

TECHNICAL QUALIFICATIONS AND EXPERIENCE

Project Descriptions

Include one project descriptions per Specialty tied to a green infrastructure strategy (selected under resource information) you have experience with. Projects must have been completed within the last five years, or may be ongoing projects that are more than 50% complete.

Fill out this form for each project to demonstrate your experience on specific green infrastructure installations and specialties.

Project Information (1):

Project Name: Johnson Residence

Address/City/State/Zip: 4675 N. 18th St. Milwaukee

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

(all as part of StormGUARDen installation)

- | | | |
|--|---|---|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input checked="" type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other, StormGUARDen |
| <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 checked="" type="checkbox"/> Landscaping | <input checked="" type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input checked="" type="checkbox"/> Maintenance | <input checked="" type="checkbox"/> Inspection |
| <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: Mark and Venita Johnson

Address/City/State/Zip: 4675 N. 18th St. Milwaukee

Phone: [Click here to enter text.](#)

Email: johnson_venita@yahoo.com

Project Construction Information:

Construction Management Vendor: StormGUARDen

Project Manager Name: Harlan Groll

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

Email: hjg@stormwater-solutions-engineering.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): 7/17/2017

Construction Start date (actual): 7/17/2017

Construction End date (contracted): 7/17/2017

Construction End date (actual): 7/17/2017

Was the project completed on time? ☒ Yes ☐ No; Explanation: [Click here to enter text.](#)

ATTACHMENT A

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): Met with the owner on 7/6/2017 to perform a site evaluation. Installed device on 7/17. Installation includes removal of sod, modification of downspout, installation of stone, StormGUARDen kit, engineered soil media, native vegetation. O&M information left with owner. Inspected site in September 2017 and January 2018 with good results. Total cost = \$2,000 with plants



Project Information (2):

Project Name: Pierce Residence

Address/City/State/Zip: 2514 N. Pierce St, Milwaukee

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

(all as part of StormGUARDen installation)

- | | | |
|--|---|---|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input checked="" type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other, StormGUARDen |
| <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 checked="" type="checkbox"/> Landscaping | <input checked="" type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input checked="" type="checkbox"/> Maintenance | <input checked="" type="checkbox"/> Inspection |
| <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: Aaron Pierce

Address/City/State/Zip: 2514 N. Pierce St., Milwaukee

Phone: [Click here to enter text.](#)

Email: aaronpierce1981@gmail.com

Project Construction Information:

Construction Management Vendor: StormGUARDen

Project Manager Name: Harlan Groll

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

Email: hjg@stormwater-solutions-engineering.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): 8/18/2017

Construction Start date (actual): 8/18/2017

Construction End date (contracted): 8/18/2017

Construction End date (actual): 8/18/2017

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): Met with the owner on 8/1 to perform site evaluation. Installation on 8/18 (photo left) included removal of a fence and sod, modification of downspout, installation of stone, StormGUARDen kit, engineered soil media, native vegetation. O&M information

left with owner. Inspected site in September 2017 and January 2018 (photo right) with good results.
Total cost = \$2,000 with plants



Project Information (3):

Project Name: Grundy Residence

Address/City/State/Zip: 4520 S. Lawler Ave., Cudahy, WI

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

(all as part of StormGUARDen installation)

- | | | |
|--|---|---|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input checked="" type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other, StormGUARDen |
| <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 checked="" type="checkbox"/> Landscaping | <input checked="" type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input checked="" type="checkbox"/> Maintenance | <input checked="" type="checkbox"/> Inspection |
| <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: Colleen Grundy

Address/City/State/Zip: 4520 S. Lawler Ave, Cudahy

Phone: [Click here to enter text.](#)

Email: cgrundy2@me.com

Project Construction Information:

Construction Management Vendor: StormGUARDen

Project Manager Name: Harlan Groll

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

Email: hjg@stormwater-solutions-engineering.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): 7/21/2017

Construction Start date (actual): 7/21/2017

Construction End date (contracted): 7/21/2017

Construction End date (actual): 7/21/2017

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): Site assessment performed on 7/19, and installation on 7/21 (photo left). Installation included removal of a sod, modification of downspout, installation of stone, StormGUARDen kit, engineered soil media, native vegetation. An environmentally friendly fast-patina

(greying) product was applied (one application needed per lifetime). O&M information left with owner. Inspected site in September 2017 and January 2018 (photo right) with good results. Total cost = \$2,000 with plants



Project Information (4):

Project Name: Doctors' Residence

Address/City/State/Zip: 2596 S. Shore Dr, Milwaukee

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

(all as part of StormGUARDen installation)

- | | | |
|--|---|---|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input checked="" type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other, StormGUARDen |
| <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 checked="" type="checkbox"/> Landscaping | <input checked="" type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input checked="" type="checkbox"/> Maintenance | <input checked="" type="checkbox"/> Inspection |
| <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: Russell Cuhel and Carmen Aguilar

Address/City/State/Zip: 2596 S. Shore Drive, Milwaukee

Phone: [Click here to enter text.](#)

Email: aguilar@uwm.edu

Project Construction Information:

Construction Management Vendor: StormGUARDen

Project Manager Name: Harlan Groll

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

Email: hjg@stormwater-solutions-engineering.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): 8/22/2017

Construction Start date (actual): 8/22/2017

Construction End date (contracted): 8/30/2017

Construction End date (actual): 8/30/2017

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): Site assessment performed on 8/9, and installation on 8/22 (photo left). Downspout work was done later and plants installed on 8/30. Installation included removal of a tree and sod, installation of stone, StormGUARDen kit, engineered soil media, native vegetation. An environmentally friendly fast-patina (greying) product was applied (one application needed per lifetime).

O&M information left with owner. Inspected site in September 2017 and January 2018 (photo right)- notice holiday lights! Total cost = \$2,000 with plants



Project Information (5):

Project Name: Duhnke Residence

Address/City/State/Zip: 3138 S. Herman St., Milwaukee

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

(all as part of StormGUARDen installation)

- | | | |
|--|---|---|
| <input type="checkbox"/> Green Roofs | <input type="checkbox"/> Rain Barrels | <input type="checkbox"/> Rain Gardens |
| <input type="checkbox"/> Constructed Wetlands | <input checked="" type="checkbox"/> Cisterns | <input checked="" type="checkbox"/> Soil Amendments |
| <input checked="" type="checkbox"/> Native Landscaping | <input type="checkbox"/> Stormwater Trees | <input checked="" type="checkbox"/> Other, StormGUARDen |
| <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 checked="" type="checkbox"/> Landscaping | <input checked="" type="checkbox"/> Downspouts and Gutters |
| <input checked="" type="checkbox"/> Engineering | <input checked="" type="checkbox"/> Maintenance | <input checked="" type="checkbox"/> Inspection |
| <input checked="" type="checkbox"/> Construction | <input type="checkbox"/> Plumbing | |

Project (Property) Owner Information:

Owner's Name: Eric Duhnke

Address/City/State/Zip: 3138 S. Herman St. Milwaukee

Phone: [Click here to enter text.](#)

Email: ericduhnke@hotmail.com

Project Construction Information:

Construction Management Vendor: StormGUARDen

Project Manager Name: Harlan Groll

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

Email: hjg@stormwater-solutions-engineering.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): 10/12/2017

Construction Start date (actual): 10/12/2017

Construction End date (contracted): 10/12/2017

Construction End date (actual): 10/12/2017

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): Site assessment performed on 10/5, and installation on 10/12 (photo left). Rerouting of downspouts to capture more roof was done by another vendor. Installation included removal of sod, installation of stone, StormGUARDen kit, engineered soil media, native vegetation. An environmentally friendly fast-patina (greying) product was applied (one

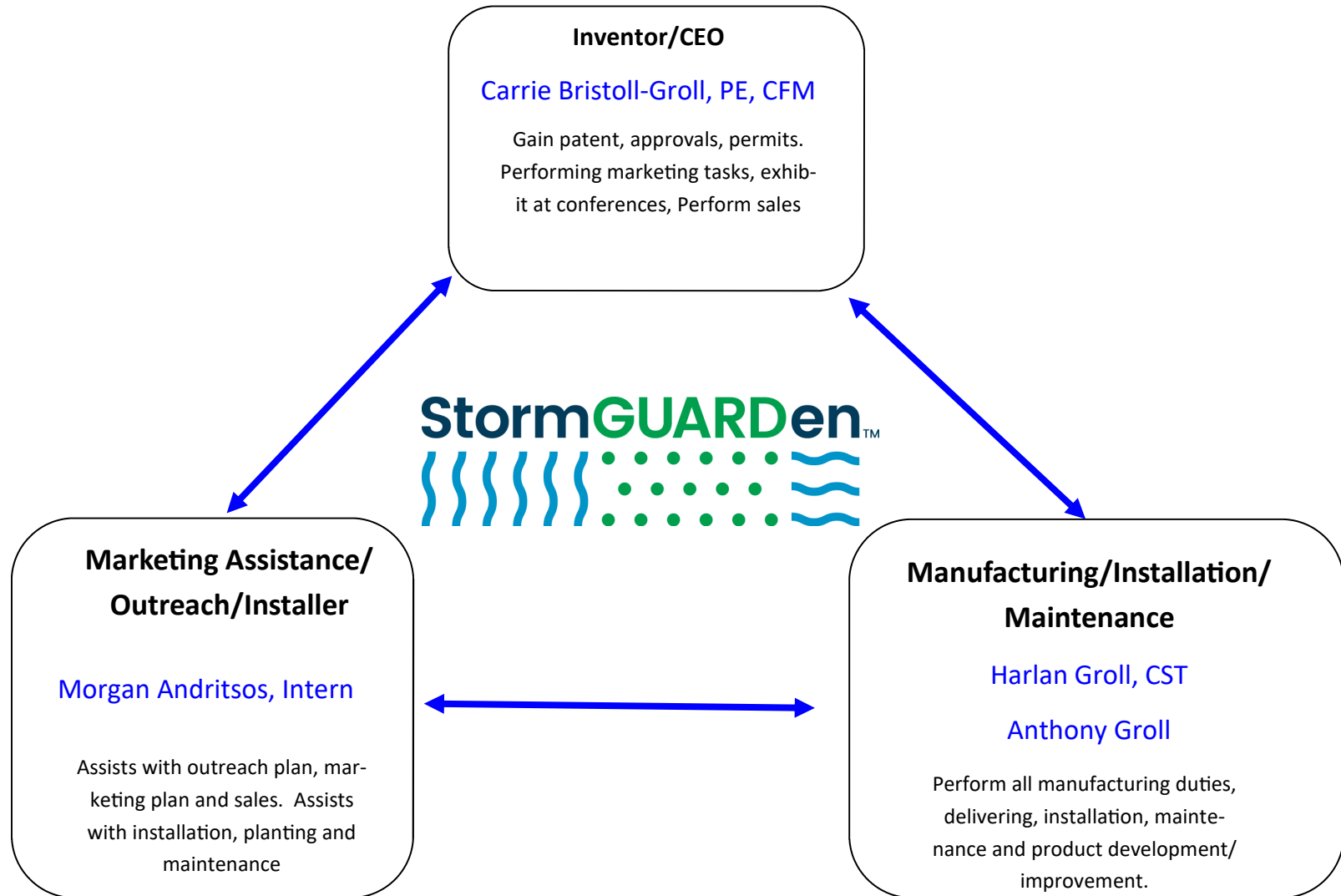
application needed per lifetime). O&M information left with owner. Inspected January 2018 (photos right). Total cost = \$2,000 with plants



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. As a new branch of an existing firm (Stormwater Solutions Engineering, LLC), StormGUARDen customer service is handled much the same way as other customers. Calls or emails are routed to the owner-Carrie Bristoll-Groll, or to our StormGUARDen intern Morgan Andritsos. Requests or issues are noted on a data management form in our computer system, and followup visit or call is scheduled. To date, only calls for information on a StormGUARDen sale/install has been received. We also have a feedback program through surveys mailed out quarterly during the first year of StormGUARDen ownership. One to two inspections are also scheduled, along with followup O&M guidance.

StormGUARDen Team Organizational Chart



StormGUARDen.com

@StormGUARDen



Harlan J. Groll

Production/Engineering Technician

An Innovative Garden System that Protects the Environment

247 Freshwater Way, Suite 410
Milwaukee, WI 53204
(414) 810-1245
hjb@stormwater-solutions-
engineering.com

Education

Associate Degree/Civil Engineering
Technology,
Milwaukee Area Technical College,
date of graduation:
May, 2014.

Business Coursework, University of
Wisconsin- Milwaukee
Fall 2010

CADD I and II, Hartford Union High
School, 2009-2010

Microsoft A+ Certification Training,
Cincinnati Bell, Cincinnati, OH
Summer 2009

Autocad Drafting, Moraine Park
Technical College, Spring 2008

Professional Organizations

Wisconsin Association for Floodplain,
Stormwater and Coastal Management
(WAFSCM)

Harlan oversees all manufacturing, installation and maintenance of StormGUARDen. He has performed installation, site inspection and maintenance of small-scale stormwater practices since 2009, including raingardens, rain barrels and other treatments. Harlan is a certified Survey Technician—and a performs all drafting of site plans for StormGUARDen.

Harlan's StormGUARDen experience includes:

Water Council Pilot Program Installations 2017

Perform 15 site assessments, build 12 StormGUARDen units at warehouse facility, and install at 10 sites in Milwaukee County.

Private Site Installations, 2016-2017

Build 5 StormGUARDen units and install on private residences.

Harlan's Stormwater Solutions Engineering experience includes:

MMSD, Neighborhood Outreach and Green Infrastructure Installation, 2016 (prime role)

Prepared equipment and quantities for 12 rain gardens and 64 rain barrel installations, participated in outreach with flyer distribution throughout a neighborhood. Installed 10 of the raingardens in summer 2016 and organized daily activities of MMSD's Fresh Coast Intern Team.

Milwaukee County Stormwater Facility O&M, Milwaukee County, 2014-2016 (prime role)

Performed maintenance and inspection operations on analysis and maintenance services for several Milwaukee County stormwater best management practices including raingardens, porous pavement, infiltration devices and wet ponds. Managed field logs and monitored changes in conditions at each site for year-long project. Provided written observations to be used in [maintenance guidebook text](#).

MMSD, Menomonee River Barriers Removal Project, 2013-2015 (Subconsultant)

Used Civil 3D to draft all river restoration, dam removal and sewer improvements including preparation of construction details and MMSD Standard Plan package. Coordinated all communications between prime firm and MMSD on drafting and planset needs.

MMSD, Conveyance Services On-Call, Native Landscape Plan, 2015 (Subconsultant)

Drafting of native landscape plan to serve new parking lot runoff and other site design for 13th/College Veolia site. Plans prepared in Civil 3D format.



StormGUARDen LLC

247 Freshwater Way | Milwaukee, WI 53204

Phone: (414)810-1245

Web: www.stormgarden.com



Carrie Bristol-Groll, PE, CFM

Inventor/CEO

An Innovative Garden System that Protects the Environment

247 Freshwater Way, Suite 410
Milwaukee, WI 53204
(414) 810-1245
cbg@stormwater-solutions-engineering.com

Education

BS, Civil Engineering
UW-Milwaukee, Wisconsin, 1994

Graduate coursework in Civil Engineering, UW-Milwaukee, Wisconsin, 1994-1995

Professional Organizations

Advisory Council Member: University Wisconsin-Sea Grant

Board Member: American Council of Engineering Companies (ACEC-WI)

Technical **Mentor**-Engineers Without Borders

Treasurer (2009-2013)/**Conference Chair** (2015)- Wisconsin Association for Floodplain, Stormwater and Coastal Managers (WAFSCM)

Founder/Organizer: Women of Water

Professional Engineer -
State of Wisconsin No. 33316

Certified Floodplain Manager, ASFP, 2006

Carrie has been serving Southeastern Wisconsin in Stormwater Engineering for the past 20+ years, serving the Cities of Milwaukee and Brookfield as a staff stormwater engineer prior to founding Stormwater Solutions Engineering, LLC in 2002, where she's built a team of professionals all focused on designing for when it rains, where and how the water flows and the quality when it reaches the stream.

Carrie is inventor of a patented product, StormGUARDen™, a small site innovative stormwater management device which won The Water Council's Pilot Project and BizTimes Innovation Quotient Award in 2017.



Her StormGUARDen experience includes:

Water Council Pilot Program Installations 2017

Work with design and testing of StormGUARDen units to achieve a model that meets the objectives desired. Perform outreach and secure pilot installation locations. Work with homeowners to ensure they are satisfied with the installations at 10 sites in Milwaukee County.

Private Site Installations, 2016-2017

Perfect design, research materials and obtain provisional patent. Utility patent applied for.

Her Stormwater Solutions Engineering, experience includes:

MMSD Kinnickinnic River Watercourse Project, 2014-2017 (Subconsultant)

Led SSE team in performing hydrologic modeling (Hydrocad and HSPF), green infrastructure and stormwater management design to reduce flood risk to structures. Assisted project team with public outreach, stakeholder engagement and FEMA CLOMR. Led SSE's efforts in the KK Watershed Green Infrastructure Plan, modeled after the Regional GI Plan, this was the first watershed focused GI Plan in the region.

MMSD Green Infrastructure (GI) Center of Excellence Strategic Plan, 2017 (Prime role)

Facilitated MMSD staff in a Strategic Plan for the new GI Center located in the Global Water Center to assist MMSD in meeting their 740 MG of GI goal. Used the Business Model Canvas to work through the most effective route in working with Key Stakeholders to provide the services leading to the biggest outcome.

MMSD Neighborhood Outreach and Green Infrastructure Installation, 2016 (Prime role)

Organized installation of 12 rain gardens and 64 rain barrels in Greenfield, through public engagement and outreach. Won January 2017 Green Luminary award.



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