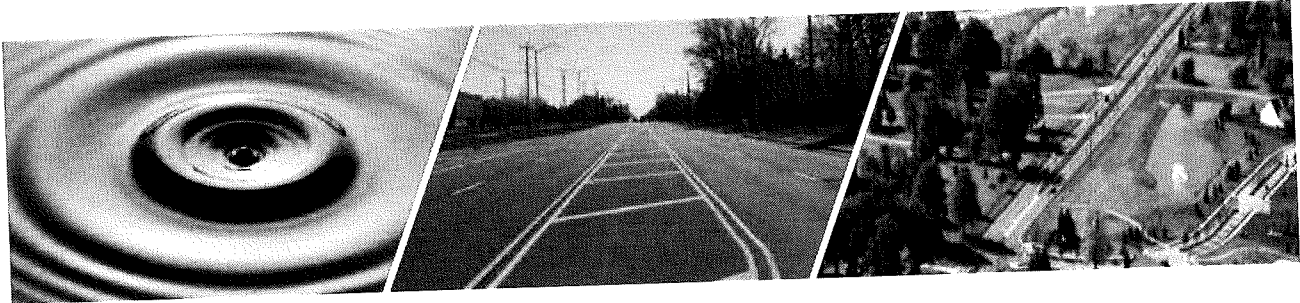
NEW ALBANY, IN
120 West Spring Street, Suite 400
New Albany, IN 47150
812.725.8595

LOUISVILLE, KY
312 S. Fourth Street, Suite 700
Louisville, KY 40202
502.587.1748

LEXINGTON, KY
1040 Monarch Street, Suite 200
Lexington, KY 40513
859.286.1140



Municipal Engineering



At Clark Dietz, we understand how vital infrastructure is to people. We never forget the importance of those who rely on it. As municipal engineers, our actions support our client's best interests, representing the values and the standards of the community at all times.

MUNICIPAL ENGINEER

- Board Meetings
- Staff Consultant
- Citizen's Contact
- Consultant Oversight
- Public Involvement

ASSISTING BUILDING DEPARTMENT AND PUBLIC WORKS DEPARTMENT

- Permitting Reviews
- Escrow Compliance
- Roadway Maintenance
- Ordinance Updates and Reviews
- Storm, Sewer and Water Main Maintenance
- Sanitary Sewer Collection Systems

DEVELOPMENT REVIEW

- Engineering Review
- Code/Ordinance Compliance
- Land Use Plan Compliance
- Escrow Requirements
- Permitting Requirements

CONSTRUCTION SERVICES

- Construction Letting
- Awards and Contracting
- Construction Observation
- Pay Request and Change Order Processing
- Preparation of Punch Lists and Assurance of Completion of Punch List Items
- Recommendations to Village for Acceptance of Improvements

REGULATORY COMPLIANCE AND REPORTS

- WDNR NR216 Reporting
- WDNR CMAR Reporting
- MMSD CMOM Reporting
- MMSD Chapter 13 Reporting
- WisDOT Local Program Funding
- WisDOT Roadway Inventory
- CDBG Funding

Site/Civil Engineering



Clark Dietz has the broad range of capabilities needed for site civil engineering services in today's environmentally and politically complex environment. Quality surface transportation and environmental sensitivity are essential to the economic vitality and quality of life in our communities.

Site development for major facilities typically involves multiple stakeholders and Clark Dietz has the experience with Context Sensitive Solutions methodology used by Illinois Department of Transportation to help facilitate stakeholder communication regarding site development issues. Our staff is up to date with the ever-changing stormwater regulatory issues and emerging sustainable solutions to provide sustainable site development.

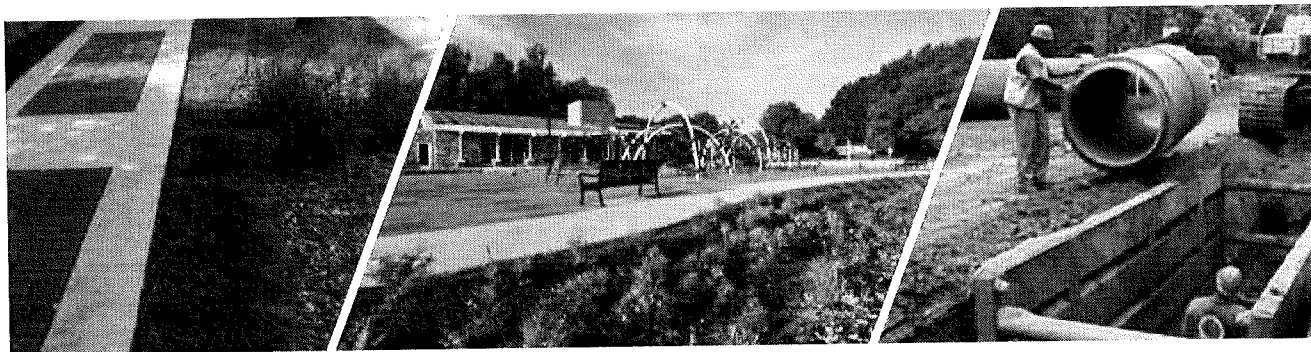
SITE DEVELOPMENT

- Master Planning
- Topo/Legal Survey
- Streetscaping
- Water Distribution
- Sewer Collection
- Stormwater Detention
- Parks / Trails

ROADWAYS/TRAFFIC

- Traffic Impact Studies
- Alignment Studies
- Street Design
- Parking Lots
- Traffic Calming
- Pedestrian/Bike Paths
- Accident/Conflict Studies

Stormwater



The management of stormwater has a direct impact on public safety, land values, and the overall economic and environmental health of a community.

Our engineers employ a focused approach to stormwater management, identifying targeted, cost-effective solutions that benefit key stakeholders. Our experience runs from master planning through design and construction, providing sustainable solutions that include identification of funding sources to make projects possible.

Our staff is up to date with ever-changing stormwater regulatory issues and emerging technologies. Our technical professionals are experts in advanced hydrologic and hydraulic modeling, using the latest tools to provide our clients with the answers they need to enhance their stormwater systems.

WATERSHED MASTER PLANNING

- Capital improvement programs
- Sewer system modeling
- Floodplain delineation
- Riverine system analysis
- Stream bank restoration
- Stakeholder involvement

MODELING EXPERTISE

- SWMM
- HEC-HMS/HEC-RAS
- TR-20/HY8
- GIS-based applications

PROJECT IMPLEMENTATION

- Design services
- Construction administration
- Project funding assistance
- Program funding (stormwater utilities)

OVERVIEW OF OUR SERVICES

CIVIL ENGINEERING AND STORMWATER MANAGEMENT

Clark Dietz provides civil engineering services including site survey, engineering design and post design services such as staking and construction inspection. We provide these services to public and private clients, including local government, State Governments, and institutional entities such as School Districts, Park Districts and WEC.

Our stormwater services include reports, drainage studies, local code compliance, and local government permitting activities for construction.

ADA REQUIREMENTS

Nearly 100 percent of Clark Dietz's civil design products include ADA compliance, both within buildings and all outdoor facilities including sidewalks, walkways, park and recreation facility access points, building access points, recreational trails, boardwalks, and other facilities with non-vehicular access.

PARKING LOT - WORK YARD LAYOUT; TRAFFIC FLOW

Clark Dietz provides start-to-finish design products for government and institutional workspaces, including yards, parking lots, storage areas, salt sheds, bulk material handling areas, etc. Our services include both internal layout and design and access from nearby roadways, driveways, and traffic impact studies affecting public roads near facilities.

ASPHALT AND CONCRETE PAVEMENT DESIGN

As a roadway and highway design firm, Clark Dietz provides comprehensive asphalt and concrete pavement design services for anticipated use, loading, and wear conditions encountered in driving or storage surfaces.

EROSION CONTROL DESIGN

100 percent of our design products include an Erosion Control Plan, universally required for construction activity in all of our practice jurisdictions. In several of our offices, Clark Dietz personnel also enforce local Erosion Control codes - receiving, reviewing and enforcing erosion control ordinances ON BEHALF of the communities we serve. Clark Dietz staff have also authored about a dozen erosion control ordinances for use within our client communities in Wisconsin.

SITE SURVEYING

Clark Dietz provides full-service site survey, topographic mapping, property surveys, construction staking, and as-built survey services throughout our service geography.

STRUCTURAL ENGINEERING

Clark Dietz provides full structural engineering services for public and private clients. Our work includes bridges, retaining walls, underground storage tanks and vaults, water towers, cell phone antennas and similar.

ELECTRICAL ENGINEERING

Clark Dietz has a strong electrical engineering team with four individuals holding State Professional Engineering licensure. Our lighting services include work yard lighting, street lighting, athletic field lighting, and airport lighting. In this capacity, we serve local government as well as State agencies for education facilities and correctional institutions.

In addition to lighting, our services to the State of Wisconsin include the design of security systems in the context of correctional facilities such as Lincoln Hills and Green Bay Correctional. Many of our clients who procure fire stations, police stations, or municipal building also rely on Clark Dietz's security camera expertise.

COST ESTIMATING

Clark Dietz, as a consultant to local government, has a strong practice of capital budgeting, cost estimating and project planning services in infrastructure. Engineers in each of our locations are routinely and intimately involved in fiscal projection and planning activities for capital expenditures.

ENGINEERING PLANS AND SPECIFICATIONS

Nearly 100 percent of our professional products include construction ready plans and specifications used for public bidding purposes. In cases where public bidding is not used, Clark Dietz will produce construction ready documents for contracting purposes as directed by the owner. In these instances, it is customary to have the plan set tailored to the needs of the selected contractor and significant cost savings in engineering effort may be achieved.

CONSTRUCTION INSPECTION AND CONTRACT ADMINISTRATION

Clark Dietz construction services include combinations of full-time construction inspection, resident engineering, and contract administration services for local governments and public agencies including Illinois Department of Transportation, Tri-State Tollway Authority, and State of Wisconsin Facilities.

Clark Dietz provides these services with in-house staff, specially trained for this work, including necessary certifications where applicable.

PERMIT APPLICATIONS

One of Clark Dietz's strengths is our understanding and familiarity with local and state permit requirements in Wisconsin and Illinois. State highway access permits, natural resource permits, and erosion control permits are some of the most commonly encountered requirements.

Clark Dietz is your go-to consultant to navigate this sometimes complicated and always time-consuming phase of the project.

AS-BUILT DRAWINGS - RECORD DRAWINGS

When directed to do so, our field staff, including construction inspectors and surveyors, are familiar with the protocols and requirements of creating as-built and record drawings for the owner. Whenever we are assigned a construction management task, this step is almost always included, and Clark Dietz has the required expertise to deliver the as-built product.

Richard E. Maslowski Park Site Grading, Pavement, and Stormwater Management Design

Glendale, WI



PROJECT DURATION

7/1/2014 - 7/31/2015

PROJECT TEAM

Emily Basalla, PE, CFM
 Christopher Beyer, PE
 Mustafa Emir, PhD, PE
 Brandon Flunker, PE, CFM
 Thomas Foley, PE
 Kevin Risch, PE
 Owen Sharp
 Andrew Torola

OWNER CONTACT

Charlie Imig
 Director of Public Works
 City of Glendale
 414.228.1746
c.imig@glendalewi.gov

An abandoned landfill had long existed at the west end of Bender Road as open space in the City of Glendale. The City of Glendale and Nicolet High School wished to jointly pursue the development of the Bender Recreational Complex as a multi-use park area with an access road, three ball fields, and an outdoor amphitheater with a playground. Clark Dietz worked in conjunction with the City, an Architect on behalf of the School District, and a Consultant leading the landfill closure, to develop plans for the open site that would meet the desires of the municipality and school. The plan was able to make the best use of the site while providing an access roadway and allowing the continued monitoring and methane venting of the closed landfill.

Clark Dietz was also responsible for the design of an access road, watermain, sanitary sewer, and storm drainage services into and through the complex. The presence of waste cells throughout the site greatly impacted the utility layout and site grading plan. The utilities had to be routed to leave the cells undisturbed. The grading plan ensured that there was no net gain or loss of fill on the site, while also leaving the six foot clay cap intact above the garbage cells. Clark Dietz also submitted documents for regulatory approvals to the Southeast Wisconsin Regional Planning Commission and the Wisconsin Department of Natural Resources.

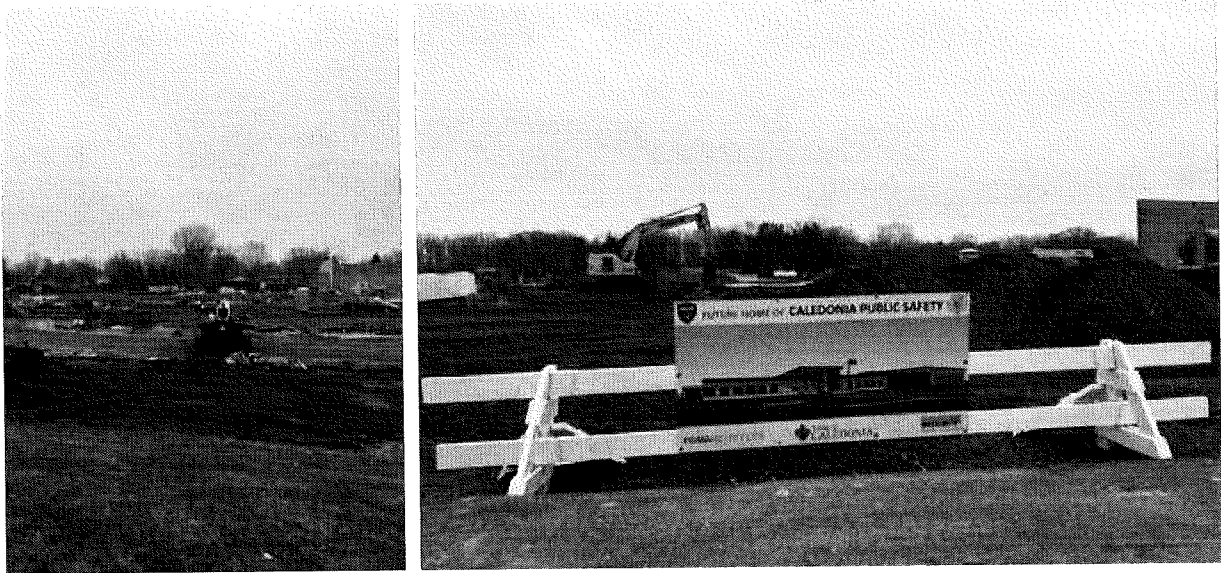
Richard E. Maslowski Park Site Grading, Pavement, and Stormwater Management Design | continued

Clark Dietz designed the water main on-site to loop two existing stubs in the distribution system. Sanitary sewers were also extended to the complex from two different locations. The storm drainage system serves the drainage needs of the access drives and parking lots within the complex. The system is unique in its design since it mostly consists of overland flow due to the inability to trench storm sewer through the cells. Clark Dietz prepared and permitted the Stormwater Management Plan (SWMP) through the City of Glendale and the Milwaukee Metropolitan Sewerage District (MMSD). The SWMP addressed the entire site and included design of two ponds connected by a 600-ft discharge pipe, underground storage beneath the ball fields, and a biofilter. Scope included 3200 TON of 1 ¼ in Base Aggregate, 1300 TON of Asphalt, 2,000 LF of Concrete Curb, 365 LF of 8" Sanitary Sewer, 1000 LF of 8" Watermain, 345 LF of Storm Sewer.

Clark Dietz also secured grant funding in the amount of \$43,000 through a program called Green Solutions for Separate Infrastructure & Sewer Separation (GSSISS) as administered by MMSD. This grant helped to offset additional costs associated with the biofilter, while also providing an opportunity for the City to implement Green Infrastructure technology in an area with complex stormwater challenges.

Public Safety Building Site Grading, Pavement, and Stormwater Management Design

Caledonia, WI



SIZE
13 Acres

PROJECT DURATION
11/1/2021 - Present

PROJECT TEAM
Emily Basalla, PE, CFM
Christopher Beyer, PE
Devin Carlson
Brandon Flunker, PE, CFM
Adam Latusek
Benjamin Metzler, PE
Nirav Patel, PE
Kevin Risch, PE
Andrew Torola

OWNER CONTACT
Mark Price
FGM Architects
MarkP@fgmarchitects.com

CLIENT CONTACT
Andrew Mayo
FGM Architects
414.346.7284
AndrewM@fgmarchitects.com

The Village of Caledonia has been in the process of developing an existing farm field into a Village Campus. The area is generally nestled between existing commercial and residential areas, so public involvement has been key to overall project success. The development had already included the Village Hall building, parking lot and stormwater facilities constructed in 2017, as well as the first stages of Crawford Park. The next phase of the Village Campus was to include a Public Safety building which covered approximately 13 acres of undeveloped farm land. The new building would be approximately 52,000 square feet which would include police, fire and shared office areas. Clark Dietz worked jointly with the Village of Caledonia and an Architect to develop plans for this next phase of the Village Campus.

Clark Dietz was responsible for developing the next phase of the Village Campus site which included overall site grading, stormwater management facilities, site drainage, roadway improvements, parking lots, sidewalks, landscaping, and utility work. The existing stormwater management facilities and existing Village Hall building were incorporated into this phase. A significance piece to this project was to ensure that the proposed Public Safety Building, parking lot and roadway configuration, as well as stormwater management facilities met seamlessly with the existing stormwater facilities and existing Village Hall building. The overall grading plan took into account proposed building finished floor elevations, parking and roadway grades, stormwater ponds, as well as existing and proposed drainage patterns. Significant site grading for ponds excavations, parking lots and access roadways were needed; however, the site was designed to eliminate the need to haul spoils on or off the site.

Clark Dietz prepared and permitted the Stormwater Management Plan (SWMP) through the Village of Caledonia. SWMP included two new wet ponds that hydraulic

Public Safety Building Site Grading, Pavement, and Stormwater Management Design | continued

connected into the existing Village Hall wet pond. The total suspended solids (TSS) and stormwater runoff release rate requirements were met by the use of those two wet ponds which accounted for approximately 270,000 cubic feet of stormwater storage volume. An additional 0.5 acre outlot was included in the SWMP for the future development of multi-family dwellings. The stormwater facilities were uniquely designed to ensure all existing and new stormwater management facilities functioned as an extension of each other.

Clark Dietz also designed all storm sewer, as well as water service and sanitary laterals for the Public Safety building improvements. The storm drainage system serves the access drives, parking lots, and stormwater management facilities within this phase of the Village Campus development. Scope included 550 LF of 8" Sanitary Sewer, 900 LF of 8" Watermain, 800 LF of varying in size (6"-30") Storm Sewer.

David Hobbs Honda Site Grading, Pavement, and Stormwater Management Design

Glendale, WI



PROJECT DURATION
8/1/2017 - 11/8/2017

PROJECT TEAM
Andrew Ashley, PE
Emily Basalla, PE, CFM
Mustafa Emir, PhD, PE
Brandon Flunker, PE, CFM
Andrew Torola

OWNER CONTACT
Greg Hobbs
David Hobbs Honda
414.800.3001

Clark Dietz provided design and construction services for a vehicle storage area in a newly acquired land east of the existing dealership of David Hobbs Honda. Parking lot layout and pavement design services were performed.

The design included building a parking surface on a layer of 2 to 3 feet of refuse. Clark Dietz developed a pavement plan that drained the paved surface to the pond in accordance with the approved stormwater management plan. Clark Dietz also connected the new surface to existing property in accordance with vehicle movement requirements/desires.

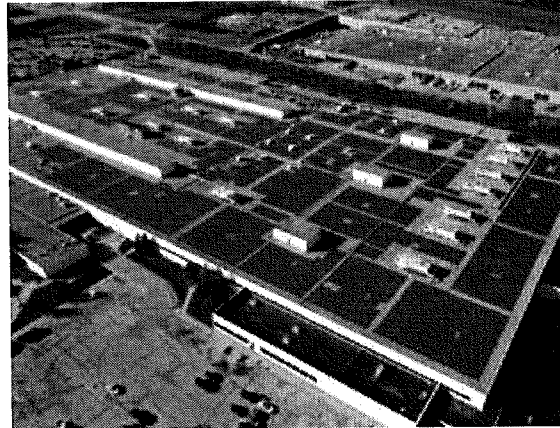
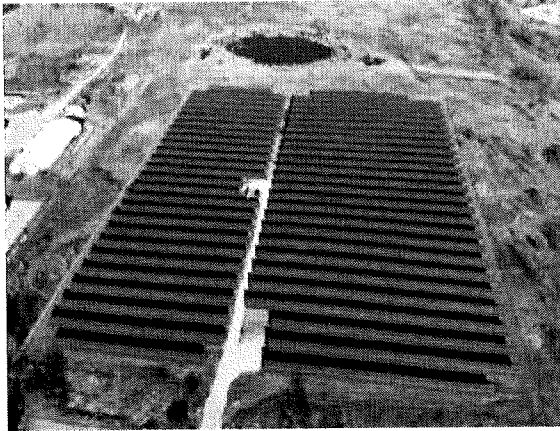
Clark Dietz assisted in coordinating the perimeter fencing to the north to match the desired appearance for neighbors. Clark Dietz also prepared specifications for paving the vehicle storage area and assisted in selecting and executing work by the contractor.

Clark Dietz provided lighting design that included providing layout and specifications to light the proposed lot. Included were lighting controls that minimized neighborhood impact as well and impact to energy bills. Clark Dietz's design included neighborhood sensitive products and operation recommendations.

WDNR permits were submitted by Clark Dietz for impervious surface creation.

Site Grading, Pavement, and Stormwater Management Design

Sunvest Solar LLC, Various Locations



PROJECT DURATION
5/4/2020 to Present

PROJECT TEAM

Mustafa Emir, PhD, PE
Tonia Westphal, PE, LEED AP
Steve Myers, LC, LEED AP
Emily Basalla, PE, CFM
Ben Metzler, PE
Brandon Flunker, PE, CFM
Andy Ashley, PE
Greg Schanen, PE
Ike Dolan, PE
CJ Beyer, PE
Adam Latusek
Andy Torola
Kendrick Payne, PE, LEED AP
Nirav Patel, PE
Lisa Zahrt, PE, LEED AP
Scott Kauzlaric, PE
Sean Marzano, SE, PE

OWNER CONTACT

Ryan Shannon
Vice President of Design and
Engineering
SunVest Solar, LLC
262.547.1200
rshannon@SunVest.com

SunVest Solar is a solar development company, helping building owners invest in sustainable solar energy. Clark Dietz works with the SunVest Solar, delivering civil and solar engineering projects across multiple states. Our team has helped manage projects running concurrently throughout several states. Most projects are design/build including civil, electrical, and structural design, engineering, consulting services and construction phase services for the construction of new ground mount or roof mounted, tracking type PV systems. Our services typically include providing:

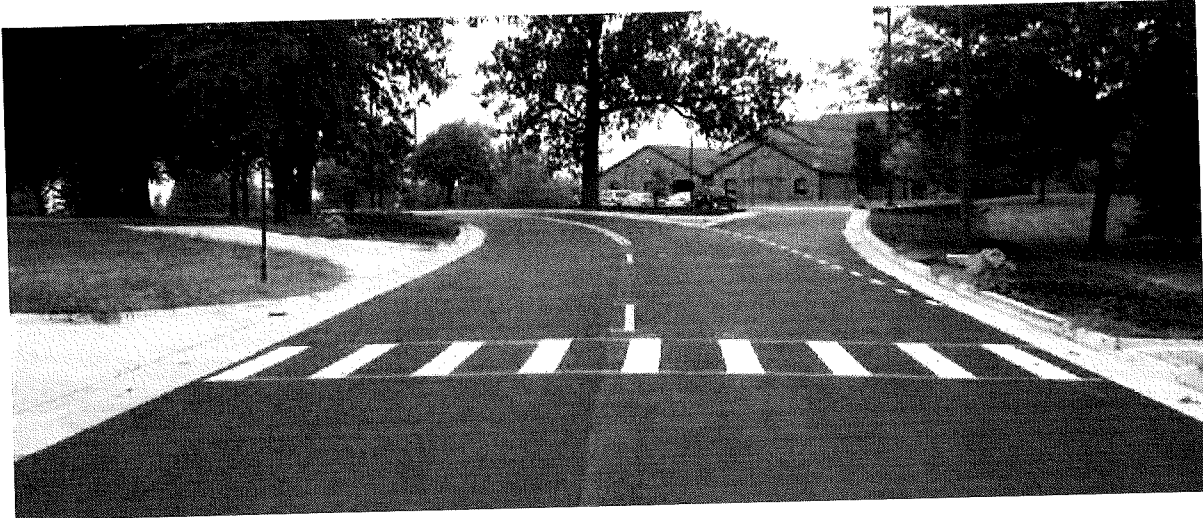
- Creation of plans with topography and specifications
- Drainage design
- New Access Road design and perimeter fencing design
- Electrical engineering including designing site electrical plans with detailed layout of solar array equipment
- Coordination study, fault current, and arc flash studies
- Structural analysis and design
- Preparation of IFC documents
- Communication one-line diagrams
- Civil and electrical equipment installations detail
- Construction survey layout
- Permitting assistance
- SWPPP inspections

Project locations include:

- Harley Davidson Powertrain Operations Facility, 2.9 MW Solar DC rooftop, fixed mounted PV System, Menomonee Falls, WI
- University of Wisconsin - Parkside 2.8 MW Solar Array Installation, Kenosha, WI
- Lily Lake Community 2.9 MW Solar Garden, Maple Park, IL
- Jones Dairy 2.8 MW Solar Array Installation, Fort Atkinson, WI
- Glenwood 2.6 MW Solar Array Installation, Chicago Heights, IL
- Mazon 2.6 MW Solar Array Installation, Morris, IL
- Discovery World 275 kW Solar Roof Structural Analysis, Milwaukee, WI
- Incobrasa Soybean Processing Facility, 5 MW Solar Array Installation, Gilman, IL
- Talty 1, 2 and 3 3 MW Solar Installation, Streator, IL
- Baileyville 1 and 2, Baileyville 2.9 MW Ground Mount Solar, Baileyville, IL

Campuswide Drainage Improvement Master Plan

Parkland College, Champaign, IL



CONSTRUCTION COST
\$10,374,000

TOTAL PROJECT COST
\$11,474,000

OWNER CONTACT
James Bustard
Physical Plant Director
Parkland College
217.351.2211
jbustard@parkland.edu

The Master Plan identified and corrected Parkland College's campus-wide surface and subsurface stormwater drainage problems and identified corrective measures with respect to ADA non-compliance and emergency vehicle and service vehicle access. Infrastructure deficiencies were identified with the goal of reducing and/or eliminating these problem areas in order to provide safe and efficient travel ways for both vehicles and pedestrians.

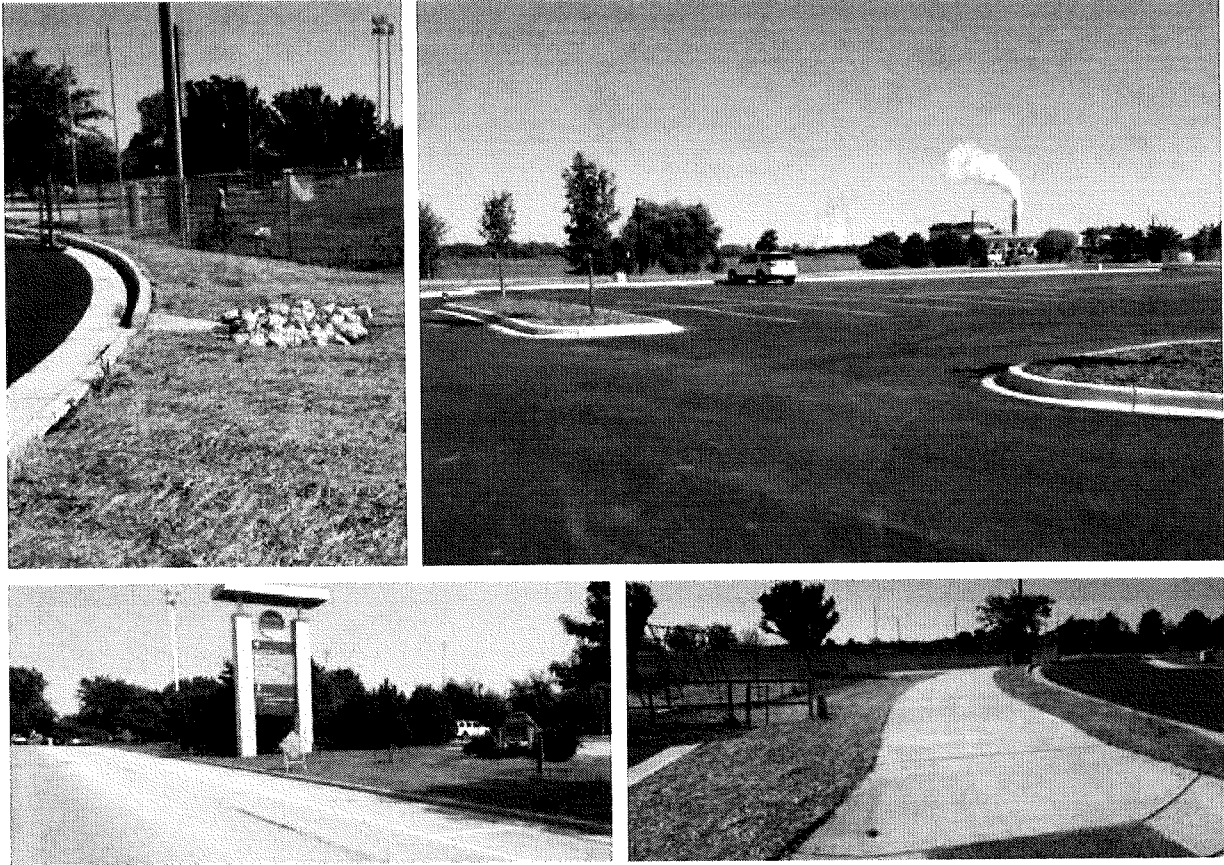
A program of proposed improvements was developed which addressed each of the five major categories of deficiency identified by the engineering database: drainage, safety, access, ADA compliance, and pavements. Specific goals were adopted to guide in the remediation of each area of deficiency.

The improvement program was organized into a series of annual phases based upon the urgency of the needed repairs or restorations and the anticipated magnitude of annual funding. The resulting schedule provided an overview of the areas to be improved during each annual phase as well as a preliminary annual cost estimate. Typical improvements include:

- Drainage improvements and construction of a new west entrance road.
- Reconstruction of existing roadways, parking lots and sidewalks.
- Various drainage improvements including on-site detention basins to accommodate planned building and site expansions and the allowance for oversizing for stormwater storage.
- Site civil services including coordination with architects for design and construction of various building expansions.

Prairie Springs Park Grading, Pavement, and Stormwater Management Design

Pleasant Prairie, WI



PROJECT TEAM

Mustafa Emir, PhD, PE
 Emily Basalla, PE, CFM
 Brandon Flunker, PE, CFM
 Andy Ashley, PE
 CJ Beyer, PE
 Andy Torola

OWNER CONTACT

Thomas Hupp
 Manager of Technical Support
 Village of Pleasant Prairie
 262.925.6769
 thupp@pleasantprairiewi.gov

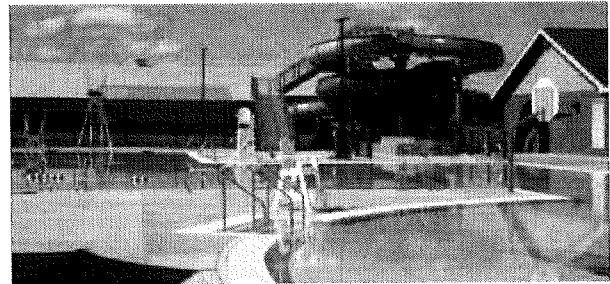
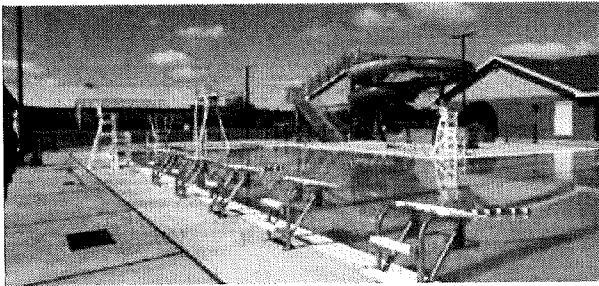
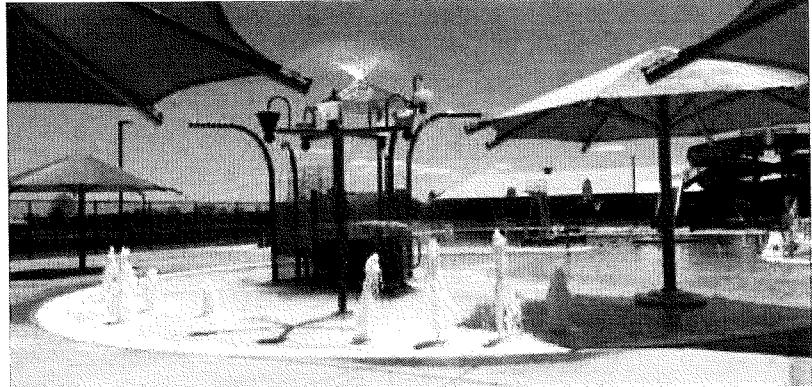
The RecPlex is the largest municipal recreation facility in America. It is located on the shores of Lake Andrea in Prairie Springs Park, Pleasant Prairie, WI. Due to heavy use and deterioration, the Village needed to reconstruct the large parking lot there, also wishing to improve on site drainage and adding new sidewalk that led to a shared use path.

Clark Dietz was hired to provide site civil engineering services. These services included design and bidding related services for the expansion and reconstruction of the Terwall Terrace Parking Lot. The existing parking lot was reconfigured to allow for future buildings along Terwall Terrace. The improvements included new curb and gutter and a new parking lot layout. In addition, the existing gravel parking area adjacent to the parking lot was improved with asphalt pavement, new curb and gutter and a site drainage plan. Due to the size of the project, total suspended solids removal practices were implemented.

Services performed included Topographic Survey, preliminary site design, stormwater management plan including grading and storm sewer plan, and final design.

Municipal Aquatic Center Grading, Pavement, and Stormwater Management Design

Merrill, WI



CONSTRUCTION COST
\$1,500,000

SIZE
2,060 SF

PROJECT TEAM

Tonia Westphal, PE, LEED AP
Emily Basalla, PE, CFM
CJ Beyer, PE
Brandon Flunker, PE, CFM
Steve Myers, LC, LEED AP
Andy Ashley, PE
Kendrick Payne, PE, LEED AP
Nirav Patel, PE
Lisa Zahrt, PE, LEED AP
Nirav Patel, PE

OWNER CONTACT

Daniel Wendorf
Director of Parks and Recreation
City of Merrill
715.536.7313
dan.wendorf@ci.merrill.wi.us

The Merrill Municipal outdoor pool is a public swimming facility that has a large pool with various areas of activities for all ages including slides, lap pools and play area. The bathhouse facility includes a ticketing area, cash room, first aid room, lockers and shower spaces, and quick service food station.

Clark Dietz was part of an architect led team that provided design and construction phase services including site civil, building, pool and site lighting, mechanical and plumbing. The system designs included energy efficient instantaneous gas fired water heaters, chemical room ventilation systems, LED lighting, storm water pump station, site storm water design, and control equipment.

- Potable water and sanitary sewer connections, storm sewer and access path, including stormwater management plan.
- Bathhouse facilities for men and women featuring water saving fixtures.
- Instantaneous gas fired energy efficient water heater for bath houses.
- Pool water heaters interconnected with mechanical ventilation system.
- Restroom exhaust system.
- Power systems for building, pool and site lighting, pool equipment.
- Lift station to fully drain pool and stormwater pond capable of total suspended solids removal and release rate.

Section 2



Project Team



Mustafa Z. Emir, PhD, PE

Project Director

EXPERIENCE

30 Years

EDUCATION

PhD, Engineering, Concordia University, Montreal, Canada

BS, Engineering, Concordia University, Montreal, Canada

REGISTRATIONS

Wisconsin Professional Engineer
#E-34786

PROFESSIONAL AFFILIATIONS

American Council of Engineering Companies, Public Funding Committee

American Water Works Association

American Public Works Association, Wisconsin Chapter Diversity Committee

Wisconsin City/County Managers Association

CIVIC ORGANIZATIONS

Milwaukee Riverkeeper

Wisconsin Policy Forum

RiverWorks Development Corp.

Discovery World

Downtown Milwaukee Rotarian

Mr. Emir is a highly respected Infrastructure Planning and Management Professional with over 30 years of hands-on engineering experience. He has authored dozens of long-term municipal infrastructure management plans, including sewer collection, stormwater management, flood control, water distribution, open space and parks, etc. for governments throughout the Midwest.

Throughout his career, Mustafa has been involved in long range infrastructure planning for built-out communities. This effort includes assessing and defining ways to improve public facilities, including Village Halls, City Centers, Community Centers, Park Buildings, and Salt Sheds. Mustafa leads a diverse team that will advise local governments and guide the process of renewal.

Leader in Local Government Renewal

Mustafa has been involved in many of the Southeast Wisconsin communities' efforts to improve services to residents. He has led assessment and design efforts for the following initiatives:

- Village of Shorewood Village Hall and Library parking lot reconstruction, with Green Infrastructure elements to retain stormwater at the property.
- Village of Whitefish Bay Village Hall and Police Department Site Civil engineering and stormwater management, including funding, design and construction Green Infrastructure parking area for Police Department.
- City of Glendale City Hall site Civil funding, stormwater management facilities, and green infrastructure design and construction.
- City of Cudahy salt shed feasibility analysis, including financial analysis, structural and civil engineering consulting.
- Richard E. Maslowski Community Center site plan and construction in Glendale.
- City of Glendale salt shed needs assessment, structural and regulatory review and consulting.

Mastery in Public Involvement and Public Communication Skills

As the municipal engineer in communities such as Glendale, Whitefish Bay, Bayside, and River Hills, WI, Mustafa provides day to day management of engineering needs in those communities. Mustafa has gained great insight into the type of respectful and prompt service expected by many area residents.

Mustafa prepared and led dozens of potentially contentious public information meetings that steadily moved from confrontational to peaceful and ended up in a collaborative mood. He has an extraordinary ability to connect to all kinds of people and present complex ideas and foster constructive discussion with the public.



Emily K. Basalla, PE, CFM

Project Manager

EXPERIENCE

18 Years

EDUCATION

BS, Civil Engineering, University of Missouri, Columbia

REGISTRATIONS

Wisconsin Professional Engineer
#E-41026

Indiana Professional Engineer
#12100316

Multiple States ASFPM Certified
Floodplain Manager #US-17-09577

Illinois Professional Engineer
#062.061744

ADDITIONAL TRAINING

Using Hec-Ras to Model Bridges,
Culverts and Floodplains, University
of WI - Madison

BMP-LID Design with EPA-SWMM,
IAFSM

WinSLAMM for Urban Stormwater
Quality Management, NASECA
Wisconsin

Designing Bio/Infiltration BMPs for
Stormwater Quality Improvement,
University of WI-Madison

XP-SWMM Training, XP Software

PROFESSIONAL AFFILIATIONS

Wisconsin Association for
Floodplain, Stormwater, and Coastal
Management, Member

American Public Works Association,
Member

American Council of Engineering
Companies

Illinois Association of Floodplain and
Stormwater Management, Member

Ms. Basalla is a Project Manager with experience in civil, environmental, and municipal engineering projects. She takes a creative approach to every project with the goal of integrating functional roadway, drainage, and storm sewer designs with sustainable solutions in a community context.

Ms. Basalla provides comprehensive solutions to drainage conveyance and maintenance issues, including permitting. Emily has experience in stormwater design, water main relocations, sanitary sewer design, wastewater treatment processes, pavement replacement, and roadway widening projects. Emily brings a strong background facilitating municipal permitting and designing for green infrastructure. Ms. Basalla is a Certified Floodplain Manager with a proven level of expertise in floodplain mapping, national and state level requirements.

Strong Local Municipal Relationships

Ms. Basalla has developed strong working relationships with municipalities throughout Wisconsin and Illinois. She takes a thorough approach to understanding client needs and developing solutions that minimize community and environmental impacts.

Client Communication

Ms. Basalla works hard to ensure clear and consistent communication, leaving nothing to surprise. An important benefit while working with Emily is her ability to maintain close client contact throughout the entirety of the project.

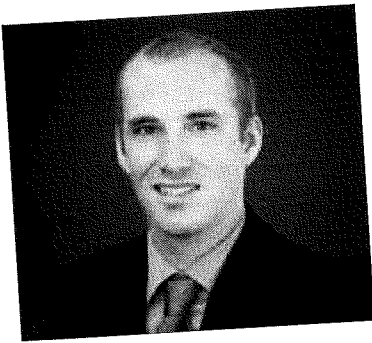
Design Experience

Ms. Basalla has experience in the design of a wide variety of projects. She understands that real solutions come from understanding the client's needs. Whether the goal is to increase capacity, maintain compliance, or achieve energy efficiencies, Emily works closely with her clients throughout the design process to ensure that comprehensive and efficient solutions are achieved for the long term.

Ms. Basalla performs oversight, review and project management roles in the design of water main, sanitary sewer, combined sewer, pavement replacement and roadway widening projects. Additional design experience includes drainage, storm sewer design and overseeing parks and rec recreations facility projects. Emily brings a strong background facilitating municipal permitting and designing for green infrastructure.

Experienced Municipal Engineer

Ms. Basalla is a Municipal Engineer and oversees Clark Dietz engineering staff in fulfilling Village and City Engineering roles in local governments in Wisconsin and Illinois. She is well versed in NPDES permitting processes. Her knowledge, experience, and tenacity ensure that the municipality will experience a smooth and consistent delivery of projects.



Christopher J. Beyer, PE

Lead Designer

EXPERIENCE

7 Years

EDUCATION

BS, Civil Engineering, University of Wisconsin Platteville

REGISTRATIONS

Wisconsin Professional Engineer
#47016-6

Illinois Professional Engineer
#062.071358

ADDITIONAL TRAINING

WinSLAMM for Urban Stormwater
Quality Management

PROFESSIONAL AFFILIATIONS

American Public Works Association,
Member

Mr. Beyer is a civil engineer with design and construction inspection experience for municipal roadway, water main and parking lot projects. Christopher (CJ) works closely with his clients throughout the design process to ensure that a long term and efficient solution is achieved. His detailed approach to preparing plans, specifications and estimates translates to time and cost savings over the project life cycle. His practical knowledge gained through site visits and construction inspection translates to more accurate design plans, minimizing construction changes and unseen obstacles.

Field Experience Means Efficient Designs

Mr. Beyer's practical knowledge gained through construction inspection translates to more accurate design plans, minimizing construction changes and unseen obstacles. His detailed approach to preparing plans, specifications and estimates translates to time and cost savings over the project life cycle.

To guarantee that infrastructure projects are completed as smoothly as possible, Mr. Beyer makes public involvement one of his key priorities. Andy is committed to ensuring a positive public outreach to the municipality's residents. He addresses any feedback from residents in the project area, and strives to remain open and available.

Municipal Engineering and Service to Community

CJ is an up and coming municipal engineer, learning fast and adapting to the many needs of the communities he serves. In Kenosha he is the go-to consultant for erosion control enforcement, roadway construction inspection, and traffic engineering. In Gurnee, CJ is the lead designer of watermain replacement projects that annually replace over 10,000 feet of watermain.

CJ has strong roadway design experience, including complete road reconstruction and road resurfacing design and bidding, traffic studies or warrant analysis, sanitary and storm sewer design, water main design, and incorporating green infrastructure improvements and other sustainable design elements. His involvement includes both design engineering and project management on municipal projects for the Cities of Kenosha and Racine, Racine and Kenosha Counties, the Villages of Somers and Pleasant Prairie in Kenosha County and the Villages of Shorewood and Whitefish Bay in Milwaukee County.



Brandon Flunker, PE, CFM

Stormwater Engineering Lead

EXPERIENCE
10 Years

EDUCATION
BS, Civil Engineering- Environmental
/Water Resources, University of
Wisconsin Milwaukee

REGISTRATIONS
Illinois Professional Engineer #062-
071033 (2018)
Multiple States ASFPM Certified
Floodplain Manager #US-18-10739
(2018)
Wisconsin Professional Engineer #E-
45347-6 (2017)

PROFESSIONAL AFFILIATIONS
Illinois Association of Floodplain and
Stormwater Management, Member
Wisconsin Association for
Floodplain, Stormwater, and Coastal
Management
American Public Works Association,
Member

CIVIC ORGANIZATIONS
Milwaukee Watershed - Urban
Ecology Center, Milwaukee

Mr. Flunker is a civil engineer who has developed a portfolio of municipal infrastructure experience with drainage, storm and sanitary sewers, and road reconstruction projects. Brandon gained first-hand municipal engineering experience during his employment with the Village of Germantown and the City of Mequon. He understands that real solutions come from understanding the client's needs. Brandon works closely with his clients throughout the design process to ensure that a long term and efficient solution is achieved.

Field Experience Translates to Efficient Designs

Mr. Flunker's practical knowledge gained through site visits and construction inspection translates to more accurate design plans, minimizing construction changes and unseen obstacles. His detailed approach to preparing plans, specifications and estimates translates to time and cost savings over the project life cycle.

Relevant Experience

- WPS Oshkosh Service Center Drainage Improvements, Oshkosh, WI
- WPS Storage Yard Paving and SWM, Wausau, WI
- WPS Wausau Storage Yard Construction Services, Wausau, WI
- WEC Energy Group Facility Parking Lot Stormwater Management Plan, Green Bay, WI
- We - First Street Steam Pipe Investigation, Milwaukee, WI
- We - Marquette University Redundancy Loop, Milwaukee, WI
- Lily Lake CSG Array Installation, Maple Park, IL
- NG IL CSG Mazon Solar, Morris, IL
- O'Shea Urban Solar Farm, Detroit, MI
- Largest Carport Solar Array in Michigan, East Lansing, MI
- Weston Plant Storm Sewer & Outfall Replacement, Rothschild, WI
- 2021 Stormwater Management Services, Bayside, WI
- TMDL Stormwater Management Plan, Bayside, WI
- TMDL Stormwater Management Planning, Milwaukee, WI
- 2018 Stormwater Management Plan, Shorewood, WI
- Cramer Street Reconstruction and Storm Sewer, Whitefish Bay, WI
- Wildwood Storm Sewer Extension, Whitefish Bay, WI
- Nicolet Recreational Park Complex, Glendale, WI
- Timber Ridge Apartments Drainage Improvements, Kenosha, WI
- Terwall Terrace Parking Lot, Pleasant Prairie, WI
- Manor Lane Lift Station, River Hills, WI



Adam Latusek

Survey Lead

EXPERIENCE

8 Years

EDUCATION

Pre - Civil Engineering Technician,
College of Lake County

BS, Science in Mining, University
of Science and Technology, Krakow
Poland

MS, Science in Mining, University
of Science and Technology, Krakow,
Poland

ADDITIONAL TRAINING

Design of Foundations,
Embankments and Earth Structures,
IL Institute of Technology

Mr. Latusek is an engineering technician with experience providing topographic surveying, construction staking, and construction inspection and documentation for a wide variety of municipal projects. Adam identifies and addresses obstacles before the improvements are built to reduce or prevent errors, delays, and costly overruns. He handles the duties of inspection and surveying. With experience throughout Wisconsin and Illinois, Adam has provided construction observation services for roadway reconstruction and resurfacing, as well as water main and sewer replacement.

Relevant Experience

- David Hobbs Honda Construction Services, Glendale, WI
- We - Miller-Coors Steam Service Extension, Milwaukee, WI
- Cramer Street Storm Sewer Design, Whitefish Bay, WI
- CTH H Watermain Extension Construction, Pleasant Prairie, WI
- Cooper Road Extension, Pleasant Prairie, WI
- Village Green Construction, Pleasant Prairie, WI
- 2016 Kenosha County Construction Staking Services, Kenosha, WI
- 2017 Construction Staking Services, Kenosha, WI
- 39th Avenue Construction Inspection, Pleasant Prairie, WI
- Pleasant Prairie Heritage Valley Sewer, Pleasant Prairie, WI
- 2016 Sewer Design, Whitefish Bay, WI
- Berkeley Blvd Street Design, Whitefish Bay, WI
- STH 50 (75th Street), Paddock Lake, WI
- 2016 Street Reconstruction and Combined Sewer Improvements, Shorewood, WI
- 2018 CDBG Sidewalk Construction, Glendale, WI
- 60th Street Reconstruction, Kenosha, WI
- Velodrome As-Built Survey, Kenosha, WI
- CTH W - CTH FR to CTH F - Reconstruction, Salem, WI
- Staking Services- Palmer Drive Underpass, Elmhurst, IL
- 2015 Roadway Rehab Construction Services, Gurnee, IL
- Churchill Drive Water Main Replacement, Richton Park, IL
- Harrison Street Detention Improvement, Elmhurst, IL
- High Ridge Road Phase III Engineering, Villa Park, IL
- Palmer Drive Underpass, Elmhurst, IL
- Golden Oaks Sewer Replacement, Homer Glen, IL
- Balmoral Drive Water Main Construction, Richton Park, IL
- Camden Court Reconstruction and Water Main Replacement, Richton Park, IL
- Greenfield Subdivision Public Improvements, Richton Park, IL
- Latonia Lane Rehabilitation, Richton Park, IL
- Walmart Construction Inspection, Richton Park, IL
- Cullerton Drive Reconstruction, Franklin Park, IL
- WMRA Parking Improvements - Construction, Franklin Park, IL
- 2015 Street Improvements Phase III, Villa Park, IL
- South Michigan Avenue Reconstruction, Villa Park, IL
- N. York Road Field Survey, Elmhurst, IL

Section 3



Work Samples

WORK SAMPLES

Work samples recently completed by our firm have been provided on the enclosed flash drive.

Section 4



Methodology and Approach

METHODOLOGY

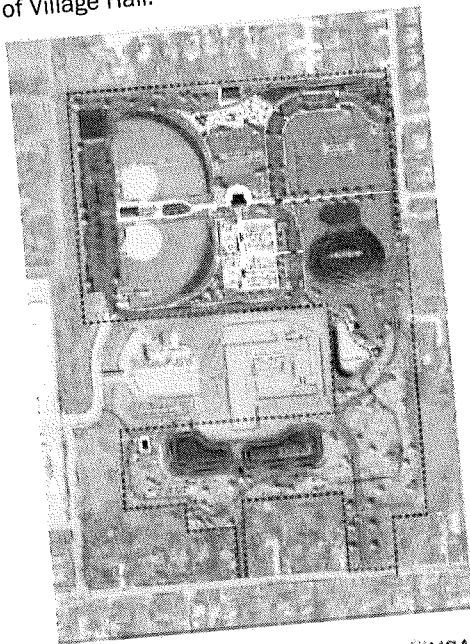
WE ARE SITUATIONALLY AWARE

Challenge: Flat topography

The biggest challenge in creating a working grading plan at this property is topography – or the almost complete lack of it. Therefore, we are already thinking about ways to create some elevation variation across this property to handle surface runoff.

Advantage: South end drainage largely under control

Helping out with this challenge is that drainage and stormwater management in the south end of the property is already figured out, with the new safety Building Pond oversized to accept imperviousness that may occur within the Park (trails and access road to 4 Mile Rd.) or even a multi-family development on Chester Lane, south of Village Hall.



Crawford Park
Village of Caledonia
MSA

Advantage: Existing amenities in the northwest

Also helping is that the existing parking lot and the two baseball fields are not going to be relocated – therefore, the elevations and drainage patterns are largely set. Accordingly, we will focus our most intensive grading creativity to the northeast quadrant of the Park and make sure that the overall grades fall away towards the north, with the cuts and the additional ponds creating enough dirt to build the sled hill right away.

We would see the splash pad and the playground about the same elevation, possibly higher than the baseball outfield as well as the adjacent parking area.

Challenge: Drain tiles everywhere

We would potentially use the paved parking area in the northeast to convey runoff on the surface to the northern storm facilities INSTEAD of relying on new storm sewers at that location.

Storm pipes in the northeast parking area may have to be too shallow for cover and run into conflicts with drain tiles.

Advantage: Drain tiles everywhere

We would not interfere with the existing drain tiles as long as they are functional. These drain tiles are the reason the parcel is buildable in the first place. In fact, we would leverage the tiles to use them for drainage planning for the park to the extent possible or feasible.

In the case of the existing storm pond at Village Hall, as well as the new pond at the Safety Building, existing drain tiles were used as pond outlet pipes instead of installing new storm sewers. We will continue this idea for maximum runoff management and to minimize storm sewer infrastructure costs.

Challenge: Soils unsuitable for infiltration

One of the most cost-effective stormwater management practices would be bioswales or infiltration basins. However, site work we conducted on this property in 2005 to evaluate infiltration capacity showed that the west half of the property has soil conditions NOT suitable for infiltration, or bioswale installation.

See Section 9 – Supporting Information for more details on this.

Advantage: East half of the property has infiltration potential

Knowing the soil conditions and the location of the drain tiles means that we would focus on getting runoff

to the east side of the property to take full advantage of soil conditions. In this sense, the BMPS that may be planned by the baseball fields may be better located on the other side of the central hard court amenities if they are going to be bioswales.

WE ARE SERIOUS ABOUT PROJECT MANAGEMENT

By this, we mean that we are serious about making sure that we produce the deliverables you expect completed at the agreed upon time, in exchange for the fee you have agreed to pay us. Clark Dietz approaches every project in a collaborative way. We tailor project plans to meet the needs, goals, and previous experiences of the municipality.

In this case, we know what the product must look like and our commitment is that you will NOT get a fee amendment request because we know what we have to do already. We can say this because we are serious about managing our projects.

- We know that you have set aside funds for the first phase of Crawford Park development and that every dollar you spend on us will take away from a yard of dirt you can move.
- We know that the projected funding in future years means that the full development of the park will take several years – which means it is SUPER important to make each phase count. Otherwise, there will be a risk of the community losing interest and shifting funding priorities elsewhere a few years down the line.
- We know that we have to get ourselves in gear and get the master grading and drainage plan done so that you can build the first phase of the park in 2023. Clark Dietz brings the necessary discipline to allow Caledonia to NOT experience time pressure to bid this thing early in the year and get a good deal in the market.

NO SURPRISES

Our way is to be responsive. We keep you in the loop with our progress, our status, what we're working on, what we're struggling with, what ideas we came up with. We keep you in the loop, so when you're in your department head meeting, when you're at the Public Works Committee or the Parks Committee, or the Village Board meetings and a question comes up, you don't have to say, "I'll find out from the consultant." You will know what we're doing and where we're at. And, we will not surprise you or blind side you. Ever. This is our way.

Although this project is a design assignment, Clark Dietz believes that planning for construction during the design phase is critical to making any infrastructure project a success. ***In the most basic sense, engineering design is not just lines on paper, but rather a preview of real-life impacts.***

PROJECT APPROACH

Clark Dietz will provide all of the necessary municipal engineering services to prepare the deliverables for this project. In doing so, we will generally follow the task list provided below.

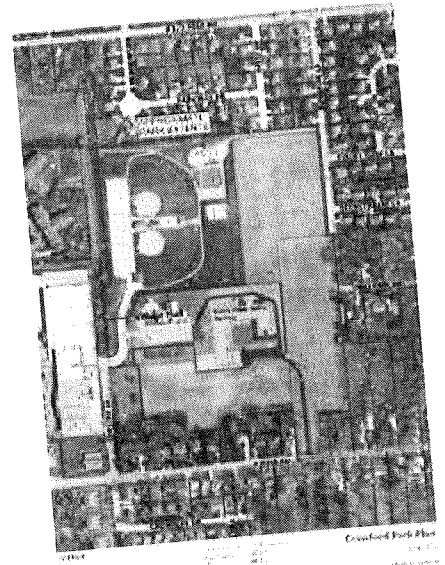
GOAL SETTING – CONSENSUS BUILDING

We want to be 100 percent part of your team. To accomplish this, we believe it is not sufficient to read the master plan documents, but really delve deep into the planning process and the Village's stance on developing this park.

We will spend as much time as needed without unreasonable expense to fully be on the same page as you before we jump in the engineering of the site.

DATA GATHERING – DIGITAL AND RECORDS

We will work with your staff to gather digital data of nearby infrastructures, including the GIS information for drainage facilities surrounding the Park. Included in this effort is the currently available information on the drain tile network in the property. As the designers of the site for the Safety Building, we will use our own drawings to complement received files from the Village.



DATA GATHERING – FIELD

Clark Dietz will use our own survey team to gather topographic information within and surrounding the parcel. We will pay close attention to include in the survey the road and trail connection points all around the park, with additional data gathered for the design of the 4 Mile Rd. and Sunshine Ln.

We will closely monitor and manage survey operations so that pertinent information for drainage and roadway connection design can occur.

CONCEPT GRADING

We see this as 30 percent grading, mainly distributing the amenities in their correct places, trails in their correct alignments and placing the stormwater facilities where they need to be based on off-site drainage and capacity evaluation.

Concept grading is also where we review and reconvene to revisit our consensus from the beginning of the project. This task is where we recalibrate our ideas to match yours – you get to have a serious look at our direction and provide feedback and input.

At the end of this process, we have a concept where we all agree where things are going to be. Now it is time to work on the details.

MASTER GRADING

This is where the overall grading is designed. Amenities are flat surfaces, and the trails, parking, and roadways are transitions. At Clark Dietz, we use 3-D software to create topographic surfaces and take full advantage of the software to design proposed surfaces that obey site restrictions as defined by the designer.

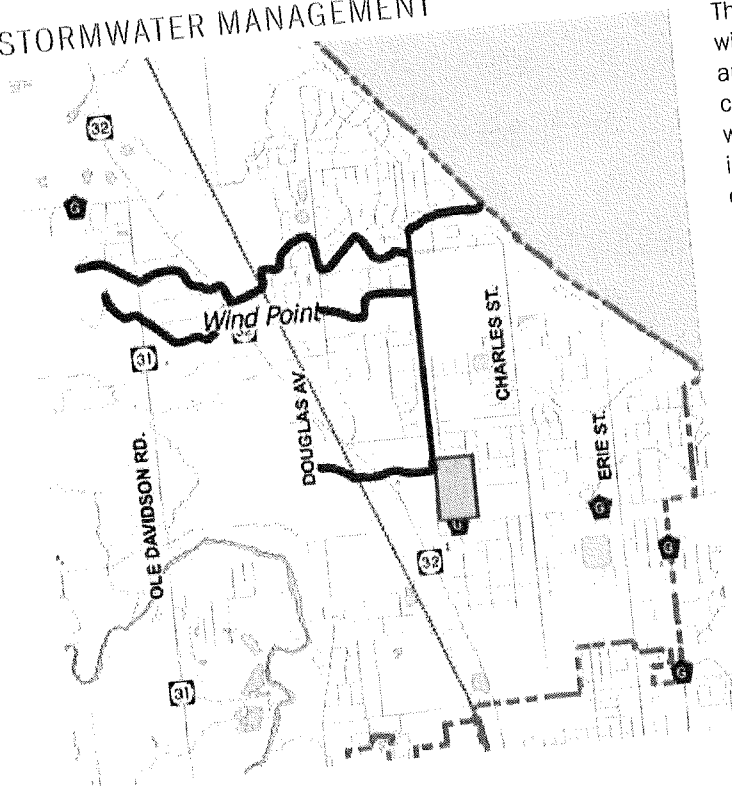
At this stage, we will deliver a mass grading surface, but will work with you to develop several interim conditions that can guide phased construction as funding allows. For each interim condition, we will provide a constructible grading scheme that fulfills the mass grading plan.

In other words, you can either mass grade at once, or in interim steps and still maintain control of the overall site. For example, you should have the means to bid out the construction of the sled hill without setting elevations for the basketball courts if that's not what is budgeted. To make this happen, we will have a plan that defines what excavation HAS to occur to build the sled hill, and allow you to build just that, for now.

NOTE: an important factor in designing phased grading projects is the protection of park elements that are already in place when the next amenities are being built. We don't want to destroy the trails when the splash pad is being built in 3 years. We are sensitive to this type of future conflict potential and will scenario play to catch as many permutations as possible of future construction to prevent conflicts.

Clark Dietz intends to maximize the use of the existing drain tile network to convey runoff from proposed impervious surfaces, especially in the north side roadway and parking amenities.

STORMWATER MANAGEMENT



The excavation from the stormwater facilities will need to be sufficient to build the sled hill and balance the rest of the site. That is one criteria for BMP design. A second criteria will be pollutant control and water quality improvements for downstream receiving ditches and streams.

Discharges to the north are essentially collected and drain directly north through a ditch system that eventually drains to Lake Michigan. In general, this conveyance has had low erosion potential, but also poor biotic values, certainly in the stretch between 4 1/2 Mile Rd. and 5 1/2 Mile Rd.

The figure on this page presents the "big picture". Crawford Park drains to Lake Michigan through the relatively developed east side of the Village.

Clark Dietz will build on 2006 Stormwater Management Plan that clearly defines improvement needs for streams and the proposed stormwater BMPs will support the management approaches adopted in that plan.

Accordingly, Clark Dietz will focus on both detention and water quality benefits of BMPs as well as the need to generate excess dirt for our facilities.

NOTE: In our opinion, the Village has a significant background work produced in pursuit of water quality benefits and could be well positioned for stormwater construction grants from the WDNR. The fact that the park construction will be realized over several years certainly gives Caledonia an opportunity to pursue grants every two years and reduce its financial burden. These WDNR construction grants are generally at 50 percent participation, but this could still be a significant contribution to the development of Crawford Park.

COORDINATION

Throughout this project, Clark Dietz staff will be available for public meetings, committee meetings, Board meetings, or otherwise desired staff meetings. While our fee estimate will include a placeholder number for this type of activity, we are NOT going to limit meetings, stop coming to the third meeting because we budgeted for two, etc.

Our philosophy is that we have to be there whenever we need to be there or whenever you call us. It also helps that our chief civil designer lives in Caledonia.

Section 5



Timeframe

PROPOSED TIMEFRAME

TIMEFRAME

Village of Caledonia Crawford Park Master Grading and Drainage Plan Proposed Schedule

Assumes Award at the DEC 19 2022 Village Board Meeting and contract signed before the end of 2022

Task	Complete on or about
Task 1 - Pre-Design Meeting	Mid January
Task 2 - Data Gathering - Digital/Records	Mid January
Task 3 - Data Gathering - Field Survey	End of January
Task 4 - Concept Grading Plan	Mid - End February
Task 5 - Master Grading Plan	Mid March
Task 6 - Stormwater and Drainage Plan	Mid March
Task 7 - On-Going Project Coordination	On-going
Task 8 - Bid Ready Documents	End of March

We anticipate that the grading contract would be on the street at the end of March, advertised on March 29 and April 5, with bid opening on April 12 2023.

Clark Dietz to provide bid tabulation and award recommendation for the second meeting on April 17, 2023.

Section 6



References

REFERENCES

Client relationships are important to Clark Dietz. We believe strong relationships are built by listening to and understanding our clients. We see our clients as valuable members of our project teams, and we genuinely value our rapport with them. We encourage you to contact our clients listed below to discuss their experiences working with us.

Client References**John Edlebeck**

Director of Public Works
Village of Whitefish Bay
5300 N. Marlborough Drive
Whitefish Bay, WI 53217
414.967.5128
j.edlebeck@wfbvillage.org

Mark Frye

City Administrator
City of Oconomowoc
174 E. Wisconsin Ave.
Oconomowoc, WI 53066
262.569.2184
mfrye@oconomowoc-wi.gov

Contractor References**Thomas A. Zoulek, PE**

President
Mid City Corporation
12930 W. Custer Avenue
Butler, WI 53007
414.349.0623
tzoulek@midcitycorp.us

Logan Greve

Project Manager
Stark Pavement Corporation
12845 W. Burleigh Road
Brookfield, WI 53050
920.427.3888
logang@starkcorp.us

Charlie Imig

Director of Public Works
City of Glendale
5909 N. Milwaukee River Pkwy
Glendale, WI 53209
414.228.1746
c.imig@glendale-wi.gov

Andy Pederson

Village Manager
Village of Bayside
9075 N. Regent Road
Bayside, WI 53217
414.315.8818
apederson@bayside-wi.gov

Mike Dretzka

Vice President
UPI, LLC.
2180 S. Springdale Rd.
New Berlin, WI 53146
262.894.2604
mike@upiconstruction.com

Brian Cater, PE

Deputy Director of Public Works
City of Kenosha
625 52nd Street, Room 300
Kenosha, WI 53140
262.653.4156
bcater@kenosha.org

Tammy LaBorde

Village Manager
Village of River Hills
7650 N Pheasant Lane
River Hills, WI 53217
414.352.8213
tlaborde@vil.river-hills.wi.us

Justin Zollitsch

Project Manager
Payne and Dolan, Inc.
N3W23650 Badinger Road
Waukesha, WI 53188
262.524.1255 office
262.366.5168 mobile
jzollitsch@walbecgroup.com

Section 7



Firm Capacity and Project Team Statement

STATEMENT OF AVAILABILITY

On behalf of Clark Dietz, I confirm that our staff will begin work on the project and complete the tasks within the timeframe shown in the proposed schedule provided in this proposal Section 5 – Timeframe.

LIST OF PERSONS INVOLVED

Mustafa Emir, Project Director

Mustafa is a highly respected Infrastructure Planning and Management Professional with over 30 years of hands-on engineering experience. He has authored dozens of long-term municipal infrastructure management plans, including sewer collection, stormwater management, flood control, water distribution, open space and parks, etc. for governments throughout the Midwest.

Emily Basalla, Project Manager

Emily provides comprehensive solutions to drainage conveyance and maintenance issues, including permitting. Emily has experience in stormwater design, water main relocations, sanitary sewer design, wastewater treatment processes, pavement replacement, and roadway widening projects. Emily brings a strong background facilitating municipal permitting and designing for green infrastructure. Emily is a Certified Floodplain Manager with a proven level of expertise in floodplain mapping, national and state level requirements.

CJ Beyer, Lead Designer

CJ is a civil engineer with design and construction inspection experience for municipal roadway, water main and parking lot projects. CJ works closely with his clients throughout the design process to ensure that a long term and efficient solution is achieved. His detailed approach to preparing plans, specifications and estimates translates to time and cost savings over the project life cycle. His practical knowledge gained through site visits and construction inspection translates to more accurate design plans, minimizing construction changes and unseen obstacles.

Brandon Flunker, Stormwater Engineering Lead

Brandon is a civil engineer who has developed a portfolio of municipal infrastructure experience with drainage, storm and sanitary sewers, and road reconstruction projects. Brandon gained first-hand municipal engineering experience during his employment with the Village of Germantown and the City of Mequon. He understands that real solutions come from understanding the client's needs. Brandon works closely with his clients throughout the design process to ensure that a long term and efficient solution is achieved.

Adam Latusek, Survey Lead

Mr. Latusek is an engineering technician with experience providing topographic surveying, construction staking, and construction inspection and documentation for a wide variety of municipal projects. Adam identifies and addresses obstacles before the improvements are built to reduce or prevent errors, delays, and costly overruns. He handles the duties of inspection and surveying.

Section 8



Cost Breakdown

COST BREAKDOWN

COST BREAKDOWN

Village of Caledonia
 Crawford Park Master Grading and Drainage Plan
 Proposed Design Fee

Task	Total Hours	Total Cost
Task 1 - Pre-Design Meeting	4	\$600
Task 2 - Data Gathering - Digital/Records	4	\$600
Task 3 - Data Gathering - Field Survey	40	\$6,500
Task 4 - Concept Grading Plan	16	\$2,750
Task 5 - Master Grading Plan	60	\$9,200
Task 6 - Stormwater and Drainage Plan	45	\$6,500
Task 7 - On-Going Project Coordination	16	\$2,200
Task 8 - Bid Ready Documents	8	\$1,400
Total Hours and Fee	193	\$29,750
Reimbursable Project Expenses		\$500
Total Not-To-Exceed Design Fee		\$30,250

Billing Rates

Labor billing rates shall be in accordance with Clark Dietz's schedule of general billing rates dated January 1, 2023 for the duration of this project.

Reimbursable Expenses

Project related expenses shall be billed in accordance with Clark Dietz's current schedule of project related expenses.

SCHEDULE OF GENERAL BILLING RATES

CLARK DIETZ, INC.

January 1, 2023

<u>TITLE</u>	<u>HOURLY RATE</u>
Principal	\$255.00
Engineer 8	240.00
Engineer 7	230.00
Engineer 6	220.00
Engineer 5	200.00
Engineer 4	170.00
Engineer 3	155.00
Engineer 2	140.00
Engineer 1	125.00
Technician 5	170.00
Technician 4	155.00
Technician 3	140.00
Technician 2	125.00
Technician 1	105.00
Intern	100.00
Clerical	90.00

Notes:

The rates in this schedule will be reviewed and adjusted as necessary but not sooner than six months after the date listed above. Rates include actual salaries or wages paid to employees of Clark Dietz plus payroll taxes, FICA, Worker's Compensation insurance, other customary and mandatory benefits, and overhead and profit. All project related expenses and subconsultants will be billed at 110% of actual cost to cover handling and administrative expenses.

SCHEDULE OF PROJECT RELATED EXPENSES

CLARK DIETZ INC.

Effective January 1 2023

Vehicles		
Autos		\$65.00/day or \$0.625/mile (per agreement)
Field Vehicles		\$65.00/day or \$0.625/mile (per agreement)
Survey Van		\$80.00/day or \$0.75/mile (per agreement)
Robotic Survey Equipment		\$20.00/hour
GPS Survey Equipment		\$30.00/hour
Nuclear Soils Compaction Gauge		\$50.00/day
CADD Usage		\$20.00/hour
Drone Usage		\$35.00/hour
Regular Format Copies* (8.5"x11" or 11"x17")		\$0.10/copy
Color Copies* (8.5"x11")		\$0.50/copy
Color Copies* (11"x17")		\$1.50/copy
Large Format Plotting and/or Copying*		
(12"x18")		\$0.50/sheet
(22"x34" or 24"x36")		\$1.75/sheet
(30"x42")		\$2.50/sheet
(36"x48")		\$3.00/sheet
Large Format Scanning*		
(12"x18")		\$.30/sheet
(22"x34" or 24"x36")		\$1.00/sheet
(30"x42")		\$1.50/sheet
(36"x48")		\$2.00/sheet
Hotels & Motels	}	At Cost
Meals		
Federal Express & UPS		
Public Transportation		
Film and Development		
Supplies		

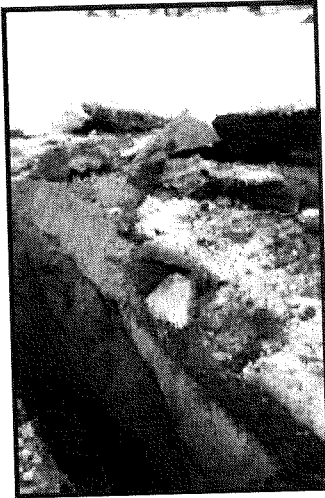
Notes:
 The rates in this schedule are subject to review and will be adjusted as necessary, but not sooner than six months after the date listed above. Certain rates listed with * are for in-house production. Larger quantities will be sent to an outside vendor.

Section 9



Supporting Information

Stormwater Infiltration Feasibility Assessment



□ Project Purpose and Goals

This section of the Caledonia Stormwater Management Plan presents the results of a field investigation to evaluate the effectiveness of infiltration basins in the Village. While the current State standards require the consideration of infiltration basin construction for new development, we had no information regarding how useful or effective this approach will be in Caledonia. Therefore, we investigated the performance of infiltration basins based on the criteria in the NR151 subchapter III and Conservation Practice Standards 1002 & 1003.

We accomplished this by analyzing the United States Department of Agriculture (USDA) soil survey for Racine County and through selective subsurface exploration to confirm infiltration rate data in the soil survey. We performed soil borings at representative locations to identify soil profiles and establish guidelines for the use of infiltration practices in stormwater management in Caledonia.

□ Summary of Wisconsin's Infiltration Performance Standards

NR151 includes agricultural performance standards and prohibitions, non-agricultural performance standards, transportation performance standards, implementation and enforcement provisions, and a process to develop and disseminate non-agricultural technical standards.

The infiltration standard requires that, to the maximum extent practicable, a portion of the runoff volume be infiltrated. The amount to be infiltrated is different for residential and non-residential (commercial, industrial, institutional) land uses.

Residential – 90 percent of predevelopment infiltration volume or 25 percent of the 2 year-24 hour design storm. No more than 1 percent of the project site is required (cap).

Non-residential – 60 percent of predevelopment infiltration volume or 10 percent of the 2 year-24 hour design storm. No more than 2 percent of the project site is required (cap).

To protect groundwater, this standard identifies areas where infiltration is discouraged: areas associated with Tier 1 industries; storage and loading areas of Tier 2 industries; fueling and maintenance areas; areas near karst features; areas in close proximity to wells; areas with inadequate separation distance to groundwater or bedrock; areas where the soils are contaminated and areas where the soils are too coarse.

For practical reasons, the standard further identifies areas where infiltration is not required, such as areas where the infiltration rate is less than 0.6 inches per hour; areas with less than 5,000 square feet of parking lot or roads in commercial and industrial development; redevelopment areas; in-fill areas less than 5 acres; and certain roads.

Based on this standard, those sites which must be evaluated for stormwater infiltration practices need to undergo a four step process. The site evaluation consists of four steps for locating the optimal areas for infiltration, and properly sizing infiltration devices.

- **Step A. Initial Screening:** The initial screening identifies potential locations for infiltration devices. The purpose of the initial screening is to determine if installation is limited by ss. NR151.12(5)(c)5. or NR151.12(5)(c)6., and to determine where field work is needed for Step B. Optimal locations for infiltration are verified in Step B.
- **Step B. Field Verification:** Field verification is required for areas of the development site considered suitable for infiltration.
- **Step C. Evaluation of Specific Infiltration Areas:** This step is to determine if locations identified for infiltration devices are suitable for infiltration, and to provide the required information to design the device. A minimum number of borings or pits shall be constructed for each infiltration device.
- **Step D. Soil and Site Evaluation Reporting:** The site's legal description and all information required in Steps B and C shall be included in the Soil and Site Evaluation Report. These reports shall be completed prior to the construction plan submittal.



□ Methods

In order to find out the usefulness or effectiveness of infiltration basins as required by the current State standards, the Village has initiated a program of soil borings at representative locations to identify soil profiles and establish guidelines for the use of infiltration practices in stormwater management. Using digital soils maps, a GIS map was created showing the suitability of filtration as a stormwater management practice in Caledonia. The result was a GIS map of the geographic classification of infiltration potential in Caledonia which guided the field verification and validation phase of the work. The analysis looked at soils information from the USAD Racine County Soil Survey and applied the criteria from NR151 that excludes infiltration on slopes greater than 20% (yellow on map), soils with inadequate separation distance to ground water (hydric soils shown as red on map), and soils with infiltration rates less than 0.6 inches per hour (orange on map). The result is a map showing the potential for stormwater infiltration in Caledonia. The next step in the study was to field verify the map by collecting soil borings in different soil types and drainage basins. As part of the field verification and validation, we selected representative soil boring and sampling locations. Both Lake Michigan and Root River watersheds were targeted in this subsurface exploration program. We provided soils and GIS analysis, soil boring and soil testing services to determine more definitively where, in Caledonia, stormwater infiltration BMP's would be feasible.

□ Results

A total of nine soil samples were collected throughout the Village. Samples 1, 2 and 3 were collected on February 9, 2005 and samples 4-9 were collected on October 19, 2005 (Appendix E). Soil samples 1-3 were recovered from test pits excavated at the site west of SCORE Park. The soil series indicated for the site by the USDA Soil Survey are Sebewa and Elliott, and consist mainly of clayey soils, consistent with profiles encountered in our test pits. However, two of the test pits encountered a 3 to 3.5 foot thick stratum of sandy loam that is absent from the indicated soil series, and a stratum of sand and gravel included in the Sebewa series was not found in the test pits.

In order for Caledonia to be exempt from having to install infiltration devices per NR151.12, the infiltration rate of the soil must be less than 0.6 inches per hour. Per DNR Standard 1002, a site is considered exempt if the least permeable soil horizon within 5 feet of the bottom of the infiltration system is one of the following: sandy clay, clay loam, silty clay loam, sandy clay, silty clay, or clay. The sandy loam encountered in two of the test pits may have an infiltration rate greater than 0.6 inches per hour, however, since this stratum is shallow and is only 3 to 3.5 feet thick and is then underlain by a clay layer with an infiltration rate of 0.07 inches per hour, these sites would be considered exempt.

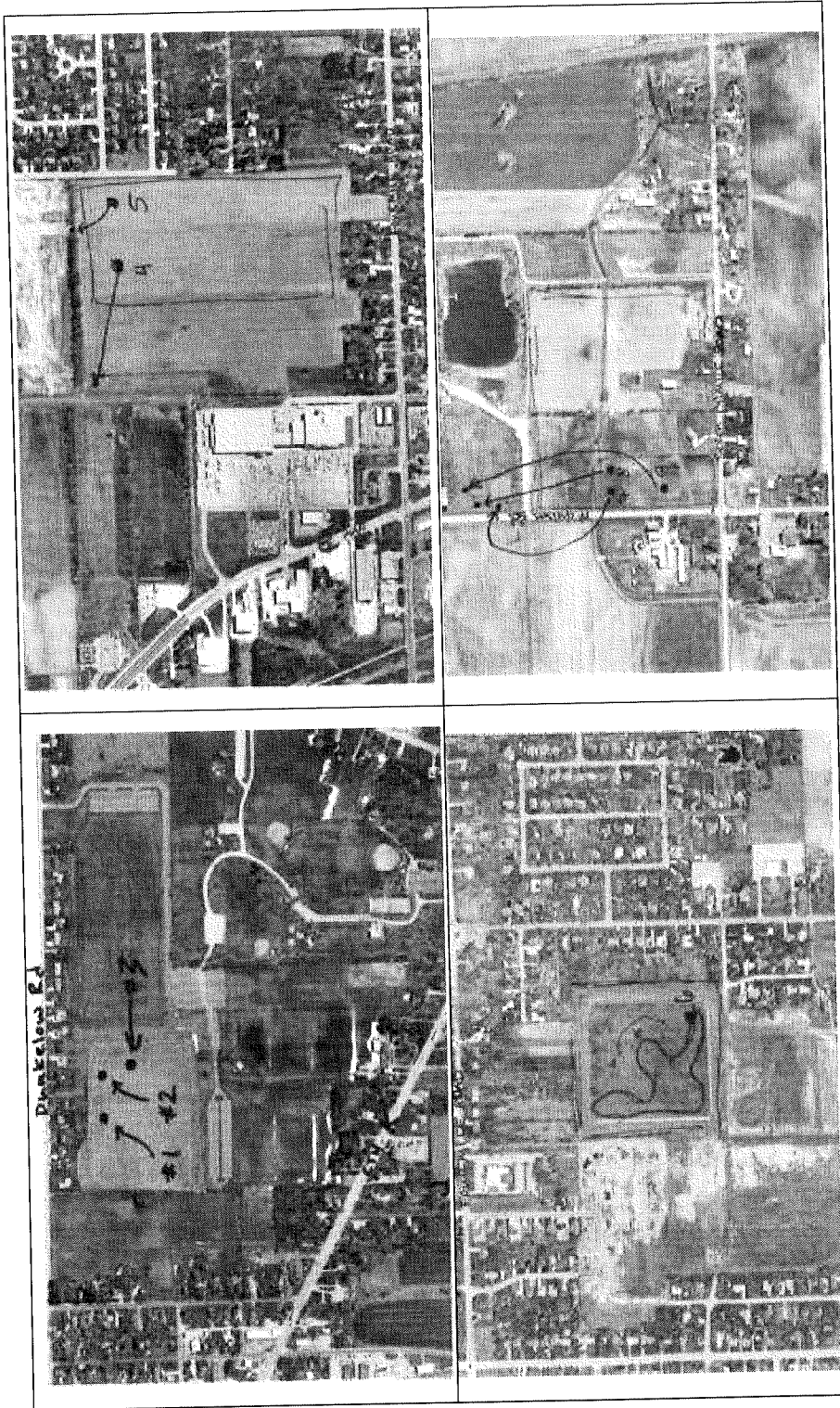
Samples 4, 5, 6 and 9 encountered clay layers between five and twelve feet in depth with infiltration rates well below the needed 0.6 inches per hour for infiltration BMP's. Samples 7 and 8 had clay layers at eight and ten feet with high groundwater at five and one half feet in depth. This means sample 7 is not suitable for infiltration due to inadequate separation distance to groundwater. Sample 8 is borderline suitable for an infiltration BMP, however it is located within the same soil type as sample 7 and approximately at the same elevation and distance away from a DNR navigable waterway.

Conclusions and Recommendations

Of ten soil samples, nine were determined to be not suitable for stormwater infiltration BMP's. This was due most often to a layer of clay between five and ten feet in depth with a very low infiltration rate (0.07 inches per hour) well below the recommended 0.6 inches per hour needed for effective infiltration. These clay layers would block infiltration below a constructed infiltration device. Only one of the ten samples had acceptable infiltration rates in the five to ten foot zone but the sample was located in close proximity to a waterway and may be subject to high groundwater or flooding. Overall the presence of hydric soils with high groundwater and very clayey sub soils there are few areas where infiltration is practicable in the Village of Caledonia.

As a consequence, we recommend that only areas shown on the attached Stormwater Infiltration Potential Map with acceptable soil permeability be required to investigate a site's potential for stormwater infiltration BMP's.

□ Locations of Soil Borings



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