

MMSD/ FRESH COAST GUARDIANS



Green Vendor List Application
August 3, 2021

Project Information:

Project Name: Green Infrastructure Condition Assessments

Address/City/State/Zip: Milwaukee Metropolitan Sewerage District Service Area

Type of green infrastructure installed (check all that apply):

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Green Roofs | <input checked="" type="checkbox"/> Rain Barrels | <input checked="" type="checkbox"/> Rain Gardens |
| <input checked="" type="checkbox"/> Constructed Wetlands | <input checked="" type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input checked="" type="checkbox"/> Stormwater Trees | <input type="checkbox"/> Other, |
| <input checked="" type="checkbox"/> Porous Pavement | <input checked="" type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- Design
- Engineering
- Construction
- Landscaping
- Maintenance
- Plumbing
- Downspouts and Gutters
- Inspection

Project (Property) Owner Information:

Owner's Name: Bre Plier, Milwaukee Metropolitan Sewerage District (MMSD)

Address/City/State/Zip: 260 West Seeboth Street, Milwaukee, WI 53203

Phone: 414.272.5100

Email: bplier@mmsd.com

Project Construction Information:

Construction Management Vendor: Ruekert & Mielke, Inc.

Project Manager Name: Christy Poniewaz, Ruekert & Mielke, Inc.

Project Manager's Vendor history: currently employed no longer employed other [Click here to enter text.](#)

Email: cponiewaz@ruekert-mielke.com

Contract information (if applicable): [Click here to enter text.](#)

Final Contract Amount (contracted and amended if applicable): [Click here to enter text.](#)

Construction Start date (contracted): 6/14/2021

Construction Start date (actual): 6/14/2021

Construction End date (contracted): 9/30/2021

Construction End date (actual): N/A

Was the project completed on time? Yes No; Explanation: Currently in progress

Was the project completed on budget? Yes No; Explanation: Currently in progress

Was the project completed to the owner's satisfaction? Yes No; Explanation: Currently in progress

Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant): The Milwaukee Metropolitan Sewerage District (MMSD) seeks to establish a green infrastructure asset monitoring program using a baseline condition assessment of District-funded GI assets. Additionally, MMSD sought to incorporate its Fresh Coast Fresh Start (FCFS) workforce development program by training participants to inspect and learn to maintain GI features. R/M was brought on to complete both, providing a baseline condition assessment, while partnering with FCFS for a meaningful training opportunity in the field. The inspections will span over 400 GI assets for which MMSD provided funding across hundreds of different property owners. Installation dates for these assets vary from a few years ago to over 10 or more.

Prior to this project, R/M partnered with Stormwater Solutions Engineering (SSE) to create the "Green Infrastructure Maintenance Analysis & Lessons Learned for Municipalities" presentation. This presentation and document has continued to be utilized during the current project and has been helpful.

Our team is developing and instituting a baseline GI asset inspection program that incorporates consistency, completeness, and an opportunity for improvement. We offer additional inspection fields or improvements for the Survey 123 application, developed a template for recommended work orders, and have included some recommendations during our inspections. Most importantly, R/M is providing hands-on training at GI asset locations for FCFS workforce.

A final report will be provided with a brief narrative to discuss the purpose of the project, the methods, and the protocols utilized. Likewise, this report will include the project management and inspection personnel, FCFS participants, and a summary of the condition assessments.

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT, WI



SERVICES

- Inspection
- Work Order Recommendation
- Green Infrastructure

PROJECT TEAM

- Christy Poniewaz

GREEN INFRASTRUCTURE CONDITION ASSESSMENTS

The Milwaukee Metropolitan Sewerage District (MMSD) seeks to establish a green infrastructure asset monitoring program using a baseline condition assessment of District-funded GI assets. Additionally, MMSD sought to incorporate its Fresh Coast Fresh Start (FCFS) workforce development program by training participants to inspect and learn to maintain GI features. R/M was brought on to complete both, providing a baseline condition assessment, while partnering with FCFS for a meaningful training opportunity in the field. The inspections will span over 400 GI assets for which MMSD provided funding across hundreds of different property owners. Installation dates for these assets vary from a few years ago to over 10 or more.

Prior to this project, R/M partnered with Stormwater Solutions Engineering (SSE) to create the "Green Infrastructure Maintenance Analysis & Lessons Learned for Municipalities" presentation. This presentation and document has continued to be utilized during the current project and has been helpful.

Our team is developing and instituting a baseline GI asset inspection program that incorporates consistency, completeness, and an opportunity for improvement. We offer additional inspection fields or improvements for the Survey 123 application, developed a template for recommended work orders, and have included some recommendations during our inspections. Most importantly, R/M is providing hands-on training at GI asset locations for FCFS workforce.

A final report will be provided with a brief narrative to discuss the purpose of the project, the methods, and the protocols utilized. Likewise, this report will include the project management and inspection personnel, FCFS participants, and a summary of the condition assessments.

CLIENT CONTACT

Bre Plier
MMSD
bplier@mmsd.com
414.272.5100



Project Information:

Project Name: Allen Road

Address/City/State/Zip: Between Jonathan Drive and River Bluff Circle, Oconomowoc, WI

Type of green infrastructure installed (check all that apply):

- | | | |
|---|---|--|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input type="checkbox"/> Cisterns | <input type="checkbox"/> Soil Amendments |
| <input type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input type="checkbox"/> Other, Click or tap here to enter text. |
| <input type="checkbox"/> Porous Pavement | <input checked="" type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- | | | |
|--|--------------------------------------|---|
| <input checked="" type="checkbox"/> Design | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Maintenance | <input type="checkbox"/> Inspection |
| <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: Mark Frye, Director of Public Works, City of Oconomowoc

Address/City/State/Zip: 174 E Wisconsin Avenue, Oconomowoc, WI 53066

Phone: 262.569.2184

Email: mfrye@oconomowoc-wi.gov

Project Construction Information:

Construction Management Vendor: Ruekert & Mielke, Inc.

Project Manager Name: Terrence R. Tavera, P.E., Ruekert & Mielke, Inc.

Project Manager's Vendor history: currently employed no longer employed other Click here to enter text.

Email: ttavera@ruekert-mielke.com

Contract information (if applicable): Click here to enter text.

Final Contract Amount (contracted and amended if applicable): \$1,455,000

Construction Start date (contracted): 4/1/2016

Construction Start date (actual): 5/30/2016

Construction End date (contracted): 10/28/2016

Construction End date (actual): 10/28/2016

Was the project completed on time? Yes No; Explanation: Click here to enter text.

Was the project completed on budget? Yes No; Explanation: Click here to enter text.

Was the project completed to the owner's satisfaction? Yes No; Explanation: Click here to enter text.

Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant): The City of Oconomowoc reconstructed 2,500 lineal feet of Allen Road, from Johnathon Drive to Concord Road. Wetlands and several culverts directing runoff to the Oconomowoc River are adjacent to the project site. Oconomowoc is in the Rock River TMDL area and is actively taking efforts to reduce the amount of Total Suspended Solids (TSS) and

Phosphorus that reach surface waters via the municipal storm sewer system.

Ruekert & Mielke, Inc. (R/M) incorporated a grass-lined swale behind the curb and gutter system to allow for treatment and infiltration of the runoff prior to reaching the wetlands and conveyance systems leading to the Oconomowoc River. The result is a traditional urban section roadway with curb cuts and a grass swale system that work in conjunction with each other to reduce runoff peak flows and volumes and provide water quality treatment.



SERVICES

- Street Design
- Civic Campus Site Design
- Storm Water Analysis
- Floodplain Modeling
- Sanitary Sewer Repair and Rehabilitation
- Water Main Repair and Rehabilitation
- Bidding

PROJECT TEAM

- Terry Tavera, PE., CFM, CPESC

CLIENT CONTACTS

Mark Frye
Director of Public Works
mfrye@oconomowoc-wi.gov
262.569.2184

ALLEN ROAD

The City of Oconomowoc reconstruction of 2,500 lineal feet of Allen Road, from Johnathon Drive to Concord Road. Wetlands and several culverts directing runoff to the Oconomowoc River are adjacent to the project site. Oconomowoc is in the Rock River TMDL area, and is actively taking efforts to reduce the amount of Total Suspended Solids (TSS) and Phosphorus that reach surface waters via the municipal storm sewer system.

Ruekert & Mielke, Inc. (R/M) incorporated a grass-lined swale behind the curb and gutter system to allow for treatment and infiltration of the runoff prior to reaching the wetlands and conveyance systems leading to the Oconomowoc River. The result is a traditional urban section roadway with curb cuts and a grass swale system that work in conjunction with each other to reduce runoff peak flows and volumes, and provide water quality treatment.

Project Information:

Project Name: City of Oconomowoc – First Bank Financial Centre Parking Lot Improvements
Address/City/State/Zip: 219 W Wisconsin Avenue, Oconomowoc, WI 53066

Type of green infrastructure installed (check all that apply):

- | | | |
|---|---|--|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input checked="" type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input type="checkbox"/> Cisterns | <input type="checkbox"/> Soil Amendments |
| <input type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input type="checkbox"/> Other, Click or tap here to enter text. |
| <input checked="" type="checkbox"/> Porous Pavement | <input checked="" type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- | | | |
|--|--------------------------------------|---|
| <input checked="" type="checkbox"/> Design | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Maintenance | <input type="checkbox"/> Inspection |
| <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: Mark Frye, Director of Public Works, City of Oconomowoc
Address/City/State/Zip: 174 E Wisconsin Avenue, Oconomowoc, WI 53066
Phone: 262.569.2184
Email: mfrye@oconomowoc-wi.gov

Project Construction Information:

Construction Management Vendor: Ruekert & Mielke, Inc.
Project Manager Name: Violet V. Razo, P.E., Ruekert & Mielke, Inc..
Project Manager's Vendor history: currently employed no longer employed other Click here to enter text.
Email: vrazo@ruekert-mielke.com
Contract information (if applicable): Click here to enter text.
Final Contract Amount (contracted and amended if applicable): \$932,617.50

Construction Start date (contracted): 6/13/2016
Construction Start date (actual): 6/13/2016
Construction End date (contracted): 10/21/2016
Construction End date (actual): 11/18/2016

Was the project completed on time? Yes No; Explanation: Additional coordination and installation time was required for the Electric Utility and irrigation system (by others)

Was the project completed on budget? Yes No; Explanation: Click here to enter text.

Was the project completed to the owner's satisfaction? Yes No; Explanation: Click here to enter text.

Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant): A partnership opportunity arose between the owners of the private parking lot adjacent to the City of Oconomowoc's municipal parking lot on South Street and Church Street, providing the opportunity to re-design the overall lot to include storm water treatment facilities, which were not present before. This parking lot serves the downtown

commercial district, City community center and public library, and drains to Lac La Belle, approximately 500 feet away.

By adjusting the layout of and re-painting the parking stalls, the parking lot can now hold 336 vehicles, an increase of 50. Vegetated bioretention basins and swales have been incorporated into the parking lot design, allowing some of the runoff to flow along the curb and into the vegetated areas. Runoff then infiltrates through the engineered soils and into the ground, where an extension to the storm sewer runs underneath, directing excess water to the storm sewer system. This system allows pollutants from the parking lot to be captured in the bioretention facilities, prior to discharging from the storm sewers to Lac la Belle. In addition to the three bioretention facilities, a 350 square foot rain garden planted with native prairie grasses and flowers is located on the west side of the lot, just north of the library, which now receives and infiltrates the runoff from the sidewalk which used to flow onto the pavement and into the storm sewer system prior to discharging to the lake.

The depressed bioretention basins and rain garden are in a very visible location, providing an opportunity for the City to inform residents and visitors about the importance of storm water treatment to the protection of the lakes in Oconomowoc.



SERVICES

- Road Design
- Bioretention
- Storm Sewer Design
- Sidewalk Design

PROJECT TEAM

- Violet V. Razo, P.E.
- Michael E. Michalski

CLIENT CONTACT

Mark Frye
Director of Public Works
mfrye@oconomowoc-wi.
gov
262.569.2184

FIRST BANK FINANCIAL CENTRE PARKING LOT IMPROVEMENTS

A partnership opportunity arose between the owners of the private parking lot adjacent to the City of Oconomowoc's municipal parking lot on South Street and Church Street, providing the opportunity to re-design the overall lot to include storm water treatment facilities, which were not present before. This parking lot serves the downtown commercial district, City community center and public library, and drains to Lac La Belle, approximately 500 feet away.

By adjusting the layout and re-painting the parking stalls, the parking lot can now hold 336 vehicles, an increase of 50. **Vegetated bioretention basins and swales have been incorporated into the parking lot design, allowing some of the runoff to flow along the curb and into the vegetated areas.** Runoff then infiltrates through the engineered soils and into the ground, where an extension to the storm sewer runs underneath, directing excess water to the storm sewer system. This system allows pollutants from the parking lot to be captured in the bioretention facilities, prior to discharging from the storm sewers to Lac la Belle.

In addition to the 3 bioretention facilities, a 350 square foot rain garden planted with native prairie grasses and flowers is located on the west side of the lot, just north of the Library, which now receives and infiltrates the runoff from the sidewalk which used to flow onto the pavement and into the storm sewer system prior to discharging to the lake.

The depressed bioretention basins and rain garden are in a very visible location, providing an opportunity for the City to inform residents and visitors about the importance of storm water treatment to the protection of the lakes in Oconomowoc.



Project Information:

Project Name: Glenwood Elementary School Community Forest

Address/City/State/Zip: 3550 S 51st St, Greenfield, WI 53220

Type of green infrastructure installed (check all that apply):

- | | | |
|--|---|--|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input checked="" type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input type="checkbox"/> Cisterns | <input type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other, Biofilters, Butterfly Gardens |
| <input type="checkbox"/> Porous Pavement | <input type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- | | | |
|---------------------------------------|--------------------------------------|---|
| <input type="checkbox"/> Design | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Downspouts and Gutters |
| <input type="checkbox"/> Engineering | <input type="checkbox"/> Maintenance | <input checked="" type="checkbox"/> Inspection |
| <input type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: School District of Greenfield

Address/City/State/Zip: 4850 S 60th St, Greenfield, WI 53220

Phone: 414.855.2050

Email: smiller@greenfield.k12.wi.us

Project Construction Information:

Construction Management Vendor: Scherrer Construction Co., Inc.

Project Manager Name: Chad Redman

Project Manager's Vendor history: currently employed no longer employed other [Click here to enter text.](#)

Email: ChadRedman@scherrerconstruction.com

Contract information (if applicable): [Click here to enter text.](#)

Final Contract Amount (contracted and amended if applicable): [Click here to enter text.](#)

Construction Start date (contracted): [Click here to enter a date.](#)

Construction Start date (actual): 6/5/2017

Construction End date (contracted): [Click here to enter a date.](#)

Construction End date (actual): 11/20/2018

Was the project completed on time? Yes No; Explanation: Construction is still underway.

Was the project completed on budget? Yes No; Explanation: Construction is still underway.

Was the project completed to the owner's satisfaction? Yes No; Explanation: Construction is still underway.

Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant): This institutional project, that consisted of two phases, started with an existing elementary school, with a typical asphalt play area and parking lot that drained directly into the city's storm sewer system and land improvements to a wooded lot adjacent to the school grounds. During phase one, reconstruction included removing portions of the paved areas near the existing storm inlet structures and other areas and creating four separate biofilters. These biofilters consist of a typical rain garden cross section consisting of pea gravel,

drainage rocks, a sand/compost engineered mix top dressed with hardwood mulch. Planting consist of Iris plugs, Fox Sedge plugs, and Smooth Penstemon. In addition to these biofilters, a much larger size biofilter with the same type of mix and planting was constructed, however run-off collected from this facility discharged into a newly constructed underground water detention system.

Phase two (Community Forest) involved turning the existing wooded lot into an ecological and environmental learning area. Select trees were removed to create natural and paved paths leading to newly constructed learning areas including a covered shelter, an amphitheater, as well as other natural seating areas. New tree plantings consisting of oaks, maples, and spruces have occurred. In applicable areas, other native seed plantings have occurred which included sedge, coneflower, black eyed Susans and daisies. At the southern edge of the forest, a buffer zone was created consisting of newly planted evergreens and native prairie seeding. At the entrance just outside of the forest a butterfly garden was constructed consisting of various native species including prairie clover, bluestem grasses and milkweeds. Erosion and sediment control inspection was performed by Ruekert & Mielke, Inc. (R/M) on behalf of the City of Greenfield during the construction period of both phases. The majority of the construction had taken place in 2017, however some plantings are being held off until spring of 2018.



SERVICES

- Native Landscaping
- Rain Gardens
- Biofilters
- Butterfly Gardens

PROJECT TEAM

- Mark A. Bruns, CISEC

CLIENT CONTACTS

School District of Greenfield
Director of Public Works
smiller@greenfield.k12.wi.us
414.855.2050

GLENWOOD ELEMENTARY SCHOOL COMMUNITY FOREST

This institutional project, that consisted of two phases, started with an existing elementary school, with a typical asphalt play area and parking lot that drained directly into the city's storm sewer system and land improvements to a wooded lot adjacent to the school grounds. During phase one, reconstruction included removing portions of the paved areas near the existing storm inlet structures and other areas and creating four separate biofilters. These biofilters consist of a typical rain garden cross section consisting of pea gravel, drainage rocks, a sand/compost engineered mix top dressed with hardwood mulch. Planting consist of Iris plugs, Fox Sedge plugs, and Smooth Penstemon. In addition to these biofilters, a much larger size biofilter with the same type of mix and planting was constructed, however run-off collected from this facility discharged into a newly constructed underground water detention system.

Phase two (Community Forest) involved turning the existing wooded lot into an ecological and environmental learning area. Select trees were removed to create natural and paved path's leading to newly constructed learning areas including a covered shelter, an amphitheater, as well as other natural seating areas. New tree plantings consisting of oaks, maples, and spruce's have occurred. In applicable areas, other native seed plantings have occurred which included sedge, coneflower, black eyed Susans and daisys. At the southern edge of the forest, a buffer zone was created consisting of newly planted evergreens and native prairie seeding. At the entrance just outside of the forest a butterfly garden was constructed consisting of various native species including prairie clover, bluestem grasses and milkweeds. Erosion and sediment control inspection was performed by Ruekert & Mielke, Inc. (R/M) on behalf of the City of Greenfield during the construction period of both phases. The majority of the construction had taken place in 2017, however some plantings are being held off until spring of 2018.

Project Information:

Project Name: Rawson Homes Drainage Improvements

Address/City/State/Zip: South 36th Street & West Madison Blvd., Franklin, WI 53132

Type of green infrastructure installed (check all that apply):

- | | | |
|---|---|---|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input type="checkbox"/> Cisterns | <input type="checkbox"/> Soil Amendments |
| <input type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other, Biofilters |
| <input type="checkbox"/> Porous Pavement | <input checked="" type="checkbox"/> Bioswales | |

Area of specialty for this project (check all that apply):

- | | | |
|--|--------------------------------------|---|
| <input checked="" type="checkbox"/> Design | <input type="checkbox"/> Landscaping | <input type="checkbox"/> Downspouts and Gutters |
| <input type="checkbox"/> Engineering | <input type="checkbox"/> Maintenance | <input type="checkbox"/> Inspection |
| <input type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: City of Franklin – Glen E. Morrow (City Engineer / Director of Public Works)

Address/City/State/Zip: 9229 W. Loomis Rd. Franklin, WI 53132

Phone: 414.425.7510

Email: GMorrow@franklinwi.gov

Project Construction Information:

Construction Management Vendor: N/A

Project Manager Name: N/A

Project Manager's Vendor history: currently employed no longer employed other N/A

Email: N/A

Contract information (if applicable): [Click here to enter text.](#)

Final Contract Amount (contracted and amended if applicable): [Click here to enter text.](#)

Construction Start date (contracted): 5/16/2018

Construction Start date (actual): N/A

Construction End date (contracted): 9/28/2018

Construction End date (actual): N/A

Was the project completed on time? Yes No; Explanation: N/A

Was the project completed on budget? Yes No; Explanation: N/A

Was the project completed to the owner's satisfaction? Yes No; Explanation: N/A.

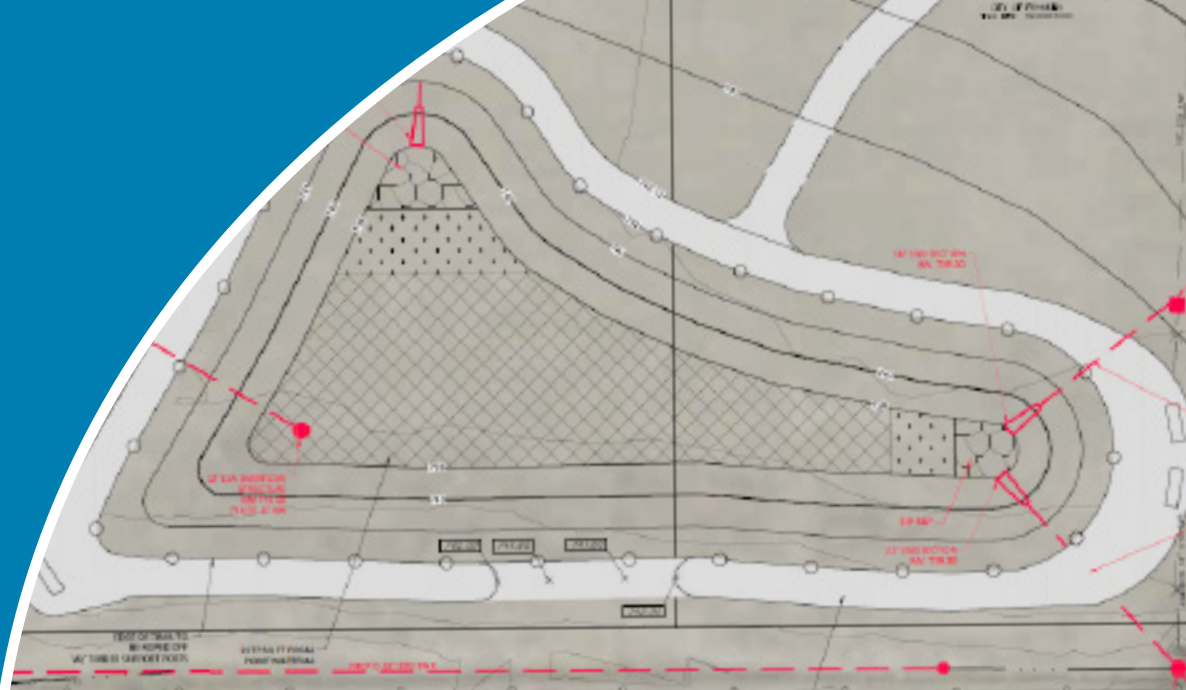
Project Description (Be sure to include cost information, photos, and a detailed description of the work performed by the Vendor applicant): The Rawson Homes neighborhood near W. Madison Boulevard and S. 36th Street relies solely on a system of shallow grass swales and culverts which drain to an unnamed tributary of the Root River east of S. 35th Street Persistent drainage issues resulting from high groundwater in the area (and exacerbated by the recent sanitary sewer infiltration and inflow work) led the City of Franklin to hire Ruckert & Mielke, Inc. (R/M) to complete a design study for drainage and water quality improvements.

The study was completed in April 2017 and determined the feasibility of replacing failing roadside

grass swales in the Rawson Homes neighborhood with an alternative conveyance and treatment system that overcomes the issue of high groundwater while maintaining the necessary pollutant reductions. To improve the nuisance concerns from continuous standing water in the swales, the proposed grass swale redesign involves filling all ditches within the drainage area with approximately two feet of clear stone and adding a perforated underdrain. The stone would be covered with a geotextile fabric and a minimum of 4-inches of topsoil.

It is not expected that significant water quality improvements would be achieved from the proposed ditch cross section, however this will resolve the drainage areas and allow for conveyance of runoff throughout the neighborhood to a biofilter for enhanced treatment. Drainage throughout the 21.62-acre neighborhood will be treated in an approximately 10,000 SF biofiltration device at the corner of W. Madison Boulevard and S. 36th Street. The design will incorporate FocalPoint engineered media which is a high performance modular biofiltration system (HPMBS) which infiltrates runoff at approximately 100 inches per hour.

The City of Franklin has a funding agreement with the Milwaukee Metropolitan Sewerage District's Green Solutions Program for \$171,858 or approximately 1/3 of the total estimated project cost. The remainder of the project (\$465,830) will be funded through MMSD's Private Property Inflow and Infiltration Program.



SERVICES

- Grant Funding
- Site Survey
- Biofilter and Walking Path Design
- Public Involvement
- DNR Storm Water Permit Application

PROJECT TEAM

- Maria Kealey, E.I.T.

CLIENT CONTACTS

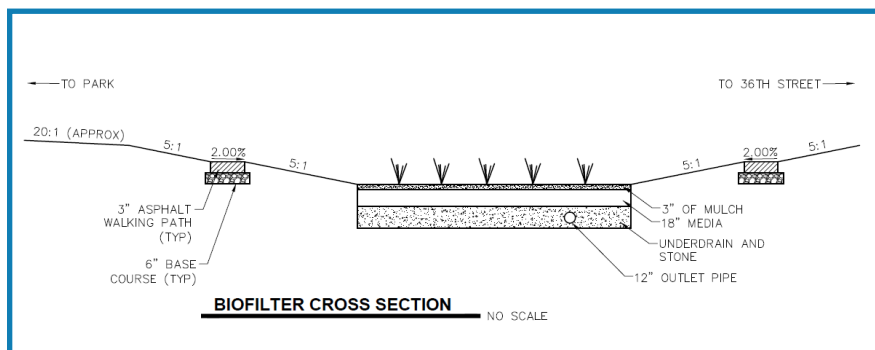
Glen Morrow
City Engineer/Director of
Public Works
414.425.7500
gmorrow@franklinwi.gov

RAWSON HOMES DRAINAGE IMPROVEMENTS

The Rawson Homes neighborhood near W. Madison Boulevard and S. 36th Street relies solely on a system of shallow grass swales and culverts which drain to an unnamed tributary of the Root River east of S. 35th Street. Persistent drainage issues resulting from high groundwater in the area (and exacerbated by the recent sanitary sewer infiltration and inflow work) led the City of Franklin to hire Ruekert & Mielke, Inc. (R/M) to complete a design study for drainage and water quality improvements.

The study was completed in April 2017 and determined the feasibility of replacing failing roadside grass swales in the Rawson Homes neighborhood with an alternative conveyance and treatment system that overcomes the issue of high groundwater while maintaining the necessary pollutant reductions. To improve the nuisance concerns from continuous standing water in the swales, the proposed grass swale redesign involves filling all ditches within the drainage area with approximately two feet of clear stone and adding a perforated underdrain. The stone would be covered with a geotextile fabric and a minimum of 4-inches of topsoil.

It is not expected that significant water quality improvements would be achieved from the proposed ditch cross section, however this will resolve the drainage areas and allow for conveyance of runoff throughout the neighborhood to a biofilter for enhanced treatment. Drainage throughout the 21.62-acre neighborhood will be treated in an approximately 10,000 SF biofiltration device at the corner of W. Madison Boulevard and S. 36th Street. The design will incorporate FocalPoint engineered media which is a high performance modular biofiltration system (HPMBS) which infiltrates runoff at approximately 100 inches per hour.



Biofilter Cross Section Example

The City of Franklin has a funding agreement with the Milwaukee Metropolitan Sewerage District's Green Solutions Program for \$171,858 or approximately 1/3 of the total estimated project cost. The remainder of the project (\$465,830) will be funded through MMSD's Private Property Inflow and Infiltration Program.

Customer Service Approach

Please provide a description of your firm's customer service approach. This section should give the reviewer a good idea of how conflicts with clients are resolved or how issues that arise during work are resolved. Please provide your customer service approach and at least one example of how your firm has implemented this approach.

Customer service at Ruckert & Mielke, Inc. (R/M) has, and always will be, the foundation for success at R/M. With over 75 years of experience, we understand that personal, meaningful relationships with clients will always result in a better result for any project, large or small. Because our staff live, work, and play in the areas in which we serve, we strive to build both relationships and projects that will last for years to come. We at R/M pride ourselves on meeting clients' goals and expectations for every project in which we are involved. With consistent communication and a relentless desire to put our best foot forward on every project, we are most often successful in delivering projects on time, on budget, and to clients' satisfaction.

However, sometimes unavoidable issues can and do arise. In those cases, we work closely with the client to understand what the problem is, how it happened, how to resolve it, and how to ensure it doesn't happen again. For example, the Village of Sussex recently embarked on a major downtown revitalization project that included a new Civic Campus, reconstruction of Main Street, new sewer, water, and storm sewer lines, streetscaping and green infrastructure (cistern at Village Hall, bioretention, etc). R/M was selected as the primary design firm to assist the Village with this transformational endeavor.

About a third of the way through design, the Village replaced their Village Engineer, bringing a new set of creative ideas, viewpoints, and ways of doing things to the project. Most importantly, the new engineer desired a much more collaborative approach to the entire design process. It no longer was R/M designing and the Village reviewing. It was the team of R/M with the Village designing and the same team reviewing.

The first phase of the two-phased project was a learning experience for both the Village and R/M. The design team initially continued with a status quo process but came to realize that major changes to communication protocol and review checkpoints were needed. The result for the first phase was a high-quality project, but communication between the parties was somewhat strained and efficiencies were lost.

Prior to starting Phase 2 in Spring, R/M initiated a meeting to understand the Village's new expectations and determine the procedural changes that needed to happen to ensure success. The R/M project team and the Village staff spent several hours having an open, honest discussion that led to some radical changes. The Village became more involved in the design process, reducing the need for changes down the road and streamlining the entire design process. The communication protocol was also modified, assuring both the Village and R/M would get timely responses to their questions. The Phase 2 design project was completed in December of that year on time, on budget and with a partnership between R/M and the Village that is thriving.