AGENDA OF THE COMMON COUNCIL

TUESDAY, NOVEMBER 7, 2023, 6:00 PM
In person at City Hall, Room 203 - Council Chambers.
Virtual attendance also available via Zoom.

A. Zoom Meeting Information.

1. Join Zoom Meeting Online:
   https://us02web.zoom.us/j/85814520332

   Or call in by phone: +1 312 626 6799
   Meeting ID: 858 1452 0332
   Passcode: 633539

   If you wish to speak at this public meeting or leave a comment, please fill out the online Comment Form and submit by 4:30 PM on Council meeting day. More detailed Zoom Instructions can be found online.

B. Roll Call.

C. Pledge of Allegiance.

D. Invocation.

E. Approval of Minutes.

1. October 17, 2023

F. Approval of the Agenda.

G. Report by the Mayor.

H. Announcements.

I. Recognitions and Awards.

J. Appointments.

K. Public Hearings.

L. Landmarks Commission

1. Appeal from Pat Drury regarding the denial of Certificate of Appropriateness (COA 23-58) for an architectural makeover to a Tudor-style façade at 412-414 Porlier Street. To direct the appellant and staff to submit written arguments by end of business on November 29, 2023 to be presented to Council for a Quasi-Judicial hearing at the December 5, 2023 Common Council Meeting.

2. Appeal from John Hurkman regarding the denial of Certificate of Appropriateness (COA 23-45) design review for front window removal and replacement located at 1137 S Monrow Avenue. (*Previously heard and continued from the Common Council Meeting of October 17, 2023).*

   The Council may convene in closed session pursuant to Section 19.85(1)(a), Wis. Stats., for purposes of deliberating concerning a case which was the subject of any judicial or quasi-judicial trial or hearing before that governmental body. The Council will thereafter reconvene in open session pursuant to Section 19.85(2), Wis. Stats., to take action on items discussed in closed session, if appropriate, and to consider the remainder of the agenda.

M. Ordinances - Second Reading for Adoption.

1. Zoning Ordinance No. 18-23
   An ordinance rezoning the property located at 3164 Finger Road (Parcel 21-173) from Office Residential (OR) District to General Commercial (C1) District.

N. Report of the Improvement & Services Committee (October 25, 2023).

1. To approve the recommendation by Green Bay Sustainability Commission to adopt and implement the City-Wide Green Stormwater Infrastructure (GSI) Plan.

2. To approve the draft letter and resolution prepared by Department of Public Works seeking WisDOT reconsideration regarding need for sidewalks on Country Club Road reconstruction, and authorize the Director of Public Works to submit the items to WisDOT (held over from August 16, 2023 Improvement and Services meeting).

O. Report of the Protection & Policy Committee (October 24, 2023).

1. To deny an appeal by Michael and Pati Zawacki at 1509 Creekside Ln. and reduce the reinspection fees to $75 (from $300).

2. To approve a request by Rocky'z Taqueria LLC at 1679 Main St. for an extension to the issuance of the "Class B" Liquor & Class "B" Beer license to December 20, 2023, due to new hood installation for the kitchen (License granted on 8/22/2023).

3. To approve a request by Family Dollar Stores of Wisconsin, LLC at 1285 Main St. for an extension to the issuance of a "Class A" Liquor and Class "A" Beer license to November 3, 2023, to allow more time to work on orders to get the store back in compliance. (License granted for the 2023-2024 license year at the June 6, 2023 Common Council Meeting).

4. To approve a request by Family Dollar Stores of Wisconsin, LLC at 550 N Military Ave. for an extension to the issuance of a "Class A" Liquor and Class "A" Beer license to November 3, 2023, to allow more time to work on orders to get the store back in compliance.

(License granted for the 2023-2024 license year at the June 6, 2023 Common Council Meeting).

5. To approve a request by Madrid Tapas, LLC at 225 E Walnut St. for an extension to the issuance of a "Class B" Liquor & Class "B" Beer license to December 2023 (License granted for the 2023-2024 license year at the June 27, 2023 for the 2023-2024 license year).

6. To approve a request by Legacy Green Bay, LLC at 1004 Brett Favre Pass for an extension to the issuance of a reserve "Class B" Liquor & Class "B" Beer license to November 22, 2023, due to delays in construction (previously anticipated opening was October 2023).

7. To approve a request by VIC Theatre Green Bay LLC at 217 E. Walnut for an extension to the issuance of a "Class B" Liquor and Class "B" Beer license to January 31, 2024 (Granted by Council at the August 22, 2023 Council meeting).

8. To hold a "Class B" Liquor & Class "B" Beer license for Taste of the South on Wheels LLC at 114 S. Broadway with a license premises description as "behind bar, in kitchen, in basement," subject to the approval of the proper authorities (Filed June 30 and previously licensed as Green Dragon during the 22-23 license year).

9. Informational Only: Liquor Violation Report

10. Informational Only: Clerk's Licensing Report.

P. Report of the Protection & Policy Committee Granting Operator Licenses.

1. Report of the Protection & Policy Committee Granting Operator Licenses.

Q. Report of the Plan Commission. (October 23, 2023)

1. To approve a request for a Conditional Use Permit at 1184 Shadow Lane (Parcel 1-2509) to allow a detached structure with a metal exterior finish exceeding 120 square feet in the Low Density Residential (R1) District. (Public Hearing held 10.23.2023)

2. To approve a request to amend a Planned Unit Development for property located at 3757 Vital Place, 641 South Grandview Road, 3751 East Mason Street, 3760 East Mason Street and 3855 Finger Road regarding amendments to Section 2.C.(7), Signage. (Public Hearing held 10.23.2023)

R. Report of the Finance Committee. (October 24, 2023)

1. To purchase from Baycom a certified 700 MHz Emergency Responder Radio Coverage System in the amount of $51,092 to be funded using ARPA Funds.

2. To approve the ARPA reallocation request from the Green Bay Police Department.

3. To approve a budget amendment resolution for unbudgeted overtime for special events.

4. To receive and place on file the 2024-2028 Capital Improvement Plan (CIP).

5. To refer to staff the 2024 capital needs and draft borrowing request.

6. To approve the Claims Committee Report.

The Common Council may convene in closed session pursuant to Sections 19.85(1)(e), Wis. Stats., for purposes of deliberating or negotiating the sale of public properties, investing of public funds or conducting other specified public business as necessary for competitive or bargaining reasons. The Common Council will thereafter reconvene in open session pursuant to Section 19.85(2), Wis. Stats., to take action on items discussed in closed session, if appropriate, and to consider the remainder of the agenda.

S. Report of the Park Committee. (October 25, 2023)

1. To approve a Change Order for $12,500 for additional engineering work associated with the stormwater management and trail design for Olde Preble Park..

2. To approve the request by the Astor Neighborhood Association and Astor East River Neighborhood Association to apply for a mini-grant for the purchase and installation of a furnace for the Astor Park shelter.

3. To deny the request by the Astor and Astor East River Neighborhood Associations to allow unlimited free use of the Astor Park shelter for meetings and instead allow 3 free shelter rentals per year for each Neighborhood Association, per the existing policy.

T. Report of the Personnel Committee.

1. To approve the request to fill the following replacement postions and all subsequent vacancies resulting from internal transfers.
   a. Truck Driver

2. To refer to the Joint Finance/Personnel Committee without recommendation the implementation of the updated City Pay Plan as recommended by the Carlson Dettmann market analysis.

3. For staff to proceed as discussed in closed session regarding the 2024 City of Green Bay and City of Green Bay Fire Fighters Local 141, International Associaiton of Fire Fighters AFL-CIO 158 labor agreement.

   The Committee may convene in closed session pursuant to § 19.85(1)(e), Wis. Stats., for purposes of deliberating or negotiating public employee contracts for competitive or bargaining reasons. The Committee may thereafter reconvene in open session pursuant to § 19.85(2), Wis. Stats., to report the results of the closed session and consider the balance of the agenda.

U. Report of the Public Arts Commission (October 25, 2023).

1. To approve the City of Green Bay Public Art Grant application - A Walk With Nature.

2. To table the City of Green Bay Public Art Grant application - Creative Public Seating.

V. Report of the Traffic, Bicycle, and Pedestrian Commission (October 16, 2023).

1. To receive and place on file the report by the Police Department on the monthly Traffic Enforcement Unit Traffic Safety Plan.

2. To receive and place on file the report by the Police Department of the 2023 3rd quarter serious injury and fatal crashes.

3. To remove the 2-WAY YIELD condition on Hazel Street at Howard Street.

4. To adopt by ordinance the establishment of a 2-WAY STOP condition on Hazel Street at Howard Street.

W. Report of the Sustainability Commission (October 18, 2023).

1. To approve the Sustainability Commission's recommendation of sending the Citywide GSI Plan to the Improvement & Services Committee for adoption and implementation.

X. Report of the Equal Rights Commission

1. To approve the Visibility Initiative Strategic Action Plan that was held over from the August 17, 2023 Equal Rights Commission meeting.

2. To hold until the next Equal Rights Commission meeting the initiative to install signage that has the City of Green Bay in the language of each culture represented in Green Bay that was held over from the August 17, 2023 Equal Rights Commission meeting.

Y. Informational.

1. Building Report for October 2023

Z. Resolutions.

1. Resolution authorizing Conditional Use Permit at 1184 Shadow Lane/Parcel 1-2509.

2. Resolution authorizing Budget Amendment.

3. Resolution drawing final orders to contractors for November 7, 2023.

4. Resolution requesting declaration of emergency repair of storm sewer outfall East River at Ellis Street extended.

5. Resolution seeking WisDOT reconsideration regarding need for sidewalks on Country Club Road.

6. Resolution authorizing Alderperson Salary Increase.

7. Resolution authorizing increased Municipal Judge hours.

AA. Committee of the Whole.

1. For consideration and possible action on an update regarding PFAS litigation.

The Council may convene in closed session pursuant to Section 19.85(1) (g), Wis. Stats., for the purpose of conferring with legal counsel for the governmental body who is rendering oral or written advice concerning strategy to be adopted by the body with respect to litigation in which it is or is likely to become involved. The Council will thereafter reconvene in open session pursuant to Section 19.85(2), Wis. Stats., to take action on items discussed in closed session, if appropriate, and to consider the remainder of the agenda.

2. Consideration with possible action on a request by Department of Public Works to declare an emergency for repair of storm sewer along the East River, south of Main Street, in the vicinity of Ellis Street extended.

3. For consideration and possible action on the over-hire of the Community Liaison role in the Mayor's Office, cost $2,878.

BB. Ordinances - First Reading.

1. Zoning Ordinance No. 19-23
   An ordinance zoning certain property located at 641 South Grandview Road, 3757 Vital Place, 3751 East Mason Street, 3760 East Mason Street, and 3855 Finger Road as a Planned Unit Development District for purposes of developing the Grandview Industrial Park.

2. General Ordinance No. 22-23
   An ordinance amending Section 40-71, relating to traffic regulations.

3. Miscellaneous Ordinance 07-23
   An ordinance amending redistricted boundaries of aldermanic districts

CC. Referral of Petitions & Communications.

DD. Adjournment.

1) SUPPLEMENTAL INFORMATION: The Video of this meeting, Agenda, Agenda Packet, and Minutes are available online at www.greenbaywi.gov/Meetings.
2) ACCESSIBILITY: Any person wishing to attend who requires special accommodation because of a disability, should contact the City Safety Manager at 920-448-3125 at least 48 hours before the scheduled meeting time so that arrangements can be made.
3) QUORUM: Please take notice that a majority or quorum of the Common Council will attend this committee meeting and will constitute a meeting of the Common Council for purposes of discussion and information gathering relative to this agenda.
4) REPRESENTATION: The party requesting the communication, or their representative, should be present at this meeting.

Community & Economic Development Department
100 North Jefferson Street • Room 608
Green Bay, Wisconsin 54301-5026
www.greenbaywi.gov

Phone 920.448.3400
Fax 920.448.3426

October 23, 2023

Pat Drury
410 Porlier Street
Green Bay, WI 54301

Re: Certificate of Appropriateness, Denial of Application

Dear Applicant:

Please be informed that the City of Green Bay's Landmark Commission has denied the Certificate of Appropriateness (COA) for work done without at COA at 412-414 Porlier Street. This work is described as an architectural make-over to a Tudor-style façade.

You have the right to appeal this decision as detailed in Section 44-1552(3) of the Green Bay Municipal Code: *Appeals. Should the LC or their designee fail to issue a COA due to the failure of the proposal to conform to the requirements and guidelines of this article and Division 5 of Article II of this chapter and applicable guidelines, the applicant may appeal such decision to the Common Council within 30 days. In addition, if the LC fails to issue a COA, the LC shall, with the cooperation of the applicant, work with the applicant in an attempt to obtain a COA within the requirements and guidelines of this article and Division 5 of Article II of this chapter.*

We look forward to working with you to find a solution. As mentioned during the meeting, the Commission is interested in a proposal that would retain the existing architectural style of the home. Please do not hesitate to reach out if you need support or additional information.

Sincerely,

Stephanie Hummel, AICP
Planner II

cc: Pete O'Connor, Inspection Division
Tim Meves, Inspection Division

Law Firm of
CONWAY, OLEJNICZAK & JERRY, S.C.

Since 1976

To: Common Council

From: John and Amy Hurckman

Date: October 25, 2023

Re: Brief in Opposition to the Denial of Mr. John Hurckman's COA Application for 1137 S. Monroe Avenue, Green Bay, Wisconsin

PROCEDURAL POSTURE AND BACKGROUND:

Amy S. and John F. Hurckman (the "Hurckmans" or "Applicants") petitioned the Landmarks Commission (the "Commission") under section 14-1552(2)(b) of the Green Bay Municipal Code ("GBMC") for a certificate of appropriateness ("COA"). The Commission denied the COA, and pursuant to GBMC 14-1552(3), the Applicants filed a timely appeal to the City of Green Bay Common Council (the "Council"). *See* WIS. STAT. § 62.23(7)(em)(3) (stating that "An owner of property that is affected by a decision of a city landmarks commission may appeal the decision to the common council").

ARGUMENT:

The Council should reverse the decision of the Commission.

1. ***Building Permit***

The Commission, on page four of its brief in support of the denial of the applicant's COA application (the "Brief"), cites GBMC 14-1552(2)(D), which states that "a building or other municipal permit shall be invalid if it is obtained without the presentation of a COA required for the proposed work." In the Commission's eyes, this invalidated the Hurckman's building permit.

Yet, the Commission has conveniently omitted from their Brief any mention of GBMC 14-1552(2)(a), which indicates that "Unless a COA has been granted, the Development Services Manager shall not issue a permit for such work." The Hurckmans were not trying to "circumvent" the Commission as suggested by the Commission. The Hurckmans had already obtained a building permit for the glass windows, and had they not, of their own volition, applied for a COA from the Commission, the Commission would have been none less the wiser to the changed windows. Instead, acting as concerned citizens, they swiftly attempted to rectify (by applying for a COA) the detrimental mistake of the Development Services Manager, who approved the building permit in violation of the GBMC.

Furthermore, the Commission has put forth a second yet equally unavailing argument relating to the building permit, asserting that the approval of this appeal would "delegitimize the authority of the [] Commission by creating an exception to the requirement that historical structures, sites, and districts must obtain a COA prior to doing updates." Yet, at most, the Commission presents a distinction without a difference. Under the Commission's reasoning, it already delegitimized its authority by approving the Hurckman's second COA ("COA 23-40"). A COA which was approved by the Commission, who, by their own admission, was fully aware that work had been completed *prior* to the issuance of a COA. The Hurckmans went though the entire permitting process and multiple inspections before the issue with glass block windows was ever brought to their attention.

2. Appeal and Claim Preclusion

The Commission asserts on page three of its Brief in support of the denial of the applicant's COA application (the "Brief") that the "Common Council should deny this appeal because the applicant failed to appeal the first COA ("COA 23-14.") However, the Commission has mistakenly asserted that the applicant is appealing COA 23-14. Rather, the applicant was appealing the third COA ("COA 23-45") and exercised their right to appeal within the required timeframe. GBMC 14-1552(3).

In the alternative, the Commission has asserted that it is ultimately irrelevant if the Council finds that the applicant made a timely appeal since COA 23-45 is "duplicative" of COA 23-14 and should be denied because of "claim preclusion." However, the Commission's assertion is baseless as it has not provided any reference to a provision codifying the concept of claim preclusion in the GBMC.

Additionally, the Commission has neglected the fact that the doctrine of claim preclusion is more applicable to a judicial setting rather than an *administrative* decision of the Commission. Findings of the Commission fall squarely within an administrative process and are not subject to the same rules and procedures as court cases. The applicant is not taking advantage of a "backdoor loophole," as the Commission suggests. It is appealing a decision utilizing the mechanisms established in the municipal code. Therefore, the assertion of "claim preclusion" is meritless and should be treated as such by the Council.

3. Compliance with GBMC 14-1552(2)(b)(1):

Sections two through five of GBMC 14-1552(2)(b) do not apply to the property at 1137 South Monroe Ave., and therefore, this Section will focus on compliance with GBMC 14-1552(2)(b)(1). According to GBMC 14-1552(2)(b), the Commission "shall approve the application [for a COA] unless . . . the proposed work would *detrimentally* change, destroy, or adversely

affect any exterior feature of the improvement or site upon which said work is to be done." GBMC 14-1552(2)(b)(1) (emphasis added).

The goal of the Hurckman's is not to harm the historical setting of the neighborhood. Rather, their goal aligns with the underlying purposes of historical preservation. The addition of the glass windows act as a mechanism to "stabilize and improve property values," GBMC 14-1546(a)(4), while also "improv[ing] and enhanc[ing] the visual aesthetic character of the city." GBMC 14-1546(a)(7). Effectively, the implementation of the glass windows will further the goals of historical preservation and not act as a determinant but as a benefit to the community.

CONCLUSION:

Based on the foregoing, the Applicant respectfully requests that the Common Council (1) Approve the appeal request for the denial of COA 23-45 since the Applicants satisfy the appeal requirements of GBMC 14-1552(3) and (2) Grant COA 23-45 since Applicant's glass windows further the goals of historic preservation within the Astor Historic District.

Respectfully Submitted,

John and Amy Hurckman

4792775

CITY OF GREEN BAY

TO: City of Green Bay Common Council

FROM: City of Green Bay Landmarks Commission Staff

DATE: November 1, 2023

RE: Landmarks Commission Appeal – 1137 S. Monroe Avenue

Procedural Background

On May 17, 2023, the Landmarks Commission denied a Certificate of Appropriateness (COA) for changes to three glass block windows at the residence located at 1137 S. Monroe Ave. from property owner John Hurckman.[1] Mr. Hurckman appealed the Landmarks Commission's decision to the Common Council, which requested written submissions from the parties. After deliberations at its October 17, 2023 meeting, Council requested additional briefing from the parties on the following question:

> Do the windows as removed or replaced qualify for a certificate of appropriateness pursuant to Section 44-1552(2)(b), Green Bay Municipal Code?

Applicable Law

A. Detrimentally changes, destroys, or adversely affects a feature – Sec. 44-1552(2)(b)1.

Section 44-1552(2)(b), GBMC, says that the Landmarks Commission shall approve an application for a COA unless one of five conditions applies. Two of those conditions are relevant here and preclude granting a COA to Mr. Hurckman.[2]

First, the changes to the windows detrimentally change, destroy, and adversely affect an exterior feature of the historic structure. Sec. 44-1552(2)(b)1., GBMC. Although the exact date of its construction is unknown, the house was built prior to 1950 but after 1936.[3] The glass block windows are a character-defining feature of the building. Given the time period in which the building was constructed, the glass block is likely historically accurate as well, as glass block became popular as a building material in the United States in the 1930s and 1940s.[4]

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[1] Other changes to the property, not relevant to this appeal, were discussed at that same meeting.

[2] Subsections 44-1552(2)(b)2. (relating to new construction on an historic site), (2)(b)4. (relating to demolition of historical buildings or structures), and (2)(b)5. (relating to demolition necessitated by owner's lack of maintenance to the property) are not applicable to this matter.

[3] The NHRP nomination form for the Astor Historic District indicates the building was constructed "c. 1920." However, the structure first appears on City maps having been pasted onto the 1936 Sanborn map, indicated it was constructed some time after that year. *See* Landmarks Commission Meeting, May 17, 2023, at 1:14:58, *available at* https://greenbaywi.portal.civicclerk.com/event/8397/media.

[4] "History of Glass Block in Architectural Design," Seves Glass Block, April 12, 2021, *available at* https://sevesglassblockinc.com/blog/history-glass-block-architectural-design.

The work Mr. Hurckman performed unquestionably changed, destroyed, and adversely affected the windows. First, Mr. Hurckman went from three windows down to two—thus destroying one window altogether. Additionally, he undeniably changed the other two windows by not only removing the character-defining glass block and replacing it with single pane glass, but also adding window casing around the exterior of the windows, consequently changing not only the windows themselves but the exterior of the home around the windows as well. Because these windows contributed to the historical character of the property, and especially since the glass block was a character-defining feature and had likely become historic in its own right, these alterations are detrimental to the structure. Given this detrimental change and destruction to an exterior feature of the building—namely, the windows—the windows do not qualify for a COA and Mr. Hurckman's appeal should be denied based on Section 44-1552(2)(b)1.

B. Does not conform to purpose and intent of historical district – Sec. 44-1552(2)(b)3.

Second, removing one and fundamentally changing two other windows constitutes an exterior alteration that does not conform with the purpose and intent of historic preservation in the City under Section 44-168, GBMC. Sec. 44-1552(2)(b)3. The Astor Historic District, in which the property in question is located, has been on the National Register of Historic Places since 1980. The nomination form indicated that the District "was the home of a large proportion of the financial, industrial, professional, and political leaders of Green Bay from its settlement well into the twentieth century."[5] The leaders left a lasting impression on the area, as reflected by the grand scale and stylishness of the homes, particularly from the prosperity period from 1895 to 1929.[6] The property in question, 1137 S. Monroe Ave., is among the noteworthy historical homes in the Astor Historic District, and it has been on the National Register of Historic Places since 1980. It is a relatively rare International Style house, defined by its box-like shapes and stucco exterior.

The Common Council has declared as a matter of public policy that it is necessary to protect sites of special architectural or historic value within the City in order to, among other things: protect, enhance, and perpetuate sites and districts that reflect the City's cultural, social, and architectural history; safeguard the City's historic and cultural heritage; protect and enhance the City's historic districts, structures, and sites for the benefit of residents, tourists, and visitors; and improve and enhance the visual and aesthetic character of the City. Sec. 44-168(a)(1), (2), (5), (6), GBMC. Relatedly, the Landmarks Commission—and, by extension, Common Council upon appeal—shall not approve an application for a COA if the proposed exterior alteration does not conform to the purpose and intent of Section 44-168(a).

The Astor Historic District has a rich historical background, dating back to the first settlement of the area, and the Council has indicated its intent that such history be protected and preserved to safeguard the City's historic and cultural heritage. Additionally, 1137 S. Monroe is a rare example of an International Style house, and the glass block windows in question are character-defining. Preserving various historic styles of homes in the historic district is another of the stated purposes of the City's historic preservation provisions, as is protecting historical structures for the benefit of residents and visitors alike. Allowing alterations like those requested by Mr. Hurckman would be inconsistent with the stated purpose of the City's historic preservation provisions.

[5] *See* Nomination Form, Astor Historic District, *National Register of Historic Places Inventory*, dated Feb. 27, 1980.
[6] *Id.*

Not only that, but to do so would be detrimental to the entire Astor Historic District. 1137 S. Monroe is currently classified as a "contributing" property to the historical district. Allowing these changes will result in the house being reclassified to "non-contributing," thus detracting from the entire historic district overall. The cumulative effect of losing contributing properties is the eventual dissolution of the Astor Historic District by the National Register of Historic Places and the corresponding loss of access to preservation tax credits for property owners.

For all of these reasons, under Sections 44-1552(2)(b)3. and 44-168(a), the COA for the changes to the windows should not be approved.

Conclusion

The Council asked the parties to explain whether, under Section 44-1552(2)(b), the work already done to the windows on the building at 1137 S. Monroe qualifies for a Certificate of Appropriateness. For the reasons stated in this brief, it does not. The changes to the windows detrimentally change the exterior of the house by changing the number and shape of the windows, as well as the historically significant material. Additionally, the failure to preserve the historical character of the structure goes against the City's stated purpose of protecting historical structures to safeguard the City's history and culture. For these reasons, Council should deny Mr. Hurckman's appeal and affirm the Landmarks Commission's denial of the COA.

RESPONSE FROM JOHN HURCKMAN, OWNER 1137 SOUTH MONROE

We are writing this petition to address a pressing issue that affects our residence located at 1137 South Monroe Ave Green Bay, WI 54301. This is a Petition to approve the windows as installed at 1137 South Monroe Ave. (See Exhibit 4). The Landmark Commission of the City of Green Bay ordered that the windows installed be removed and restored to their previous state which means removing the currently installed new windows with new Glass Block windows. See second bullet point from Landmark Commission letter dated May 19, 2023 (exhibit 5).

Background: Early in 2022 we discovered the roof had failed on the garage located at 1137 South Monroe and replacement would be required. The existing garage did not allow a passenger to exit the vehicle inside the garage. We also discovered that there were structural failures in the house to which the garage was attached and water issues in an area where concrete had been poured continuously adjacent to the house.

RECEIVED
OCT 06 2023

The city requested we apply for a remodel building permit which we did and received in Oct of 2022 (remodel permit issued October of 2022 Exhibit 1). The permit was issued without the required approval of the Land Marks Commission. We were unaware of the Land Marks Commission and any additional need for their involvement. As the project progressed, it was noted that openable windows were required in two of the openings, and they were installed by a field-change that is required by building code sps379.10 (exhibit 2). The third opening is noted on the submitted plan (exhibit3) indicated by note triangle 2 to be removed with stucco on the exterior of the house. Both windows in the remodel project meet and match windows installed and approved for the property by the building inspectors..

In April of 2023 we received a general mailing that the city sends to all residences in the historical district for the need of a Certificate of Appropriateness. As a good citizen we filled out the form and mailed it in and the response was a "stop work order" was placed on the project until after the May meeting (letter attached exhibit 5)

It is a matter of great concern that the zoning staff has refused to acknowledge an administrative error by the city, which was that the permit was issued without the required approval of the Land Marks Commission. During the May meeting in 2023 a member of the commission asked how and why the permit was issued. Staff answered that that the failure in the system

had been fixed so this can't happen again. This oversight has resulted in the commission's order to restore the Glass Block in three openings on work completed prior to April of 2023.

As a resident of Green Bay I have experienced firsthand the negative consequences when trying to obtain approval. We submitted a new application in August that was rejected at the September meeting with staff recommendation that a new application offers no new information. We reject that on the basis that information at the May meeting did not inform the commission of the third Glass Block opening that was removed by plan during the October 2022 building permit application and issue. (Exhibit 4 is a photo of a staircase and approved to be installed on the October plan submittal and railing installed where the third opening was located prior to the remodel.) Two remaining openings have been installed with openable windows to comply with code. We reject that there wasn't new information to support the new application. After a June meeting on site Staff responded that he was looking at note 2 and 7 as an engineer, later informing me by email that note 7 supersedes note 2 (no explanation given). Another e mail after the June meeting at the site informed me that the glass block windows were grandfathered. This is all after the work was completed and inspected for staircase and railing prior to May of 23. Staff answered that the software has been fixed so this can't happen again. We have had a number of meetings with staff for a new review going back to May when I requested the commission to open the application with the additional information. By email I was informed that once a vote is taken my alternative is to petition.

We attach two photos of the house (exhibit 6) before the remodel and after the windows were installed (exhibit 7) prior to May 2023. The house was designated as International design and no discussion or argument by the city attempts to change it from that designation due to the remodel.

To rectify this situation and improve the overall livability and safety of our community, I urge you to support this petition calling for a change from glass block windows to openable ones and the third opening allowed to be finished as per the October 2022 Plan. I'd also hope the counsel will take a harder look at how and what is appropriate and if Engineering should be in the position to make recommendations on Architectural issue.

Improved Ventilation: Openable windows allow fresh air circulation

throughout buildings, reducing indoor pollutants and improving overall air quality (source: American Society of Heating, Refrigerating and Air-Conditioning Engineers

This process has been most stressful for us, it has cost additional dollars for us as owners, the city for lost time and Commissioner's not being given all the information to challenge staff. Staff was asked the question at the May meeting if the glass blocks were historic and staff answered: know, they could not say they were which I hoped settle the question. After the permit issuance and multiple inspections and the interior alterations completed, requiring us to add $20,000 in cost should have should be the first consideration. Together we can create a safer, healthier, and more comfortable environment for our community. Let us stand united in this endeavor and make our voices heard!

Thank you for your support.

Attachments: Exhibits 1,2,3,4,5,6,7

John and Amy Hurckman

- Contact information: cell number 9203712255

Email - Johnhurckman@hurckman.com

030407.169:#4775036

EXHIBIT 1

TO SCHEDULE INSPECTIONS
CALL (920) 448-3300 BETWEEN
8:00 AM AND 4:00 PM AT LEAST
ONE BUSINESS DAY PRIOR TO
INSPECTION DATE NEEDED.

DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

It shall be unlawful to conceal or proceed with any part of the work on this building until official approval has been given.

THE FOLLOWING INSPECTIONS ARE REQUIRED:

Bldg:	☒ Footing	☒ Rough In/Framing	
	☐ Foundation/Wall	☒ Insulation	
	☐ Tar/Tile/Stone	☒ Final	
Hvac:	☐ Rough In	☐ Final	
Elec:	☐ Service	☒ Rough In	☒ Final
Plbg:	☐ Sewer	☒ Groundwork	
	☒ Rough In	☒ Final	

THIS BUILDING PERMIT COVERS:

REMODEL

PERMIT EXPIRES: 10/28/2023

Please be advised that any work within or around the right-of-way that would affect a public tree may be subject to fees as outlined by the City of Green Bay Tree and Stump Removal Policy.

IT IS UNLAWFUL TO COMMENCE WORK BEFORE THIS CERTIFICATE IS PLACED IN A CONSPICUOUS PLACE ON THE PREMISES

THIS CERTIFIES THAT A

BUILDING PERMIT

HAS BEEN ISSUED TO

AMY S & JOHN F HURCKMAN

Authorizing such building, repairing, or remodeling as shown in the application, plans, and specifications on file in the office of the Building Inspector, City Hall, Green Bay, Wisconsin

Address: 1137 S MONROE AV

Parcel # 16-103 Project # 110694

Dated: 10/28/2022

ErikWa

BUILDING INSPECTOR

NOTICE: No wiring shall start until an electrical permit is obtained. An electrical permit signed by the owner or licensed electrical contractor is required before wiring can begin.

NOTICE: It is the general contractor's responsibility to schedule all applicable inspections.

Please post this permit in a window visible from the street when work commences and remove after final inspection has been approved.

History: 1-2-56; renum. and am., Register, September, 1974, No. 225, eff. 10-1-74; correction made under s. 13.93 (2m) (b) 7., Stats., Register, June, 1995, No. 474; **correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.**

SPS 379.07 Exit doors. All exit doors shall be as required in s. SPS 375.24 except that a door which accommodates not more than 4 families or 20 persons will not be required to swing outward.

History: 1-2-56; renum. and am., Register, September, 1974, No. 225, eff. 10-1-74; correction made under s. 13.93 (2m) (b) 7., Stats., Register, June, 1995, No. 474; **correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.**

SPS 379.08 Exit lights and signs.

(1) In every building which accommodates more than 4 families or 20 persons, and in every building which accommodates transients, the public passageways, stairways, and exit doors shall be illuminated from one hour after sunset to one hour before sunrise. This illumination shall include lights at all intersections of passageways, at all exits, and at the head and foot of every stairway.

(2) The lights at all exit doors shall be red lights and shall be accompanied by a sign bearing the word EXIT or OUT, in plain letters not less than 5 inches in height. Exit lights shall be installed in accordance with the requirements of the Wisconsin state electrical code and s. SPS 375.24.

History: 1-2-56; renum. and am., Register, September, 1974, No. 225, eff. 10-1-74; correction made under s. 13.93 (2m) (b) 7., Stats., Register, June, 1995, No. 474; **correction in (2) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.**

SPS 379.09 Size of rooms. Every sleeping room shall be of sufficient size to afford at least 400 cubic feet of air space for each occupant over 12 years of age, and 200 cubic feet for each occupant under 12 years. No greater number of occupants than the number thus established shall be permitted in any such room.

History: 1-2-56; renum., Register, September, 1974, No. 225, eff. 10-1-74.

EXHIBIT 2

SPS 379.10 Windows. No room shall be used as a sleeping or living room unless it has a window or windows opening upon a street, alley, or yard, or upon a court connecting therewith, or above the roof of an adjoining building, or upon an inner court not less than 25 square feet in area; or unless it has a vertically-sliding pulley-hung sash window, not less than 15 square feet in area, opening into another room in the same apartment, which other room opens on a street, alley, or yard, either directly or through similar windows. Every such sash window shall be placed as nearly as possible in line with outside windows, and both halves shall be made to open readily, and the glass in the lower half shall be translucent.

History: 1-2-56; renum., Register, September, 1974, No. 225, eff. 10-1-74.

SPS 379.11 Basement rooms.

(1) No basement room shall be used as a sleeping or living room unless all the following conditions are complied with:

(a) The room shall be at least 8 feet high from floor to ceiling.

(b) The ceiling shall be at least 4 feet above the surface of the adjoining street or ground.

(c) The room shall have a window or windows opening upon a street, alley, or yard, or upon a court connecting therewith, or upon an inner court not less than 60 square feet in area; and the total window area shall be at least one-tenth of the floor area of the room, and the upper half of such window or windows shall be made to open the full width.

(d) The walls and floor shall be dampproof and waterproof.

(e) The room shall have sufficient light and ventilation and shall be fit for human habitation.

History: 1-2-56; renum., Register, September, 1974, No. 225, eff. 10-1-74.

SPS 379.12 Toilet rooms.

(1) In every apartment building where a sewer system is available, at least one water-closet shall be provided for every 2 apartments. Every such water-closet shall be located within the building, in a separate room or compartment, on the same floor with the apartments which it serves, and shall be accessible from each such apartment without passing through another apartment. All water-closets and the pipes connecting therewith shall be properly protected against frost; if located in a public hall such hall shall be heated, if necessary, so as to prevent the closets and pipes from freezing.

PROPOSED GARAGE ADDITION/REMODEL FOR:

JOHN HURCKMAN

Exhibit 3

Page C1.1

1137 S. MONROE AVENUE

GREEN BAY, WISCONSIN

BUILDING CODE ANALYSIS

CURRENT CODES	..... WI UNIFORM DWELLING CODE - LATEST EDITION
BUILDING USE	..... (R-1) RESIDENTIAL
CONSTRUCTION CLASSIFICATION	..... VB
FIRE SUPPRESSION SYSTEMS	..... NO SPRINKLER SYSTEM
ALLOWABLE BUILDING HEIGHT	..... NA
ALLOWABLE AREA	..... NA

FLOOR AREA / OCCUPANCY	BUILDING AREA	OCCUPANCY
PROPOSED ADDITION	571	R-1

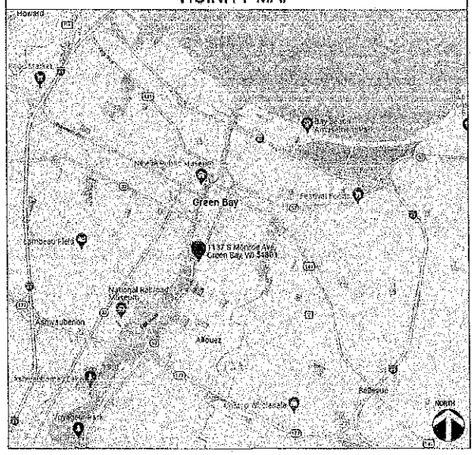
REQUIRED FIRE RESISTANCE RATINGS:

3/4 HOUR FIRE RATED CONSTRUCTION BETWEEN RESIDENCE AND GARAGES - SEE PLAN FOR WALL TYPES

EXITING ANALYSIS

NUMBER OF EXITS REQUIRED: (1 EXIT PROVIDED)

VICINITY MAP



PROJECT NOTES

1.) THE DESIGNER MAINTAINS NO RESPONSIBILITY FOR THE GENERAL CONTRACTOR, SUBCONTRACTORS, OR THOSE WORKING IN SUCH CAPACITIES, FOR THE METHODS USED, OR LACK THEREOF, IN THE EXECUTION OF THE WORK AND SAFETY PROCEDURES AND PRECAUTIONS TAKEN AT THE PROJECT SITE.

2.) SUBCONTRACTORS SHALL ASSUME FULL RESPONSIBILITY - UNRELIEVED BY REVIEW OF SHOP DRAWINGS NOR BY SUPERVISION OR PERIODIC OBSERVATION OF CONSTRUCTION FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS - FOR DIMENSIONS TO BE CONFIRMED AND CORRELATED ON THE JOB SITE AND BETWEEN INDIVIDUAL DRAWINGS OR SETS OF DRAWINGS, FOR FABRICATION, PROCESSES AND CONSTRUCTION TECHNIQUES (INCLUDING EXCAVATION, SHORING, SCAFFOLDING, BRACING, ERECTION, FORM WORK, ETC.), FOR COORDINATION OF THE VARIOUS TRADES; FOR SAFE CONDITIONS ON THE JOB SITE AND FOR THE PROTECTION OF THE PEOPLE AND PROPERTY AT THE JOB SITE.

3.) VARIATIONS IN FIELD CONDITIONS RELATIVE TO THE THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE DESIGNER/ENGINEER, WORK SHALL NOT PROGRESS UNTIL WRITTEN PERMISSION FROM THE ENGINEER IS OBTAINED.

4.) THE INFORMATION CONTAINED ON THE DRAWINGS IS IN ITSELF INCOMPLETE, AND VOID, UNLESS USED IN CONJUNCTION WITH ALL THE SPECIFICATIONS, TRADE PRACTICES, OR APPLICABLE STANDARDS, CODES, ETC, INCORPORATED THEREIN BY REFERENCE, OF WHICH THE CONTRACTOR CERTIFIES KNOWLEDGE BY SIGNING THE CONTRACT.

5.) DESIGNER/ENGINEER'S REVIEW OF DRAWINGS PREPARED BY THE CONTRACTORS, SUPPLIERS, ETC. ARE ONLY FOR THE CONFORMANCE WITH THE DESIGN CONCEPT. CONSTRUCTION SHALL NOT START WITHOUT SAID REVIEW, AND ONLY SHOP DRAWINGS STAMPED BY THE DESIGNER/ENGINEER WILL BE ALLOWED AT THE JOB SITE.

6.) DRAWINGS ARE NOT TO BE USED FOR SHOP DETAILING OF FOR CONSTRUCTION UNLESS SPECIFICALLY STAMPED BY THE DESIGNER/ENGINEER ON THE DRAWINGS "FOR DETAILING" OR "FOR CONSTRUCTION". THESE DRAWINGS ARE NOT TO BE REPRODUCED FOR THE PURPOSE OF USING THEM AGAIN AS SHOP DRAWINGS.

7.) UNLESS NOTED OTHERWISE, ALL DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS ARE INTENDED TO BY TYPICAL FOR SIMILAR SITUATIONS ELSEWHERE.

8.) ALL DIMENSIONS ON STRUCTURAL DRAWINGS ARE TO BE CHECKED BY THE SUBCONTRACTOR AGAINST ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE CONFIRMING AND CORRELATING OF ALL DIMENSIONS ON THE JOB SITE AND BETWEEN INDIVIDUAL DRAWINGS AND TRADES.

9.) SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, SLEEVES, EQUIPMENT PADS, DEPRESSIONS, CURBS, FLOOR FINISHES, INSERTS, AND OTHER EMBEDDED ITEMS.

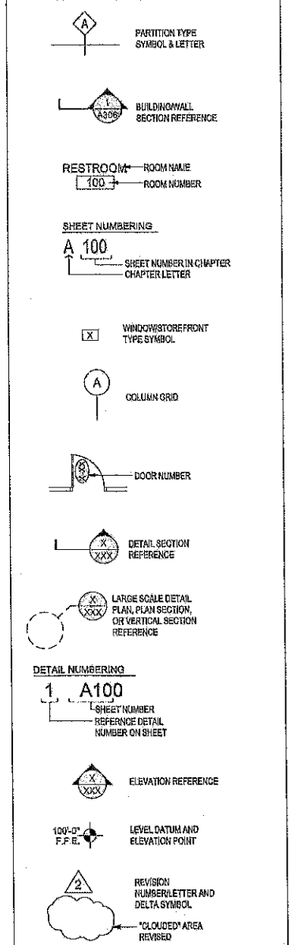
10.) UNLESS OTHERWISE SHOWN OR NOTED, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND THE PLACEMENT OF ANY INSERTS, HANGERS, PIPE SLEEVES, HOLES, OR ANCHOR BOLTS THAT ARE REQUIRED BY THE MECHANICAL OR ELECTRICAL EQUIPMENT.

11.) THE SUBCONTRACTOR SHALL COMPLY WITH THE LATEST OCCUPATIONAL SAFETY AND HEALTH ACT REQUIREMENTS.

12.) ALL CONSTRUCTION SHALL BE PERFORMED IN STRICT CONFORMANCE WITH ALL APPLICABLE STATE AND LOCAL BUILDING CODES.

13.) FIREPLACES SHALL MEET THE REQUIREMENTS OF THE WI UNIFORM DWELLING CODE.

GRAPHIC SYMBOLS



SHEET INDEX

SHEET NUMBER	SHEET DESCRIPTION	PERMIT CONST. SET 9/26/22
G1.0	COVER SHEET & PROJECT NOTES	X
CIVIL		
C1.1	EXISTING AND PROPOSED SITE PLANS	X
ARCHITECTURAL		
A1.0	FIRST FLOOR DEMOLITION PLAN & NOTES	X
A2.1	BUILDING ELEVATIONS & DETAILS	X
A3.1	BUILDING SECTIONS & DETAILS	X
STRUCTURAL		
S1.0	FOUNDATION PLAN & DETAILS	X

LINEWORX, LLC
2052 COTTAGE RD, LITTLE SUAMICO, WISCONSIN
PH: 920-621-1133 LINEWORXLLC@GMAIL.COM

ISSUE/REVISION:

NO.	DATE	DESCRIPTION

CONSULTANTS:

OWNER
JOHN HURCKMAN
1137 MONROE AVE
GREEN BAY, WI.
PHONE:
FAX:
CONTACT: JOHN HURCKMAN

PROJECT DESIGNER
LINEWORX, LLC
2052 COTTAGE ROAD
LITTLE SUAMICO, WI. 54141
PHONE: 920-621-1133
FAX:
CONTACT: STEPHEN WISOLOSKI

PROJECT NAME:

PROPOSED GARAGE ADDITION FOR:
JOHN HURCKMAN
1137 MONROE AVENUE
GREEN BAY, WISCONSIN

LOCATION MAP:

DRAWING INFORMATION:

SCALE:	AS NOTED
DRAWN BY:	SRW
CHECKED BY:	SRW
JOB NUMBER:	DATE: 9-29-22

SHEET TITLE & NUMBER:

TITLE: COVER SHEET

NO. G1.0

Filename: Sheet Plan.dwg Plotted: 9/29/2022 10:52:53 AM Pro2 Device: None Page Setup — Plotted by: Steve Wisoloski

LEGEND

- FIRE HYDRANT
- WATER VALVE/CURB STOP
- WATER MANHOLE
- REDUCER/INCREASER
- SANITARY MANHOLE
- AIR RELIEF MANHOLE
- STORM MANHOLE
- OPEN STORM MANHOLE
- STORM INLET
- STORM INLET MANHOLE
- TRAFFIC SIGNAL
- POST
- IRON PIPE/ROD
- PK NAIL
- RECORDED COUNTY MONUMENT
- SOIL BORING
- POWER POLE
- POWER POLE W/GUY WIRE
- LIGHT POLE
- ELECTRIC MANHOLE
- ELECTRIC METER
- TELEPHONE MANHOLE
- GAS VALVE
- GAS METER
- MAILBOX
- SIGN
- AC CONDENSER
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH
- CONCRETE
- WETLANDS
- (POINT OF ELEVATION) 750.05 SPOT ELEVATION
- EXISTING CULVERT
- HANDICAP PARKING
- TELEPHONE PEDESTAL
- CABLE TV MANHOLE
- CABLE TV PEDESTAL

- EXISTING STORM SEWER (SIZE NOTED)
- EXISTING FORCEMAIN (SIZE NOTED)
- EXISTING SANITARY SEWER (SIZE NOTED)
- EXISTING WATERMAIN (SIZE NOTED)
- GAS LINE
- OVERHEAD TELEPHONE LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- OVERHEAD CABLE TV LINE
- CABLE TV LINE
- R/W LINE
- PROPERTY LINE
- EASEMENT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- EXISTING CURB & GUTTER
- TREE/BRUSH LINE
- 750 EXISTING CONTOUR LINE
- RETAINING WALL
- FENCE
- PROPOSED BUILDING LINE

ADDITION NOTES: (A)

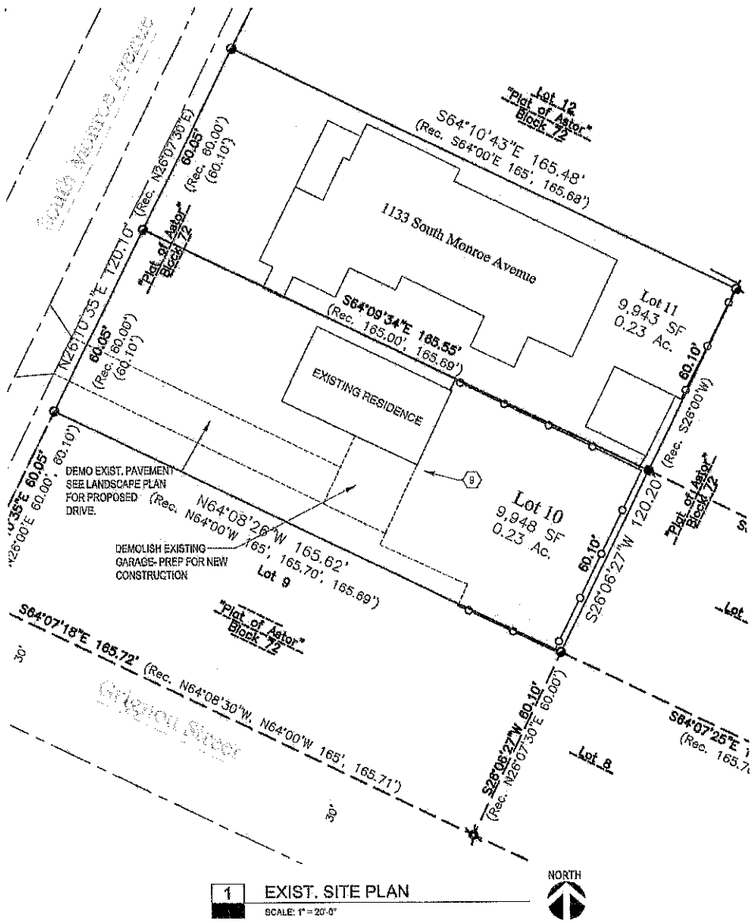
1. REMOVE TUB, REPAIR WALLS AS NEEDED. INSTALL 42" SHOWER AND BASE. RELOCATE TOILET TO SUIT.
2. REMOVE WINDOW, PREPARE OPENING FOR STUCCO.
3. REMOVE EXISTING STAIRWELL, CONNECT FLOORPLAN TO CLOSET.
4. NEW STAIRWELL AND RAIL SYSTEM PER CODE.
5. NEW SUB-FLOOR AND FLOORING THROUGHOUT.
6. CARPET BEDROOM.
7. REPAIR GLASS BLOCK WINDOWS.
8. NEW KITCHEN COUNTERTOP
9. TRIM WINDOWS AND DOORS
10. NEW ENTRY DOOR.
11. NEW PORCH AND RAILING.

CODED SITE NOTES

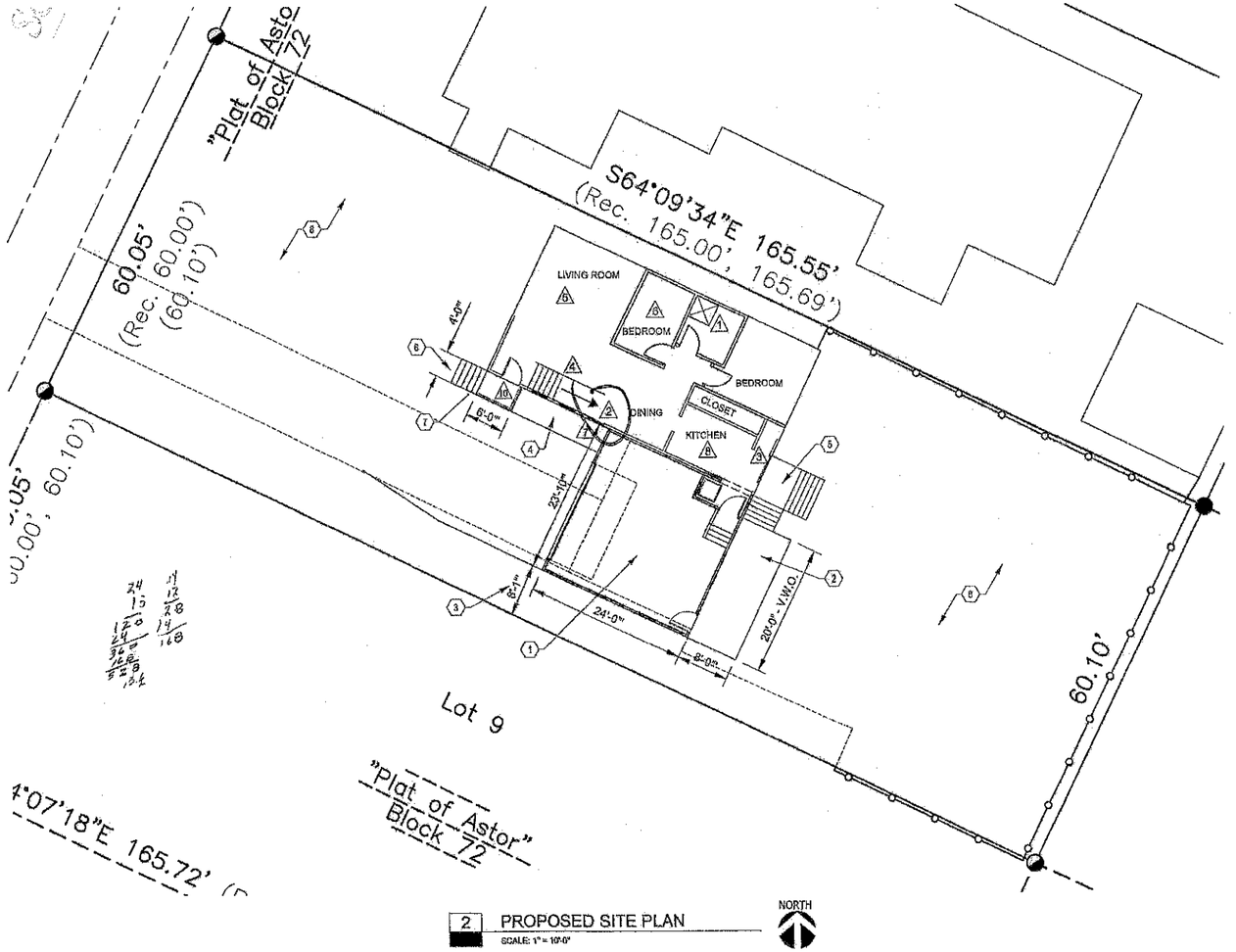
1. PROPOSED BUILDING ADDITION- SEE A101 FOR SPECIFICS
2. NEW CONCRETE PATIO- VERIFY ALL DETAILS IN FIELD W/ OWNER AND GC.
3. MIN. 9'-0" SETBACK TO BUILDING FROM PROPERTY LINE. OWNER TO SURVEY, STAKE AND VERIFY EXTENTS PRIOR TO CONSTRUCTION.
4. NEW LANDSCAPED AREA- VERIFY WITH OWNER AND LANDSCAPE DESIGNER PRIOR TO CONST.
5. EXISTING CONCRETE STEPS AND RAILINGS TO REMAIN.
6. NEW WALK TO DRIVE PER LANDSCAPE DESIGNER AND OWNER. VERIFY PRIOR TO CONST.
7. NEW CONCRETE STEPS FROM EXISTING HOME TO NEW DRIVE. FINAL DESIGN BY OWNER AND LANDSCAPE DESIGNER.
8. EXISTING GREEN SPACE TO REMAIN AS IS.
9. CUT AND DEMO PORTION OF EXISTING CONCRETE SLAB TO ACCOMMODATE NEW WORK.

GENERAL SITE NOTES

A. GENERAL CONTRACTOR TO VERIFY ALL EXISTING ELEVATIONS AND BUILDING CONDITIONS IN FIELD PRIOR TO START OF CONSTRUCTION.



1 EXIST. SITE PLAN
SCALE: 1" = 20'-0"



2 PROPOSED SITE PLAN
SCALE: 1" = 10'-0"

LINEWORX, LLC
2052 COTTAGE RD. LITTLE SUAMICO, WISCONSIN
PH: 920-621-1133 LINEWORXLLC@GMAIL.COM

ISSUE/REVISION:

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PROJECT NAME:

PROPOSED GARAGE ADDITION FOR:
JOHN HURCKMAN
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GREEN BAY, WISCONSIN

LOCATION MAP:

DRAWING INFORMATION:

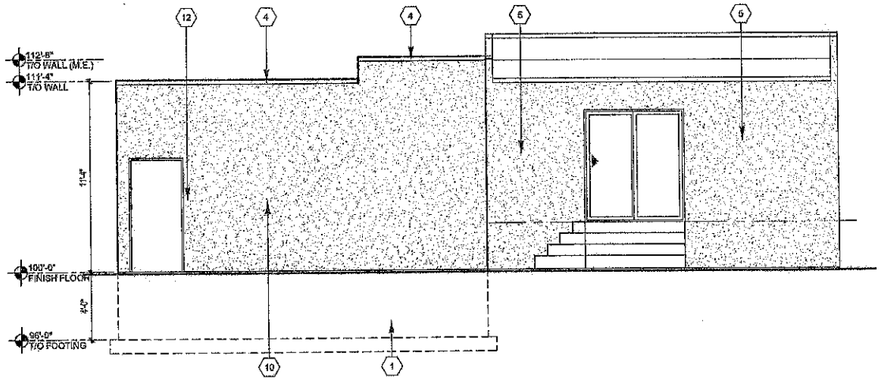
SCALE:	AS NOTED
DRAWN BY:	SRW
CHECKED BY:	SRW
JOB NUMBER:	DATE: 9-29-22

SHEET TITLE & NUMBER:

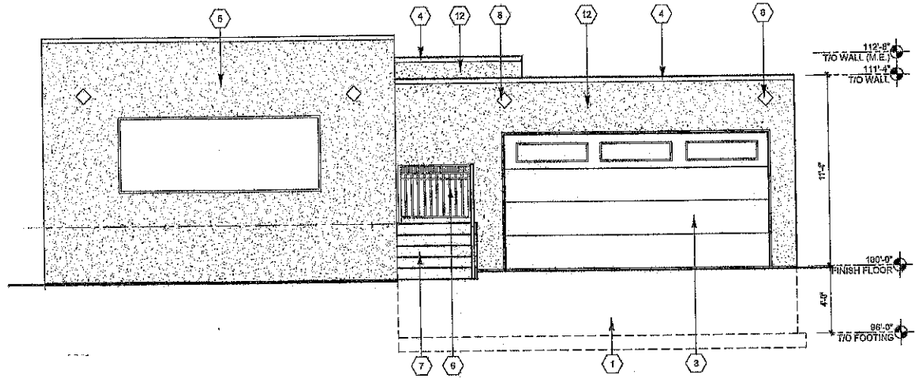
TITLE: SITE PLAN

NO. C1.1

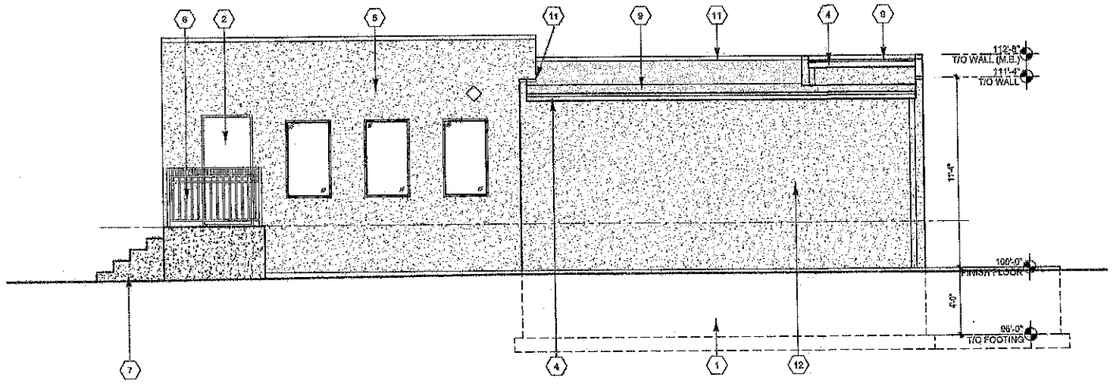
PRELIMINARY - NOT FOR CONSTRUCTION



1 EAST ELEVATION
SCALE: 1/4" = 1'-0"



2 WEST ELEVATION
SCALE: 1/4" = 1'-0"



3 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

1. FOUNDATION WALLS-SEE FOUNDATION PLAN FOR CONSTRUCTION DETAILS.
2. REPLACE EXISTING ENTRY DOOR AND FRAME. VERIFY WITH OWNER.
3. INSULATED OVERHEAD DOOR VERIFY WITH OWNER FOR SPECIFIC DOOR.
4. 24 GA. PREFINISHED ALUM. DRIP EDGE, FASCIA & GUTTER SYSTEMS TYP. SEALED WEATHERTIGHT.
5. REPAIR AND OR REPLACE EXISTING STUCCO FINISH TO MATCH NEW STUCCO FINISH. VERIFY ALL CONDITIONS IN FIELD WITH OWNER AND GC.
6. NEW METAL RAILINGS TO MATCH EXISTING ADJACENT HOME. VERIFY DETAILS AND DIMENSIONS WITH OWNER.
7. NEW CONCRETE STEPS- VERIFY RISE AND RUN IN FIELD PRIOR TO CONSTRUCTION. MAX 8" RISE AND MIN 10" RUN.
8. DECORATIVE DIAMONDS SET IN STUCCO FINISH- VERIFY WITH OWNER FOR PLACEMENT DIMENSIONS.
9. EPDM LOW SLOPE ROOFING. SEE SECTIONS FOR DETAILS AND PRODUCT INFORMATION.
10. NEW SERVICE DOOR- DESIGN AND DETAILS BY OWNER. SEE PLAN FOR LOCATION AND SIZE.
11. NEW TRANSITION FLASHINGS TO BUTT STUCCO FINISH TO NEW EPDM ROOFING MATERIAL. FLASH ALL CONNECTIONS SHALL BE WEATHERTIGHT.
12. NEW STUCCO WALL FINISH. VERIFY ALL COLORS AND DETAILS WITH OWNER. INSTALL PER MANUFACTURES REQ. & RECOMMENDATIONS- CODE COMPLIANT AND WEATHERPROOF.

KEYED NOTES 3
NTS

52
34

LINEWORX, LLC
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ISSUE/REVISION:

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FAX:
CONTACT: STEPHEN WESOLOSKI

PROJECT NAME:

PROPOSED GARAGE ADDITION FOR:
JOHN HURCKMAN
1137 MONROE AVENUE
GREEN BAY, WISCONSIN

LOCATION MAP:

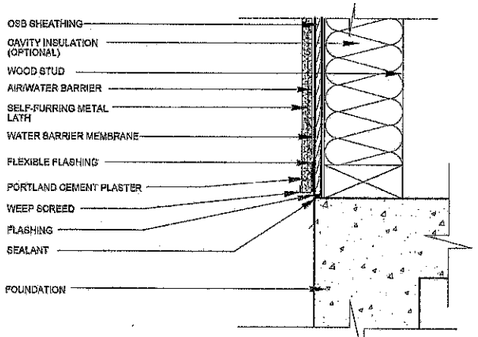
DRAWING INFORMATION:

SCALE:	AS NOTE
DRAWN BY:	SR
CHECKED BY:	SR
JOB NUMBER:	DATE: 9-29

SHEET TITLE & NUMBER:

TITLE:
BUILDING ELEVATION

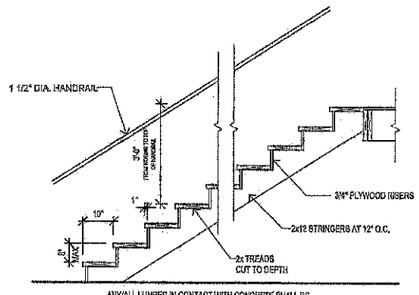
NO. A2.1



FOR REFERENCE ONLY- REFER TO MANUF. REQ. AND CODE FOR PROPER INSTALLATION.

3 STUCCO FINISH DETAIL

SCALE: NONE



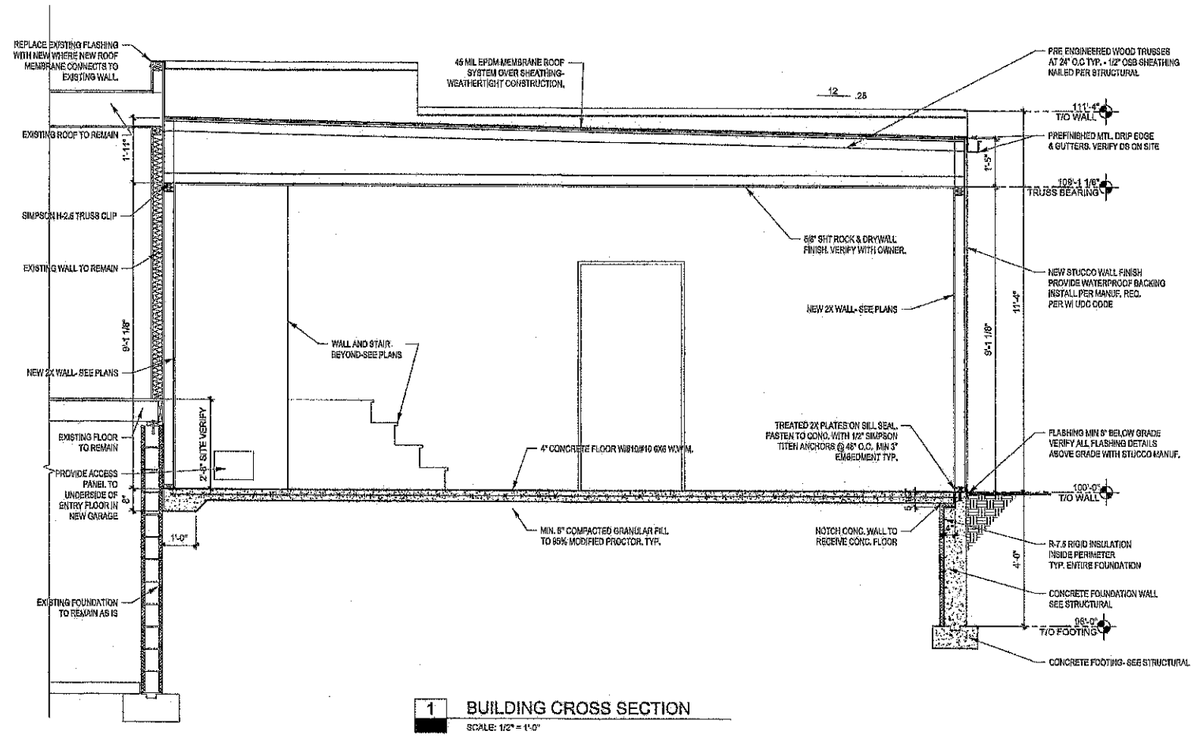
4 STAIR SECTION

SCALE: NONE

NAILING SCHEDULE

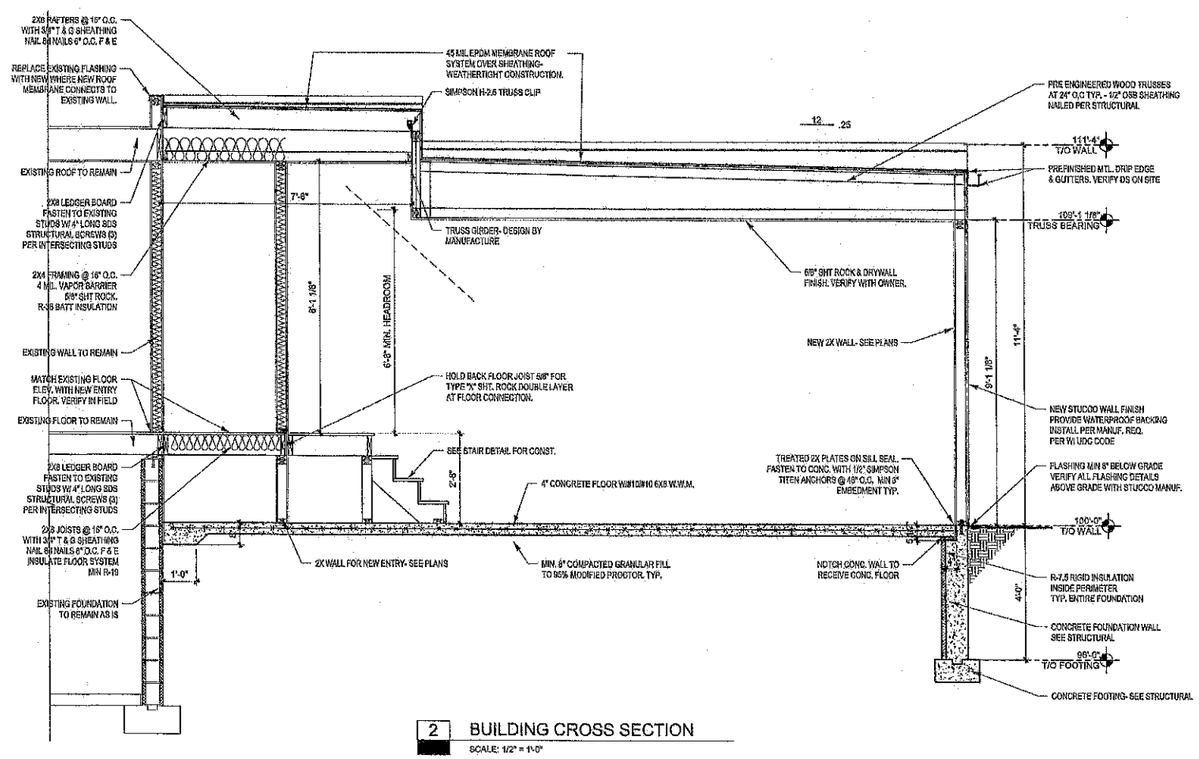
CONNECTION	NAILING (COMMON NAILS UNLESS OTHER CONNECTION IS REQUIRED)	STAPLES
BRIDGING TO TRUSSES, FACE NAIL EACH END TOP PLATE TO STUD, END NAIL STUD TO SOLE PLATE	(2) 8d (2) 16d (4) 8d, TOE NAIL OR 2-16d, END NAIL	(2) 3" 14 GAGE (3) 3" 14 GAGE (3) 3" 14 GAGE (TOE NAIL OR END NAIL)
DOUBLED STUDS, FACE NAIL BUILT-UP CORNER STUDS DOUBLED TOP PLATES, TYPICAL FACE NAIL DOUBLED TOP PLATES, LAP SPLICES	16d AT 24" O.C. 16d AT 24" O.C. 16d AT 16" O.C. (8) 16d	3" 14 GAGE AT 8" O.C. 3" 14 GAGE AT 16" O.C. 3" 14 GAGE AT 12" O.C. (12) 3" 14 GAGE
CONTINUOUS HEADER, TWO PIECES CONTINUOUS HEADER TO STUD, TOENAIL	10d AT 12" O.C. ALONG EACH EDGE (4) 8d TOE NAIL	
OSB ROOF SHEATHING EXTERIOR WALL SHEATHING	8d AT 6" O.C. AT EDGES 8d AT 6" O.C. AT INTERMEDIATE MEMBERS 8d AT 6" O.C. AT EDGES 8d AT 6" O.C. AT INTERMEDIATE MEMBERS	1½" 18 GA. AT 4" O.C. AT EDGES 1½" 18 GA. AT 8" O.C. AT INTERMEDIATE SUPPORTS 1½" 18 GA. AT 4" O.C. AT EDGES 1½" 18 GA. AT 8" O.C. AT INTERMEDIATE SUPPORTS

NOTES: 1. USE THESE PATTERNS UNLESS NOTED OTHERWISE IN THE PLANS OR UNIFORM DWELLING CODE.
2. MATERIAL SUPPLIER/TRUSS DESIGNER SHALL PREPARE BRACED WALL CALCULATIONS AND GIVE TO OWNER FOR PERMIT SUBMITTAL/CONSTRUCTION.



1 BUILDING CROSS SECTION

SCALE: 1/2" = 1'-0"



2 BUILDING CROSS SECTION

SCALE: 1/2" = 1'-0"

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ISSUE/REVISION:

NO.	DATE	DESCRIPTION

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2032 COTTAGE ROAD
LITTLE SUAMICO, WI. 54141
PHONE: 920-621-1133
FAX:
CONTACT: STEPHEN WESOLOSKI

PROJECT NAME:

PROPOSED GARAGE ADDITION FOR:
JOHN HURCKMAN
1137 MONROE AVENUE
GREEN BAY, WISCONSIN

LOCATION MAP:

DRAWING INFORMATION:

SCALE:	AS NOTED
DRAWN BY:	SRW
CHECKED BY:	SRW
JOB NUMBER:	DATE: 9-29-22

SHEET TITLE & NUMBER:

TITLE:
BUILDING SECTIONS

NO. A3.1

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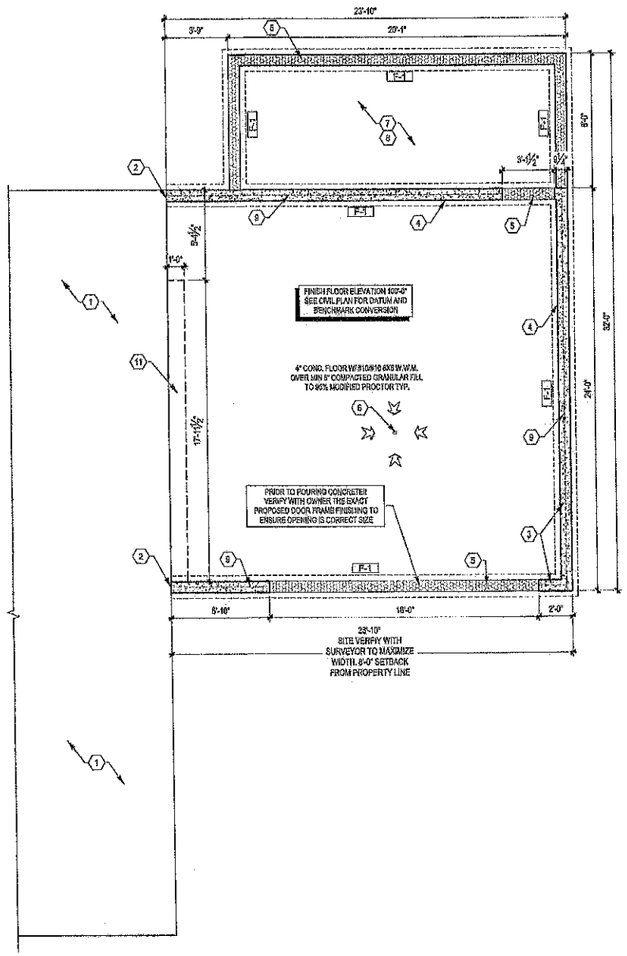


1 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

NORTH

GENERAL CONSTRUCTION NOTES

CONSTRUCTION NOTES:

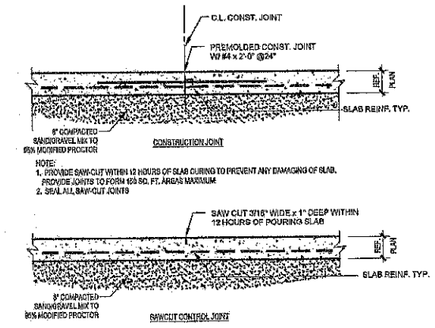
- ALL CONCRETE SHALL BE PLACED IN ACCORDANCE WITH THE CURRENT PUBLICATIONS OF THE PORTLAND CEMENT ASSOC.
- BEND ALL REINFORCING RODS AROUND ALL CORNERS AND INTO ALL INTERSECTING WALLS. COORDINATE WITH ALL OTHER TRADES FOR THE INSTALLATION OF ALL ANCHORS, SLEEVES, HANGERS, INSERTS, OPENINGS & ETC.
- REINFORCING STEEL SHALL BE ASTM-615 GRADE 60. FABRICATION SHALL BE IN ACCORDANCE WITH CURRENT SPECIFICATIONS OF THE AMERICAN CONCRETE INSTITUTE.
- COORDINATE WITH ALL TRADES FOR LOCATIONS & SIZE OF ALL OPENINGS IN FLOORS, WALLS, CEILINGS, & ROOF FOR MECH. EQUIPMENT & ETC.
- STRUCTURAL STEEL SHALL BE ASTM DES. A36 IN ACCORDANCE W/ SPECIFICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- ALL BOLTS SHALL BE HIGH STRENGTH ASTM DES. A325F.
- ALL WELDS SHALL BE FULL. ALL STEEL SHALL BE CLEAN, NEW, & SHOP PRIMED. ALL STEEL SHALL BE ERECTED TRUE & PLUMB. VERIFY ALL EXISTING CONDITIONS ON JOB SITE BEFORE CONSTRUCTION.
- ALL BUILDING MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. CAULK ALL LOCATIONS WHERE DISSIMILAR MATERIALS MEET.
- CONTRACTORS SHALL LOCATE ALL UTILITIES BEFORE CONSTRUCTION AND NOTIFY ARCHITECT & OWNER OF ANY INTERFERENCES.
- CONTRACTORS SHALL PROVIDE ALL BARRIERS, BARRICADES, FENCES AND SAFETY EQUIPMENT AND PRECAUTIONS REQUIRED BY ALL CODES OR AGENCIES HAVING JURISDICTION OVER THE PROJECT.

FOOTING SCHEDULE

MARK	FOOTING SIZE	FOOTING REINFORCING	REMARKS
F-1	8" CONC WALL W/ 16" X 8" FOOT.	(2)-#4 T & B CONTINUOUS- FOOTING (2) #4 CONT.	MIN 2" COVER IN ALL DIRECTIONS
F-2	12" X 8" THICKENED EDGE	(2) #4 CONT.	MIN 2" COVER IN ALL DIRECTIONS

ALL FOOTINGS ARE CENTERED ON COLUMN BASEPLATE OR WALL IT SUPPORTS UNLESS OTHERWISE DETAILED OR NOTED.

CONSTRUCTION FLOOR JOINT DETAILS



CODED NOTES (X)

1. EXISTING RESIDENCE BASEMENT TO REMAIN AS IS DURING CONSTRUCTION. CONTRACTORS TO PROTECT ALL EXISTING ITEMS.
2. CONNECT NEW WALLS TO EXISTING FOUNDATIONS. VERIFY ALL CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION. DRILL AND DOWEL RODS INTO EXISTING WALL (1) PER EVERY 50" IN HEIGHT (EPOXY) INTO EXIST WALL. 4" EMBEDMENT, 9" PROJECTION.
3. R-7.5-1 10" RIGID INSULATION INSIDE PERIMETER OF FOUNDATION-SEE SECTIONS.
4. TYPICAL PERIMETER CONCRETE FOUNDATION WALL SEE SCHEDULE F FOR WALL TYPE & REINFORCING.
5. DEEPEN FOUNDATION WALLS 4" AT ALL DOORS & STOOP WALLS. VERIFY WITH OWNER.
6. VERIFY WITH OWNER FOR SPECIFIC INTERIOR DRAIN INFORMATION (IF ANY) PRIOR TO CONST.
7. PROVIDE 4" THICK CONCRETE WALK WITH #3 @16.5 E.W.W.M. OVER MIN 6" COMPACTED GRANULAR FILL TO 95% MODIFIED PROCTOR. TYPICAL ALL SIDEWALKS.
8. CONCRETE PATIO- SEE SECTIONS FOR CONSTRUCTION. PITCH AWAY FROM BUILDING MIN 1/4" PER FOOT.
9. NOTCH FOUNDATION WALL FOR NEW CONC. FLOOR- SEE SECTIONS.
10. DEMO EXISTING FOUNDATIONS/BUILDING TO ACCOMMODATE NEW. WORK. VERIFY ALL EXISTING FOUNDATION LOCATIONS IN FIELD PRIOR TO CONSTRUCTION TO ENSURE COMPATIBILITY WITH PROPOSED WORK.
11. 8" DEEP X 12" WIDE THICKENED EDGE FLOOR SLAB FOR NEW WALL SUPPORT. DRILL AND DOWEL INTO EXISTING WALL 12" RODS- EPOXY INTO EXISTING FOUNDATION MIN 4" PROJECTION INTO NEW SLAB. PROVIDE EXPANSION MATERIAL BETWEEN NEW AND EXISTING ELEMENTS.

LINEWORX, LLC
2088 COTTAGE RD, LITTLE SUAMICO, WISCONSIN
PH: 920-821-1133 LINEWORXLLC@GMAIL.COM

ISSUE/REVISION:

NO.	DATE	DESCRIPTION

CONSULTANTS:

OWNER
JOHN HURCKMAN
1137 MONROE AVE
GREEN BAY, WI.
PHONE: -
FAX:
CONTACT: JOHN HURCKMAN

PROJECT DESIGNER
LINEWORX, LLC
2088 COTTAGE ROAD
LITTLE SUAMICO, WI. 54141
PHONE: 920-821-1133
FAX:
CONTACT: STEPHEN WIESOLOSKI

PROJECT NAME:

PROPOSED GARAGE ADDITION FOR:
JOHN HURCKMAN
1137 MONROE AVENUE
GREEN BAY, WISCONSIN

LOCATION MAP:

DRAWING INFORMATION:

SCALE:	AS NOTI
DRAWN BY:	SR
CHECKED BY:	SR
JOB NUMBER:	DATE: 9-2

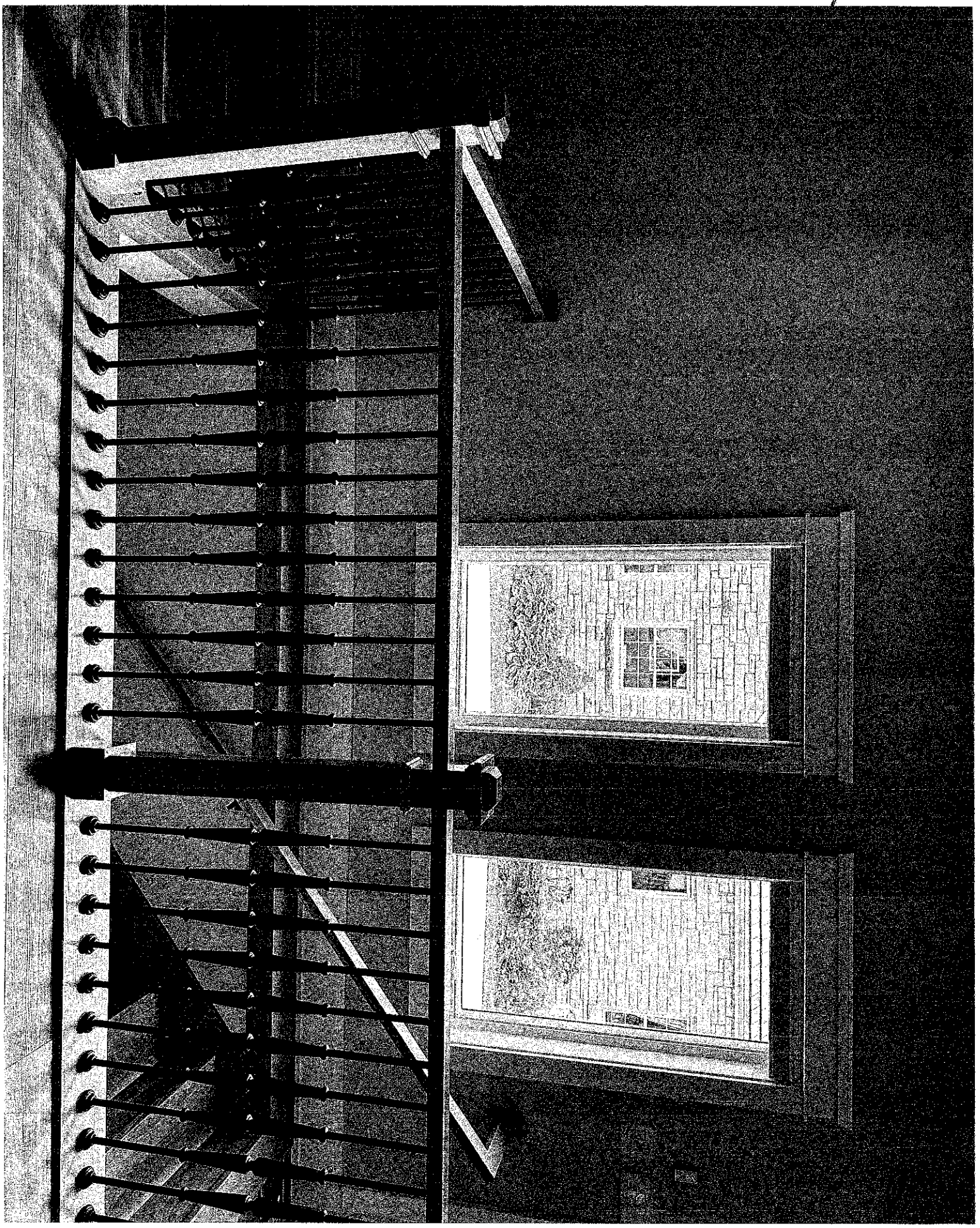
SHEET TITLE & NUMBER:

TITLE: FOUNDATION PL

NO. S1.0

Filename: Critical Plans.dwg Plotted: 9/26/2022 10:05:54 AM Plot Device: None Page Setup: — Plotted by: Steve Wiesoloski

EXHIBIT 4



Community & Economic Development Department
100 North Jefferson Street · Room 608
Green Bay, Wisconsin 54301-5026
www.greenbaywi.gov

Phone 920.448.3400
Fax 920.448.3426

EXHIBIT 5

May 19, 2023

John Hurckman
1133 S Monroe Avenue
Green Bay, WI 54301

Re: Certificate of Appropriateness, Partial Approval

Dear Applicant:

Please be informed that the City of Green Bay's Landmark Commission has approved a portion of the Certificate of Appropriateness (COA) for work at 820 S Quincy Street. The approvals are as follows:

- The garage is approved as presented, including stucco work.
- The windows that have already been removed shall be restored to their previous state. This includes all three windows being present at their previous size and material (glass block).
- The porch/attached pergola was denied.
- The front fence/wall can be reviewed at a staff level if the fence/wall does not touch either 1133 S Monroe or 1137 S Monroe buildings. Please confirm if that is accurate. If it is, I will process a staff-level approval.

Please note that this approval expires one year from the date of this COA. If the project as described above has not been started by the above date, a new COA will be required. Any changes to the project should be reported to the Landmark Commission's staff prior to work being done. If substantial changes are proposed, a new COA may be required.

You have the right to appeal this decision as detailed in Section 44-1552(3) of the Green Bay Municipal Code: *Appeals. Should the LC or their designee fail to issue a COA due to the failure of the proposal to conform to the requirements and guidelines of this article and Division 5 of Article II of this chapter and applicable guidelines, the applicant may appeal such decision to the Common Council within 30 days. In addition, if the LC fails to issue a COA, the LC shall, with the cooperation of the applicant, work with the applicant in an attempt to obtain a COA within the requirements and guidelines of this article and Division 5 of Article II of this chapter.*

Any permits required for your project as required by the City's Municipal Code can now be applied for. The existing building permit for the front porch is still open and will remain open until this project is complete. For questions regarding building permits, please contact our Inspection Division at (920) 448-3300.

Sincerely,

Stephanie Hummel, AICP
Planner II

cc: Pete O'Connor, Inspection Division
Erik Wasilewski, Inspection Division
Tim Meves, Inspection Division

Exhibit 6

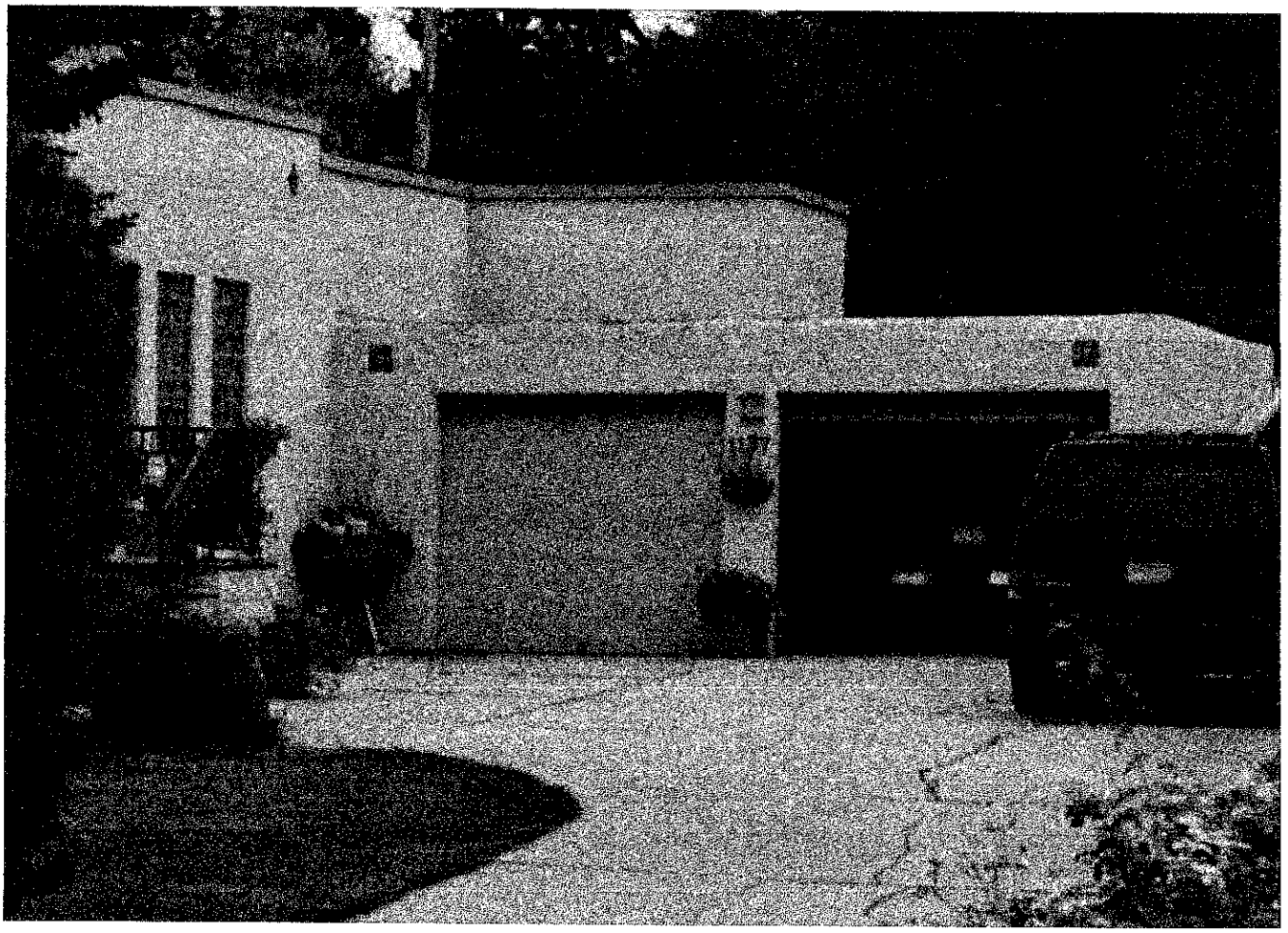
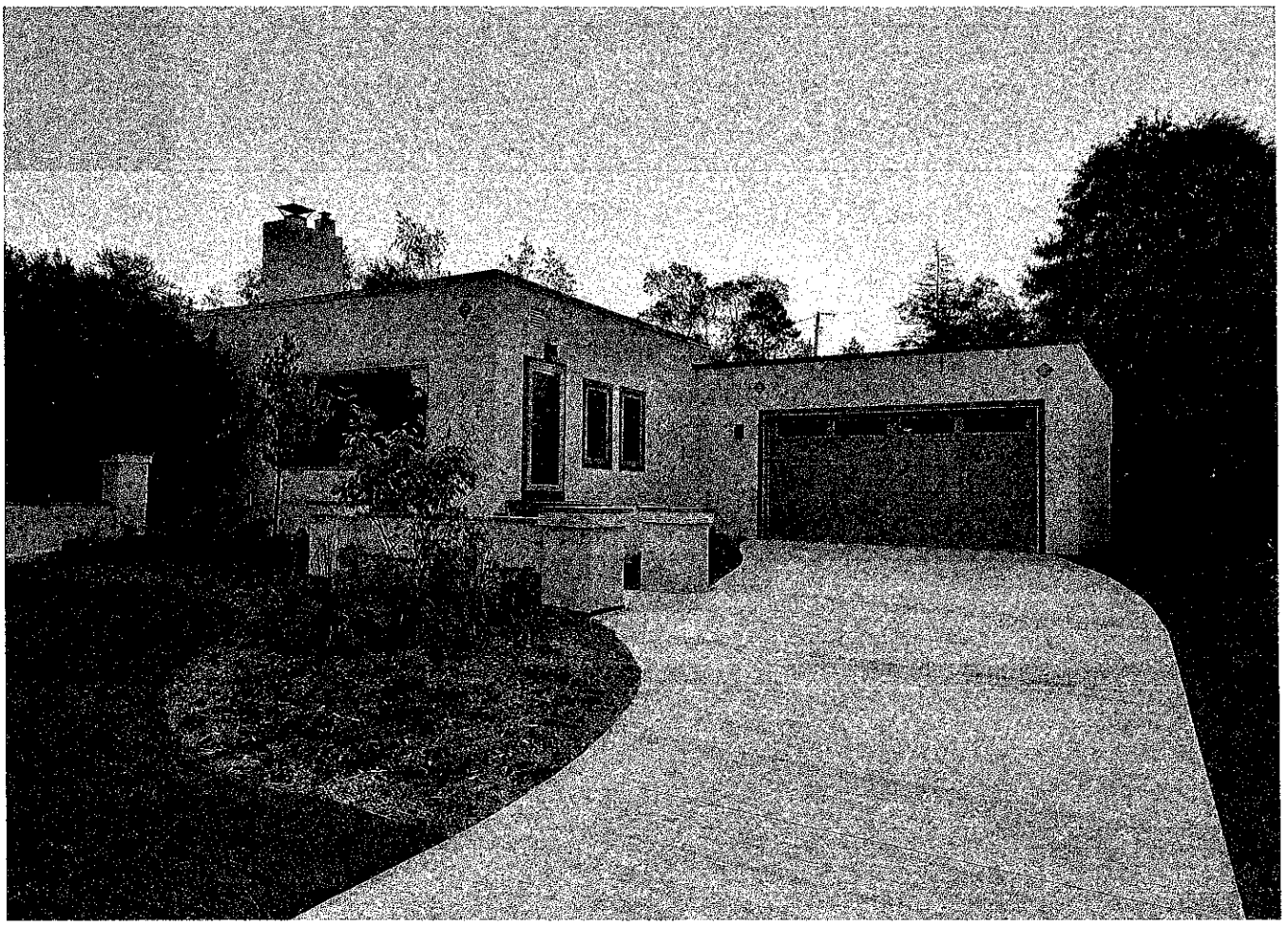


Exhibit 7



CITY OF GREEN BAY

TO: Common Council

FROM: Landmarks Commission Staff

DATE: October 12, 2023

RE: Brief in support of Denial of Mr. John Hurkman's COA Application for 1137 S. Monroe Avenue, Green Bay, Wisconsin

Procedure

The City of Green has long recognized the importance of preserving historical structures, sites, and districts. This has been procedurally accomplished with the Landmarks Commission nominating historical structures, sites, and districts to the Common Council which either approves or denies each nomination. See GBMC 44-1548. Once a structure, site, or district is recognized by the Common Council as historical, property owners must submit an application to the Landmarks Commission for approval before making any alterations, reconstructions, or demolitions. This approval is known as obtaining a certificate of appropriateness, or a "COA." Within specific guidelines, the Landmarks Commission has the authority to determine if conditions are required to ensure that the character of the property meets the guidelines within the ordinance to retain its historical significance. Thus, an application for a COA can be approved in whole or in part with additional conditions. If a COA is denied in whole or in part by the Landmarks Commission, the applicant has 30 days to appeal that decision to the Common Council. See GBMC 44-1552(3).

Background

The City of Green Bay has identified several historical districts. One of those is the Astor Historic District. Within this district is the property located at 1137 S. Monroe Avenue, Green Bay, Wisconsin, which is a contributing property to the Astor Historic District. This property is a

rare example of the International Style of architecture and is estimated to have been built in the 1920s. Property owner, Mr. John Hurckman seeks to appeal his third application for a certificate of appropriateness (COA 23-45). This appeal should be denied for several reasons, as discussed in the analysis section below. However, it is important to understand what happened chronologically.

COA 23-14: The applicant sought their first COA (identified as COA 23-14) to approve various exterior work that had already been completed without a COA. On May 17, 2023, the Landmarks Commission voted to partially approve the application for a COA with several conditions. (1) the garage was approved as presented; (2) the attached pergola was denied; (3) the fence was to be reviewed by staff; and (4) the windows that were already altered were to be restored to their previous state, specifically, the three glass block windows. The Landmarks Commission is authorized to require these conditions, as they ensure that the building retains its historical nature. All of this information was mailed and emailed to the applicant on May 19, 2023, including information on how to appeal any of these decisions. The last day to appeal this decision would have been June 18, 2023. No appeal was filed. When asked to present a timeline for restoring the windows, the applicant asked staff for a reconsideration regarding the three glass block windows. Staff notified the applicant that neither staff nor the Landmarks Commission has the authority to reconsider final decisions and reiterated that the first COA remained in place with the condition to restore the three glass windows. Staff continued to work with the applicant on other items, and it was then discovered that additional work that had not been identified in the first COA had been completed. Thus, the applicant applied for a second COA.

COA 23-40: Once it was discovered that additional work had been done without a COA, the applicant sought a second COA (identified as COA 23-40). On July 25, 2023, the Landmarks Commission approved the application for COA 23-40 to allow for the installation of a new front

porch, a new rear deck, and new rear/side windows. Notably, there were no conditions placed on this COA. The Landmarks Commission did however specifically call out that the three windows from the COA 23-14 application were not part of COA 23-40, and that the three windows were still required to be restored. No appeal was filed.

COA 23-45: On September 13, 2023, the applicant sought a third COA (identified as COA 23-45). This COA sought to deviate from the specific condition in COA 23-14 that required the three windows to be restored. Citing to the fact the issue had already been decided, the Landmarks Commission denied this application.

Analysis in Support of Denial

The City of Green Bay Common Council should deny the property owner's appeal.

Failure to appeal first COA (COA 23-14): Common Council should deny this appeal because the applicant failed to appeal the first COA, 23-14. The applicant's main complaint is over the three windows that were required to be restored as a conditions of the first COA. However, the applicant never appealed that decision. The decision was mailed and emailed to the applicant on May 19, 2023, and the last day to appeal was June 18, 2023. The applicant failed to appeal the COA and now seeks to use a backdoor loophole to get around this failure.

Claim preclusion: Common Council should deny this appeal because COA 23-14 and COA 23-45 are duplicative, and the three windows issue has previously been decided. This is known as claim preclusion, which prevents an applicant from bringing identical requests for COA's in front of the Landmarks Commission. In order for there to be claim preclusion, three elements must be met: (1) the parties must be the same; (2) the application has been heard in its entirety; and (3) there has been a final judgement. Here, the parties are the same. The application has been heard in its entirety as the first COA specifically called for the replacement of the three windows. And

finally, the Landmarks Commission was authorized by the Green Bay Common Council to make a final judgement. To approve this appeal would legitimize the applicants attempt at a backdoor loophole to circumvent the 30 day appeal window.

Permit without a COA is not valid. Common Council should deny this appeal because the issuance of a permit is not valid without prior approval of a COA. The applicant has stated that they were able to obtain a permit without a COA and argues that is justification for the work done without a COA. This is not what the ordinance says. Specifically, the ordinance states that "a building or other municipal permit shall be invalid if it is obtained without the presentation of a COA required for the proposed work." See GBMC 14-1552(2)(d). Therefore, the applicants permit is invalid, and was never valid. To approve this appeal because a permit was issued without a COA would delegitimize the authority of the Landmarks Commission by creating an exception to the requirement that historical structures, sites and districts must obtain a COA prior to doing updates. It is worth noting that if the permit were to be found valid, the application included the three windows in their original condition.

Response to applicant's appeal

There were a couple of points the applicant identified in the September 13, 2023 Landmarks Commission meeting as reasons to support their appeal. However, those points are meritless, and the Common Council should deny the appeal.

Allegation of administrative error: Common Council should deny the appeal because there was no administrative error regarding the three windows. The applicant alleges an administrative error regarding the three windows on the submitted plan. There was no administrative error. The submitted plans included the three windows. The fact that the applicant already altered the windows without approval was considered by Landmarks Commission. The Landmarks

Commission understood the issue regarding the three windows on the submitted plans and made it a condition of COA 23-14 to require the applicant to restore them to their original character.

Building code: Common Council should deny this appeal because there is no concern that the windows violate the City's building code. The applicant alleges that the windows would violate the building code, and thus would have to be altered. That is not true. Given the historic nature of the building, the windows were grandfathered in, not by the City, but by building code standards. Specifically, because the windows are inoperable, they are not required to be updated to operable windows or to meet our current building code standards.

Conclusion

Common Council should deny this appeal because the applicant failed to appeal within 30 days of the first COA. If Common Council finds the applicant timely appealed, the appeal should be denied because it is duplicative and thus subject to a claim preclusion.

ZONING ORDINANCE NO. 18-23

AN ORDINANCE REZONING THE PROPERTY LOCATED AT 3164 FINGER ROAD (PARCEL 21-173) FROM OFFICE RESIDENTIAL (OR) DISTRICT TO GENERAL COMMERCIAL (C1) DISTRICT (ZP 23-36)

THE COMMON COUNCIL OF THE CITY OF GREEN BAY DOES ORDAIN AS FOLLOWS:

SECTION 1. Section 44-30, Green Bay Municipal Code, together with the zoning map referred to therein, is hereby amended by rezoning the following described property, known as 3164 Finger Road, from Office Residential (OR) District to General Commercial (C1) District:

PART OF PARCEL #21-173 TO BE REZONED TO "OR":
PART OF THE NORTHWEST ¼ OF THE NORTHWEST ¼ OF SECTION 11, T23N-R21E, CITY OF GREEN BAY, EAST SIDE OF THE FOX RIVER, BROWN COUNTY, WISCONSIN, MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SECTION 11, T23N-R21E; THENCE S89°04'40"E, 1313.29 FEET ALONG THE NORTH LINE OF THE NORTHWEST ¼ OF SAID SECTION; THENCE S01°46'36"E, 40.04 FEET TO THE SOUTH RIGHT OF WAY OF FINGER ROAD AND THE POINT OF BEGINNING; THENCE CONTINUING S01°46'34"E, 200.22 FEET ALONG THE EAST LINE OF THE NORTHWEST ¼ OF THE NORTHWEST ¼ ; THENCE N89°04'40"W, 651.28 FEET; THENCE N00°55'17"E, 200.00 FEET TO SAID RIGHT OF WAY; THENCE S89°04'40"E, 641.86 FEET ALONG SAID RIGHT OF WAY TO THE POINT OF BEGINNING.

REZONE AREA CONTAINS 129,315 SQUARE FEET / 2.97 ACRES, MORE OR LESS.

SECTION 2. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 3. This ordinance shall not take effect until a public hearing is held hereon as provided by Section 44-82, Green Bay Municipal Code, and the adoption and publication of this ordinance.

Dated at Green Bay, Wisconsin, this _____ day of _____, 2023.

APPROVED:

_____
Eric Genrich, Mayor

ATTEST:

_____
Celestine Jeffreys, Clerk

dam:
Attachment – Map

Subject Area

200' Property Owner Notice

This is a compilation of records and data located in various City of Green Bay offices and is to be used for reference purposes only. The City of Green Bay is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied. Map prepared by DM.

Zoning Petition (ZP 23-36)
Rezone Subject Area at 3164 Finger Road from Office Residential to General Commercial

CITY OF GREEN BAY 1854 Titletown, USA

Report to the
Improvement and Service Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # N.1

To approve the recommendation by Green Bay Sustainability Commission to adopt and implement the City-Wide Green Stormwater Infrastructure (GSI) Plan.

BACKGROUND

In February 2022, the Green Bay Common Council directed staff to develop a Comprehensive City-Wide Green Infrastructure Plan. Over the past 11 months, the City has worked with two consulting firms, Aqualis and REL, to prepare a City-Wide Green Stormwater Infrastructure (GSI) Plan. The GSI plan will be a critical strategy in the City's mission to increase flood resiliency and achieve water quality goals. Adopting and implementing the plan will achieve multiple benefits for the Green Bay community, including improved water and air quality, reduce flooding, resiliency to extreme weather, traffic calming, reduced wear gray infrastructure, and an overall more pleasant urban environment.

RECOMMENDATION

To approve a recommendation by Green Bay Sustainability Commission to adopt and implement the City-wide GSI Plan.

FISCAL IMPACT

Adopting the City-Wide GSI Plan does not constitute adoption or rejection of specific project recommendations. No appropriation is required currently.

ATTACHMENTS

1. CityWide GSI Plan documents

City of Green Bay

City-Wide Green Stormwater Infrastructure (GSI) Plan

AQUALIS
Formerly Stormwater Solutions Engineering

Prepared October 2023 by:
AQUALIS Engineering Division
247 Freshwater Way, Suite 410
Milwaukee, WI 53204

AQUALIS
Formerly Stormwater Solutions Engineering

1.0 EXECUTIVE SUMMARY

October 14, 2023

Ms. Melissa Schmitz, Resiliency Coordinator
City of Green Bay Department of Public Works
100 N. Jefferson Street
Green Bay, WI 54301

Dear Ms. Schmitz:

The City of Green Bay, like many cities along the Lake Michigan coast is highly urbanized with dense development and large expanses of impervious surface such as pavements, roofs, and parking lots. As such there are flood-prone and stormwater ponding areas and water quality challenges facing the City and its residents. Green Stormwater Infrastructure (GSI) is one strategy for mitigating the effects of urbanization on water quality by managing the stormwater where it falls on each property in each watershed. GSI attempts to mimic the natural environment by capturing, storing, treating, and slowly releasing stormwater runoff thereby improving water quality and reducing the peak load on the stormwater drainage system and receiving waters.

This plan identifies the priority areas within the city where GSI strategies would have the greatest positive impacts as well as an evaluation of the cost-effectiveness of implementing GSI strategies in those identified priority areas. The plan gives the City's decision makers a clear guide to achieving the goals of reduced flood risk and healthier surface waters and environment, while improving the quality of life for its residents in the most cost-effective manner possible.

This report serves to detail the final deliverables and recommendations for the City-Wide Green Stormwater Infrastructure (GSI) plan for the City of Green Bay.

The major components contained within this report include:

- Background, Goals and Objectives
- Summary of the Analysis and Identification of the Highest Priority Subbasin Locations
- Identification and Prioritization of 30 Public and 20 Private GSI Projects Within the Priority Subbasins and the water quality and quantity modeling used to ID the projects
- Output Summary of Triple Bottom Line (TBL) Analysis of Proposed GSI Projects
- Summary of GSI Location Maps and GIS Tracking Tool
- Evaluation Process Tool for the Feasibility of GSI Projects Within the Public Right of Way
- Design Guidance for GSI Projects
- Maintenance & Operations Guidance for Identified GSI Projects

Please do not hesitate to reach out to us at 414.810.1245 if you have any questions regarding this report.

AQUALIS
Formerly Stormwater Solutions Engineering

Sincerely,

AQUALIS Engineering Services Division

Carrie Bristoll-Groll, PE, ENV SP
Executive VP, Engineering Services

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DRAFT

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Attachment B: Kick-off Meeting Polls and Materials
Attachment C: 30 Public GSI Projects
Attachment D: 20 Private GSI Projects
Attachment E: Right-of-Way Project GSI Evaluation Tool
Attachment F: GSI Detail Drawings
Attachment G: GSI Standard Specifications
Attachment H: Green Stormwater Infrastructure (GSI) Operations and Maintenance Plan

DRAFT

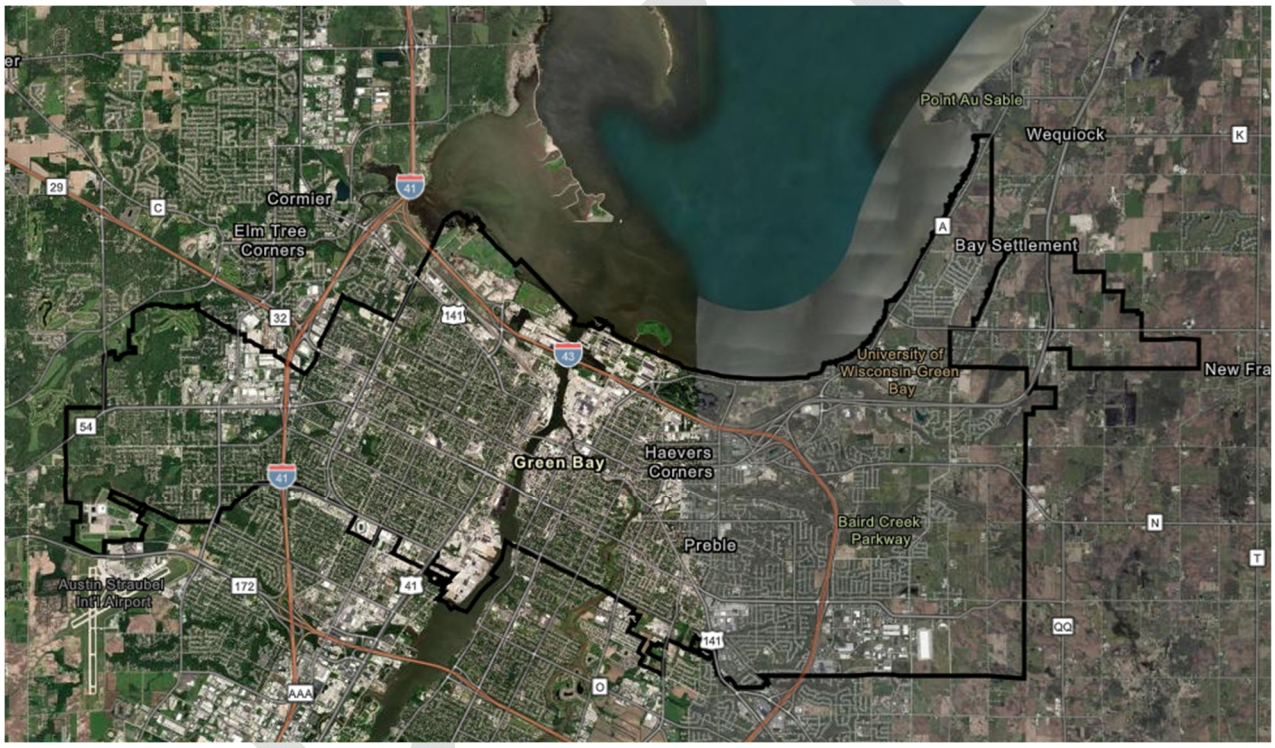
2.0 BACKGROUND, GOALS & OBJECTIVES

2.1 Introduction and Purpose

AQUALIS (formerly Stormwater Solutions Engineering, LLC) with subconsultant Robert E. Lee & Associates (REL) has been contracted by the City of Green Bay to prepare a comprehensive Green Stormwater Infrastructure (GSI) plan. The plan will guide decisions for incorporating GSI elements into development, redevelopment, or public infrastructure improvements projects for the purpose of building future flood and climate change resiliency, increase healthy green spaces for the community and improve water quality in the Fox River, East River and other tributaries, Green Bay and Lake Michigan.

2.2 Location

A location map is included in the figure below. The black outline denotes the study area for this project.



2.3 Existing Drainage System Overview

The City of Green Bay is located at the mouth of the Fox River on the southern tip of Green Bay on the western shoreline of Lake Michigan. The City of Green Bay is 5.76 square miles, has a population of 106,095 (U.S. Census Bureau) and is the oldest in the State of Wisconsin. The drainage system in Green Bay is all separated storm sewer systems (no combined sanitary/stormwater sewers). All the drainage subbasins in the City of Green Bay discharge to the Fox River and it's tributaries, or directly to Green Bay.

A drainage subbasin map is included in Attachment A.

2.4 Goals and Objectives of the Plan

The City of Green Bay, like many cities along the Lake Michigan coast is highly urbanized with dense development and large expanses of impervious surface such as pavements, roofs, and parking lots. As such there are flood-prone and stormwater ponding areas and water quality challenges facing the City and its residents. Green Stormwater Infrastructure (GSI) is one strategy for mitigating the effects of urbanization on water quality by managing the stormwater where it falls on each property in each watershed. GSI attempts to mimic the natural environment by capturing, storing, treating, and slowly releasing stormwater runoff thereby improving water quality and reducing the peak load on the stormwater drainage system and receiving waters.

This plan identifies the priority areas within the city where GSI strategies would have the greatest positive impacts as well as an evaluation of the cost-effectiveness of implementing GSI strategies in those identified priority areas. The plan gives the City's decision makers a clear guide to achieving the goals of reduced flood risk and healthier surface waters and environment, while improving the quality of life for its residents in the most cost-effective manner possible.

2.5 Types of Green Stormwater Infrastructure

The following is a brief description of each of the potential GSI strategies available to be implemented in the urban environment. These strategies vary in cost, effectiveness, appropriate locations, and maintenance considerations. Choosing the appropriate strategy to achieve the desired outcome is key to the success of the project.

2.5.1 Bioswales/Bioretention

Landscape features with engineered soil and native vegetation that capture, treat and infiltrate runoff. Bioswales typically include an underdrain that is connected to the municipal storm sewer system.

2.5.2 Blue Roofs

Roofs that are designed to temporarily store water with either passive or active control devices.

2.5.3 Green Roofs

Partially or completely planted roofs with vegetation growing in soil or other growing media to hold rainwater.

2.5.4 Greenways

Riparian and non-riparian buffer zones and strips that store and drain stormwater runoff into the ground naturally.

2.5.5 Native Landscaping

Native plants that can tolerate drought and flooding cycles because of deep roots and climate-specific adaptations.

2.5.6 Porous Pavement

Pavement that can reduce and infiltrate surface runoff through its permeable surface into a stone or filter media below.

2.5.7 Rain Gardens

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Gardens that are watered by pooled stormwater runoff, slowly infiltrating it into the ground along deeply rooted vegetation.

2.5.8 Rainwater Catchment / Cisterns / Rainwater Planters

The capture and storage of water, potentially for reuse later. StormGUARDen™ is one rainwater planter that is mentioned due to the extra gallons capacity and patented filtering technology.

2.5.9 Removal of Pavement & Structures

Removal of structures or paving for the purpose of allowing infiltration.

2.5.10 Soil Amendments

Organic materials mixed into soil or spread on existing lawn to enhance its ability to infiltrate or absorb water.

2.5.11 Stormwater Trees

Trees that hold rainwater on their leaves/branches, infiltrate it into the ground, absorb it through root systems and release it into the atmosphere (also known as evapotranspiration).

2.5.12 Constructed Stormwater Wetlands

Similar to stormwater detention ponds in that they hold a large volume of water, but are designed with shallow open-water surfaces, native vegetation and deep organic soils that are inundated or saturated for part of the year or the entire year.

3.0 CITY OF GREEN BAY WATERSHED SUBBASIN ANALYSIS

3.1 Analysis Methodology and Results

Following the initial kickoff meeting held on December 8, 2022, two informal polls were distributed to the attendees to select the criteria to be used in evaluating the need and placement of future GSI strategies. The results of those polls may be found in Attachment B. The first poll asked respondents when considering the *need* for GSI to rank a list of criteria from most important to least important. The result of this poll indicates the top 5 criteria to be:

1. Flood prone/historic ponding areas
2. High pollutant loading areas/need to meet WDNR Stormwater Permit requirements
3. To reduce costs of storm sewer system upgrades
4. Areas of known stormwater inflow to sanitary sewers, leading to basement backups (tied for 4th)
5. Poor water quality in rivers, streams, and Bay (tied for 4th)

The list of stakeholder-selected criteria above was used as the basis in assigning an impact score to each subbasin. A Geographic Information System (GIS) exercise was performed using data collected from the City, and developed by the Team for determining project locations. A number of GIS maps were created to highlight several factors within each subbasin as described:

<u>Maps 1 – Impaired Water Quality per Subbasin</u>

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Water quality modeling results from WinSLAMM software was developed previous to this project for the City's WDNR Municipal Separate Storm Sewer System (MS4) Permit. The WinSLAMM model provides output of average annual Total Suspended Solids (TSS) and Total Phosphorus (TP) in pounds per storm sewer outfall. This information was uploaded into GIS, per subbasin, to develop heatmaps of water quality per subbasin (Attachment A, Map 1 – Impaired Water Quality). Four (4) versions of Map 1 are provided, with emphasis on (1) Total Phosphorus, (2) Total Suspended Solids, and (3,4) highlighting neighborhoods within Maps (1) and (2) for the purpose of implementing the City's Residential GSI Revolving Loan Fund (https://greenbaywi.gov/1422/Residential-Green-Stormwater-Infrastruct). Also provided within the maps are the watershed delineations for the Apple Creek, Ashwaubenon Creek, Duck Creek, East River, East Shore of Green Bay, and Lower Fox River Main Channel, and cross-hatching for those that are listed on EPA's 303(d) list for Impaired Waters.

Maps 2 – Flooding Drainage Risk

Known flood points data was provided by the City. The causes of flooding were often not made clear through simple analysis of drainage by GIS. The types of flooding in commonly flooded locations was not identified through the data received. Various causes of flooding or ponding are common in cities. Flooding could be assumed to be overbank/river flooding, localized intersection/low point ponding, storm sewer capacity or maintenance related conveyance ponding, or surcharging from high water at the storm sewer outfall. As a result, and without performing hydraulic analysis of each stormwater conveyance system which was not within the scope of this project, the Team must rely upon their experience, use of local data and tools such as aerial imagery, topography, GIS sewer system maps, and the location of flooding in relation to nearby waterways, to identify if GSI would provide flooding relief in certain areas. The summation of these points of data were used as the basis for Maps 2. The maps show the points of flooding experienced. The more data points in a subbasin, the greater the color of heatmap in the subbasin. Map 2 is provided as a stand-alone map, and with neighborhoods highlighted for the purpose of neighborhood flood planning.

Map 3- Public Property Opportunities

The City's Capital Improvement Program (CIP) was provided to the Team and mapped as Map 3. Map 3 also incorporates the results from Maps 1 and 2, to show a heatmap of areas where highest priority subbasins coincide with the locations of CIP projects, providing near term impacts and best use of funding to implement GSI.

Map 4- Private Property Opportunities

As private properties within cities redevelop over time, existing stormwater management ordinances may require stormwater volume/peak flow control and water quality improvements also be made. In many cases, however, the ordinances are triggered by percent impervious surface or increase in volume or peak flow, and when a city lot is redeveloped, the percent impervious may not change. Adding green infrastructure ordinances have become more common, such as that added by the City of Milwaukee, WI, which requires GSI on projects of 5,000 sf or more new impervious surface within high priority areas in the City, and Philadelphia, PA which requires GSI on projects with 15,000 square feet or more of land disturbance. For the purpose of this project, the Team identified 20 locations where new or redevelopment is either known, planned, or potential based upon the age and condition of current structures. Map 4 details the commercial and industrial zoning, along with property values below the City's median value. Wherever possible, it is advantageous to add GSI to neighborhoods to improve property values.

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Map 5 – Barriers and Opportunities for GSI

Where the previous maps show areas of need or opportunity, Map 5 provides insight on what would be considered barriers to GSI. This map includes GIS layers such as high groundwater table, high bedrock, areas of existing wetlands, and slopes exceeding 6% where GSI would be difficult to install. The area of sandy soils is actually an opportunity to encouraging greater infiltration, and is also highlighted on Map 5, in the interest of reducing the total number of maps.

Map 6 – Priority Basins for GSI

The final map, Map 6, summarizes all previous data sets to provide the priority subbasins for GSI. All proposed GSI projects developed through this project are also shown on Map 6, to be discussed later in this report.

3.1.1 Priority Subbasin Determination Methodology

Results from Maps 1 (water quality), Maps 2 (flood risk), and Map 3 (CIP projects) were compiled to determine the highest priority subbasins. With each of the three rank factors assigned to each subbasin, a GSI priority score was generated. The score was produced by the equation shown below:

$$Priority\ Subbasin\ Score = \frac{water\ quality\ rank}{5\ (highest\ rank)} + \frac{\#\ common\ flood\ points}{3\ (highest\ rank)} + \frac{\#\ of\ CIP}{8\ (highest\ rank)}$$

The highest possible priority score was 3. Subbasins chosen to be investigated further for placement of GSI received a score of approximately 0.71 or higher.

After being identified as a priority subbasin for GSI, each subbasin was investigated for possible placement locations of GSI. The overall goal was to identify 30 public and 20 private GSI projects, spread across priority subbasins. The subbasin may have more than one or only one GSI project, depending upon the suspected causes of pollution and flood related issues. Generally, subbasins that had decent water quality and problems with flooding were considered higher priority than subbasins with medium, poor water quality and no flooding. Upon investigation of the causes of stormwater related issues in each subbasin, an initial 42 project locations were identified.

After a high number of possible GSI projects were identified, project locations were checked against locations of the BRRTS website for Remediation and Redevelopment Continuing Obligations, provided by the Wisconsin Department of Natural Resources. This was done in order to remove any project concepts where contaminated soils or other significant barriers exist. Knowledge of these factors in each project location assisted the Team to determine the feasibility and type of GSI that could be used.

For a better understanding of how GSIs were specifically placed at locations, see Section 9: Feasibility Evaluation Process Tool. Many factors included in this section were used in combination with engineering knowledge and analysis to decide on the exact placement of GSIs inside subbasins. However, it should be clearly understood and noted that GSI project ideas and locations are only conceptual and should not be used as designs for implementing actual GSI. The suggested GSI projects should be used only as starting points for placement and design of the future GSI.

GSI project concepts were created project by project and summarized in information pages, producing a total of 30 public and 20 private project concepts. Many factors went into deciding project concepts and it was attempted to balance those factors based upon the stakeholders' desires and environmental and economic benefits. An effort was made to provide projects in a range of locations with a variety of GSI types.

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4.0 SELECTED GSI PROJECT SUMMARIES

Many GSI Plans provide high level overviews on the need and general placement of GSI strategies, without actual project locations. The City requested this plan provide recommendations of catalytic projects to advance the potential for water quality and flood risk reduction from day one!

4.1 Public Projects

Using the list of Capital Improvement Projects from the City, in conjunction with the highest rated subbasins found in Maps 1 and 2, 30 public GSI project sites were selected. For each project area, criteria as provided Section 8. Feasibility Evaluation Process Tool in were used to evaluate the best GSI type selected. See Attachment C – Public GSI Project Summaries.

4.2 Private Projects

Using local redevelopment project information from staff and our Team, in conjunction with the highest rated subbasins found in Maps 1 and 2, 20 private GSI project sites were selected. For each project area, criteria as provided Section 8. Feasibility Evaluation Process Tool in were used to evaluate the best GSI type selected. See Attachment D – Private GSI Project Summaries.

5.0 TRIPLE BOTTOM LINE (TBL) ANALYSIS OF PROPOSED GSI PROJECTS

5.1 TBL Selected Criteria

In addition to proven effectiveness for stormwater management goals, GSI can yield many important co-benefits, including improving property values, beautifying neighborhoods, avoiding flood damages, improving air quality, reducing respiratory and heat-related illnesses, creating green jobs, and more. As communities continue to consider how to best integrate GSI into stormwater management planning efforts and/or expand existing GSI programs, stormwater practitioners have expressed a need for information to help them better quantify and monetize these benefits using a triple bottom line (TBL) approach.

The Water Resource Foundation (WRF) provides a GSI TBL Benefit Cost Framework and Tool, which provides stormwater practitioners with a systematic approach for quantifying and monetizing the financial, social, and environmental benefits of GSI at the community, watershed, or neighborhood scale. The Tool leads users through each step of TBL-based benefit cost analysis, from establishing a baseline, to applying appropriate economic valuation methods, and comparing benefits and costs over time.

The Tool aims to address current research gaps and information needs. Specifically, the Tool incorporates market and non-market economic valuation methods that allow users to understand and value a wide range of TBL benefits, including several harder-to-quantify benefits that have not been incorporated into existing tools or studies. The Tool also aims to strike an appropriate balance between providing enough information and data to allow practitioners to quantify relevant benefits, while requiring enough user input to ensure the process is transparent and community specific.

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The Tool is intended for use by utility and municipal staff or other interested stormwater practitioners. The Tool does require some level of expertise and familiarity with GSI implementation and planning; however, users do not need to have an advanced knowledge of economics. The Tool was developed in coordination with The Water Research Foundation's (WRF) Community enabled Lifecycle Analysis of Stormwater Infrastructure Costs (CLASIC) project. The Tool leverages data and information from CLASIC to allow users to not only assess the benefits of alternative GSI scenarios, but to also compare them appropriately to costs. While users can bring inputs to the tool from CLASIC, the Tool is a stand-alone product.

Table 1 provides a breakdown of the model outputs from the Tool, for the City of Green Bay GSI Project as developed herein.

Table 1. Benefits, Annualized and Present Values of GSI for the City of Green Bay

Benefit	Annualized Value	Present Value
Avoided Infrastructure Costs	$314,056	$5,135,267
Avoided Replacement Costs	$70,801	$1,157,696
Energy Savings	$9,219	$150,751
Water Supply	$35,301	$577,216
Air Quality	$3,859	$63,100
Property Values	$1,135,906	$22,154,655
Heat Stress	$28,386	$464,148
Recreation	$624,362	$10,209,211
Green Jobs	$25,405	$415,403
Water Quality	$3,860,744	$63,128,705
Carbon	$5,774	$94,407
Ecosystem	$8,025	$131,227

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5.2 TBL Matrix for GSI Strategies

GI Strategy	Economic					Social			Environmental			
	Initial Investment Cost	O&M Cost	Job Growth	Increase Property Values	Relief to Existing Infrastructure	Potential to Reduce Crime	Potential Access to Recreation/Education	Improves Community Connectedness	Improve Water Quality	Energy Savings	Reduces Urban Heat Island	Improves Air Quality
Bioswales	Medium	Medium	High	High	Medium	High	High	Medium	High	Medium	Medium	High
Green Roofs	High	Medium	High	Medium	Low	Medium	Low	None	None	High	Medium	Low
Greenways	Medium	Low	Medium	High	Low	High	High	High	Low	None	Medium	Low
Native Landscaping	Low	Low	Low	High	Low	Medium	Medium	Low	None	Low	Low	Medium
Permeable Pavement	Medium	Medium	Medium	Low	Low	Low	Medium	Low	Medium	None	None	None
Rain Gardens	Low	Low	Low	High	Medium	High	High	Low	Medium	Low	Low	Medium
Catchments/Cisterns	Low	Low	Low	Low	Low	Low	Low	Low	None	None	None	None
Removal of Paving & Structures	Medium	None	Low	Low	Low	Low	Low	Low	Low	None	Medium	Low
Soil Amendments	Low	Low	Low	Low	Low	None	Low	None	None	None	None	None
Trees	Low	Medium	Low	High	Low	High	Low	Medium	None	Medium	High	High
Constructed Wetlands	High	Medium	Medium	Medium	High	Medium	High	High	High	None	Low	Medium
Stormwater Ponds	Medium	Medium	High	Medium	High	Medium	Low	Low	High	Low	Medium	Low

High
Medium
Low
None

6.0 WATER QUALITY AND QUANTITY MODELING OF PROPOSED GSI PROJECTS

6.1 Sizing Standards for Hydrologic Modeling

Historically, GSI has been sized for managing what is considered a “water quality storm”, or 0.5” – 1.0” of rainfall. The author’s perspective after having designed and managed installation of hundreds of GSI devices over the past 20 years, is that they can be designed to manage much more water to also provide a flood risk reduction, for incrementally less than also adding stand-alone flood risk devices. In some cases, project area constraints do not allow for taking full advantage of flood risk sizing. For instance,

high groundwater in many areas of of the City of Green Bay is less than 3 ft below the ground surface. This restricted the ability to model GSI with deep stone storage.

Where possible, rain gardens were modeled with a 1.5-foot depth of engineered soil media and with plantings. At sites with infiltration constraints, rain gardens were modeled with a 1-foot-depth of engineered media and a weir. The designed ponding depth was 9 inches. Inclusion of an underdrain (of 6" diameter) was determined individually for each project. Bioswales were also modeled with a 1.5-foot depth of engineered soil media. At sites constrained by shallow groundwater, the bioswale models included 2 feet of stone storage and assumed no native soil infiltration. For sites where shallow groundwater was not a constraint, 3 feet of stone storage was modeled with an assumed native soil infiltration of 0.02 in/hr. All stone storage had an assumed porosity of 0.33. The bioswales were designed with a ponding depth of 1 foot with a depth of 1.5 feet. Underdrains were also included for all bioswale models. If shallow groundwater was present, the underdrain was modeled at the bottom of the storage layer with a liner. Otherwise, the underdrain was modeled at the top of the storage layer.

Permeable pavement was similarly modeled to bioswales, in terms of underground storage. Permeable pavement in areas with shallow groundwater was modeled with a 2-foot stone storage layer, with a liner and underdrain at the bottom of the storage layer. Otherwise, the storage layer was modeled as 3 feet deep with an underdrain at the top of the storage layer. The pavement was assumed to be 4 inches thick with a porosity of 0.25, and the bedding layer was 3 inches thick with a porosity of 0.30. Furthermore, porous pavement should not have an impervious run-on ratio of greater than 3:1.

Native landscaping and greenways were not modeled with storage layers below the vegetation. Native landscaping was modeled in HydroCAD as non-grazed meadow. This decreased the runoff curve number (CN) compared to land use of grass or pavement, and therefore decreased runoff in the model. Similarly, the greenway model included native landscaping as part of the concept, so the area was modeled in HydroCAD as non-grazed meadow. In WinSLAMM, the greenway was modeled as a filter strip. The grass retardance factor was B and the grass height was 36 inches.

Green roofs were modeled with similar layer properties to bioswales but with different depths per layer. The engineered media had an assumed porosity of 0.27 and the storage layer had an assumed porosity of 0.33. The depth of the engineered media was 6 inches, and the depth of the storage layer was 2 inches. The total depth of the green roof was modeled as 1 foot, with a weir at the top.

6.2 HydroCAD Model Results

Each GSI Project summary sheet provides total drainage area, proposed area of GSI device, and the gallons captured per device. See Attachments C and D for the GSI Project Summary Sheets.

6.3 WinSLAMM Model Results

WinSLAMM version X.X was used in modeling all proposed GSI devices. The total Suspended Solids (TSS) and Total Phosphorus (TP) was calculated based upon inputs for the local land use and GSI designs. The loadings in pounds of TSS and TP are shown in the GSI Project Summary Sheets. Please see Attachments C and D.

7.0 GEOGRAPHIC INFORMATION SYSTEM (GIS) MAPS AND TRACKING TOOL

7.1 Existing GIS System & Database

7.2 Proposed GIS Tracking Layer for Installed GSI

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8.0 FEASIBILITY EVALUATION PROCESS TOOL

8.1 Critical Success Factors

The critical success of GSI is primarily reliant on being the most cost-effective GSI option that is physically reasonable and provides measurable benefits. Certain GSI may be impossible to place at certain types of locations. Among the GSI options for a location, the best choice is often the lowest cost option that provides comparable benefits to the other available options.

GSI can be placed at buildings, at pavement, in green spaces, and in the Right-of-Way (ROW). The success of each type of GSI changes dependent upon the type of location it is placed in.

For buildings, the type of roof and building usage are key in deciding GSI feasibility. A flat or shallow roof has the possibility of placing a green roof, blue roof, or rainwater catchment. For steeply pitched roofs, it is only feasible to place rainwater catchments or a rain garden near the roof. In the case of outbuildings, the most beneficial BMP option may be to remove the structure entirely. Otherwise, a necessary outbuilding with external drainage may implement a rainwater catchment or rain garden nearby.

For pavement areas, land use can be divided into unused/underused pavement, parking, paths, entrance areas, and playgrounds. Pavement that is not used does not need to remain paved and can be turned into GSI that utilizes infiltration. If there is a need for stormwater storage, that area may become porous pavement or a bioswale. The success of GSI in parking lots becomes more complicated due to the regulations and functional design associated with these spaces. Parking lots with vegetated islands already have prime areas for placing vegetated GSI, such as bioswales, native landscaping, and stormwater trees. The same concept applies for parking areas sloped towards vegetated perimeters, where existing vegetation can be made into vegetated GSI.

For parking areas that drain to themselves, pavement that infiltrates is the best option, which would be porous pavement. Porous pavement becomes a more cost effective GSI option when parking lots are already scheduled to be repaved. Paths are more linear than parking lots, and therefore GSI options are limited by that factor. Native landscaping, porous pavement, and stormwater trees are ideal because they do not require a large amount of localized land area. Finally, paved school playgrounds can successfully implement all of the aforementioned BMPs. Pavement removal, native landscaping, and stormwater trees are the simplest options. However, bioswales and porous pavement may also be an option with professional assistance.

For green spaces, there is a wide range of GSI that can be considered. Green spaces can be athletic fields, terraces, buffers, entrance areas, gardens, landscaping, play areas, open green space, courtyards, and outdoor classrooms. The opportunities for GSI on athletic fields are greatly limited, and one of the only feasible options is placing porous turf. GSI options can also be limited for terraces. Less invasive GSI, such as soil amendments and native plantings, is best unless the terrace is not near a building or near a building with no basement. GSI in buffers is successful when natural materials are used. This includes stormwater trees, bioswales, rain gardens, and greenways. However, infiltrative GSI cannot be used for buffers along buildings. Entrance areas have limited space, so GSI with a small footprint, e.g., stormwater trees, soil amendments, and native plantings, are most successful in those spaces.

Gardens are intended to have plantings, so bioswales, rain gardens, native plantings, and orchard/urban agriculture are successful options. The same idea applies for landscaped areas, except they are often too small for orchards or agriculture and may incorporate more linear spaces, like greenways. Play areas are

similar and would successfully incorporate similar GSI, except a non-natural option, like porous turf, may be useful for recreational purposes. Open green spaces have greater area and open opportunities for implementing GSI that requires a lot of space. GSI like constructed wetlands or restored wetlands can provide greater storage and water treatment options. Stormwater trees and GSI that is successful with more area used, such as rain gardens, soil amendments, and native plantings are good options. Courtyards have more limited space, so wetlands and rain gardens are less successful. GSI such as bioswales and porous pavement may be successful in a concentrated space but would require professional assistance to be successful. Furthermore, outdoor classrooms vary in size and are intended for education. Therefore, GSI with visible features and benefits is successful. This means porous turf, porous pavers, and greenways are less likely to provide use in a classroom space.

Streets and right-of-way spaces are common places for public GSI projects. The success of GSI in the right-of-way is mainly restricted by space limitations and utilities. Right-of-way areas could be along residential streets, commercial streets, industrial streets, and alleys. The success of using porous pavement along streets is often dependent upon if there are parking lanes, as that is the most feasible location for porous pavement on roads. Alleys are a good option for porous pavement because GSI can be placed in the center of the alley without coming into contact with heavy vehicle traffic. For bioswales in the ROW, success is most dependent on the ROW being wide enough and far enough from water mains and other limiting utilities. Native landscaping or removing pavement may be the most successful option for narrow ROW areas. However, it is important to maintain safety, such as proper line of sight, when placing landscaping. Commercial and industrial areas may have remediation and redevelopment continuing obligations, in which case placing infiltrative GSI is difficult. In areas that have roadside ditches, without curbs or storm inlets, it may be unsuccessful to try to place bioswales in the ROW, unless they are placed in a center median.

8.2 Right of Way Project GSI Evaluation Tool

The GSI Evaluation Tool is a series of checklists for use by the project designer, to best determine if the project in question is right for GSI, to which GSI is the right fit, and later the design process steps. The Tool guides on topics of Project Budget and Schedule, Project Area Needs, and Project Area Constraints, as shown in the image below.

Project Selection Questions	Rating					Weight
	Yes	Probably	Maybe	Unlikely	No	
Project Schedule and Budget						
Is the project construction scheduled for more than 6 months from today			x			3
Is sufficient budget or grant funding available to allow a GSI device?			x			3
Is the roadway/right-of-way designer on board with adding GSI?			x			3
Do you have the necessary staff available to design GSI for this project?		x				4
Project Area Needs						
Is the project area highly rated for water quality needs according to GSI Map 1?	x					5
Is the project area highly rated to be flood prone according to the GSI Map 2?					x	1
Does the project appear in the City's GSI Plan?					x	1
Is there interest for GSI here for other reasons not yet listed?			x			3
Project Area Constraints						
Does the area have high bedrock or high water table (see Map 5)			x			3
Does the area have sandy soils?	x		x			5
Are buried or overhead utilities buried constraints to the project area?*		x				2
Do residents or abutting property owners in favor of GSI?		x				4
Likelihood of Moving Project Forward	Yes				No	
TOTAL (RECOMMENDED SCORES OVER 60% TO PROCEED)						**62%**

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The designer is guided to move forward through the process with a rating of 60% or more. Projects scoring less than 60% require some additional support to move forward. Source areas (pavement, building, or green space) provide direction for the next step. Suggestions are made for GSI best suited for each area as shown below.

Green Stormwater Infrastructure for Pavement **Does your Project Area Have** . **Best GSI**	Regenerative Stormwater Conveyance	Bioswale	Native Landscaping	Porous Pavement	Remove Pavement	Stormwater Trees
Unused/Underused Pavement						
Roadways						
Min. of 10' between curb and bldg						
With vegetated islands						
With Rural Cross-section/ditches						
Has inverted crown (alley pavement)						
Scheduled to be repaved only						
Parking Areas						
With vegetated islands						
Sloped towards vegetated permimeter						
Does not drain towards vegetated perimeter						
Scheduled to be repaved only						
Paths and Sidewalks						

Design process steps follow from conceptual design, through final design, construction management, maintenance, and grant reporting. See Attachment E for examples of the Tool.

9.0 DESIGN GUIDANCE FOR IDENTIFIED PROJECTS

9.1 GSI Detail Drawings

Typical detail drawings for the GSI devices included in this project area included as Attachment F. The drawings have also been provided to the City as Autocad Civil 3D files.

9.2 GSI Standard Specifications

Standard Specifications provide guidance on installation of each GSI device. Standard Specifications are included as Attachment G.

10.0 MAINTENANCE & OPERATIONS GUIDANCE FOR IDENTIFIED PROJECTS

To provide long term inspection and maintenance guidance is of utmost importance for GSI long-term health and effectiveness. A full Operations and Maintenance Plan has been provided for the City, as Attachment H.

ATTACHMENTS

Attachment A: GSI Maps
Attachment B: Kick-off Meeting Polls and Materials
Attachment C: 30 Public GSI Projects
Attachment D: 20 Private GSI Projects
Attachment E: Right-of-Way Project GSI Evaluation Tool
Attachment F: GSI Detail Drawings
Attachment G: GSI Standard Specifications
Attachment H: Green Stormwater Infrastructure (GSI) Operations and Maintenance Plan

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Legend

- Proposed GSI Locations
- Top Priority Basins
- Streets
- Lakes and Rivers
- Storm Basins

High

Low

Priority Subbasins For GSI

The priority level of each subbasin was determined by the analysis of factors associated with Green Stormwater Infrastructure (GSI) best placement.

Determining Factors for Subbasin Ranking

Percentage of Subbasin
- Sandy Soils
- Bedrock < 3 Feet
- Depth to Groundwater < 3 Feet
- Wetlands > 1 Acre
- Below Median Home Value
- Commercial or Industrial Zoning
- Parks

Total Number Within Subbasin
- Wetlands < 1 Acre
- Capital Improvement Projects
- Poor PASER Ratings (1-4)
- Schools
- Flooding areas/concerns

Value/Classification (Low-High)
- Existing TSS (Lbs/Ac/Yr)
- Existing TP (Lbs/Ac/Yr)

VILLAGE OF HOBART

VILLAGE OF ASHWAUBENON

VILLAGE OF BELLEVUE

LAWRENCE

Austin Straubel Int'l Airport

FOX RIVER

East River

Baird Crk

UWGB

Lake Largo

FIGURE 6
PRIORITY BASINS FOR GSI
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

N

0 0.5 1 Miles

Source: Robert E. Lee & Associates, Inc., Brown County, City of Green Bay, U.S. Census 2021, USGS, Aqualis

Disclaimer: Robert E. Lee & Associates, Inc. makes every effort to ensure this map is free of errors but does not warrant the map or its features are either spatially or temporally accurate or fit for a particular use. Robert E. Lee & Associates, Inc., provides this map without any warranty of any kind whatsoever, either expressed or implied.

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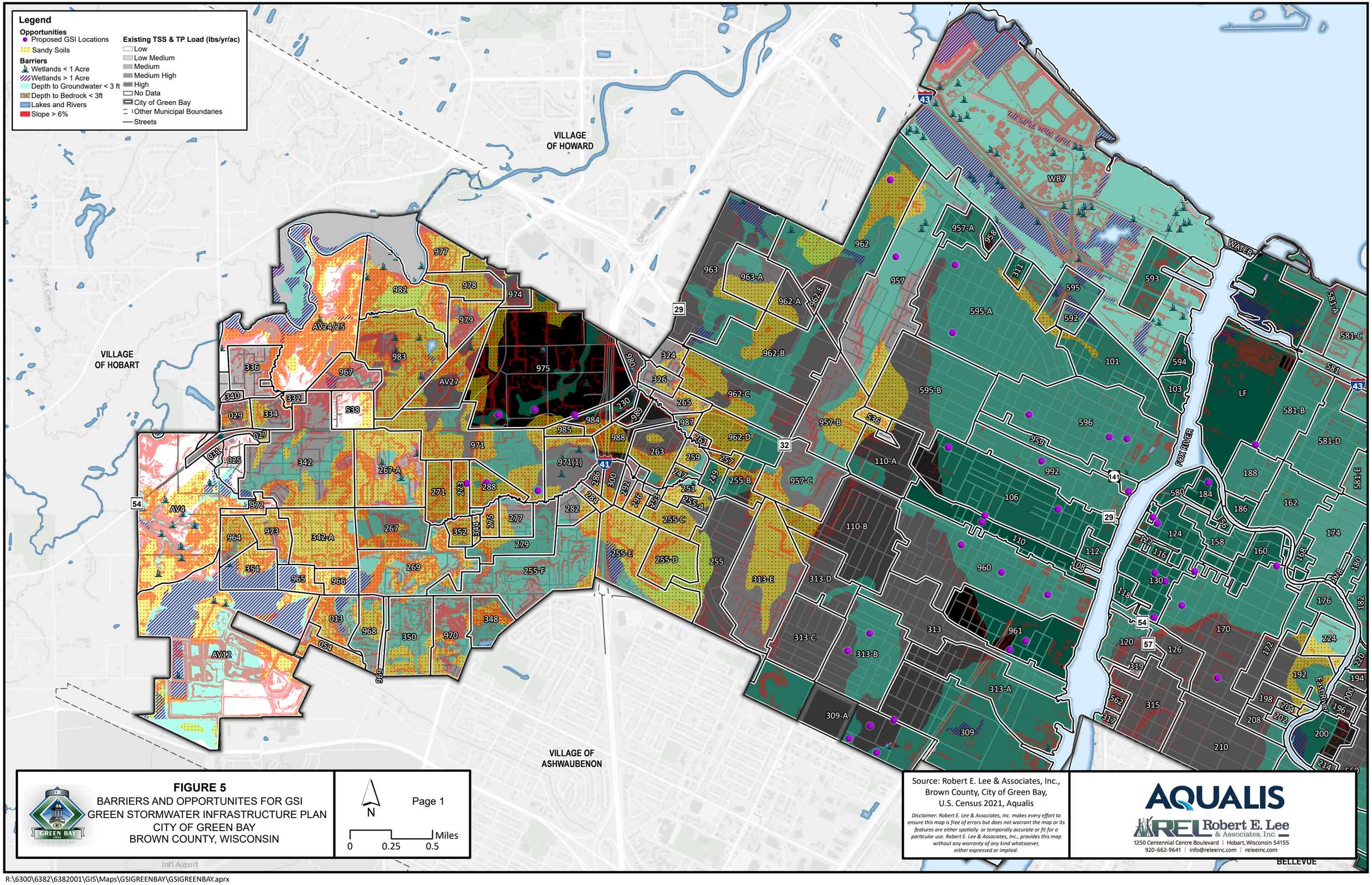

FIGURE 5
BARRIERS AND OPPORTUNITES FOR GSI
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

Source: Robert E. Lee & Associates, Inc., Brown County, City of Green Bay, U.S. Census 2021, Aqualis

Disclaimer: Robert E. Lee & Associates, Inc. makes every effort to ensure this map is free of errors but does not warrant the map or its features are either spatially or temporally accurate or fit for a particular use. Robert E. Lee & Associates, Inc., provides this map without any warranty of any kind whatsoever, either expressed or implied.

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Legend

Opportunities
- Proposed GSI Locations
- Sandy Soils

Barriers
- Wetlands < 1 Acre
- Wetlands > 1 Acre
- Depth to Groundwater < 3 ft
- Depth to Bedrock < 3ft
- Lakes and Rivers
- Slope > 6%

Existing TSS & TP Load (lbs/yr/ac)
- Low
- Low Medium
- Medium
- Medium High
- High
- No Data
- City of Green Bay
- Other Municipal Boundaries
- Streets

WATER
FOX RIVER
LF
LE5
UWGB
Lake Largo
Baird Crk
TOWN OF SCOTT
TOWN OF HUMBOLDT
VILLAGE OF ASHWAUBENON
VILLAGE OF ALLOUEZ
VILLAGE OF BELLEVUE

FIGURE 5
BARRIERS AND OPPORTUNITES FOR GSI
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

N

Page 2

0 0.25 0.5 Miles

Source: Robert E. Lee & Associates, Inc., Brown County, City of Green Bay, U.S. Census 2021, Aqualis

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Legend

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- Proposed GSI Locations
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Existing TSS & TP Load (lbs/yr/ac)
- Low
- Low Medium
- Medium
- Medium High
- High
- No Data
- City of Green Bay
- Other Municipal Boundaries
- Streets

TOWN OF SCOTT

TOWN OF GREEN BAY

TOWN OF HUMBOLDT

Lake Largo

UWGB

Baird Crk

FIGURE 5
BARRIERS AND OPPORTUNITES FOR GSI
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

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Legend

- Wetlands < 1 Acre
- Concept Private Property GSI Locations
- Streets
- Wetlands > 1 Acre
- Storm Basins
- Lakes and Rivers
- Property Values Below City Median Value ($151,000)

Commercial and Industrial Zoning

- C1 - Commercial One
- C2 - Commercial Two
- C3 - Commercial Three
- GI - General Industry
- S-RLI - Special District Light Industry
- LI - Light Industry
- City of Green Bay
- Other Municipal Boundaries

VILLAGE OF HOWARD

VILLAGE OF HOBART

VILLAGE OF ASHWAUBENON

BELLEVUE

Beaver Dam Creek

Trout Creek

FOX RIVER

East River

WATER

WB7

LF

AV4 AV12 AV24/25 AV27

FIGURE 4

PRIVATE PROPERTY OPPORTUNITIES
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

N

Page 1

0 0.25 0.5 Miles

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WATER
FOX RIVER
East River
Baird Crk
Lake Largo
TOWN OF SCOTT
TOWN OF HUMBOLDT
VILLAGE OF ASHWAUBENON
VILLAGE OF ALLOUEZ
VILLAGE OF BELLEVUE
UWGB
LF
LE5
F10

FIGURE 4

PRIVATE PROPERTY OPPORTUNITIES
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

N

0 0.25 0.5 Miles

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- Lakes and Rivers
- Property Values Below City Median Value ($151,000)

Commercial and Industrial Zoning

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- City of Green Bay
- Other Municipal Boundaries

TOWN OF SCOTT

TOWN OF GREEN BAY

TOWN OF HUMBOLDT

FIGURE 4

PRIVATE PROPERTY OPPORTUNITIES
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

Page 3

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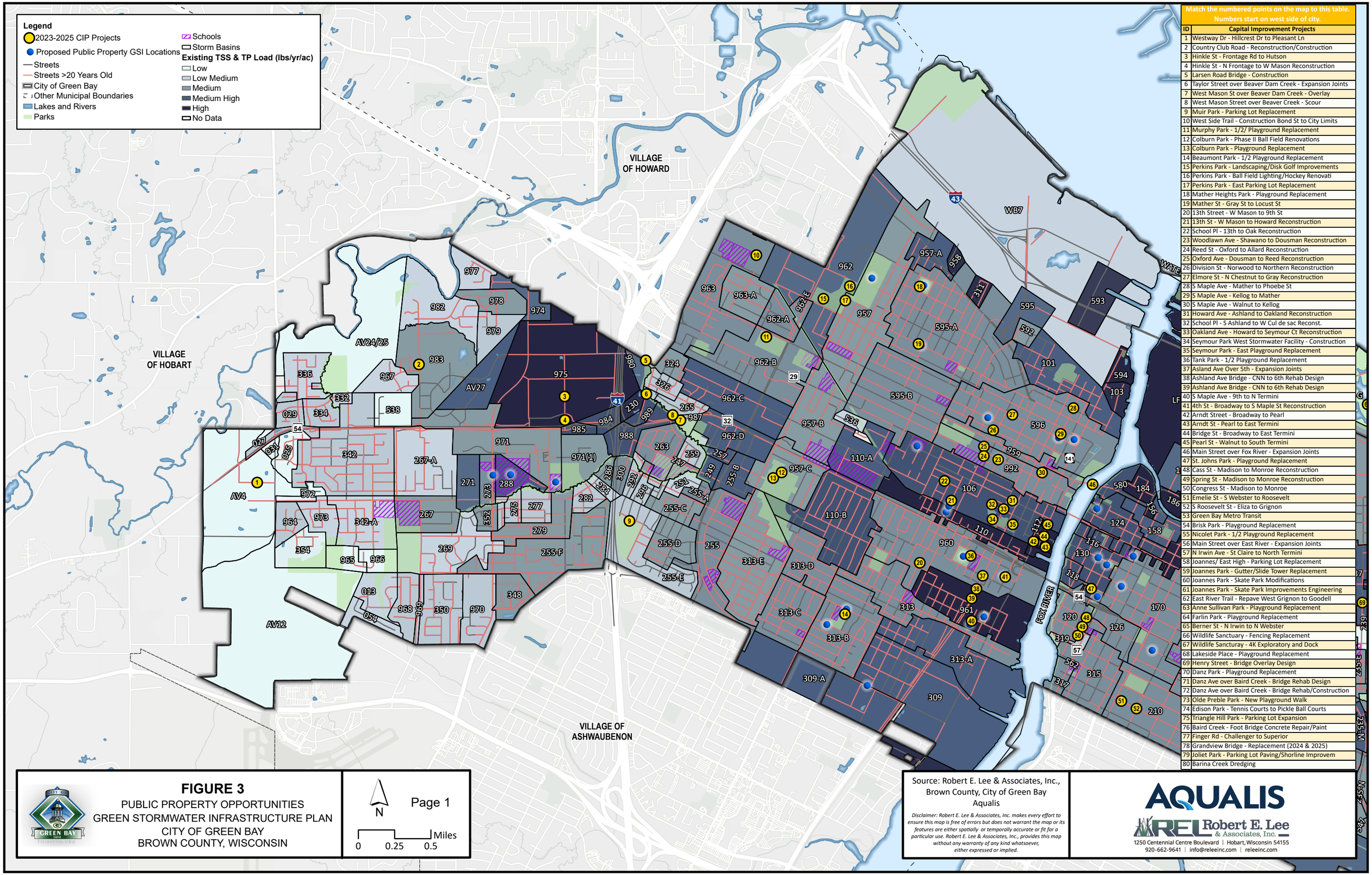

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4	Hinkle St - N Frontage to W Mason Reconstruction
5	Larsen Road Bridge - Construction
6	Taylor Street over Beaver Dam Creek - Expansion Joints
7	West Mason St over Beaver Dam Creek - Overlay
8	West Mason Street over Beaver Creek - Scour
9	Muir Park - Parking Lot Replacement
10	West Side Trail - Construction Bond St to City Limits
11	Murphy Park - 1/2/ Playground Replacement
12	Colburn Park - Phase II Ball Field Renovations
13	Colburn Park - Playground Replacement
14	Beaumont Park - 1/2 Playground Replacement
15	Perkins Park - Landscaping/Disk Golf Improvements
16	Perkins Park - Ball Field Lighting/Hockey Renovati
17	Perkins Park - East Parking Lot Replacement
18	Mather Heights Park - Playground Replacement
19	Mather St - Gray St to Locust St
20	13th Street - W Mason to 9th St
21	13th St - W Mason to Howard Reconstruction
22	School Pl - 13th to Oak Reconstruction
23	Woodlawn Ave - Shawano to Dousman Reconstruction
24	Reed St - Oxford to Allard Reconstruction
25	Oxford Ave - Dousman to Reed Reconstruction
26	Division St - Norwood to Northern Reconstruction
27	Elmore St - N Chestnut to Gray Reconstruction
28	S Maple Ave - Mather to Phoebe St
29	S Maple Ave - Kellog to Mather
30	S Maple Ave - Walnut to Kellog
31	Howard Ave - Ashland to Oakland Reconstruction
32	School Pl - S Ashland to W Cul de sac Reconst.
33	Oakland Ave - Howard to Seymour Ct Reconstruction
34	Seymour Park West Stormwater Facility - Construction
35	Seymour Park - East Playground Replacement
36	Tank Park - 1/2 Playground Replacement
37	Asland Ave Over 5th - Expansion Joints
38	Ashland Ave Bridge - CNN to 6th Rehab Design
39	Ashland Ave Bridge - CNN to 6th Rehab Design
40	S Maple Ave - 9th to N Termini
41	4th St - Broadway to S Maple St Reconstruction
42	Arndt Street - Broadway to Pearl
43	Arndt St - Pearl to East Termini
44	Bridge St - Broadway to East Termini
45	Pearl St - Walnut to South Termini
46	Main Street over Fox River - Expansion Joints
47	St. Johns Park - Playground Replacement
48	Cass St - Madison to Monroe Reconstruction
49	Spring St - Madison to Monroe Reconstruction
50	Congress St - Madison to Monroe
51	Emelie St - S Webster to Roosevelt
52	S Roosevelt St - Eliza to Grignon
53	Green Bay Metro Transit
54	Brisk Park - Playground Replacement
55	Nicolet Park - 1/2 Playground Replacement
56	Main Street over East River - Expansion Joints
57	N Irwin Ave - St Claire to North Termini
58	Joannes/ East High - Parking Lot Replacement
59	Joannes Park - Gutter/Slide Tower Replacement
60	Joannes Park - Skate Park Modifications
61	Joannes Park - Skate Park Improvements Engineering
62	East River Trail - Repave West Grignon to Goodell
63	Anne Sullivan Park - Playground Replacement
64	Farlin Park - Playground Replacement
65	Berner St - N Irwin to N Webster
66	Wildlife Sanctuary - Fencing Replacement
67	Wildlife Sancturay - 4K Exploratory and Dock
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69	Henry Street - Bridge Overlay Design
70	Danz Park - Playground Replacement
71	Danz Ave over Baird Creek - Bridge Rehab Design
72	Danz Ave over Baird Creek - Bridge Rehab/Construction
73	Olde Preble Park - New Playground Walk
74	Edison Park - Tennis Courts to Pickle Ball Courts
75	Triangle Hill Park - Parking Lot Expansion
76	Baird Creek - Foot Bridge Concrete Repair/Paint
77	Finger Rd - Challenger to Superior
78	Grandview Bridge - Replacement (2024 & 2025)
79	Joliet Park - Parking Lot Paving/Shorline Improvem
80	Barina Creek Dredging

FIGURE 3
PUBLIC PROPERTY OPPORTUNITIES
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

Source: Robert E. Lee & Associates, Inc., Brown County, City of Green Bay
Aqualis

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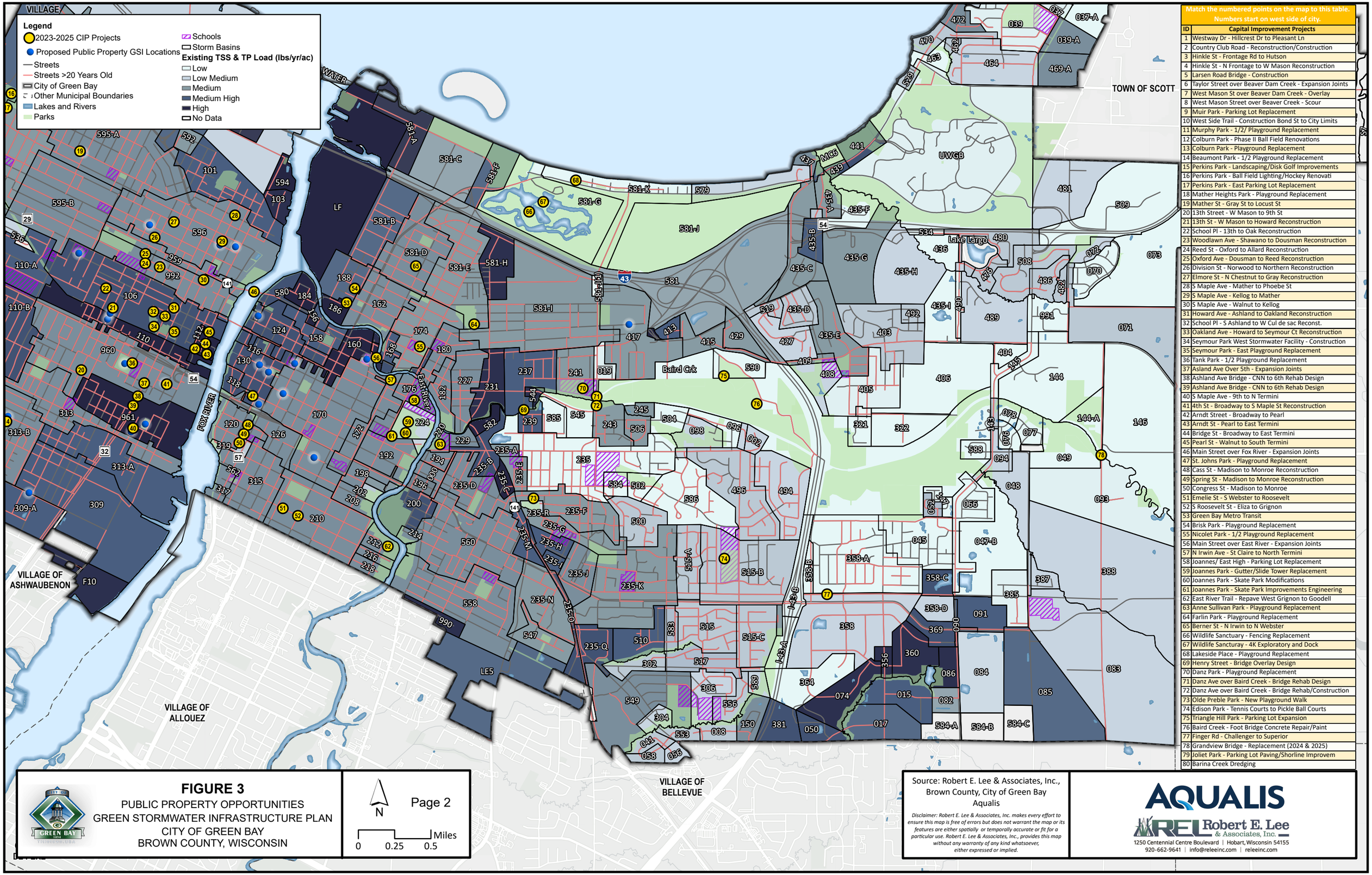

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FIGURE 3
PUBLIC PROPERTY OPPORTUNITIES
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

N
Page 2
0 0.25 0.5 Miles

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Legend

- 2023-2025 CIP Projects
- Proposed Public Property GSI Locations
- Streets
- Streets >20 Years Old
- City of Green Bay
- Other Municipal Boundaries
- Lakes and Rivers
- Parks
- Schools
- Storm Basins

Existing TSS & TP Load (lbs/yr/ac)

- Low
- Low Medium
- Medium
- Medium High
- High
- No Data

TOWN OF SCOTT

TOWN OF HUMBOLDT

UWGB

Lake Largo

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FIGURE 3

PUBLIC PROPERTY OPPORTUNITIES
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

N

Page 3

0 0.25 0.5 Miles

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Legend

- Major and Minor Outfalls
- Common Points of Flooding
- Wetlands < 1 Acre
- Storm Sewers
- Streets
- Private Storm Sewers
- Storm Water Ponds
- Lakes and Rivers
- Wetlands > 1 Acre
- Common Flooding Areas
- City of Green Bay
- Other Municipal Boundaries

Flooding Areas Per Storm Basin

- No Recorded Flooding Area
- 1 Area
- 2 Areas
- 3 Areas
- 5 Areas
- Storm Basins
- Neighborhood Associations

VILLAGE OF HOWARD
VILLAGE OF HOBART
VILLAGE OF ASHWAUBENON
JOURNEY'S END
THREE SISTERS
PACKERLAND
TIMBERLAND
FRITSCH PARK
KING OF ARMS
WOODLANDS
MACARTHUR HEIGHTS
JOHN MUIR PARK
FIREMANS PARK
MURPHY PARK
KELLER PARK
PERKINS PARK AREA
COLBURN
JACKSON
LOMBARDI
OLDE NORWOOD
MARQUETTE PARK
FRANKLIN
WESTERN CORRIDOR
MAPLE ARCHES
MATHER HEIGHTS
NORTHWEST RAILWAY GARDENS
VANCOSTER
FISK ADDITION
FORT HOWARD
LINCOLN
SEYMOUR PARK
TANK PARK
SHIPYARD
DOWNTOWN
WHITNEY PARK
THREE CORNERS
OLDE NORTH
BAY VIEW
NAVARINO
JOANNES PARK
ASTOR
ASTOR EAST
OAK GROVE
STARLITE
FOX RIVER
RIVER

FIGURE 2

FLOODING/DRAINAGE RISK
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

N

Page 1

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- Streets
- Private Storm Sewers
- Storm Water Ponds
- Lakes and Rivers
- Wetlands > 1 Acre
- Common Flooding Areas
- City of Green Bay
- Other Municipal Boundaries

Flooding Areas Per Storm Basin

- No Recorded Flooding Area
- 1 Area
- 2 Areas
- 3 Areas
- 5 Areas
- Storm Basins
- Neighborhood Associations

FIGURE 2

FLOODING/DRAINAGE RISK
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

Page 2

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0 0.25 0.5 Miles

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- City of Green Bay
- Other Municipal Boundaries

Flooding Areas Per Storm Basin

- No Recorded Flooding Area
- 1 Area
- 2 Areas
- 3 Areas
- 5 Areas
- Storm Basins
- Neighborhood Associations

TOWN OF SCOTT

TOWN OF GREEN BAY

TOWN OF HUMBOLDT

NICOLET DRIVE

EAST SHORE DRIVE

EAST SHORE DRIVE EXTENSION

RED SMITH

UWGB MAHON CREEK

LAKE LARGO

BAY HIGHLANDS

COLLEGIATE WAY

MAHON

STONE GARDEN

BAIRD CREEK

Baird Crk

FIGURE 2

FLOODING/DRAINAGE RISK
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

Page 3

N

0 0.25 0.5 Miles

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Legend

- Major and Minor Outfalls
- Common Points of Flooding
- Wetlands < 1 Acre
- Storm Sewers
- Streets
- Private Storm Sewers
- Storm Water Ponds
- Lakes and Rivers
- Wetlands > 1 Acre
- Common Flooding Areas
- City of Green Bay
- Other Municipal Boundaries

Flooding Areas Per Storm Basin

- No Recorded Flooding Area
- 1 Area
- 2 Areas
- 3 Areas
- 5 Areas
- Storm Basins

VILLAGE OF HOWARD

VILLAGE OF HOBART

VILLAGE OF ASHWAUBENON

BELLEVUE

FOX RIVER

East River

FIGURE 2

FLOODING/DRAINAGE RISK
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

N

Page 1

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TOWN OF SCOTT

TOWN OF HUMBOLDT

VILLAGE OF ASHWAUBENON

VILLAGE OF ALLOUEZ

VILLAGE OF BELLEVUE

UWGB

Lake Largo

Baird Crk

FOX RIVER

East River

FIGURE 2

FLOODING/DRAINAGE RISK
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

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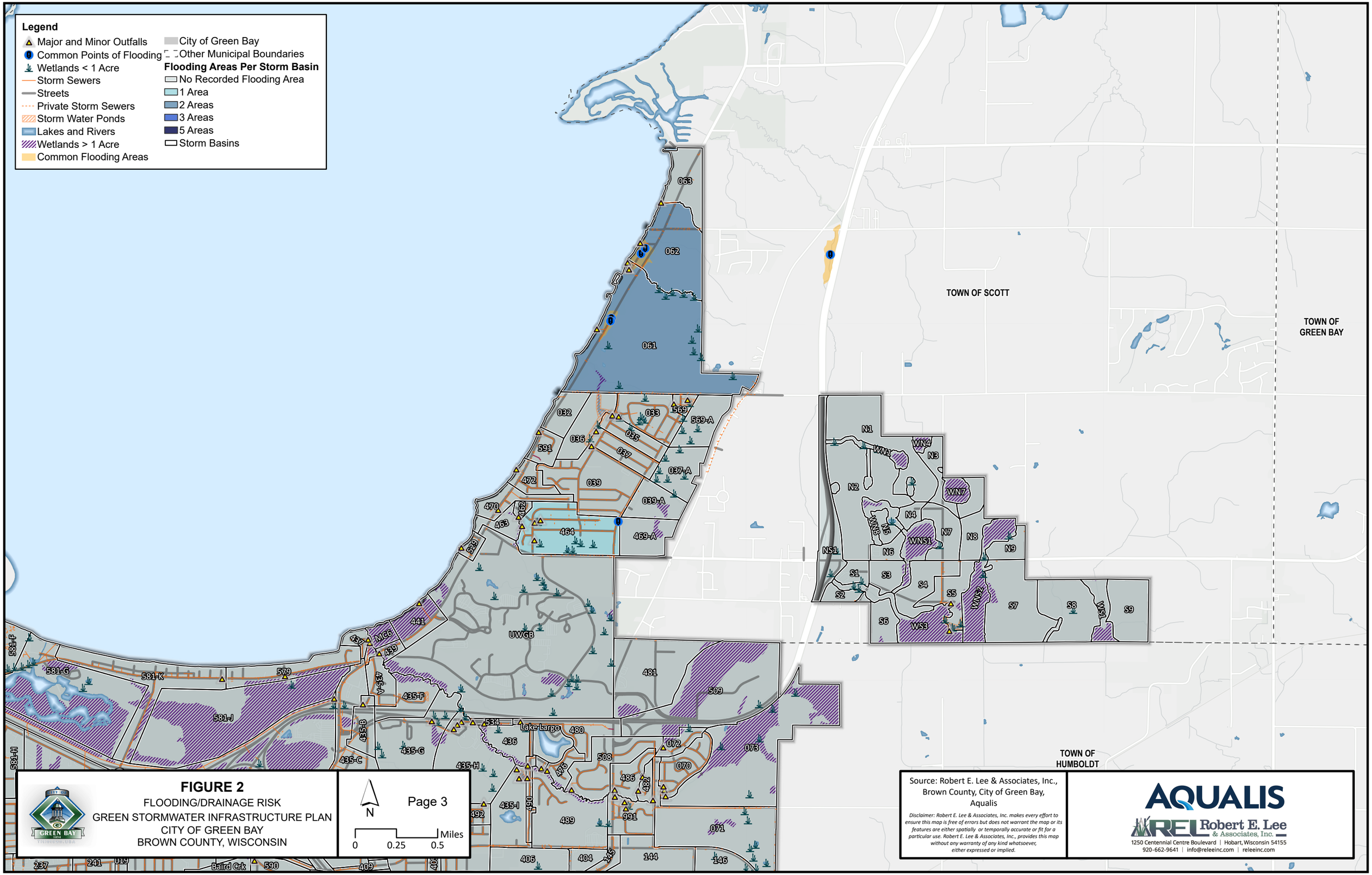

FIGURE 2
FLOODING/DRAINAGE RISK
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

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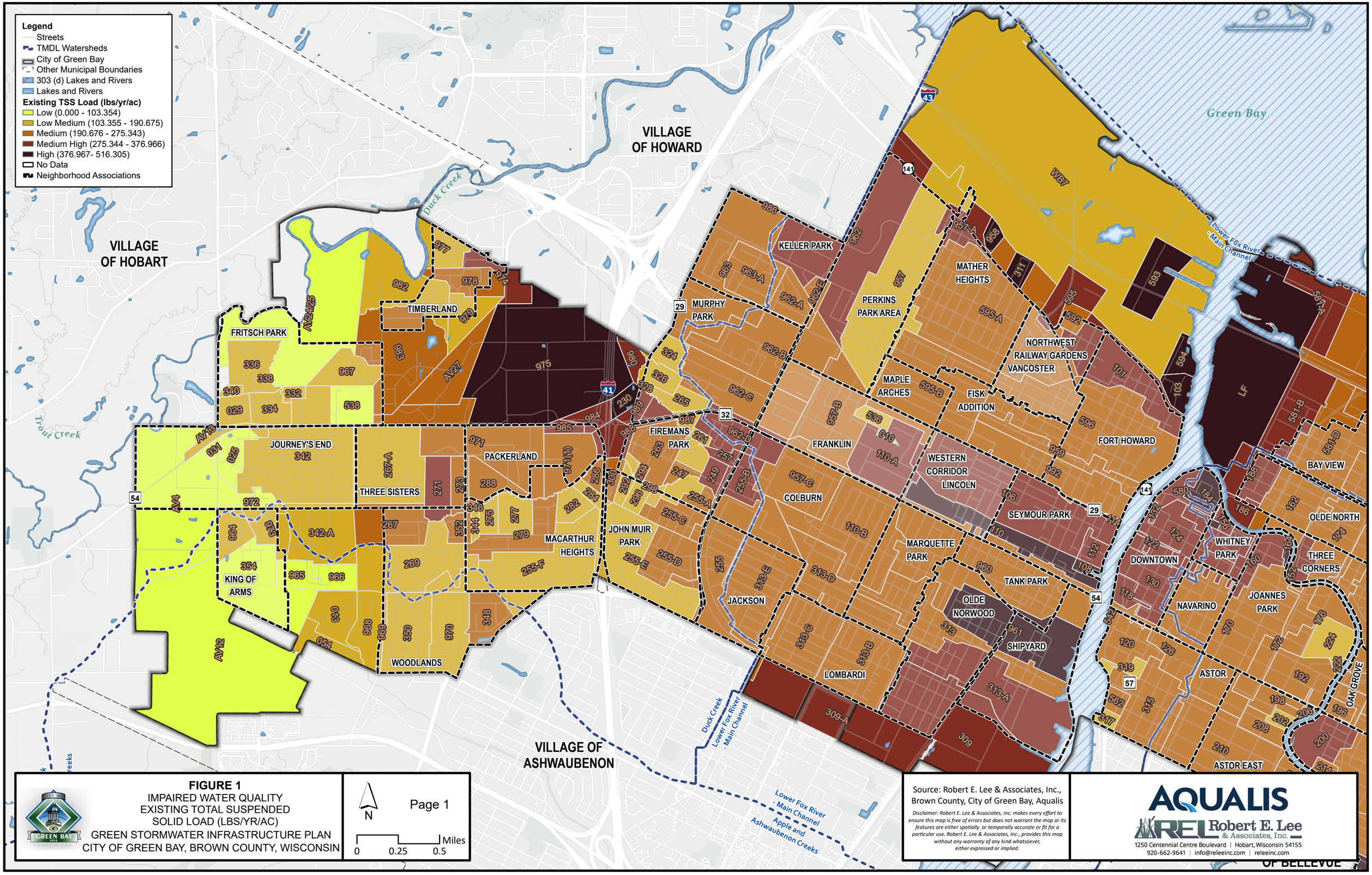

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL SUSPENDED SOLID LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY, BROWN COUNTY, WISCONSIN

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Legend

- Streets
- TMDL Watersheds
- City of Green Bay
- Other Municipal Boundaries
- 303 (d) Lakes and Rivers
- Lakes and Rivers

Existing TSS Load (lbs/yr/ac)

- Low (0.000 - 103.354)
- Low Medium (103.355 - 190.675)
- Medium (190.676 - 275.343)
- Medium High (275.344 - 376.966)
- High (376.967- 516.305)
- No Data
- Neighborhood Associations

Green Bay

Lower Fox River - Main Channel

East Shore Green Bay

East River

Baird Crk

TOWN OF SCOTT

TOWN OF HUMBOLDT

VILLAGE OF ASHWAUBENON

VILLAGE OF ALLOUEZ

VILLAGE OF BELLEVUE

RED SMITH

NICOLET DRIVE

MAHON CREEK

UWGB

EAST SHORE DRIVE

EAST SHORE DRIVE EXTENSION

FISK ADDITION

FORT HOWARD

WESTERN CORRIDOR

LINCOLN

SEYMOUR PARK

TTE PARK

TANK PARK

OLDE NORWOOD

SHIPYARD

BAY VIEW

NORTH BAIRD TRAILER COURT

OLDE NORTH

KENNEDY PARK

WHITNEY PARK

DOWNTOWN

THREE CORNERS

BAIRD

JOANNES PARK

NAVARINO

ASTOR

OLDE PREBLE

NEWBERRY

BAIRD CREEK PARKWAY

ASTOR EAST RIVER

OAK GROVE

STARLITE

PREBLE PARK

IMPERIAL PRIDE

WILDER PARK

LAKE LARGO BAY HIGHLANDS

COLLEGIATE WAY

MAHON

SCHMITT PARK

BAIRD CREEK

STONE GARDEN

ROYAL PONDS PRESERVE

WOODSIDE HEIGHTS

MCAULIFFE PARK

ERIE FINGERS

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL SUSPENDED SOLID LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY, BROWN COUNTY, WISCONSIN

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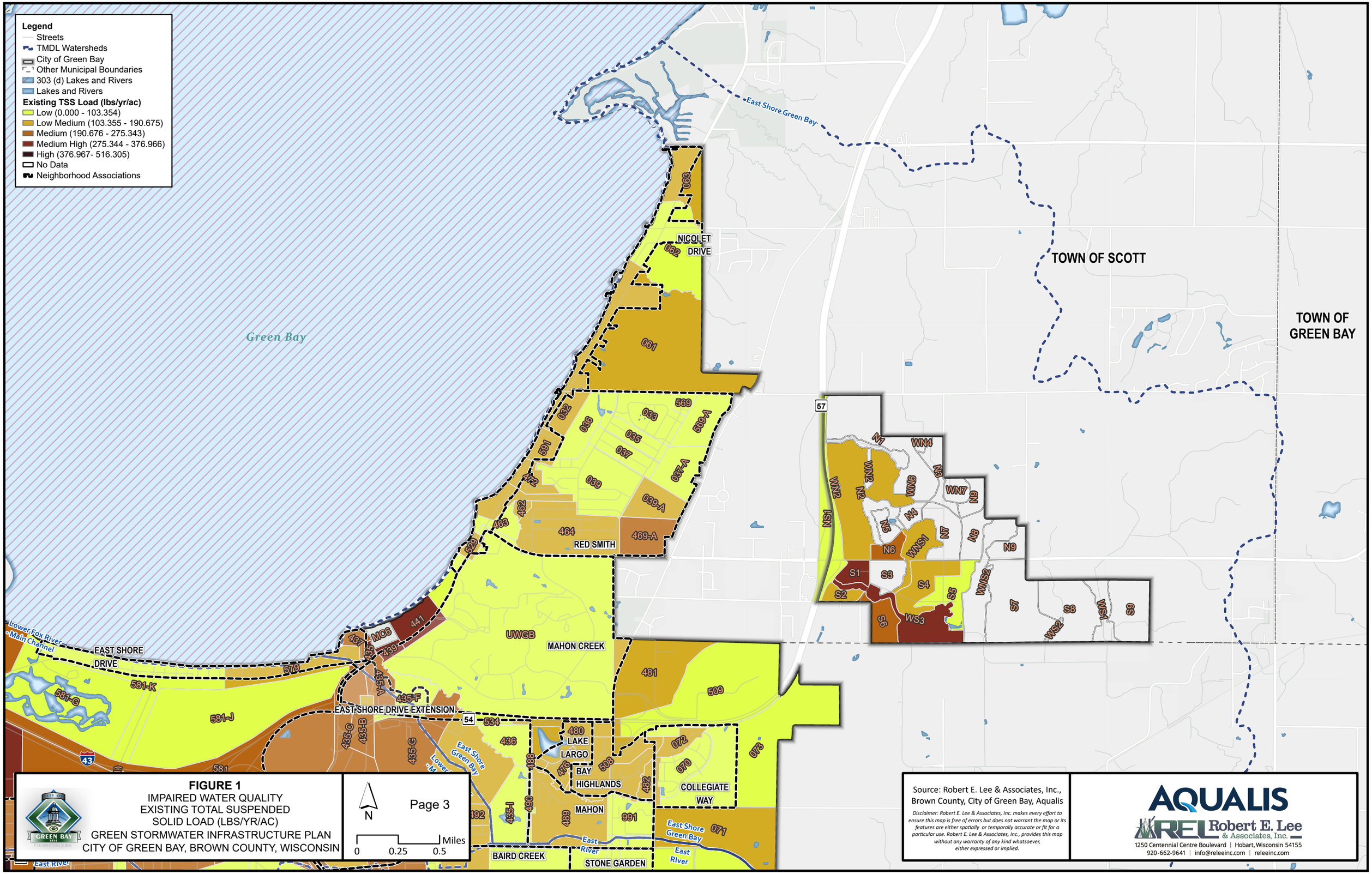

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL SUSPENDED
SOLID LOAD (LBS/YR/AC)
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CITY OF GREEN BAY, BROWN COUNTY, WISCONSIN

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VILLAGE OF HOWARD

VILLAGE OF HOBART

VILLAGE OF ASHWAUBENON

VILLAGE OF BELLEVUE

Green Bay

Duck Creek

Trout Creek

Lower Fox River - Main Channel

Apple and Ashwaubenon Creeks

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL SUSPENDED SOLID LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY, BROWN COUNTY, WISCONSIN

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Green Bay

Lower Fox River - Main Channel

East Shore Green Bay

East River

Baird Crk

Bairdcrka

Fox River

TOWN OF SCOTT

TOWN OF HUMBOLDT

VILLAGE OF ASHWAUBENON

VILLAGE OF ALLOUEZ

VILLAGE OF BELLEVUE

UWGB

LF

LE5

MG6

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL SUSPENDED SOLID LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY, BROWN COUNTY, WISCONSIN

Page 2

N

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- High (376.967- 516.305)
- No Data

Green Bay

East Shore Green Bay

TOWN OF SCOTT

TOWN OF GREEN BAY

UWGB

Lower Fox River - Main Channel

East River

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL SUSPENDED SOLID LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY, BROWN COUNTY, WISCONSIN

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Legend
- Streets
- TMDL Watersheds
- City of Green Bay
- Other Municipal Boundaries
- 303 (d) Lakes and Rivers
- Lakes and Rivers

Existing TP Load (lbs/yr/ac)
- Low (0.000 - 0.373)
- Low Medium (0.373 - 0.556)
- Medium (0.556 - 0.694)
- Medium High (0.694 - 0.813)
- High (0.813 - 1.017)
- No Data
- Neighborhood Associations

VILLAGE OF HOWARD
VILLAGE OF HOBART
VILLAGE OF ASHWAUBENON
Green Bay
Duck Creek
Trout Creek
Lower Fox River - Main Channel
Apple and Ashwaubenon Creeks
KELLER PARK
MURPHY PARK
PERKINS PARK AREA
MATHER HEIGHTS
NORTHWEST RAILWAY GARDENS VANCOSTER
MAPLE ARCHES
FISK ADDITION
FORT HOWARD
FRANKLIN
FIREMANS PARK
WESTERN CORRIDOR LINCOLN
COLBURN
SEYMOUR PARK
MARQUETTE PARK
JOHN MUIR PARK
JACKSON
TANK PARK
OLDE NORWOOD
SHIPYARD
LOMBARDI
DOWNTOWN
WHITNEY PARK
BAY VIEW
OLDE NORTH
THREE CORNERS
JOANNES PARK
NAVARINO
ASTOR
ASTOR EAST
OAK GROVE
TIMBERLAND
FRITSCH PARK
JOURNEY'S END
THREE SISTERS
PACKERLAND
MACARTHUR HEIGHTS
KING OF ARMS
WOODLANDS

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL PHOSPHORUS LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

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Green Bay

Lower Fox River - Main Channel

East Shore Green Bay

East River

Baird Crk

Duck Creek

FISK ADDITION
FORT HOWARD
WESTERN CORRIDOR
LINCOLN
SEYMOUR PARK
TANK PARK
OLDE NORWOOD
SHIPYARD
DOWNTOWN
WHITNEY PARK
NAVARINO
JOANNES PARK
ASTOR
ASTOR EAST RIVER
OAK GROVE
STARLITE
BAY VIEW
NORTH BAIRD TRAILER COURT
OLDE NORTH
KENNEDY PARK
THREE CORNERS
BAIRD
OLDE PREBLE
NEWBERRY
PREBLE PARK
IMPERIAL PRIDE
WILDER PARK
EAST SHORE DRIVE
EAST SHORE DRIVE EXTENSION
NICOLET DRIVE
RED SMITH
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UWGB
LAKE LARGO BAY HIGHLANDS
COLLEGIATE WAY
MAHON
SCHMITT PARK
BAIRD CREEK
STONE GARDEN
BAIRD CREEK PARKWAY
ROYAL PONDS PRESERVE
WOODSIDE HEIGHTS
MCAULIFFE PARK
ERIE FINGERS

TOWN OF SCOTT

TOWN OF HUMBOLDT

VILLAGE OF ASHWAUBENON

VILLAGE OF ALLOUEZ

VILLAGE OF BELLEVUE

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL PHOSPHORUS LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

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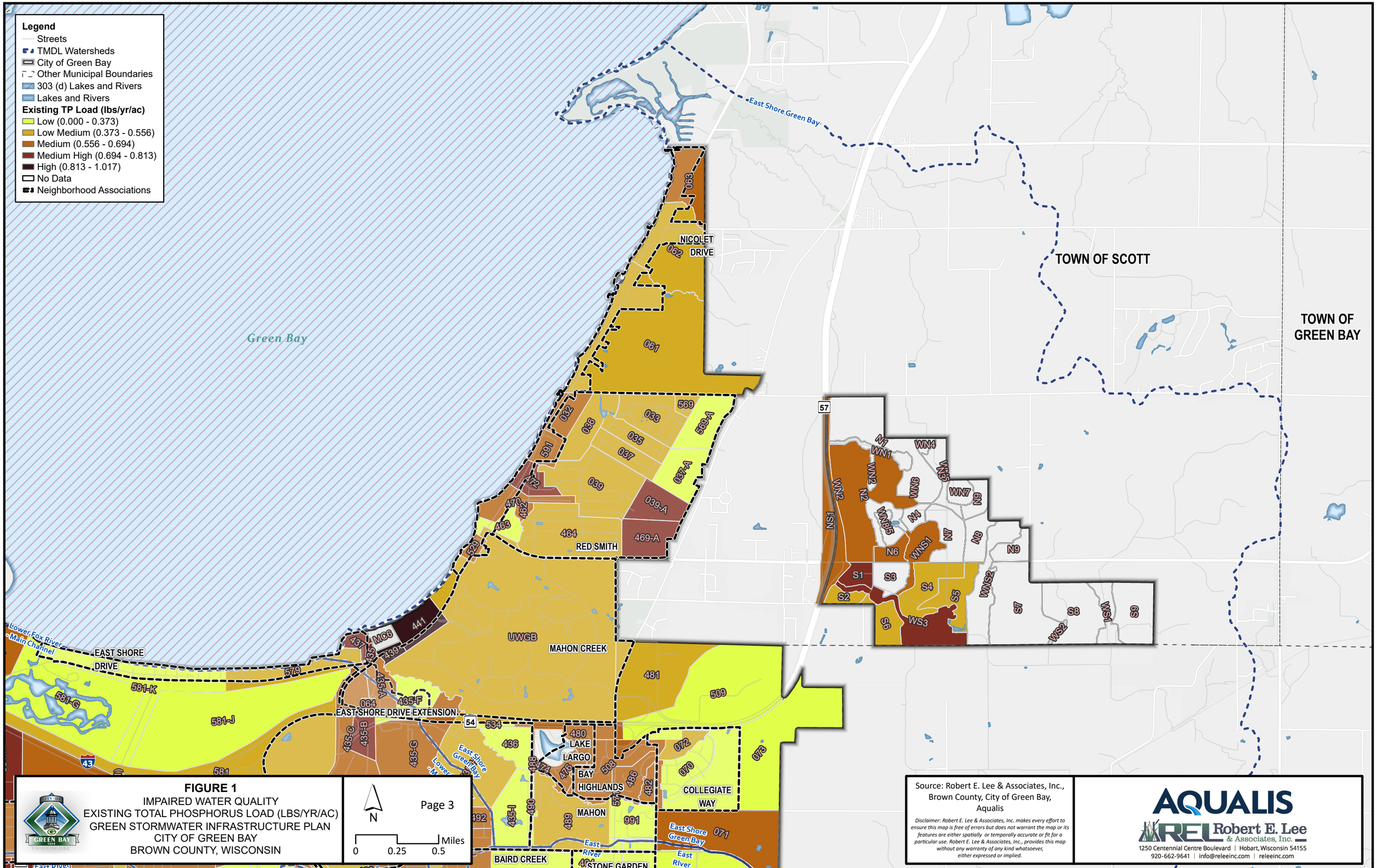

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL PHOSPHORUS LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

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VILLAGE OF HOWARD

VILLAGE OF HOBART

VILLAGE OF ASHWAUBENON

VILLAGE OF BELLEVUE

Green Bay

Duck Creek

Trout Creek

Lower Fox River - Main Channel

Apple and Ashwaubenon Creeks

FIGURE 1

IMPAIRED WATER QUALITY
EXISTING TOTAL PHOSPHORUS LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

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Green Bay

Lower Fox River - Main Channel

East Shore Green Bay

East River

Baird Crk

Baird Creek

TOWN OF SCOTT

TOWN OF HUMBOLDT

VILLAGE OF ASHWAUBENON

VILLAGE OF ALLOUEZ

VILLAGE OF BELLEVUE

UWGB

MCG

LF

LE5

FIGURE 1
IMPAIRED WATER QUALITY
EXISTING TOTAL PHOSPHORUS LOAD (LBS/YR/AC)
GREEN STORMWATER INFRASTRUCTURE PLAN
CITY OF GREEN BAY
BROWN COUNTY, WISCONSIN

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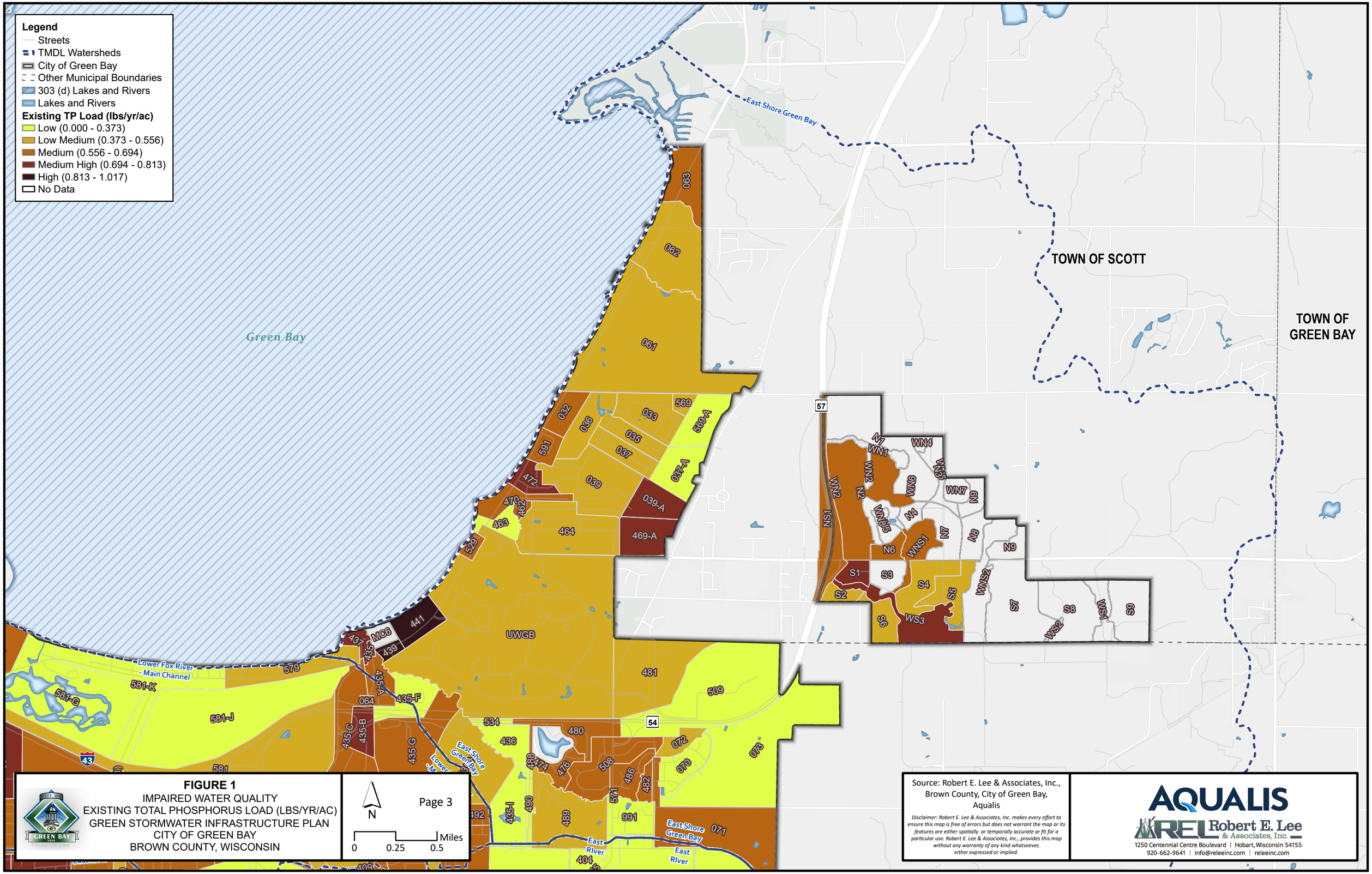

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Site Location:

Lincoln Elementary School,

Green Bay, WI

Parcel ID #3-215

GSI Description:

An outdoor classroom featuring permeable pavement which drains to a bioswale. The bioswale is placed along a drainage path on a playground. The proposed bioswale placement would capture the runoff from the paved and unpaved playground and large sodded area. This will result in better water quality and reduced flooding risk.

Drainage Area = 0.790 acres (34,398 sq. ft.)

Proposed Bioswale Area = 0.082 acres (3,558 sq. ft.)

Approximate Cost = $250,000 + $3,558/year

Annualized Cost = $727.59/ lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.0967 lbs (52.24%)

Total Suspended Solids Reduction =

22.07 lbs (81.76%)

Volume Captured = 19,045 gallons

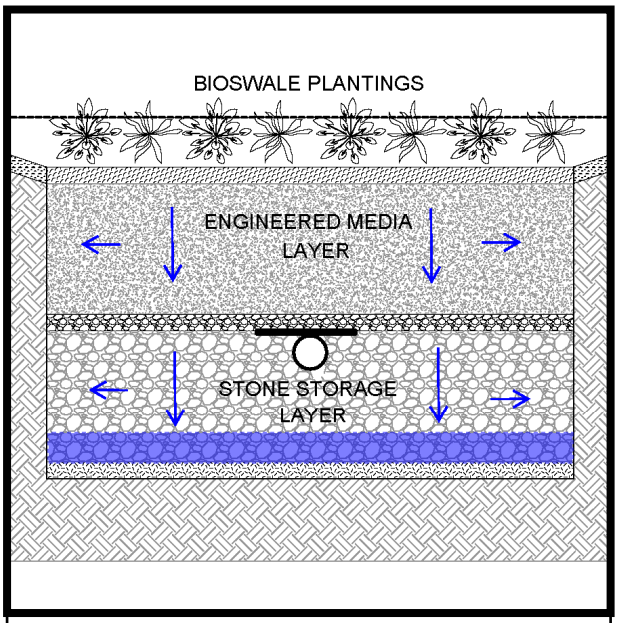


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

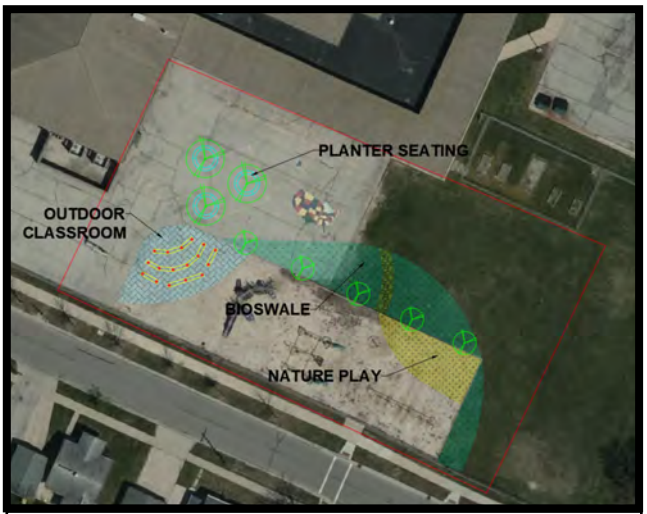


Figure 3: Proposed site with bioswale area shown by green hatch. Additional project element are called out.

Site Location:

Howard St from S Oakland Ave to S Ashland Ave, Green Bay, WI

GSI Description:

Four bioswales placed along a mostly residential street. The proposed bioswales would capture stormwater runoff from the street and residential properties before it reaches storm sewer inlets. The bioswales can aid in reducing flood concerns and improving water quality.

Drainage Area = 0.639 acres (27,835 sq. ft.)

Proposed Bioswale Area = 0.014 acres (620 sqft)

Approximate Cost = $39,000 + $620/year

Annualized Cost = $12.83/ lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.4545 lbs (61.34%)

Total Suspended Solids Reduction =

200.3 lbs (78.96%)

Volume Captured = 3,194 gallons

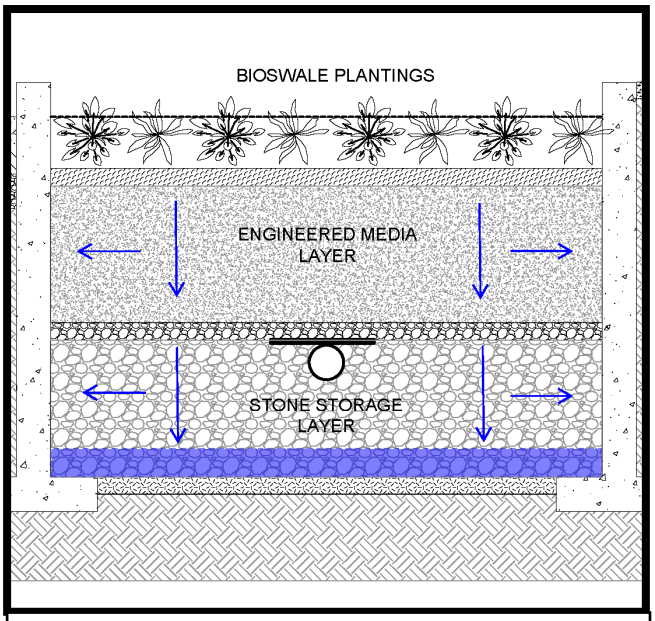


Figure 1: Typical bioswale detail.

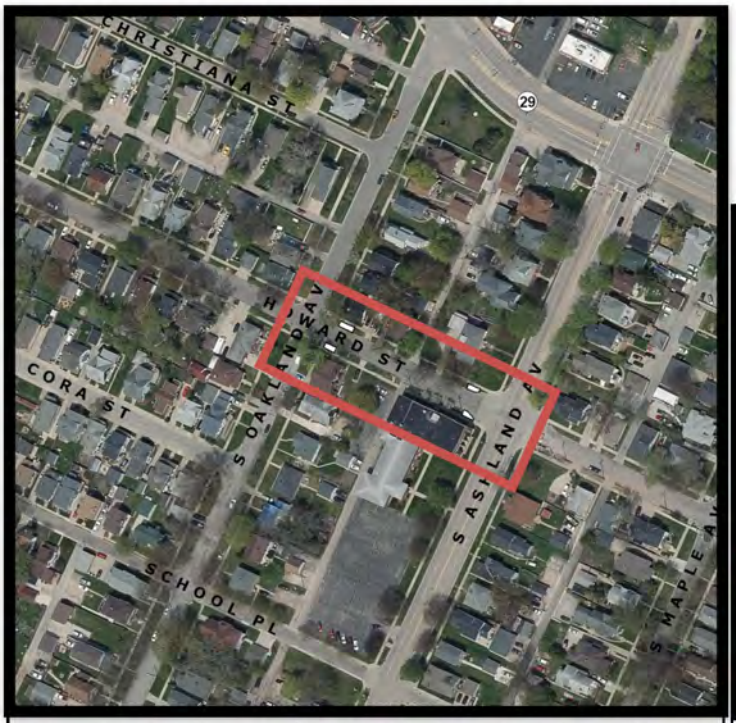


Figure 2: Aerial image of CoGB with the project site outlined.

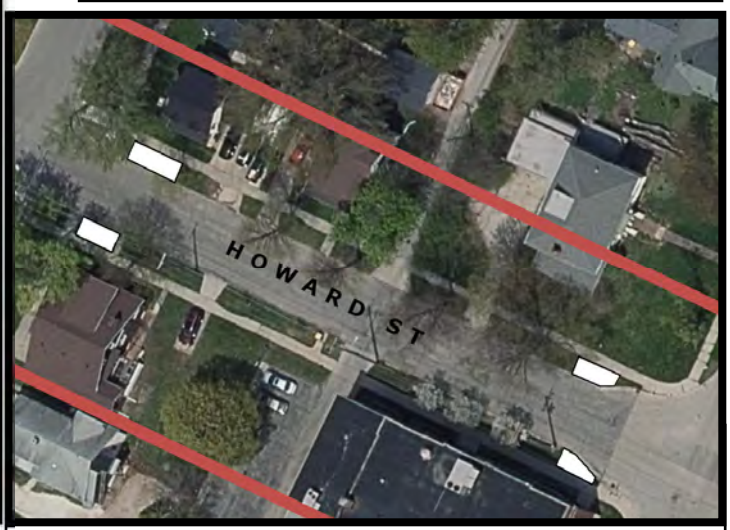


Figure 3: Proposed site with proposed bioswales in white.

Site Location:

13th Avenue & Clinton St,

Green Bay, WI

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 0.6558 lbs (50.41%)

Total Suspended Solids Reduction = 244.2 lbs (72.39%)

Volume Captured = 18,140 gallons

GSI Description:

Two bioswales placed at low points along street. The proposed bioswale placements would capture stormwater runoff from the street, resulting in improved water quality and a reduced flooding risk.

Drainage Area = 1.489 acres (64,840 sq. ft.)

Proposed Bioswale Area = 0.018 acres (800 sq. ft.)

Approximate Cost = $35,000 + $800/year

Annualized Cost = $10.44 / lb TSS reduction

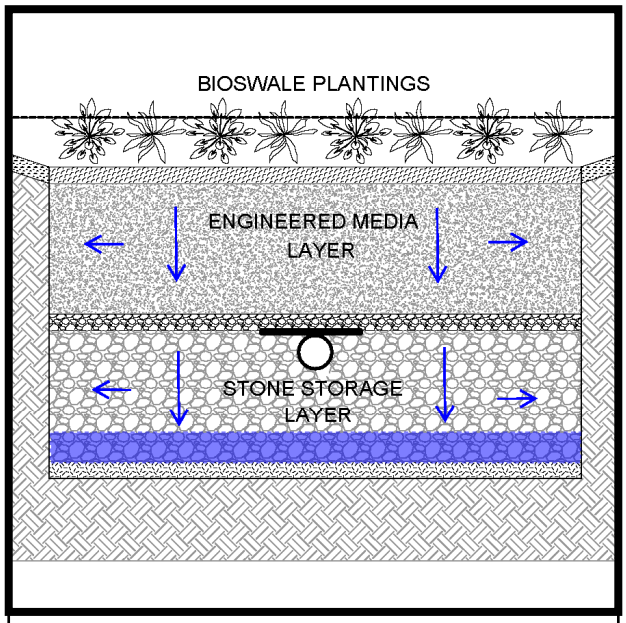


Figure 1: Typical bioswale detail.

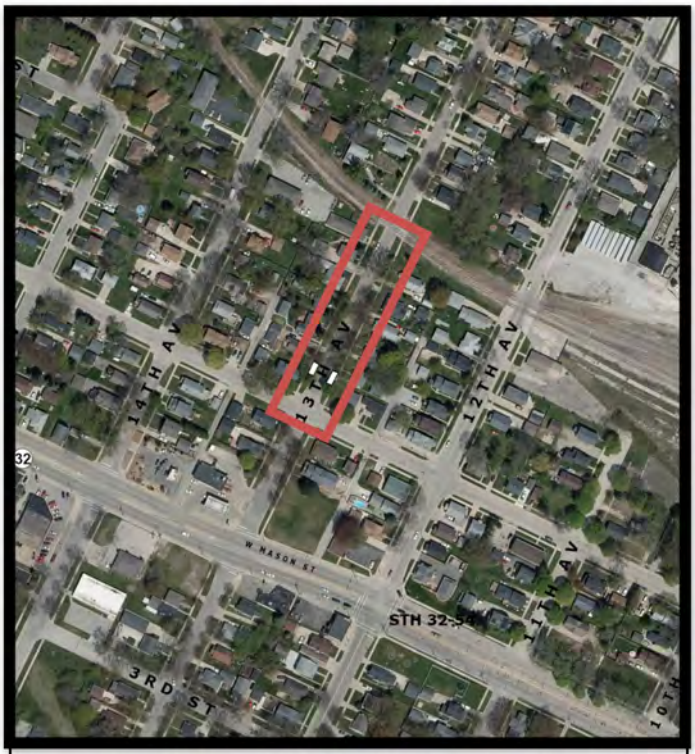


Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site showing bioswale areas as white rectangles.

Site Location:

Leonardo Da Vinci School

Green Bay, WI

GSI Description:

A bioswale placed to intercept runoff from the paved playground and grass open space. Trees and ground cover landscaping added to unvegetated area. The proposed GSI placements would capture runoff and improve water quality and add to outdoor education.

Drainage Area = 0.431 acres (18,780 sq. ft.)

Proposed Bioswale Area = 0.68 acres (2970 sq. ft.)

Proposed Tree Cell Area = 0.008 acres (345 sq. ft.)

Approximate Cost = $85,000 + $3,000/year

Annualized Cost = $83.33 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.2419 lbs (57.25%)

Total Suspended Solids Reduction =

87.0 lbs (79.96%)

Volume Captured = 17,781 gallons

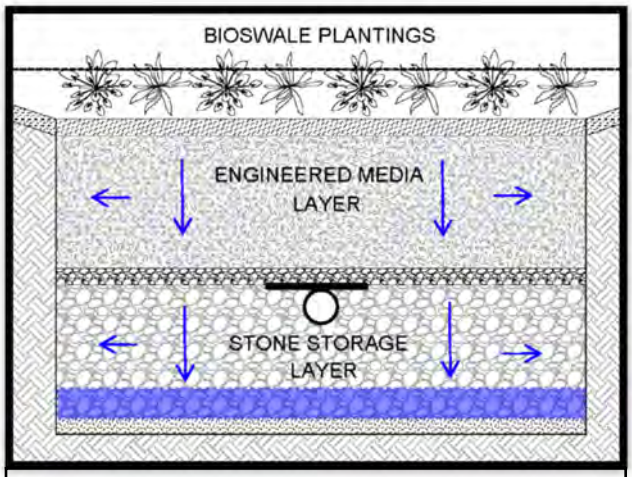


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

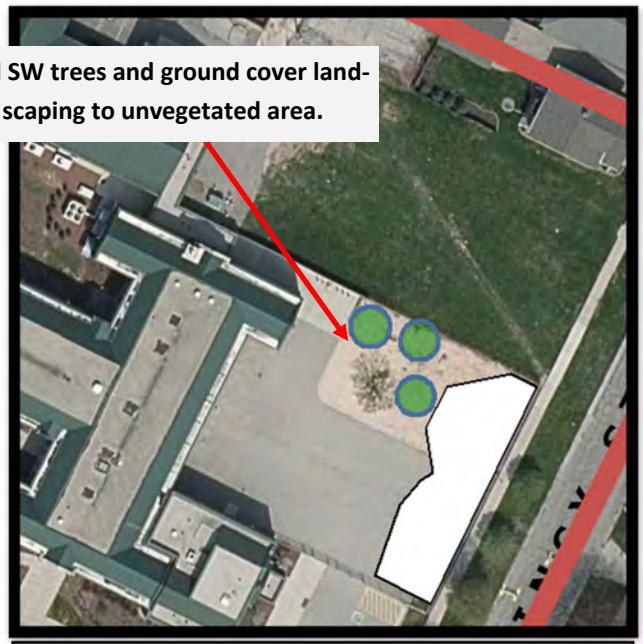


Figure 3: Proposed site with bioswale area shown in white and tree shown by green and blue outlined circles.

Site Location:

N Washington St from Northland Ave to Cherry St, Green Bay, WI

GSI Description:

A bioswale on the side of a street, collecting water through curb cut. The proposed bioswale would capture the stormwater runoff from a part of the street length, resulting in better water quality.

Drainage Area = 0.119 acres (5,170 sq. ft.)

Proposed Bioswale Area = 0.005 acres (200 sq. ft.)

Approximate Cost = $15,000 + $300/year

Annualized Cost =$10.02 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.1632 lbs (75.54%)

Total Suspended Solids Reduction =

104.8 lbs (81.18%)

Volume Captured = 696 gallons

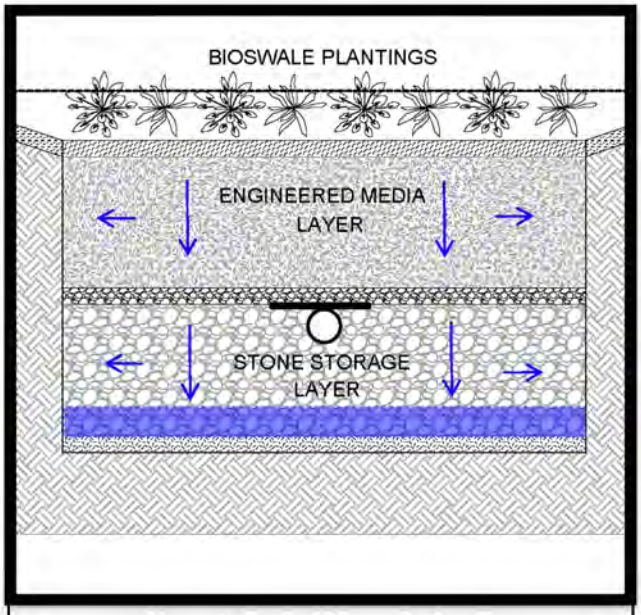


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site showing bioswale area as white rectangles.

Site Location:

S Jefferson St & Stuart St,

Green Bay, WI

GSI Description:

Two bioswales placed at low points along streets. The proposed bioswale placements would capture the stormwater runoff from the street, resulting in better water quality and a reduced flood risk.

Drainage Area = 0.294 acres (12,800 sq. ft.)

Proposed Bioswale Area = 0.01 acre (535 sq.ft.)

Approximate Cost = $27,000 + $535/year

Annualized Cost = $6.99 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.4199 lbs (78.33%)

Total Suspended Solids Reduction =

269.5 lbs (81.26%)

Volume Captured = 2,506 gallons

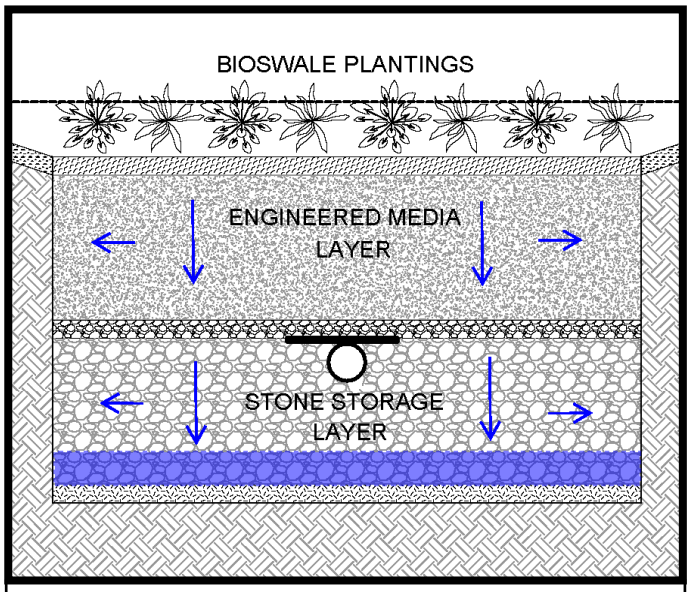


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined in red.

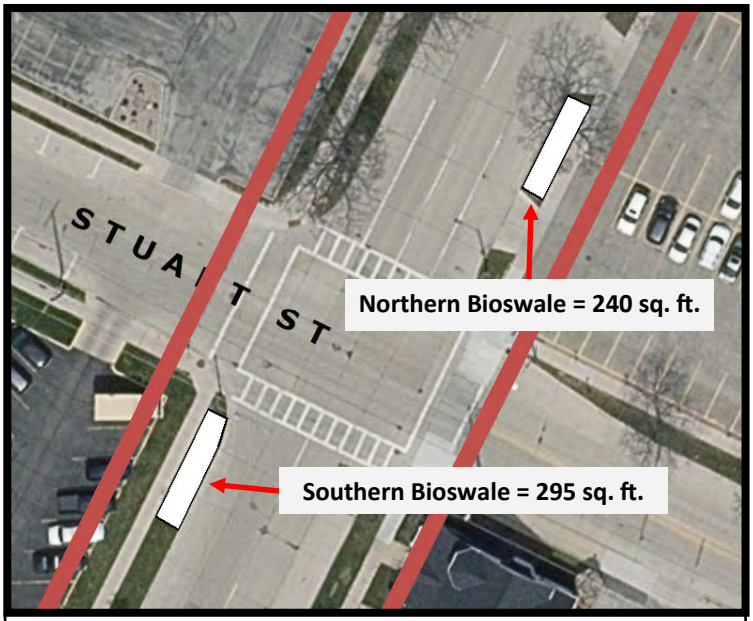


Figure 3: Proposed site with bioswales shown as white rectangles.

Site Location:

S Madison St & Moravian St,

Green Bay, WI

GSI Description:

A bioswale placed along section of S Madison Street. The proposed bioswale placement would capture the runoff from the street, resulting in better water quality and a reduced flood risk.

Drainage Area = 0.192 acres (8350 sq. ft.)

Proposed Bioswale Area = 0.007 acres (305 sq. ft.)

Approximate Cost = $18,000 + $305/year

Annualized Cost = $6.85 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.274 lbs (75.74%)

Total Suspended Solids Reduction =

175.9 lbs (81.15%)

Volume Captured = 1,945 gallons

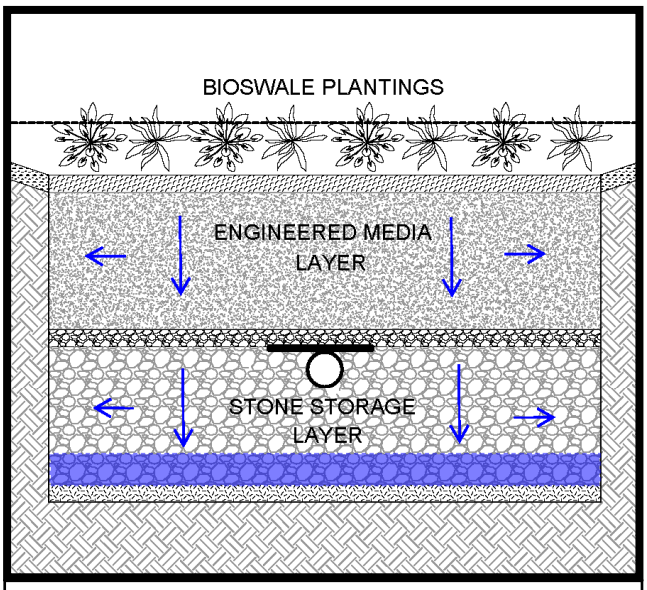


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined in red.

Figure 3: Proposed site with the bioswale shown as a white rectangle.

Site Location:

Howe Elementary School

525 S Madison St, Green Bay, WI

GSI Description:

Two bioswales placed at low points in paved parking areas. A raingarden placed on the side of the building. Permeable pavers for a section of parking lot. The proposed bioswale, raingarden, and permeable pavement placements would capture the stormwater runoff from paved parking and increase greenspace, resulting in reduced flood risk, better water quality and environmental benefits for the school.

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 0.3304 lbs (68.65%)

TSS Reduction = 204.8 lbs (84.04%)

Volume Captured = 16,113 gallons

Drainage Area = 0.570 acres (24,810 sq. ft.)

Proposed Total Bioswale Area = 0.032 acres (1,400 sq. ft.)

Proposed Total PP Area = 0.141 acres (6,130 sq. ft.)

Proposed Total Rain Garden Area = 0.018 acres (800 sq. ft.)

Approximate Cost = $315,000 + $4,865/year

Annualized Cost = $100.66/lb TSS reduction

Figure 1: Aerial image of CoGB with the project site outlined.

Figure 2: Proposed site with bioswales shown as white rectangles, permeable paver area show in in green with black border, rain garden shown in purple, and removed pavement buffer shown in green.

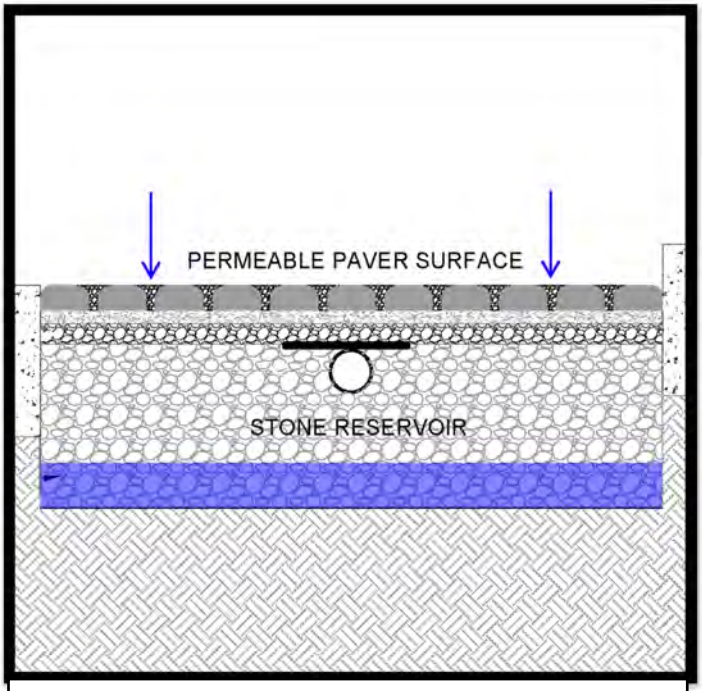


Figure 3: Typical permeable paver detail.

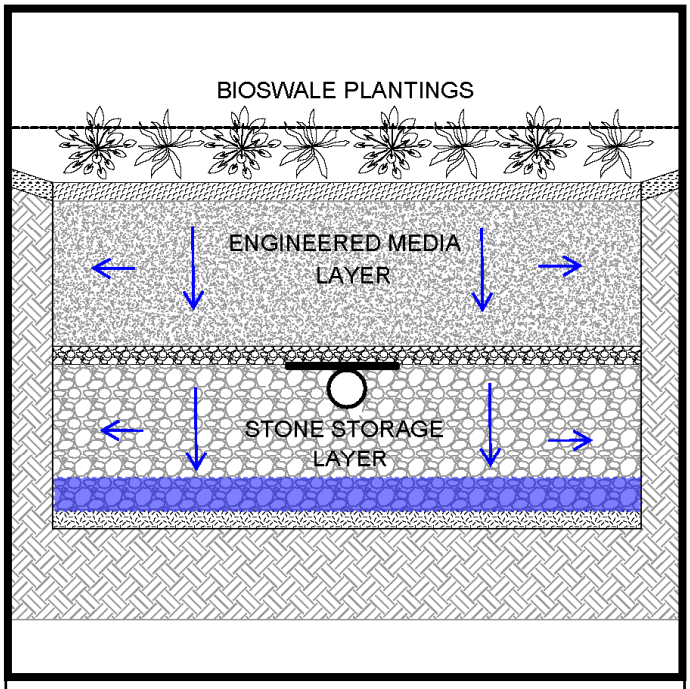


Figure 4: Typical bioswale detail.

Figure 5: Proposed site with permeable paver area shown in green.

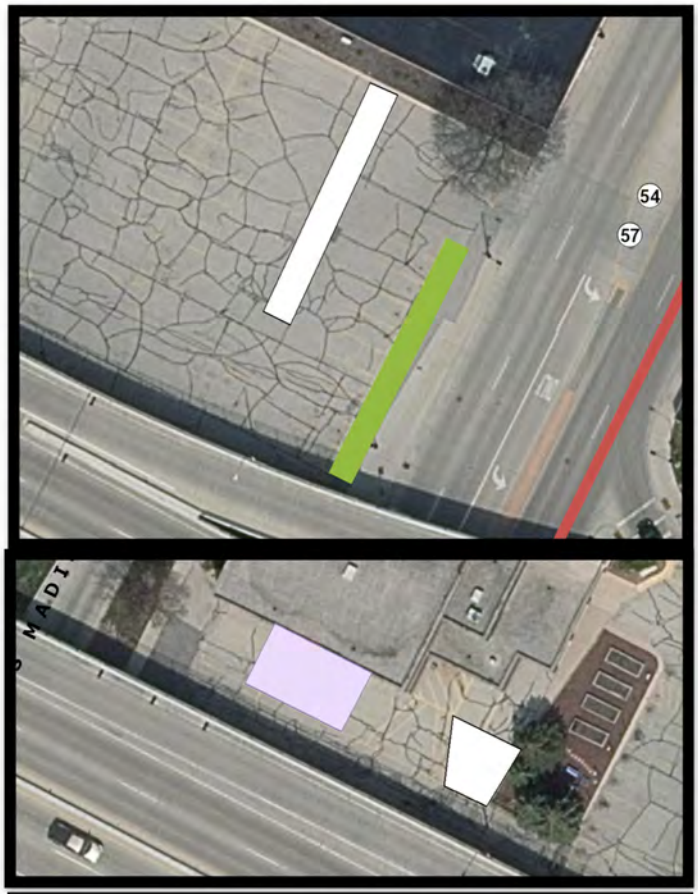


Figure 6: Proposed site with bioswales in white, pavement removal buffer in green, and rain garden in purple.

Site Location:

Dr. Rosa Minoka-Hill School, Green Bay, WI

Parcel ID #14-10

GSI Description:

A rain garden to collect runoff from a paved and un-paved playground. Permeable pavers placed to intercept runoff from the two sections of parking lot.

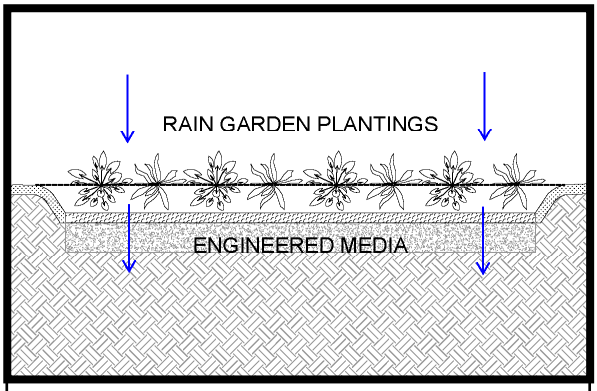


Figure 1: Typical rain garden detail.

Drainage Area = 2.725 acres (118,720 sq. ft.)

Proposed PP Area = 0.15 acres (6,534 sq. ft.)

Proposed Rain Garden Area = 0.007 acres (290 sf)

Approximate Cost = $285,000 + $1,900/year

Annualized Cost = $59.46 / lb TSS reduction

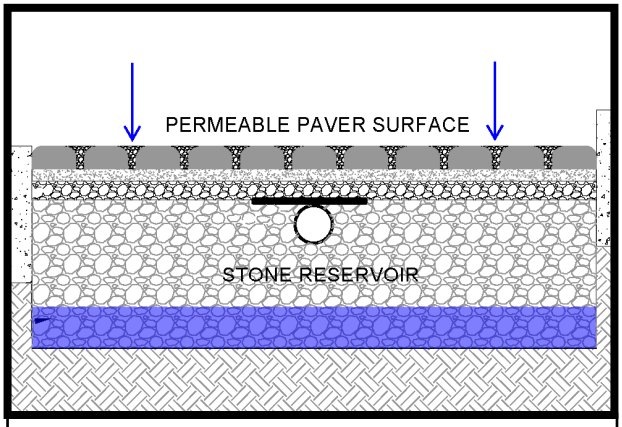


Figure 2: Typical permeable paver detail.

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 0.4371 lbs (66.05%)

Total Suspended Solids Reduction = 271.6 lbs (80.79%)

Volume Captured = 17,071 gallons

Figure 3: Aerial image of CoGB with the project site outlined.

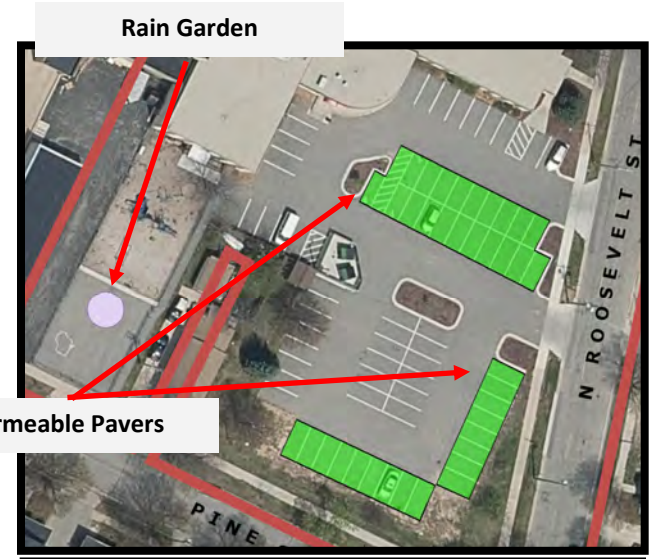


Figure 4: Proposed site with permeable paver areas denoted in green and rain garden area denoted in purple.

Site Location:

S Quincy St from Chicago St to Stuart Street,

Green Bay, WI

GSI Description:

Three bioswales placed before inlets along the street. The proposed bioswale placements would capture stormwater runoff from the street, resulting in improved water quality.

Drainage Area = 3.163 acres (137,790 sq. ft.)

Proposed Bioswale Area = 0.018 acres (780 sq. ft.)

Approximate Cost = $39,000 + $780/year

Annualized Cost = $5.48/ lb TSS removal

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 1.301 lbs (45.36%)

Total Suspended Solids Reduction = 498.3 lbs (63.74%)

Volume Captured = 37,836 gallons

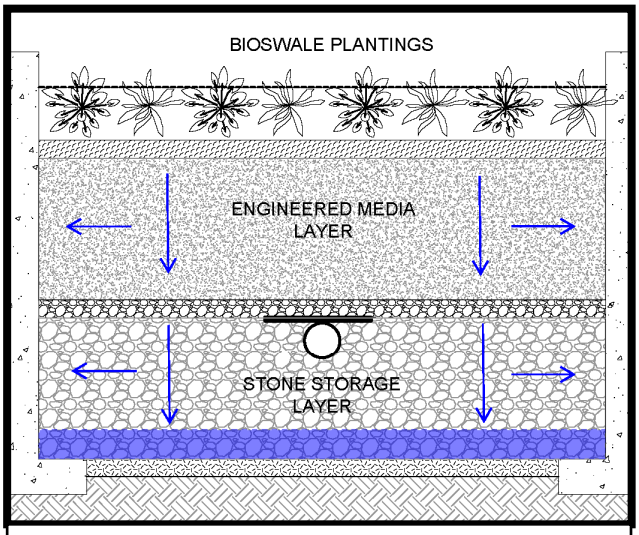


Figure 1: Typical bioswale detail.

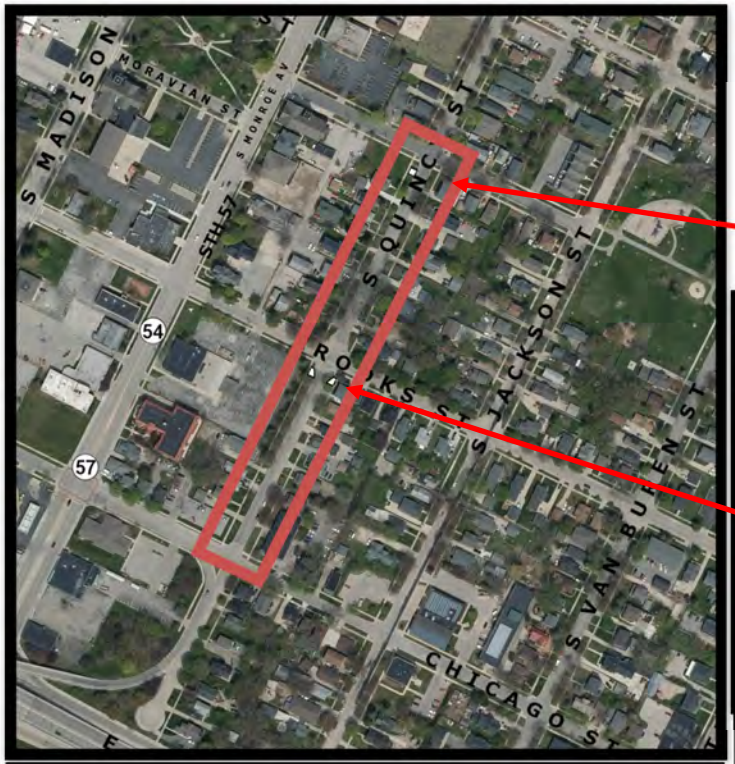


Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site showing bioswale areas as white rectangles.

Site Location:

Cass St at S Clay St & S Roosevelt St,

Green Bay, WI

GSI Description:

Four bioswales placed before inlets along the street. The proposed bioswale placements would capture stormwater runoff from the street, resulting in improved water quality.

Drainage Area = 4.558 acres (198,540 sq. ft.)

Proposed Bioswale Area= 0.033 acres (1440 sq. ft.)

Approximate Cost = $62,500 + $1,440 / year

Annualized Cost = $6.02 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

1.998 lbs (49.13%)

Total Suspended Solids Reduction =

757.7 lbs (68.82%)

Volume Captured = 59,216 gallons

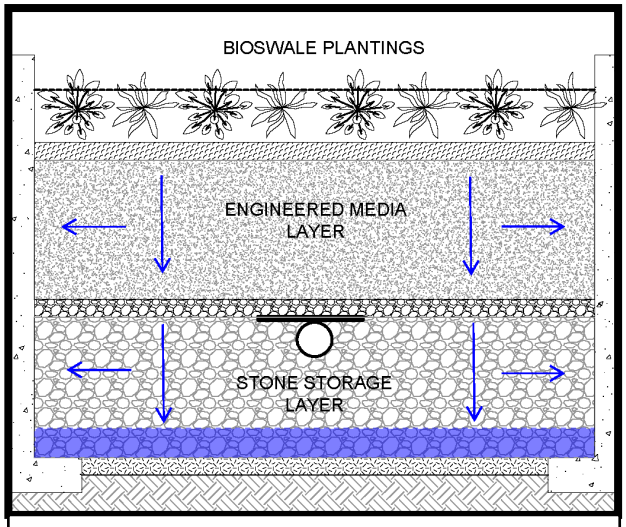


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

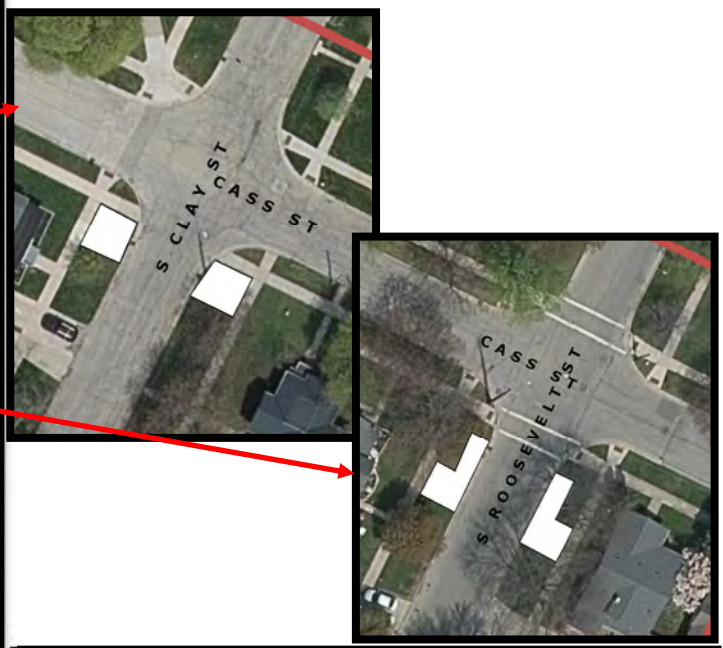


Figure 3: Proposed site showing bioswale areas as white rectangles.

Site Location:

Packerland Drive, South of Mason Street

Green Bay, WI

GSI Description:

One section of permeable pavement (PP) that would be installed in the northbound parking lane. The PP will capture, treat, and temporarily store runoff before conveying flows to the existing storm sewer. This process would improve the stormwater quality in this high traffic area.

Drainage Area = 0.85 acres (36,850 sq. ft.)

Proposed PP Area = 0.07 acres (3,160 sq. ft.)

Approximate Cost = $150,000 + $1,580/year

Annualized Cost = $10.97 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

1.322 lbs (76.97%)

Total Suspended Solids Reduction =

828 lbs (82.06%)

Volume Captured = 2,506 gallons

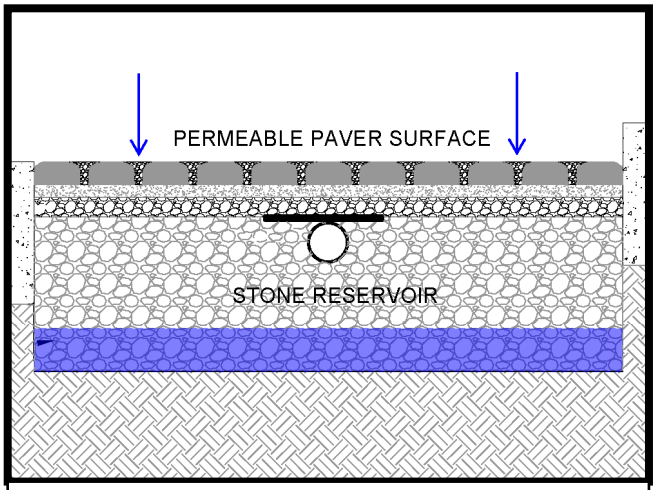


Figure 1: Typical permeable pavement detail.

Figure 2: Aerial image of the CoGB with the proposed project site outlined in red.

Figure 3: Proposed site with PP area shown as a green rectangle.

Site Location:

Southwest High School

Packer Dr, Green Bay, WI

GSI Description:

Two bioswales to be placed in medians in the northern parking lot. Another bioswale placed at the western side the of the northern parking lot, to capture stormwater at a low point. The proposed bioswale placements would capture the stormwater runoff from paved parking, resulting in better water quality.

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

1.734 lbs (67.17%)

Total Suspended Solids Reduction = 1,215 lbs (78.24%)

Volume Captured = 156,059 gallons

Drainage Area = 3.363 acres

(146,490 sq. ft.)

Proposed Total Bioswale Area =

0.178 acres (7,755 sq. ft.)

Approximate Cost = $235,000 + $5,000/year

Annualized Cost = $13.79 / lb TSS reduction

Figure 1: Aerial image of CoGB with the project site outlined.

Figure 2: Proposed site with bioswales shown as by white rectangles.

Site Location:

Lombardi Ave from Gross St to S Northwood Ave, Green Bay, WI

GSI Description:

Ten bioswales placed along street. The proposed bioswale placements would capture the storm-water runoff from the street, resulting in better water quality.

Drainage Area = 0.717 acres (31,230 sq. ft.)

Proposed Bioswale Area = 0.07 acre (2,900 sq.ft.)

Approximate Cost = $140,000 + $2,900year

Annualized Cost = $6.94 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

2.266 lbs (92.71%)

Total Suspended Solids Reduction =

1427 lbs (94.48%)

Volume Captured = 14,490 gallons

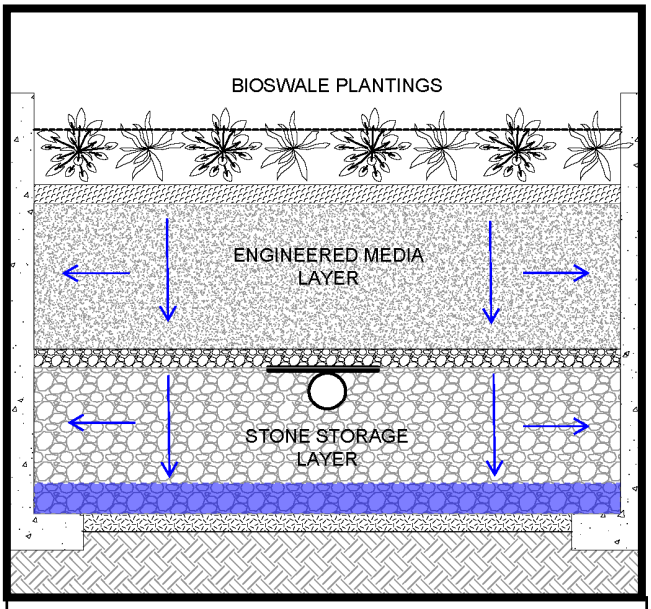


Figure 1: Typical bioswale detail.

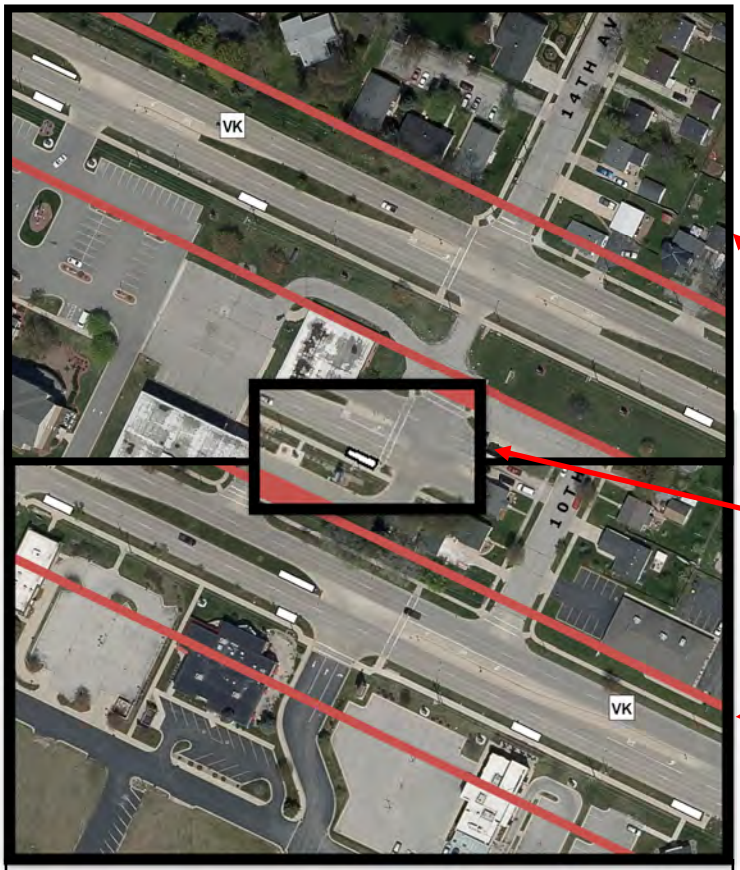


Figure 3: Proposed site with bioswales shown as white rectangles.

Figure 2: Aerial image of CoGB with the project site outlined.

Site Location:

Liberty St from S Oneida St to Sue Lane,

Green Bay, WI

GSI Description:

Bioswales placed at low points along street. The proposed bioswale placements would capture the runoff from the street, resulting in better water quality.

Drainage Area = 3.069 acres (133,670 sq. ft.)

Proposed Bioswale Area = 0.043 acres (1860 sq. ft.)

Approximate Cost = $85,000 + $1,860year

Annualized Cost = $9.56 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

1.744 lbs (59.28%)

Total Suspended Solids Reduction =

639.3 lbs (78.36%)

Volume Captured = 35,076 gallons

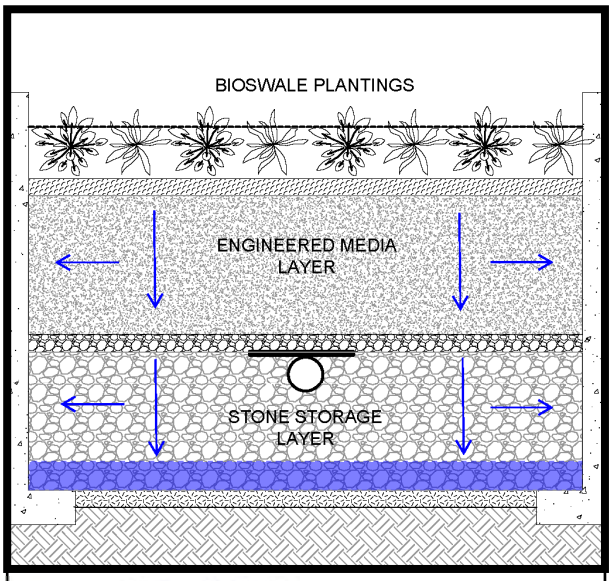


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

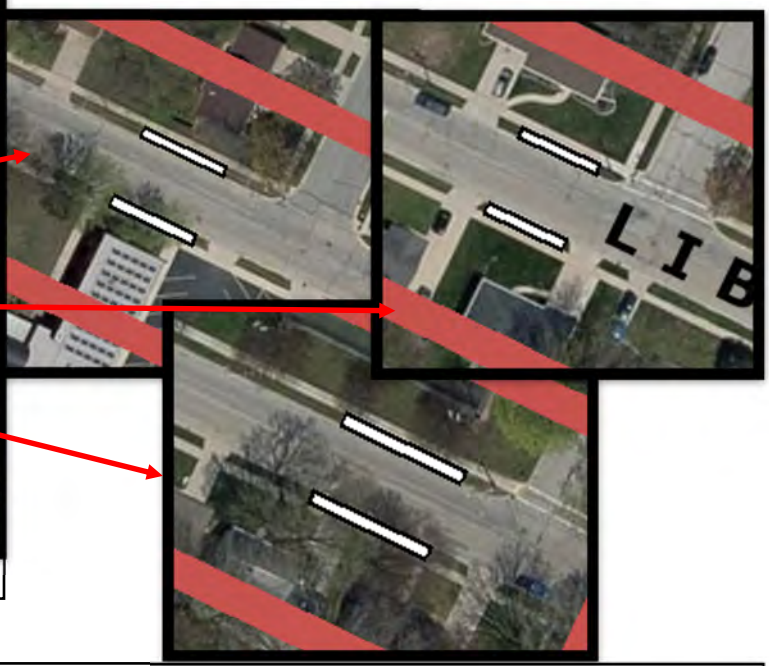


Figure 3: Proposed site with bioswale areas denoted by white rectangles.

Site Location:

Biemeret St & Sue Lane,

Green Bay, WI

GSI Description:

Bioswales placed at low points along street. The proposed bioswale placements would capture the stormwater runoff from the street, resulting in better water quality.

Drainage Area = 1.057 acres (46,035 sq. ft.)

Proposed Bioswale Area = 0.015 acres (675 sq. ft.)

Approximate Cost = $30,000 + $675/year

Annualized Cost = $8.04/ lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.5479 lbs (58.77%)

Total Suspended Solids Reduction =

270.6 lbs (78.67%)

Volume Captured = 10,779 gallons

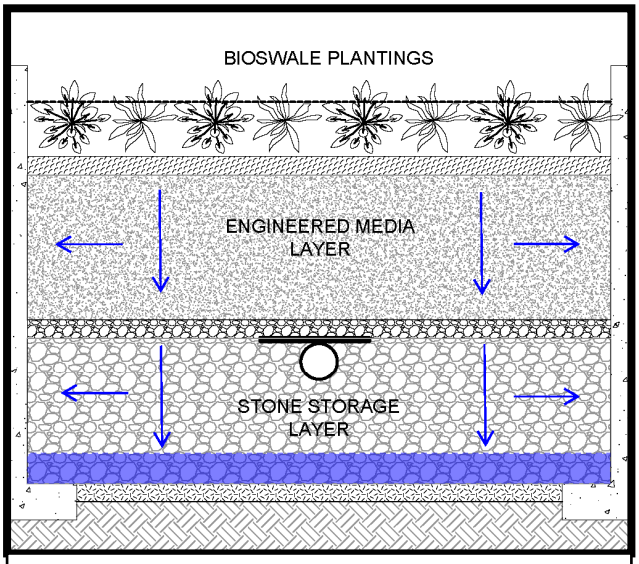


Figure 1: Typical bioswale detail.

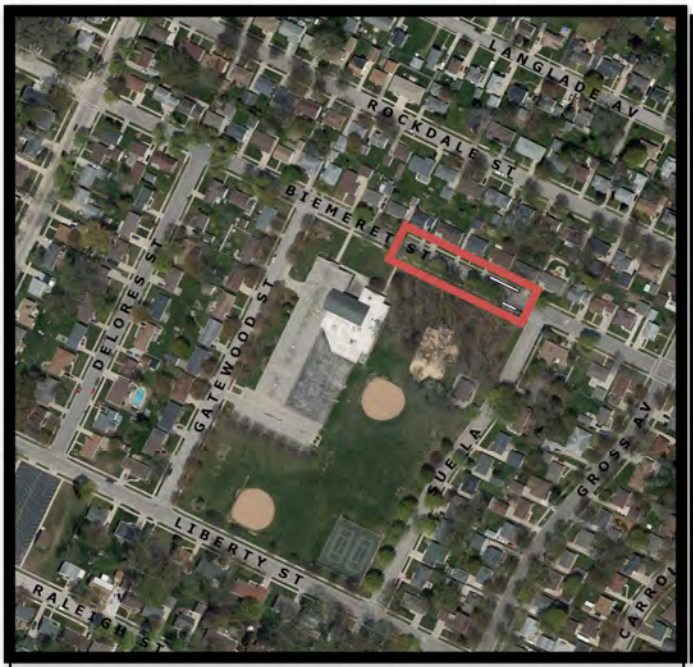


Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site. The bioswales are shown as white rectangles.

Site Location:

2300—2500 Farlin Avenue, Green Bay, WI

GSI Description:

A series of 3 bioswales installed in the ROW along the southern edge of Farlin Avenue would maximize pollutant reduction while minimizing the footprint. The proposed locations for the bioswales have been chosen due to their proximity to the catch basins and distance from other utilities.

Drainage Area = 0.43 acres (18,730 sq. ft.)

Proposed Bioswale Areas = 0.03 acres (1,500 sq.ft)

Approximate Cost = $67,500 + $1,500/year

Annualized Cost = $20.47/ lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 0.5490 lbs (62.32%)

Total Suspended Solids Reduction =

238.1 lbs (80.32%)

Volume Captured = 6,112 gallons

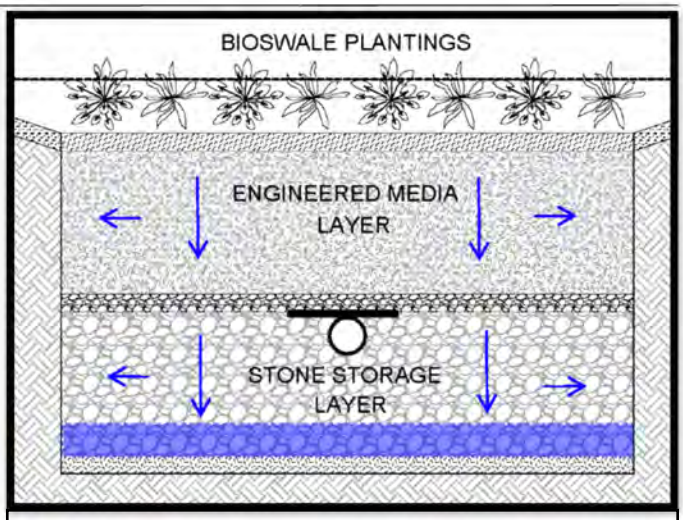


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined .

Figure 3: Proposed site with the bioswale areas shown as a white rectangles.

Site Location:

Mather Heights Park, Green Bay, WI

Parcel # 18-1366

GSI Description:

Underground storage beneath playground area. A bioswale placed to intercept runoff from the park's open space and baseball field. The proposed storage and bioswale placements would capture runoff from large grass areas of the park, resulting in better water quality.

Drainage Area = 2.73 acres (118,720 sq. ft.)

Proposed Bioswale Area = 0.15 acres

(6,710 sq. ft.)

Proposed Storage Area = 0.236 acres

(10,280 sq. ft.)

Approximate Cost = $260,000 + $4,250/year

Annualized Cost = $18.63 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.7377 lbs (55.13%)

Total Suspended Solids Reduction =

159.3 lbs (85.42%)

Volume Captured = 90,469 gallons

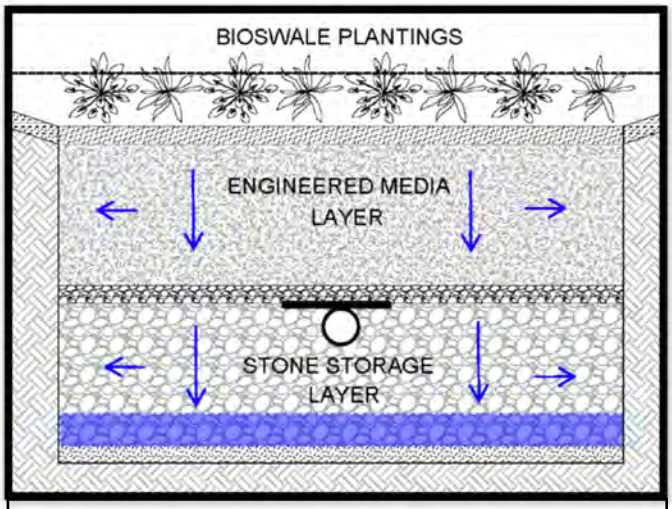


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

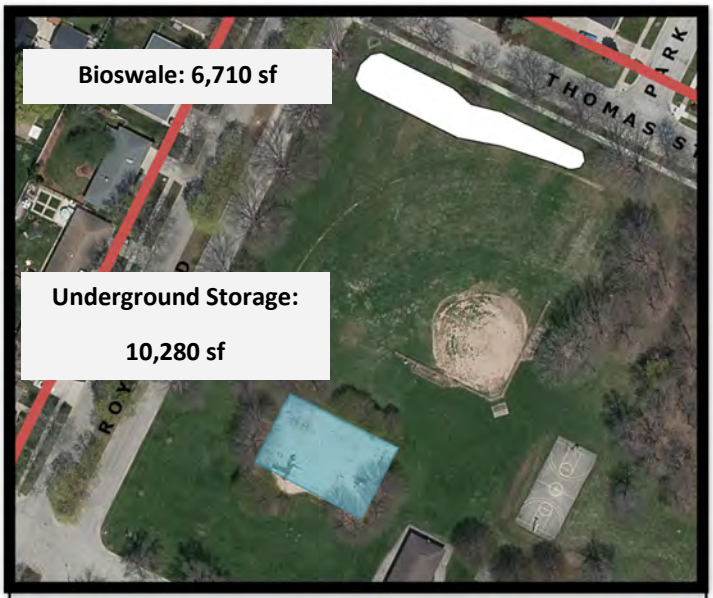


Figure 3: Proposed site with underground storage area denoted in blue and bioswale area denoted in white.

Site Location:

Mather St from Royal Blvd to N Buchanan St,

Green Bay, WI

GSI Description:

Nine bioswales placed before inlets along the street. The proposed bioswale placements would capture stormwater runoff from the street, resulting in better water quality.

Drainage Area = 4.778 acres (208,140 sq. ft.)

Proposed Bioswale Area= 0.041 acres (1770 sq. ft.)

Approximate Cost = $90,000 + $1,770/year

Annualized Cost = $6.77 / lb TSS removal

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

2.394 lbs (50.09%)

Total Suspended Solids Reduction =

925.8 lbs (69.19%)

Volume Captured = 40,514 gallons

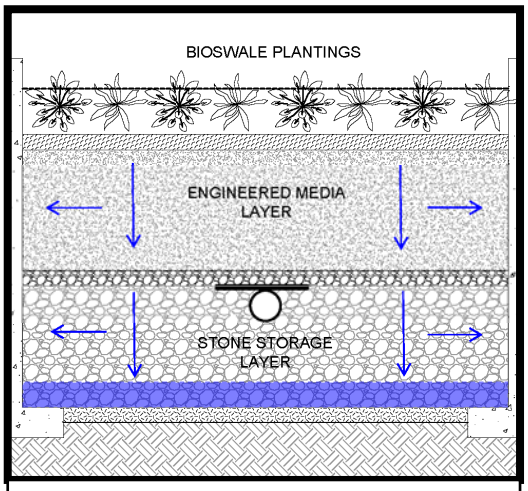


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site showing bioswale areas as white rectangles.

Site Location:

Elmore St & N Maple Ave,

Green Bay, WI

GSI Description:

Four bioswales placed at low points along streets. The proposed bioswale placements would capture the stormwater runoff from the street, resulting in better water quality.

Drainage Area = 1.652 acres (71,980 sq. ft.)

Proposed Bioswale Area = 0.028 acre (1200 sq. ft.)

Approximate Cost = $58,500 + $1,200/year

Annualized Cost = $12.60 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.8733 lbs (57.49%)

Total Suspended Solids Reduction =

327.4 lbs (77.36%)

Volume Captured = 18,986 gallons

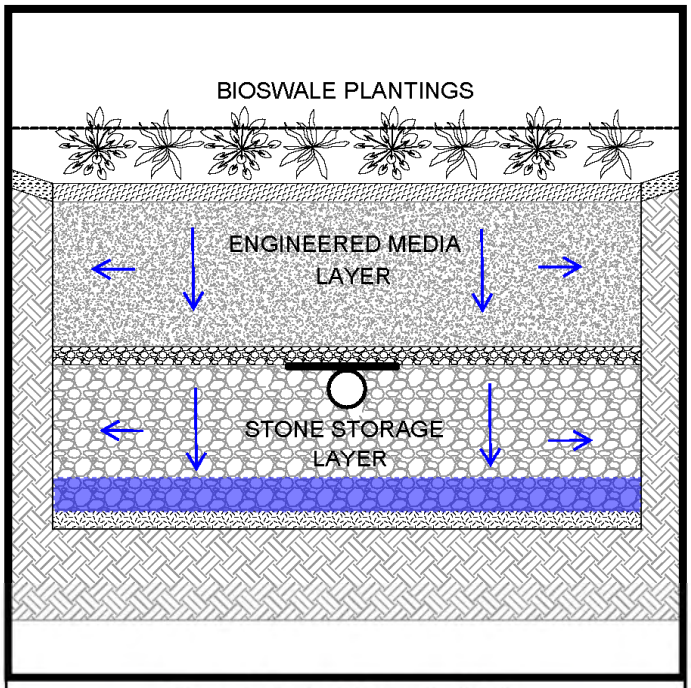


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with bioswales shown as white rectangles.

Site Location:

Division St from Northern Ave to Vroman St

Green Bay, WI

GSI Description:

Two bioswales placed before inlets along the street. The proposed bioswale placements would capture stormwater runoff from the street, resulting in better water quality.

Drainage Area = 1.579 acres (68,780 sq. ft.)

Proposed Bioswale Area = 0.014 acres (600 sq. ft.)

Approximate Cost = $29,000 + $600/year

Annualized Cost = $5.87 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.8760 lbs (46.77%)

Total Suspended Solids Reduction =

349.3 lbs (61.87%)

Volume Captured = 17,273 gallons

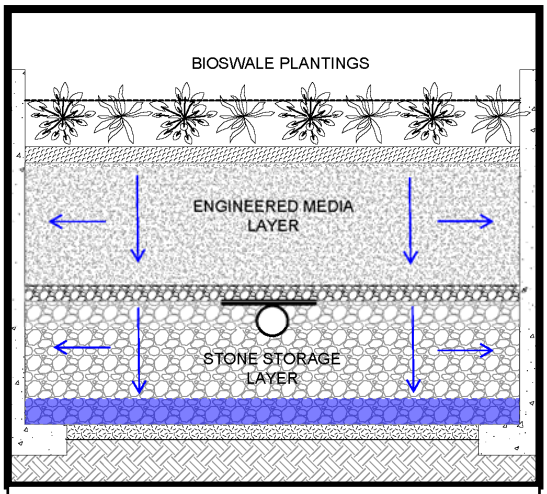


Figure 1: Typical bioswale detail.

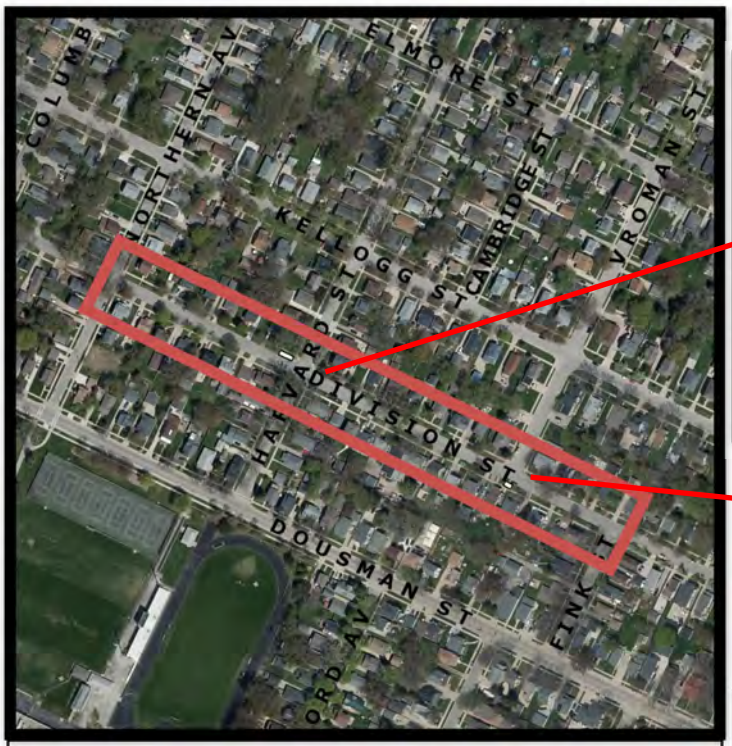


Figure 2: Aerial image of CoGB with the project site outlined.

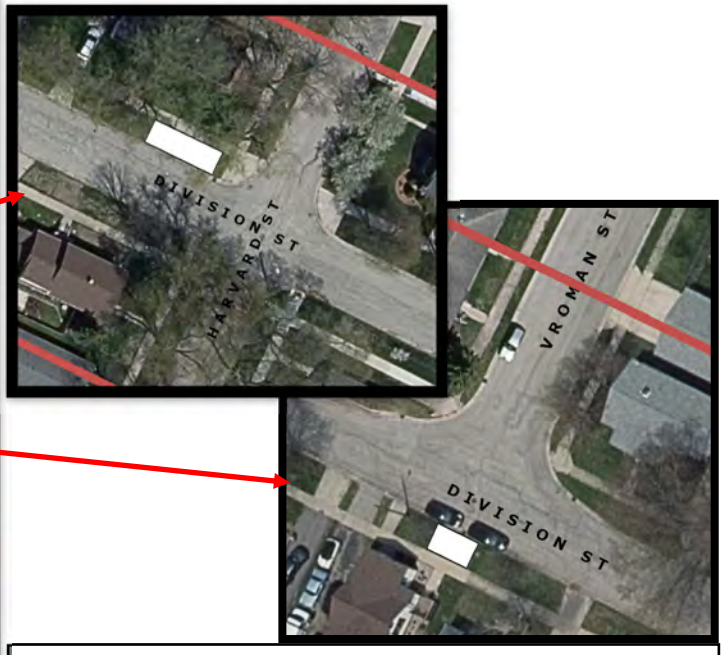


Figure 3: Proposed site showing bioswale areas as white rectangles.

Site Location:

Alley between N Chestnut Ave & N Broadway

From Bond St to Elmore St

GSI Description:

Permeable pavers (PP) in an alley, that will store and treat stormwater, as well as convey excess water to existing structures. The proposed PP placement would capture runoff from the neighboring residential plots and the alley, resulting in better water quality.

Drainage Area = 0.668 acres (29,090 sq. ft.)

Proposed PP Area = 0.027 acres (1176 sq. ft.)

Approximate Cost = $75,000 + $588/year

Annualized Cost = $53.89 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.2145 lbs (56.11%)

Total Suspended Solids Reduction =

80.50 lbs (81.49%)

Volume Captured = 21,477 gallons

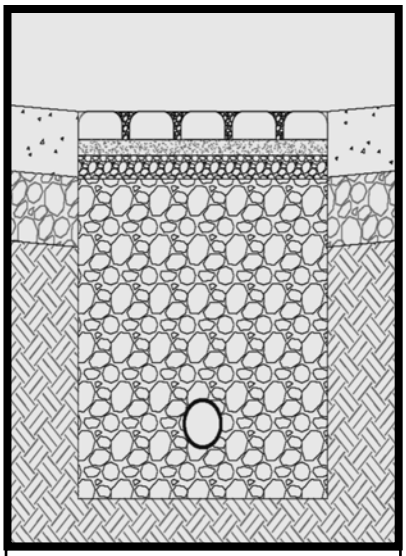


Figure 1: Typical permeable pav-

Figure 2: Aerial image of the CoGB with the project area located inside the red rectangle.

Figure 3: Proposed site with the permeable pavers shown as green rectangles.

Site Location:

4th Street bound by

S Broadway Street and S Maple Avenue

Description:

The Chestnut and 4th St. intersection is in a low spot and has flooding issues. The 3 proposed bioswales in the ROW will capture and treat the runoff to reduce flood risk and also improve water quality.

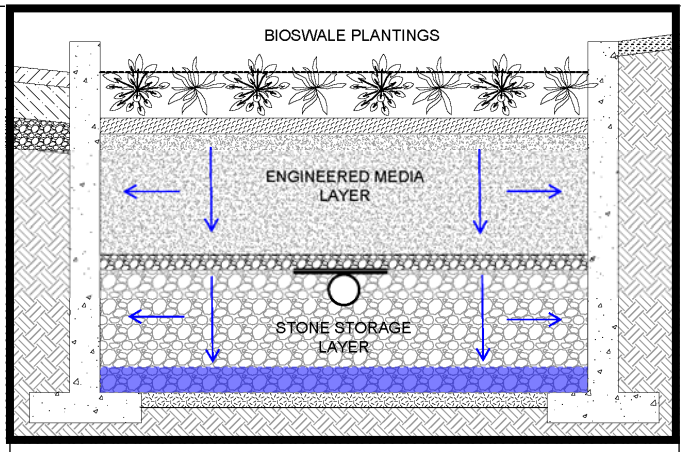


Figure 1: Typical bioswale detail

GSI Characteristics:

Drainage Area = 0.31 acres

Total Bioswale Area = 1,900 sq. ft.

Estimated Cost = $77,500 + $1,900/year

Annualized Cost = $41.07 / lb TSS reduction

Figure 2: Aerial image of the CoGB with the project site outlined

Benefits for Captured Runoff:

Total Phosphorus Reduction = 0.3436 lbs (61.03%)

Total Suspended Solids Reduction = 140.6 lbs (75.88%)

Volume Captured = 3,137 gallons

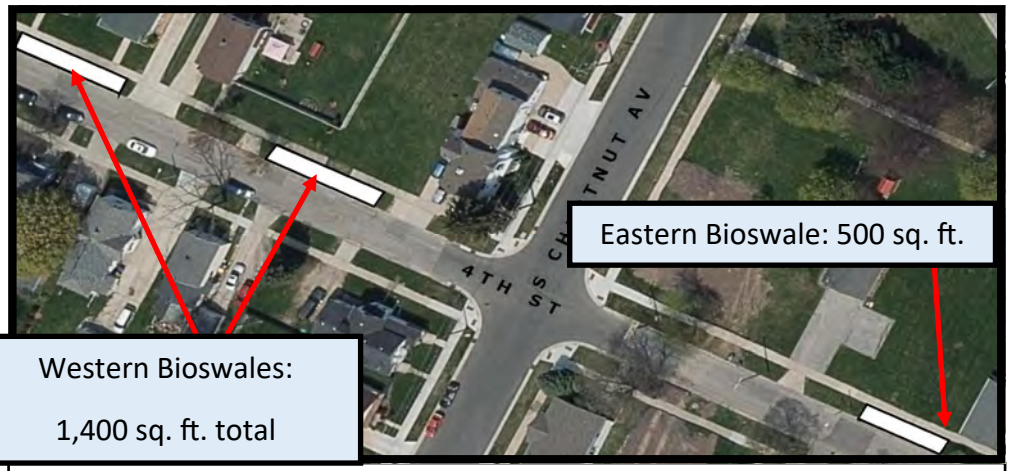


Figure 3: White rectangles indicate intended bioswale location

Site Location:

13th St from School Pl to W Mason St, Green Bay, WI

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 1.618 lbs (38.27%)

Total Suspended Solids Reduction = 642.9 lbs (51.76%)

Volume Captured = 44,598 gallons

GSI Description:

Five bioswales placed before inlets along the street. The proposed bioswale placements would capture stormwater runoff from the street, resulting in better water quality. The proposed bioswales would also aid in reducing flood risk in this area.

Drainage Area = 3.945 acres (171,850 sq. ft.)

Proposed Bioswale Area = 0.022 acres (980 sq. ft.)

Approximate Cost = $57,500 + $1,750/year

Environmental ROI = $89.44 / lb TSS reduction

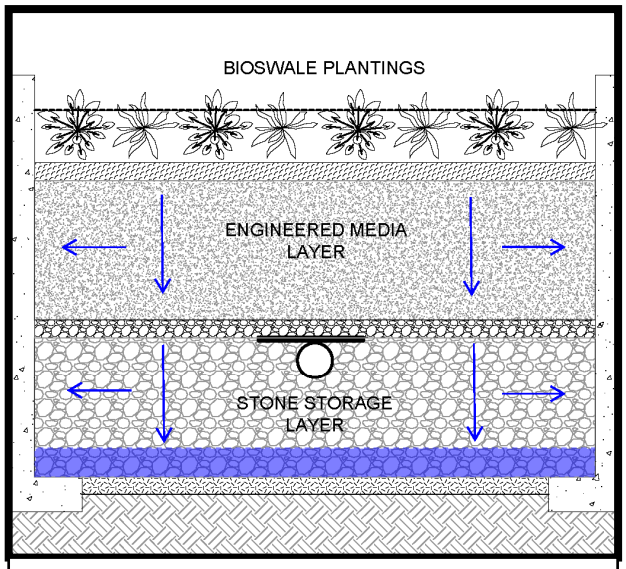


Figure 1: Typical bioswale detail.

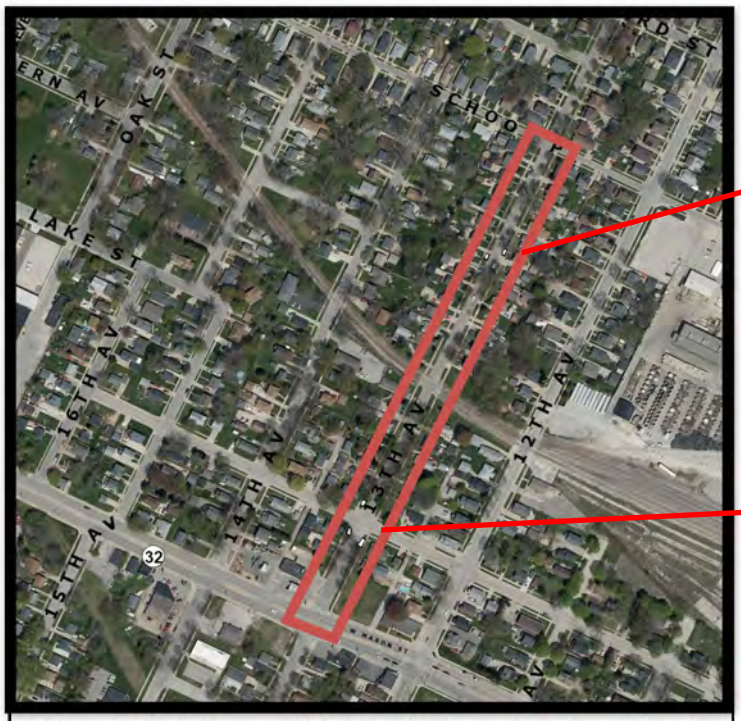


Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with bioswale areas as white rectangles.

Site Location:

Tank Park, 830 5th St, Green Bay, WI

Parcel # 2-363-1

GSI Description:

One large bioswale would capture runoff water from the majority of impervious surfaces in the park, as well as approximately half of the grassed area. The captured runoff would be stored in a 2' layer of stone prior to being conveyed into the nearby storm sewer system.

Drainage Area = 4.49 acres (195,580 sq. ft.)

Proposed Bioswale Area = 0.21 acres

(9,000 sq. ft.)

Approximate Cost: $206,000 + $6,200/year

Annualized Cost = $63.33/ lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.9731 lbs (50.60%)

Total Suspended Solids Reduction =

219.6 lbs (80.20%)

Volume Captured: 245,203 gallons

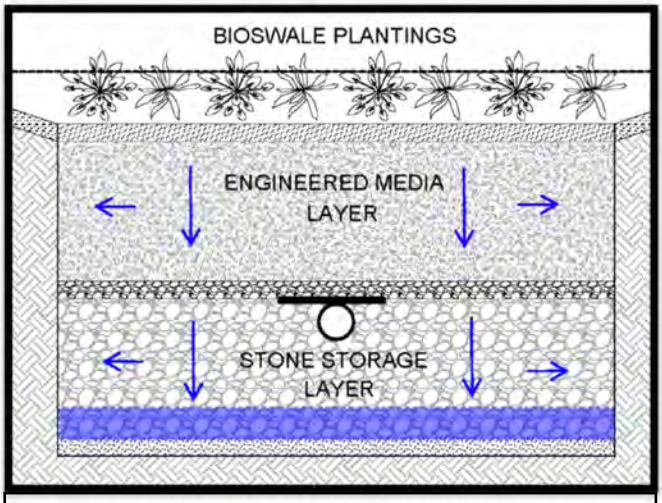


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with bioswale areas denoted in white.

Site Location:

Maple Ave bound by

9th Street and N Termini

Description:

Multiple flooding concerns, poor water quality, and a CIP make this an ideal area to install GSI. The proposed permeable pavement system can capture, treat, and temporarily store storm-water runoff, providing flood relief and improved water quality. Also, the expanded underground storage provides more storage capacity for the footprint of surface treatment.

GSI Characteristics:

PP Area = 0.06 acres (2,500 sq. ft.)

Storage Area = 0.12 acres (5,000 sq. ft.)

Approximate Cost = $180,000 + $2,500/yr

Annualized Cost = $70.47/lb TSS reduction

Figure 3: Aerial image of the City of Green Bay with the project area inside the red polygon.

Benefits for Captured Runoff:

Particulate Solids Reduction = 163.2 lbs (90.17%)

Total Phosphorus Reduction = 0.3761 lbs (73.24%)

Volume Captured = 8,565 gallons

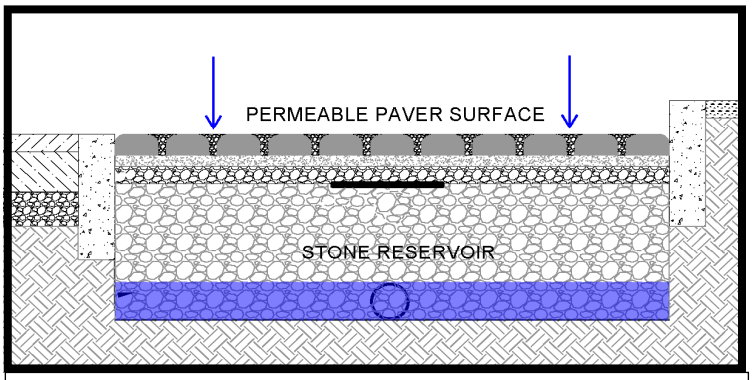


Figure 1: Typical permeable pavement detail.

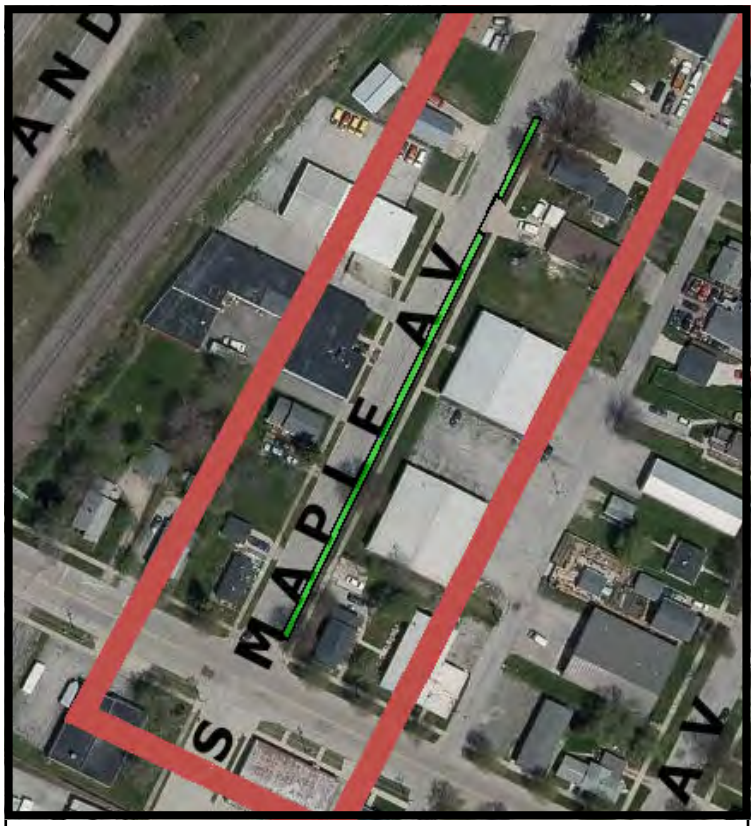


Figure 2: Plan view of the proposed project site. The green rectangles indicate proposed porous pavement location.

Site Location:

Eighth St Park, 508 8th St, Green Bay, WI

Parcel ID # 1-836

GSI Description:

A large bioswale will collect runoff flows from 70% of the site and will be positioned in the low-spot of the parcel. This parcel has had issues flooding, so this GI would aim to store and treat the rainwater before conveying it to a nearby storm sewer. A field inlet and piping would need to be installed in order to properly drain the bioswale.

Drainage Area = 1.34 acres (25,340 sq. ft.)

Proposed Bioswale Area = 0.057 acres (2,500 sq. ft)

Approximate Cost = $102,800 + $3,188/year

Annualized Cost = $117.95 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.312 lbs (50.49 %)

Total Suspended Solids Reduction =

70.6 lbs (80.07 %)

Volume Captured = 45,765 gallons

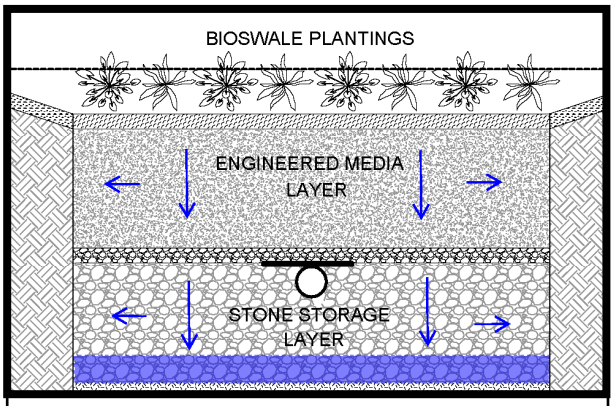


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with the bioswale area denoted by the white shape. The dashed line indicates buried piping.

Site Location:

Perkins Park, 600 N Fisk St, Green Bay, WI 54303

Parcel ID #6-62

GSI Description:

Permeable pavement (PP) in parking lot to the east. A bioswale placed at a low point in the north of the park to capture the northern field runoff.

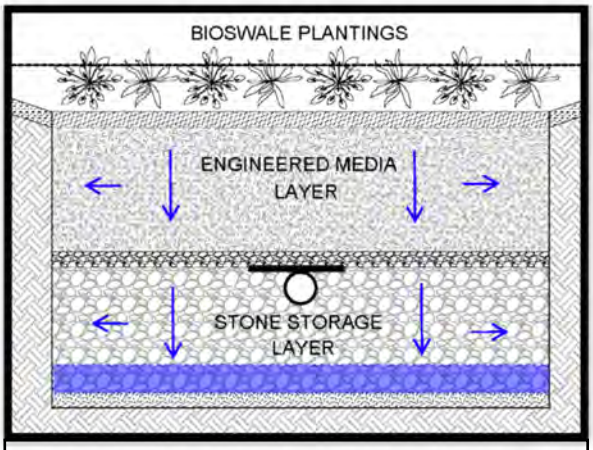


Figure 1: Typical bioswale detail.

Drainage Area = 4.227 acres (184,128 sq. ft.)

Proposed Bioswale Area = 0.091 acres (3,955 sq.ft.)

Proposed PP Area = 0.712 acres (31,000 sq. ft.)

Approximate Cost = $1,360,000 + $10,000year

Annualized Cost = $149.13 / lb TSS reduction

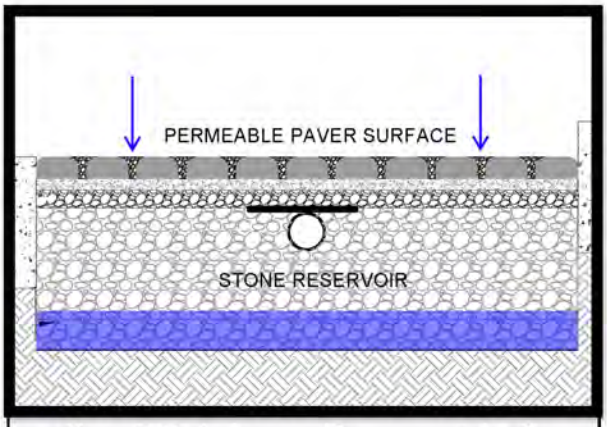


Figure 2: Typical permeable pavement detail.

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 1.435 lbs (64.13%)

Total Suspended Solids Reduction = 523.05 lbs (91.60%)

Volume Captured = 147,534 gallons

Figure 3: Aerial image of CoGB with the project site out-

Figure 4: Proposed site with permeable paver area denoted in green and bioswale areas denoted in white.

Site Location:

MacArthur Elementary School, Green Bay, WI

Parcel ID #6H-1133-A

GSI Description:

Permeable pavers (PP) replacement of old parking lot. The proposed PP would capture the runoff from the large paved area of parking.

Drainage Area = 0.562 acres (24,500 sq. ft.)

Proposed PP Area = 0.360 acres (15,690 sq. ft.)

Approximate Cost = $635,000 + $5,000/year

Annualized Cost = $190.02 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.3281 lbs (74.18%)

Total Suspended Solids Reduction =

193.4 lbs (94.11%)

Volume Captured = 43,941 gallons

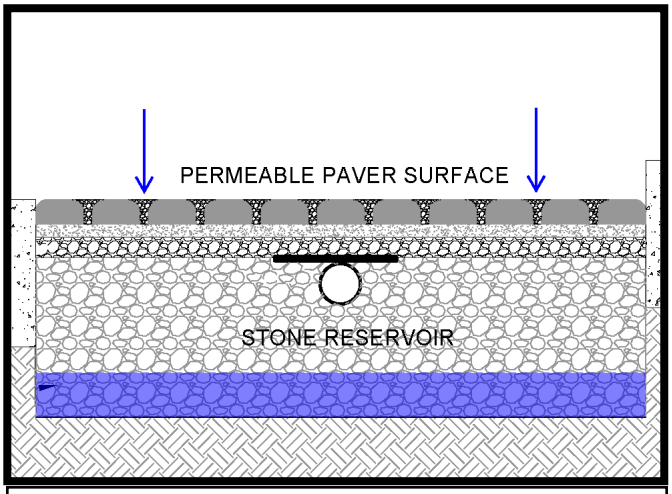


Figure 1: Typical permeable pavement detail.

Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with permeable pavement area shown as green rectangle.

Site Location:

Woodlawn Ave and Hubbard Street

Green Bay, WI

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 1.409 lbs (46.18%)

Total Suspended Solids Reduction = 548.6 lbs (63.01%)

Volume Captured = 24,738 gallons

GSI Description:

Four bioswales placed along a residential street. The proposed bioswale would capture runoff from the street and residential properties, reducing flood risk and improving water quality. The related CIP is a road reconstruction, which would be an ideal time to install GSI.

Drainage Area = 3.11 acres (135,330 sq. ft.)

Proposed Bioswale Area = 0.02 acres (750 sq. ft.)

Approximate Cost = $45,000 + $750/year

Annualized Cost = $5.47 / lb TSS reduction

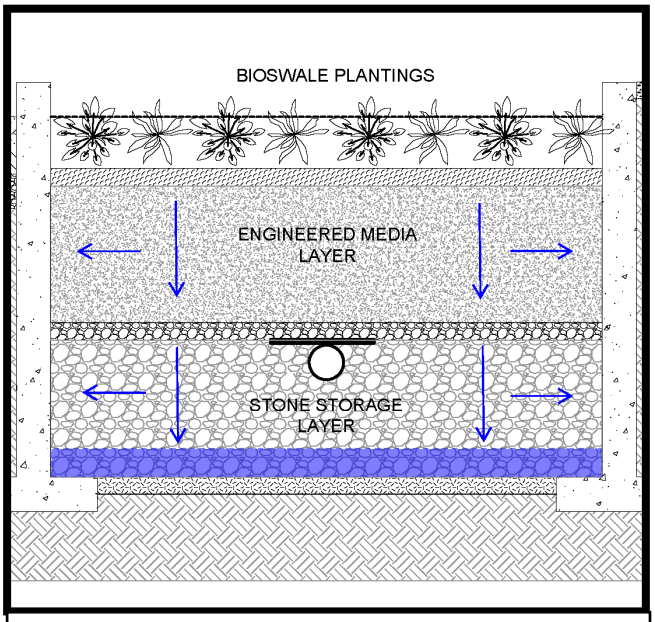


Figure 1: Typical bioswale detail.

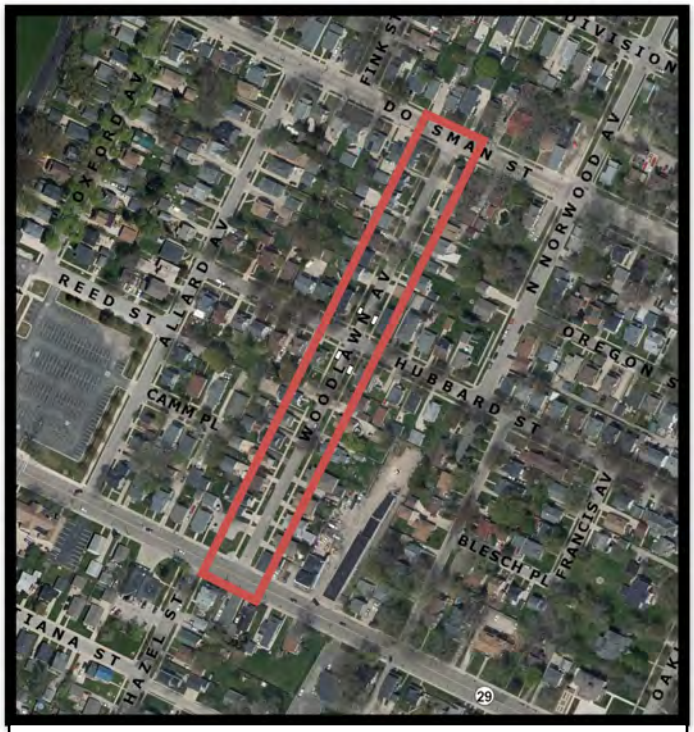


Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with bioswale areas shown in white.

Site Location:

Between 3177 & 3379 Nicolet Dr,

Green Bay , WI

Parcel # 22-128

Regenerative Stormwater Conveyance (RSC) is a step-pool treatment device that captures, stores, and infiltrates runoff in steep or channelized areas to prevent erosion and provide water quality.

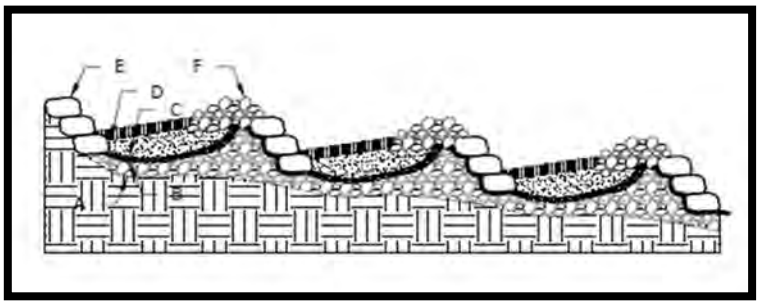


Figure 1: Typical regenerative stormwater conveyance (RSC) design

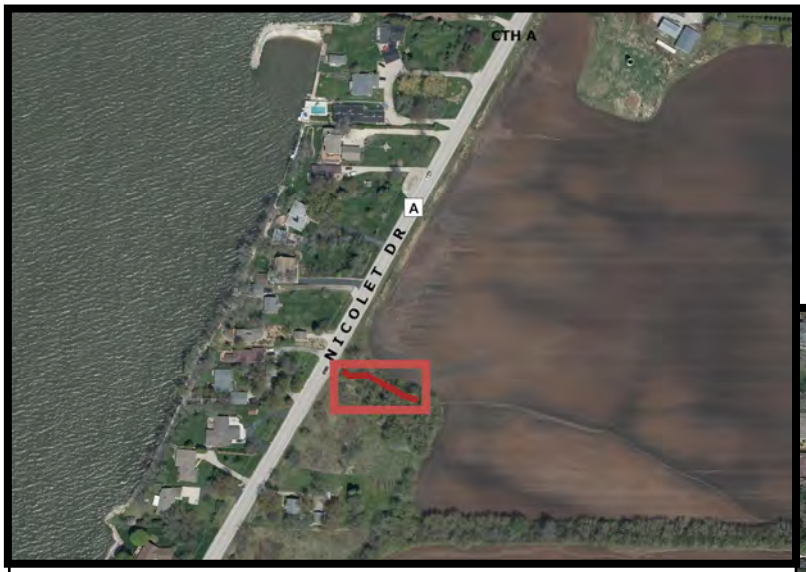


Figure 2: Aerial image of the CoGB with the project site outlined in red.

GSI Description:

A RSC that outfalls into the roadside ditch along Nicolet Dr. The proposed RSC would reduce runoff from the large expanses of fields and help to prevent flooding in the adjacent neighborhood.

Drainage Area = 16.5 acres

(720,530 sq. ft.)

Proposed RSC Length = 185 ft

Approximate Cost = $55,000 + $1,700/ year

Annualized Cost = $6.29 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

3.691 lbs (45.46%)

TSS Reduction = 708 lbs (62.75%)

Volume Captured = 90,858 gallons

Figure 3: Proposed site with RSC length denoted by red line.

Site Location:

Between 3304 & 3376 Nicolet Dr,

Green Bay, WI

Regenerative Stormwater Conveyance (RSC) is a step-pool treatment device that captures, stores, and infiltrates runoff in steep or channelized areas to prevent erosion and provide water quality.

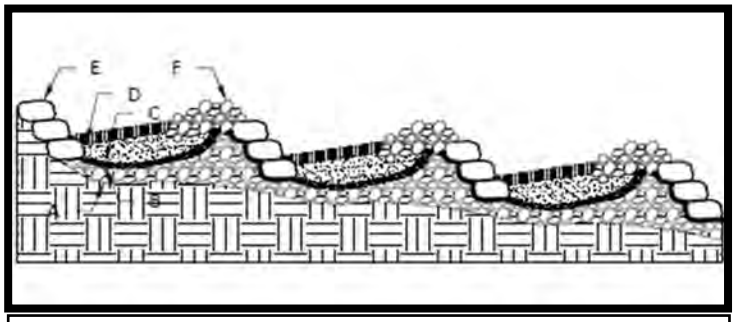


Figure 1: Typical regenerative stormwater conveyance (RSC) design

GSI Description:

RSC in the ditch between fields, that outfalls onto the roadside ditch along Nicolet Dr. The proposed RSC would reduce runoff from the large expanses of fields and help to prevent flooding in the adjacent neighborhood.

Drainage Area = 15.7 acres (683,600 sq. ft.)

Proposed RSC Length = 130 ft

Approximate Cost = $36,000 + $1,200/ year

Annualized Cost = $6.08 / lb TSS reduction

Benefits of Captured Stormwater

Total Phosphorus Reduction =

2.627 lbs (37.16%)

TSS Reduction = 493.8 lbs (52.61%)

Volume Captured = 48,660 gallons

Figure 2: Aerial image of the CoGB with the project site outlined.

Figure 3: Proposed site with RSC length denoted by red line.

Site Location:

221 Cherry St, Green Bay, WI

Green Bay Redevelopment Authority (Public Lot)

Parcel ID #12-112

GSI Description:

Permeable pavers (PP) in west and section of parking lot. The plan also includes the scenario of a possible new development for the parking lot. The proposed PP would capture the runoff from large paved areas of parking.

Drainage Area = 0.76 acres (33,245 sq. ft.)

Proposed PP Area = 0.355 acres (15,460 sq. ft.)

Approximate Cost = $635,000 + $5,000/year

Annualized Cost = $228.97/ lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.2374 lbs (22.63%)

Total Suspended Solids Reduction =

160.5 lbs (39.39%)

Volume Captured = 32,742 gallons

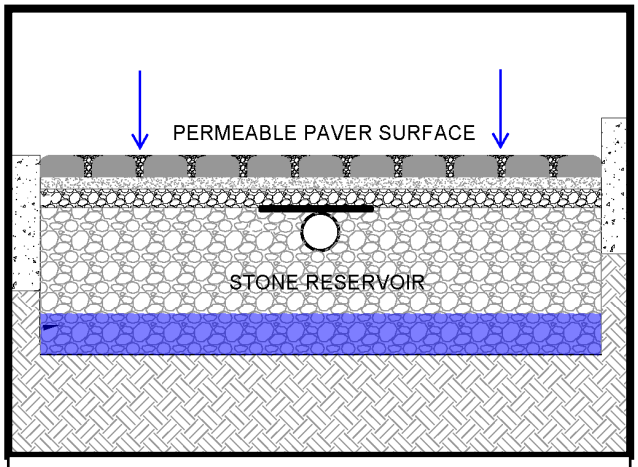


Figure 1: Typical permeable pavement detail.

Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with permeable pavement areas shown as green rectangles. Area that could be used for new development is shaded in orange.

Site Location:

Utility Ct & N Madison St, Green Bay, WI

Parcel ID # 11-134

GSI Description:

Permeable pavers (PP) in low point parking spaces. A bioswale with trees placed to intercept runoff. The proposed PP and bioswale placements would capture the runoff from large paved areas of parking, resulting in better water quality.

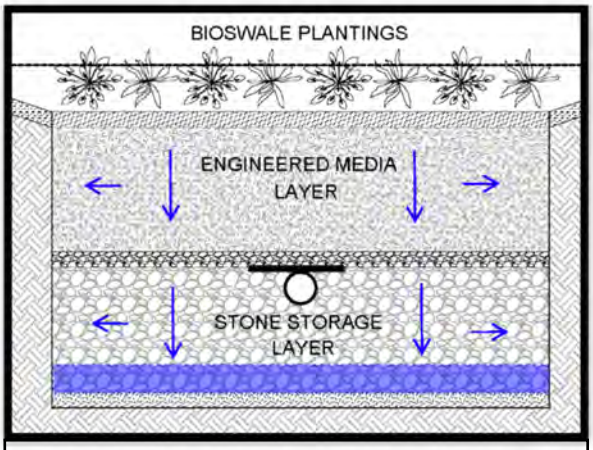


Figure 1: Typical bioswale detail.

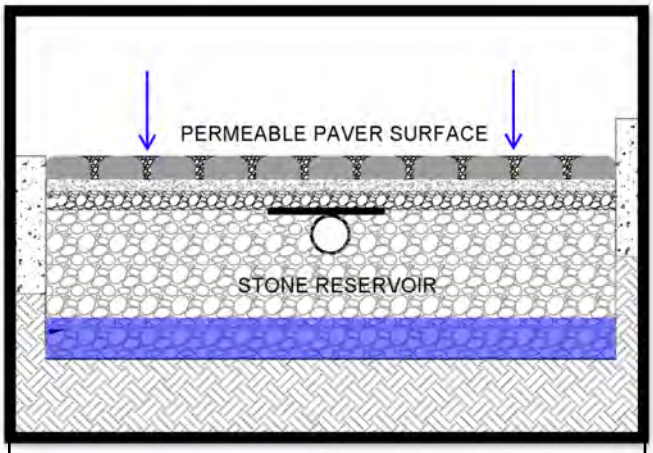


Figure 2: Typical permeable paver detail.

Drainage Area = 2.903 acres (126,465 sq. ft.)

Proposed Bioswale Area = 0.057 acres (2500 sq. ft.)

Proposed PP Area = 1.240 acres (54,000 sq. ft.)

Approximate Cost = $2,200,000 + $7,500/year

Annualized Cost = $96.08 / lb TSS reduction

Benefits of Captured Parking Lot Water:

Total Phosphorus Reduction = 1.7431 (78.06 %)

Total Suspended Solids Reduction = 1223 (90.83 %)

Volume Captured = 248,121 gallons

Figure 3: Aerial image of CoGB with the project site outlined.

Figure 4: Proposed site with permeable paver areas outlined and shaded in green and bioswale areas in white with trees.

Site Location:

1957 Main St, Green Bay, WI

Parcel ID #21-1329

GSI Description:

Two rain gardens placed to capture runoff from landscaping and pavement areas. Potential new building footprints are also considered.

Drainage Area = 1.44 acres (62,596 sq. ft.)

Proposed Rain Garden Area = 0.164 acres (7130 sq. ft.)

Approximate Cost = $62,500 + $1,500/ year

Annualized Cost = $23.63 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 0.4856 lbs (50.25%)

Total Suspended Solids Reduction = 238.0 lbs (73.67%)

Volume Captured = 65,312 gallons

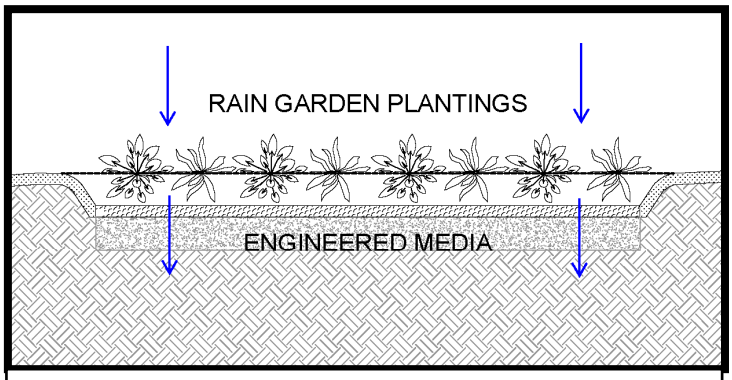


Figure 1: Typical rain garden detail.

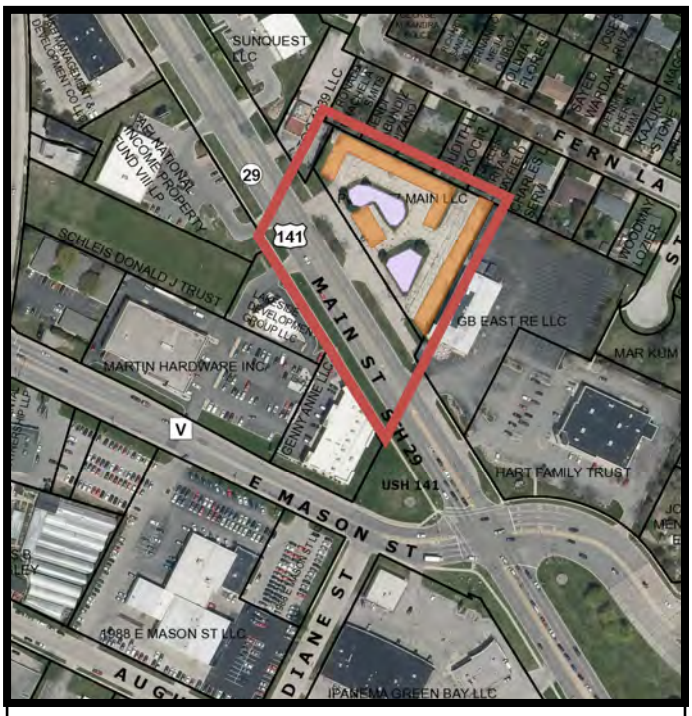


Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with rain garden areas shown in purple and potential building footprints shaded in orange.

Site Location:

East Town Mall, 2350 E Mason St, Green Bay, WI

Parcel # 21-126-7-2

GSI Description:

Permeable pavers placed to capture runoff from the parking lot. Two bioswales placed to intercept other runoff.

Drainage Area = 1.426 acres (62,120 sq. ft.)

Proposed Bioswale Area = 0.023 acres (1,000 sq. ft.)

Proposed PP Area = 0.631 acres (27,500 sq. ft.)

Approximate Cost = $1,125,000 + $7,000/year

Annualized Cost = $104.82 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 0.858 lbs (78.09%)

Total Suspended Solids Reduction =

603.4 lbs (90.79%)

Volume Captured = 123,660 gallons

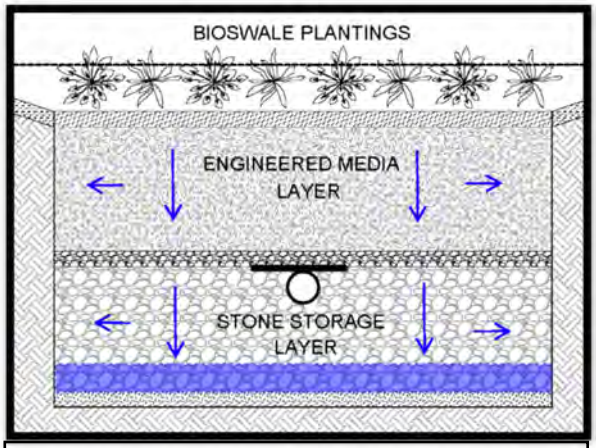


Figure 1: Typical bioswale detail.

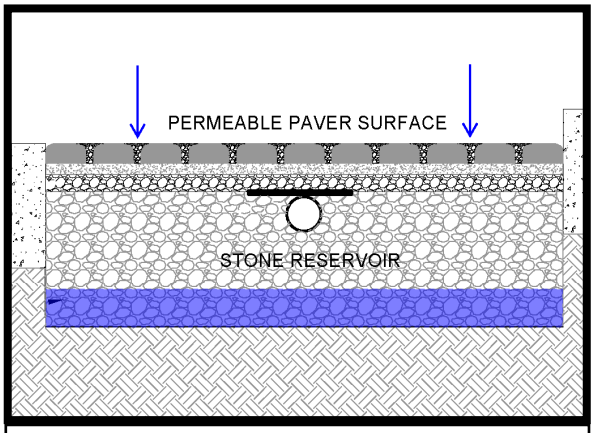


Figure 2: Typical permeable pavement detail.

Figure 3: Aerial image of CoGB with the project site outlined.

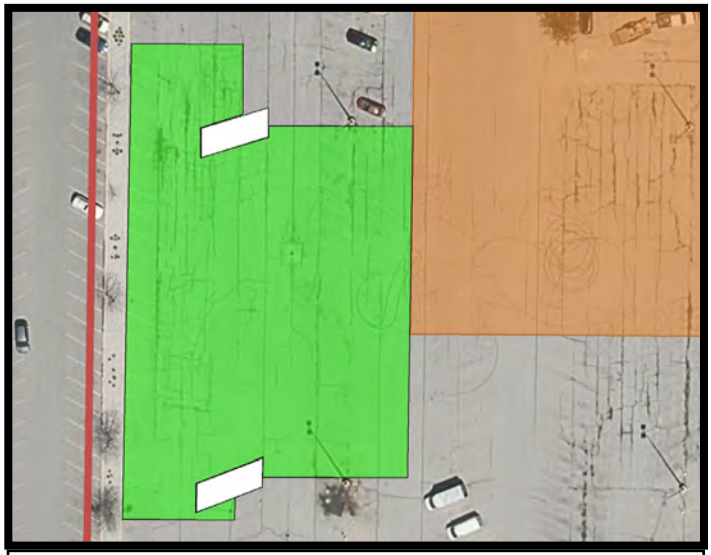


Figure 4: Proposed site with permeable pavement area denoted in green and bioswale areas denoted in white. An area of new development is shaded in orange.

Site Location:

Ricky Drive between Vine Street and Richmond Street

Parcels # 21-1361-1 & 21-1361-6

Project Area = 3 acres

Captured Area = 1.5 acres

Proposed Bioswale Areas = 1,200 sq. ft.

Proposed StormGUARDen Quantity: 17

Approximate Cost = $100,000 + $2,500/year

Annualized Cost = $13.98 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

1.39 lbs (45.5%)

Total Suspended Solids Reduction =

536.5 lbs (62.6%)

Volume Captured = 19,741 gallons

Figure 1: Aerial image of CoGB with the project site

GSI Description:

A new 17 lot development between Vine and Richmond Streets on Ricky Drive capture and treat stormwater captured by utilizing StormGUARDens™ and bioswales.

Figure 2: StormGUARDen collecting

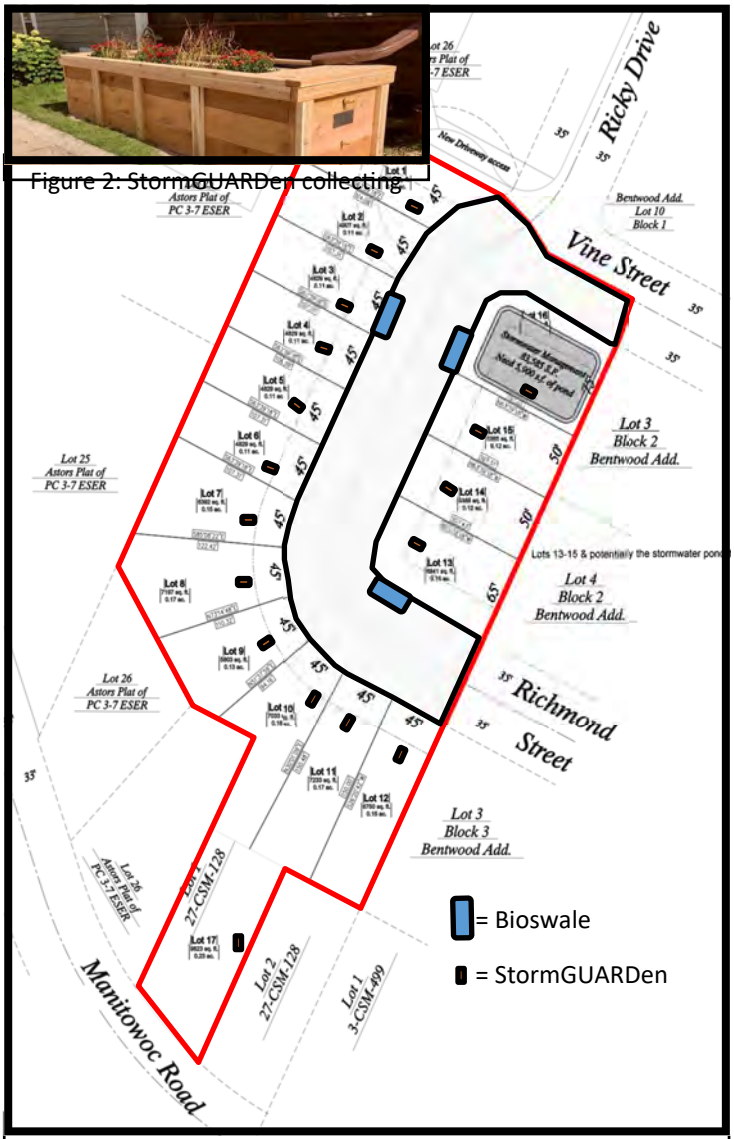


Figure 2: Preliminary Plat of the proposed project site. The area inside the red polygon is the project site, the black outlined shape is the ROW area on site.

Site Location:

Lombardi Ave & S Broadway St

Green Bay, WI

GSI Description:

Six green roof sections added to industrial buildings. The proposed extensive green roofs have the possibility to be retrofitted on existing buildings and reduced the roof runoff in an area with minimal permeable surface area.

Drainage Area = 11.77 acres (512,730 sq. ft.)

Approximate Cost = $22,500,000 + $120,000/ year

Annualized Cost = $914.10 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 3.939 lbs (100%)

Total Suspended Solids Reduction = 1362 lbs (100%)

Volume Captured = 176,099 gallons

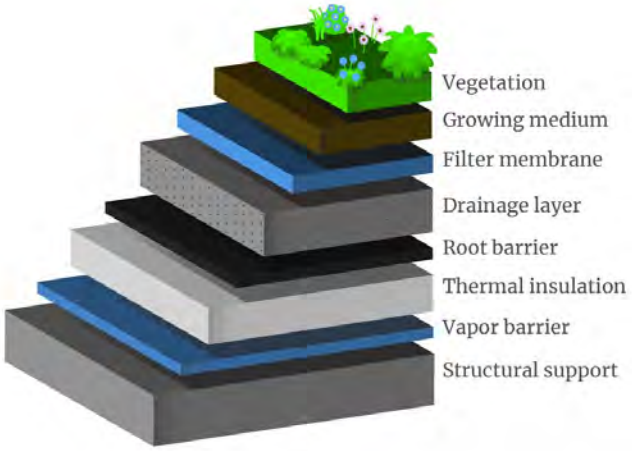


Figure 1: Typical green roof layers (Taken from EPA's Common Green Roof Layers, Using Green Roofs to Reduce Heat Islands | US EPA).

Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with proposed green roofs in shaded in green.

Site Location:

Lombardi Ave & Reggie White Way

Parcel ID #1-1841-C

GSI Description:

Private development plans taken from the Legends District Master Plan: City of Green Bay (March 2017). Permeable pavement (PP) placed in walkways and in parking spaces of lots. Bioswales collect some lot runoff not captured by PP. Additional bioswales placed to capture runoff from the road through the development, alongside native landscaping. Native landscaping also added to large grass landscaped areas. Green roofs added to buildings D and E. Trees cells placed for capture and transpiration of runoff.

Drainage Area = 13.4 acres (583,880 SF)

Approximate Cost = $5,100,000 + $80,000/year

Annualized Cost =$92.72/lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 6.53 lbs (55.63%)

Total Suspended Solids Reduction = 3613 lbs (76.3%)

Volume Captured = 644,911 gallons

GSI Areas:

Permeable Pavement: 81,800 SF (1.88 acres)

Bioswales = 29,200 SF (0.670 acres)

Native Landscaping = 10,500 SF (0.241 acres)

Green Roof = 55,000 SF (1.26 acres)

Figure 1: Aerial image of the CoGB with the project area located inside the red rectangle.

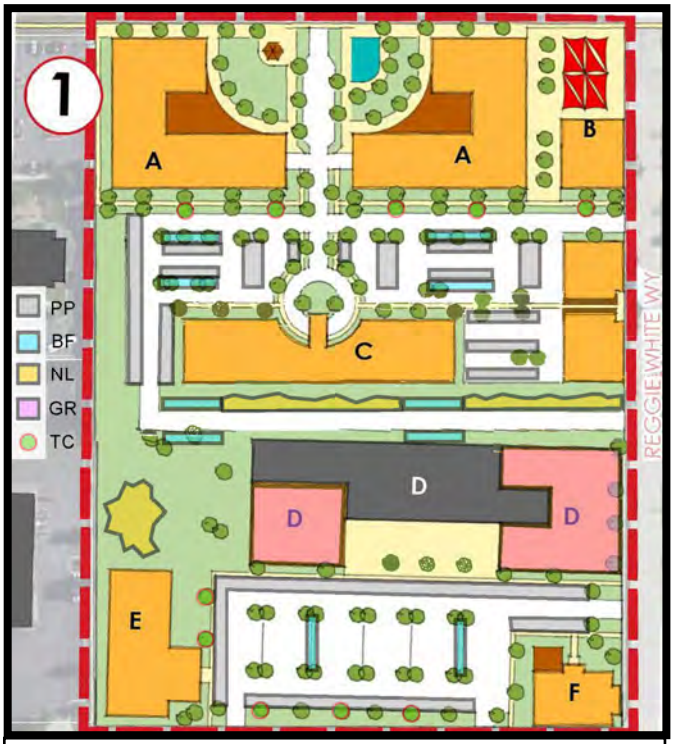


Figure 2: Proposed site with GSI areas highlighted and outlined.

Site Location:

Brett Favre Pass & Tony Canadeo Run

Green Bay, WI

Parcel ID #1-1841-B-1

GSI Description:

Private development plans taken from the Legends District Master Plan: City of Green Bay (March 2017). Permeable pavement (PP) placed in walkways and in parking spaces of lots. A bioswale collects portion of parking lot runoff not captured by permeable pavement. A green roof for building B.

Figure 1: Aerial image of the CoGB with the project area located inside the red rectangle.

Drainage Area = 2.99 acres (130,420 sq.ft.)

Approximate Cost =

$1,770,000 + $22,900/year

Annualized Cost=$147.59/lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

1.264 lbs (52.80%)

Total Suspended Solids Reduction =

754.8 lbs (77.23%)

Volume Captured = 131,964 gallons

Area of Bioswales =

0.046 acres (2,000 sq. ft.)

Area of Permeable Pavement =

0.750 acres (32,650 sq. ft.)

Area of Green Roof =

0.209 acres (9,100 sq. ft.)

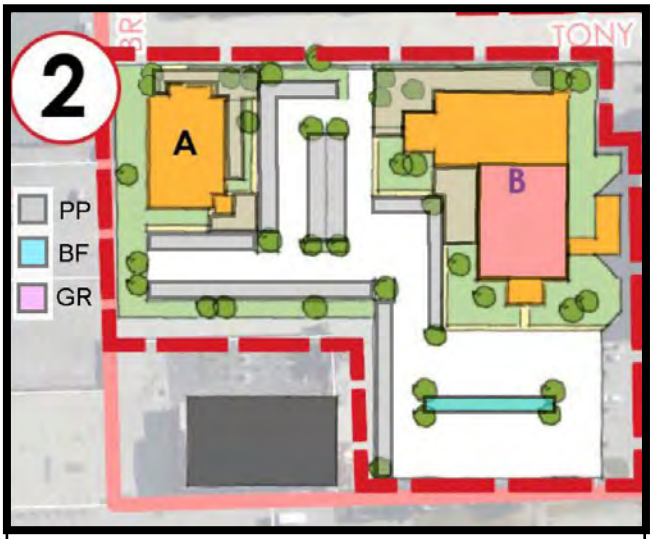


Figure 2: Proposed site with GSI areas highlighted and out-

Site Location:

Tony Canadeo Run & Bart Starr Dr

Green Bay, WI

Parcel ID #1-1841-J

GSI Description:

Private development plans taken from the Legends District Master Plan: City of Green Bay (March 2017). Permeable pavement (PP) placed in parking spaces of lots. Bioswales will collect runoff from the pedestrian walkway, as well as the runoff from the driveway. Green roofs for building A. Rain gardens placed for capturing runoff from building B/C walkways. Tree cells will be distributed throughout the site for capture and transpiration of other runoff.

GSI Footprint:

Rain Garden = 950 sq-ft; Tree Cells = 15

Green Roof = 18,000 sq-ft; Bioswale = 1,400 sq-ft

Permeable Pavement = 25,400 sq-ft

Drainage Area:

6.004 acres (261,530 sq. ft.)

Approximate Cost:

$1,902,000 + $50,000/year

Annualized Cost:

$107.15 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

2.304 lbs (39.22%)

Total Suspended Solids Reduction =

1337 lbs (62.06%)

Volume Captured = 149,588 gallons

Figure 1: Proposed site with GSI areas highlighted and outlined.

Figure 2 Aerial image of the CoGB with the project area located inside the red rectangle.

Site Location:

2020 Angie Ave, Green Bay, WI

Parcel ID #20-694

Description:

Permeable pavement (PP) with 12” of stone as a storage layer will infiltrate and hold stormwater that falls on the parking lot surface and unpaved driveway to the north. A 6” underdrain pipe will convey the stormwater to an existing manhole. This facility will reduce peak flows through culverts during heavy rain events and improve the quality of runoff before it enters surface or ground waters.

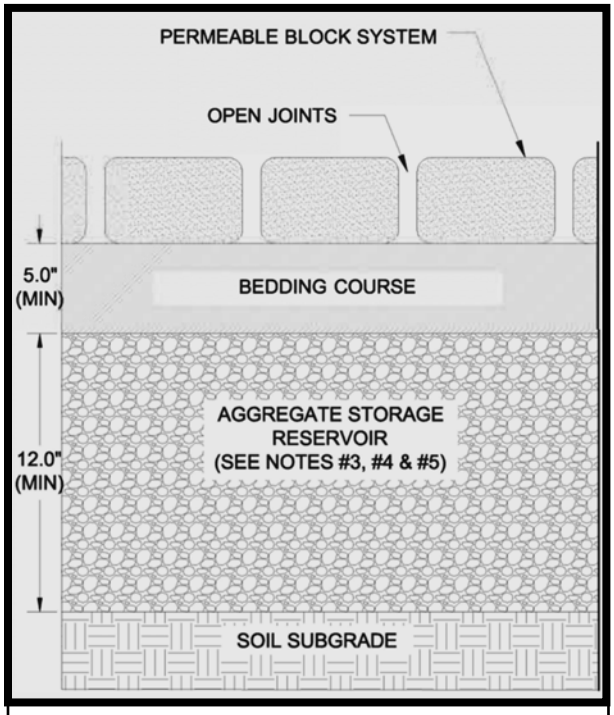


Figure 1: Typical permeable pavement detail.

Current parking lot area = 0.653 acres (28,434 sq.ft.)

Proposed PP area = 0.275 acres (11,980 sq.ft.)

Approximate Cost = $525,000 + $2,500/year

Annualized Cost = $26.52 / lb TSS reduction

Benefits of Captured Parking Lot Water:

Particulate Solids Reduction = 93.40 % (1,084 lbs)

Total Phosphorus Reduction = 86.33 % (2.21 lbs)

Volume Captured = 55,595 gallons

Figure 2: Aerial image of CoGB with project site outlined.

Figure 3: Northeast section of project site with proposed permeable pavement areas as green rectangles.

Site Location:

1950 Cofrin Drive, Green Bay, WI

Parcel ID # 21-1183-C

GSI Description:

A bioswale installed on the Northwest corner of the property would intercept street runoff and convey the flow through existing on site storm infrastructure. The added GI will improve water quality, as well as fill a location that has had 5 matured trees removed recently.

Drainage Area = 0.42 acres (18,298 sq. ft.)

Proposed Bioswale Area = 0.05 acres (2,000 sq.ft)

Approximate Cost = $ 45,000 + $1,000/year

Annualized Cost = $8.97 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 0.5258 lbs (69.50%)

Total Suspended Solids Reduction = 362.3 lbs (90.82%)

Volume Captured = 14,497 gallons

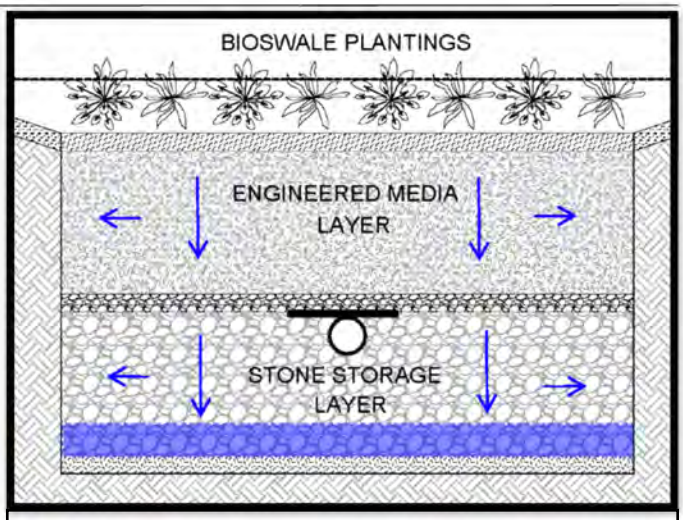


Figure 1: Typical bioswale detail.

Figure 2: Aerial image of CoGB with the project site outlined .

Figure 3: Proposed site with the bioswale area shown as a white polygon.

Site Location:

210 Museum Pl, Green Bay, WI

Parcel ID # 4-56, 4-57

GSI Description:

Porous pavement (PP) placed in parking spaces to collect runoff across the paved parking lot. The parking lot is already in poor condition and will be improved with replaced pavement. Additionally, a shallow bioswale placed to collect runoff from part of the parking lot and improve water quality. This proposed system will reduce flood risk in the surrounding area.

Drainage area = 0.898 acres (39,120 sq. ft.)

Proposed PP area = 0.190 acres (8,270 sq. ft.)

Proposed bioswale area = 0.015 acres (650 sq. ft.)

Approximate Cost = $365,000 + $3,000/year

Annualized Cost = $90.12/ lb TSS reduction

Benefits of Captured Parking Lot Water:

Particulate Solids Reduction = 235.8 lbs (83.65%)

Total Phosphorus Reduction = 0.407 lbs (63.91%)

Volume Captured = 33,535 gallons

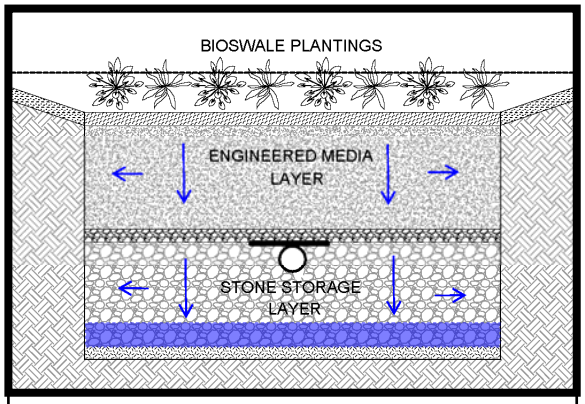


Figure 1: Typical bioswale detail.

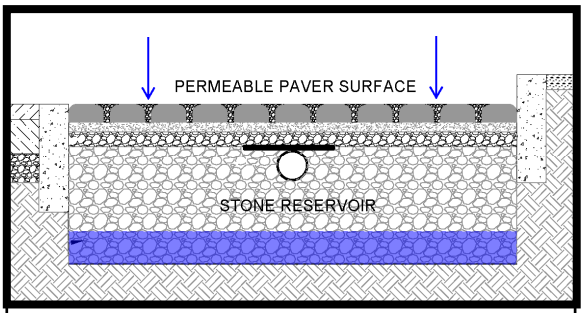


Figure 2: Typical permeable pavement detail.

Figure 3: Aerial image of the CoGB with the project site in red.

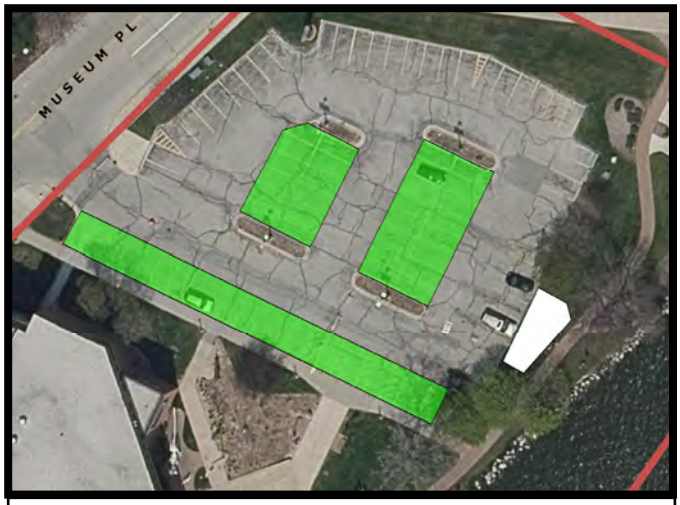


Figure 4: Project site with proposed porous pavement areas denoted by black rectangles.

Site Location:

12th to 15th Ave,

bounded by W Mason St & 5th St,

Green Bay, WI

Benefits of Captured Stormwater:

Total Phosphorus Reduction = 0.5041 (95.97%)

Total Suspended Solids Reduction = 96.32 lbs (99.15%)

Volume Captured = 282,839 gallons

GSI Description:

Four sections of greenway with native landscaping. The proposed greenway and native landscaping would replace existing mowed grass areas, reducing runoff and improving water quality.

Drainage Area = 3.441 acres (149,910 sq. ft.)

Proposed GSI Area= 2.464 acres (107,327 sq. ft.)

Approximate Cost = $375,000 + $5,000/year

Annualized Cost = $241.38/ lb TSS reduction

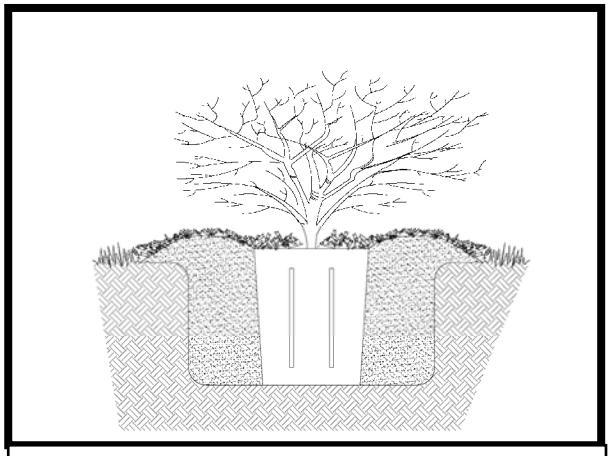


Figure 1: Typical native landscaping detail

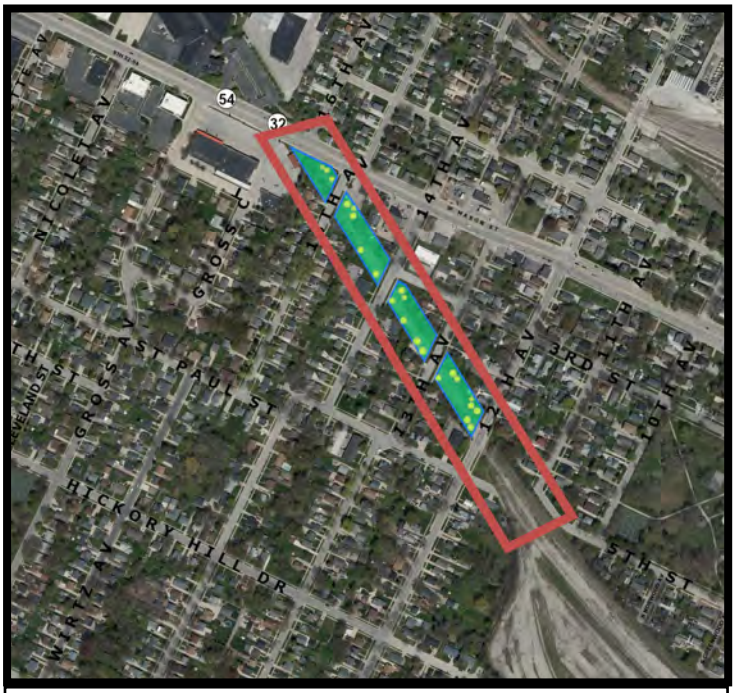


Figure 2: Aerial image of CoGB with the project site outlined.

Figure 3: Proposed site with greenway areas shown by green and blue outlined areas.

Site Location:

1350 N Military Ave, Green Bay, WI

Parcel ID #6-43, 6-42-D

GSI Description:

Two bioswales placed at across low points on the property. The proposed bioswale placements would capture runoff from the large landscaped area, resulting in better water quality.

Drainage Area = 26.879 acres (1,170,830 sq. ft.)

Proposed Bioswale Area = 4.454 acres (19,770 sq. ft.)

Approximate Cost = $470,000 + $15,000/year

Annualized Cost = $18.08 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

7.755 lbs (49.18%)

Total Suspended Solids Reduction =

2129 (81.94%)

Volume Captured = 1,319,609 gallons

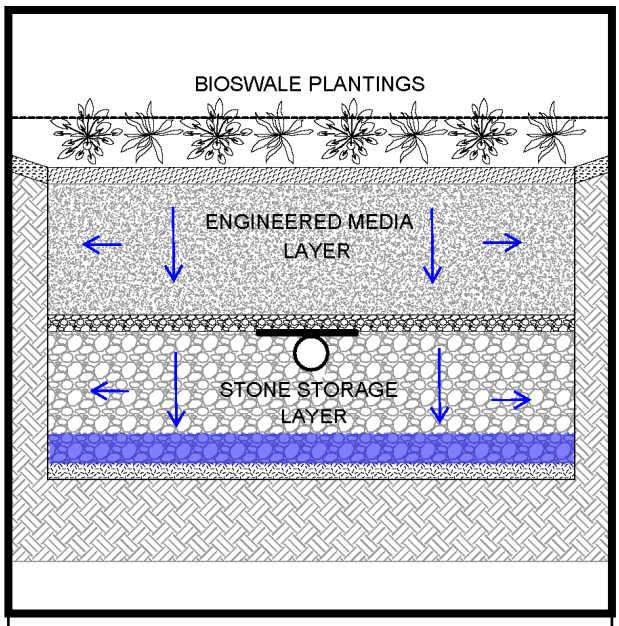


Figure 1: Typical bioswale detail.

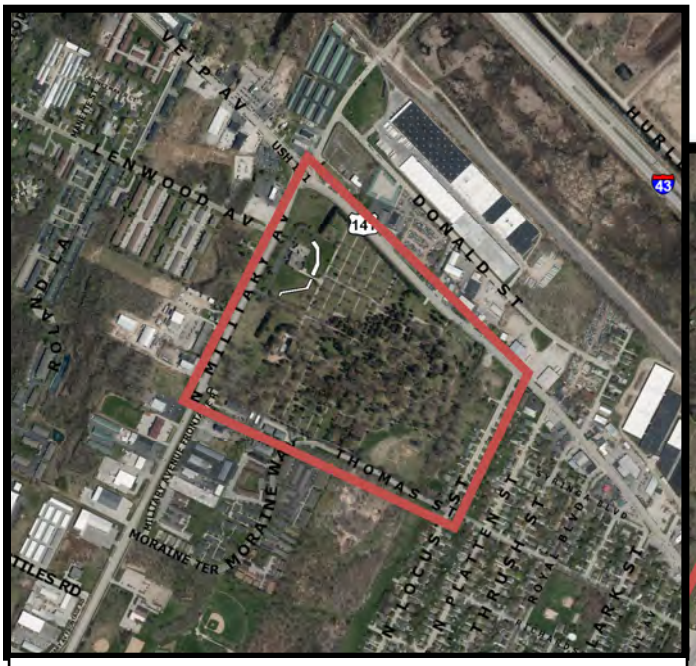


Figure 2: Aerial image of CoGB with the project site outlined.

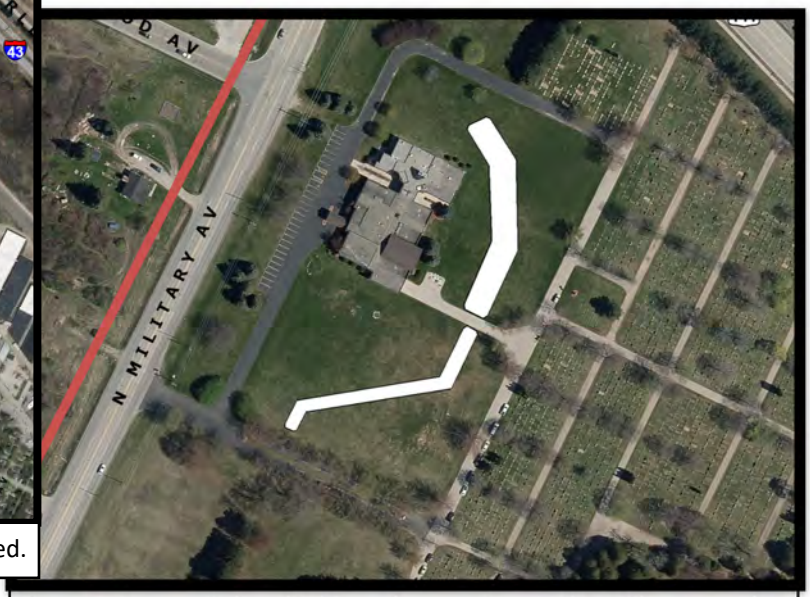


Figure 3: Proposed site with bioswale areas denoted by white rectangles.

Site Location:

2440 W Mason St, Green Bay, WI

Parcel # 6H-1763

GSI Description:

Permeable pavement (PP) with a 48" layer of stone storage. A 6" underdrain pipe will convey the stormwater to an existing manhole. The proposed PP placement would capture the heavily trafficked areas, resulting in better water quality.

Drainage Area = 1.63 acres (71,000 sq. ft.)

Proposed PP Area = 0.28 acres (12,000 sq. ft.)

Approximate Cost = $575,000 + $2,500/year

Annualized Cost = $51.53 / lb TSS reduction

Benefits of Captured Stormwater:

Total Phosphorus Reduction =

0.862 lbs (39.31%)

Total Suspended Solids Reduction =

606.4 lbs (48.40%)

Volume Captured = 119,748 gallons

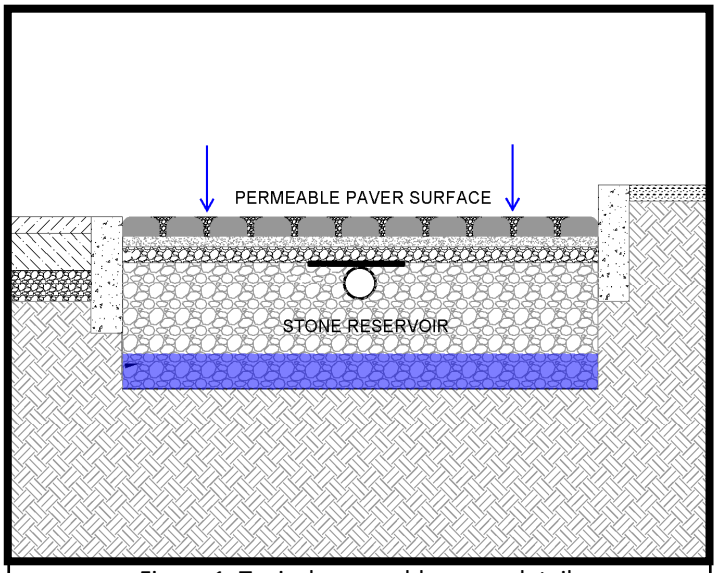


Figure 1: Typical permeable paver detail.

Figure 2: Aerial image of the CoGB with the project site outlined in red.

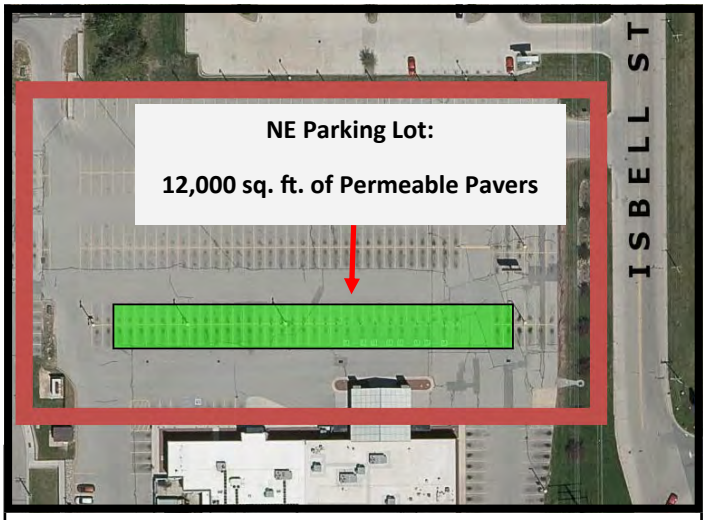


Figure 3: Proposed site with permeable pavement areas shown as a large green rectangle.

Site Location:

Walmart and Sam's Club

2440 W Mason St, Green Bay, WI

Parcel ID # 6H-2181, 2182, 2183, 2184, 2185, 2186

GSI Description:

Five sections of permeable pavement (PP) placed at intervals to capture parking lot runoff. Five bioswales placed to capture runoff and reduce runoff to the permeable pavement areas. This City of Green Bay subbasin ranks amongst the highest for poor water quality.

Drainage area = 6.067 ac. (264,290 sq. ft.)

Proposed PP area = 1.304 ac. (56,790 sq. ft.)

Proposed Bioswale area = 0.368 ac. (16,030 sq. ft.)

Approximate Cost = 2,700,000 + $15,000/year

Annualized Cost = $35.56/ lb TSS reduction

Benefits of Captured Stormwater:

Particulate Solids Reduction = 2644 lbs (93.50%)

Total Phosphorus Reduction = 4,218 lbs (90.19%)

Volume Captured = 603,581 gallons

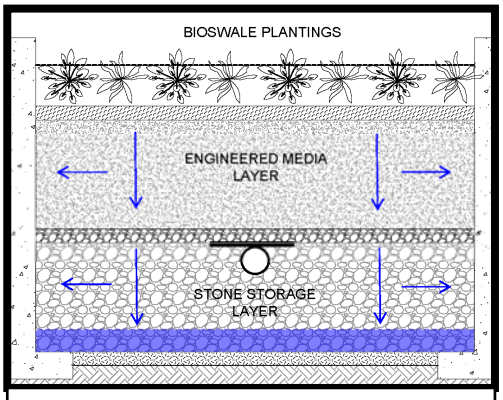


Figure 1: Typical bioswale detail.

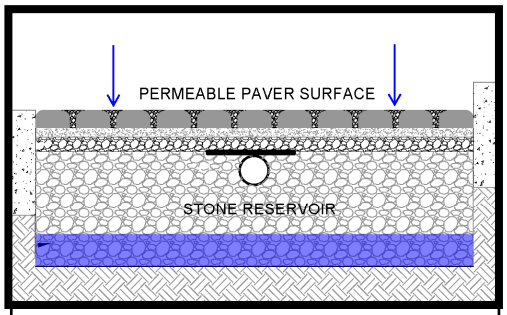


Figure 2: Typical permeable pavement de-

Figure 3: Aerial image of the CoGB with the project site outlined.

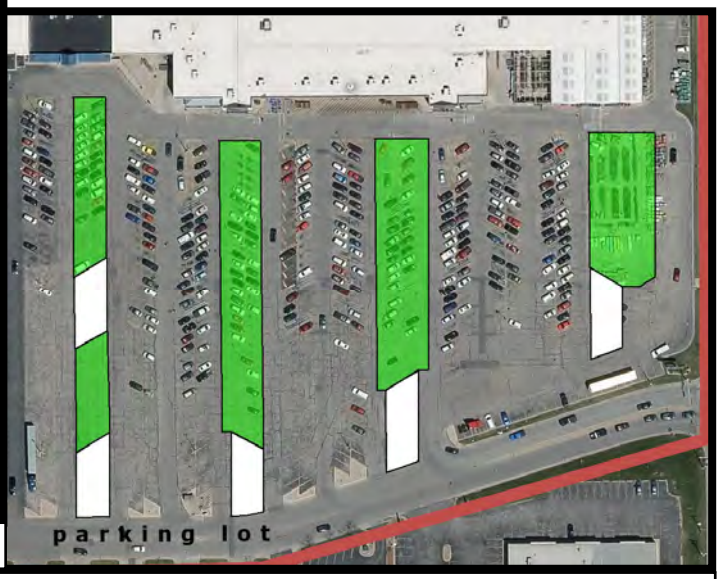


Figure 4: Proposed site with porous pavement areas shaded in green and bioswale area shown in white.

Site Location:

2250 W Mason St, Green Bay, WI

Parcel ID #6H-1096

GSI Description:

Permeable pavers (PP) in low point parking spaces. Two bioswale with trees placed to intercept runoff and reduce the amount of paved area. The proposed PP and bioswale placements would capture the runoff from large paved areas of parking.

Drainage Area = 3.374 ac. (146,960 sq. ft.)

Proposed Bioswale Area = 0.065 ac. (2850 sq. ft.)

Proposed PP Area = 0.368 ac. (16,020 sq. ft.)

Approximate Cost = $760,000 + $9,000/year

Annualized Cost = $35.50 / lb TSS reduction

Benefits of Captured Parking Lot Water:

Total Phosphorus Reduction = 0.5578 lbs (78.55%)

Total Suspended Solids Reduction =

1324 lbs (84.23%)

Volume Captured = 277,610 gallons

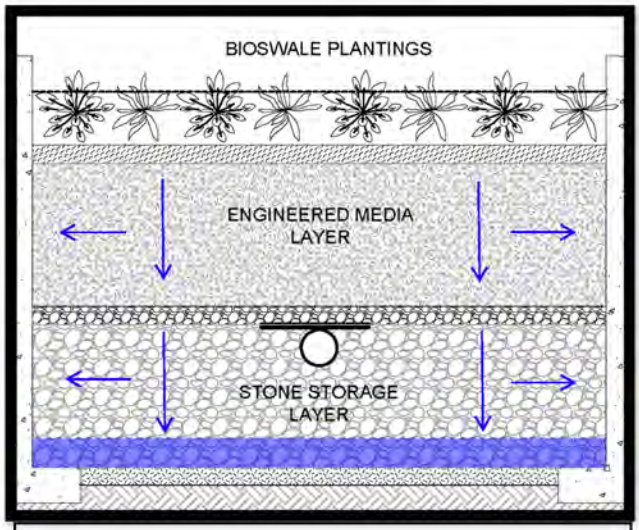


Figure 1: Typical bioswale detail.

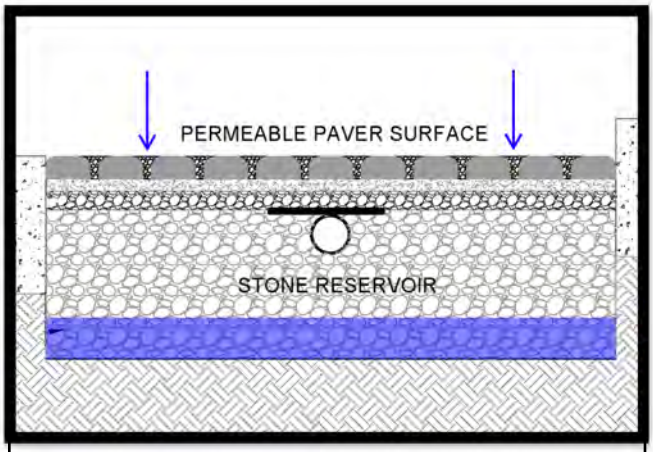


Figure 2: Typical permeable paver detail.

Figure 3: Aerial image of CoGB with the project site outlined.

Figure 4: Proposed site with permeable paver areas shaded in green and bioswale areas in white.

Site Location:

N Quincy St & Eastman Ave, Green Bay, WI

Parcel ID # 20-123

GSI Description:

Permeable pavers (PP) in parking spaces. The proposed PP and placements would capture the runoff from paved areas of parking, resulting in better water quality.

Drainage Area = 0.37 acres (16,219 sq. ft.)

Proposed PP Area = 0.19 acres (8,200 sq. ft.)

Approximate Cost = $350,000 + $4,000/year

Annualized Cost = $72.68 / lb TSS reduction

Benefits of Captured Parking Lot Water:

Total Phosphorus Reduction =

0.3008 lbs (79.13%)

Total Suspended Solids Reduction =

295.8 lbs (88.49%)

Volume Captured = 25,845 gallons

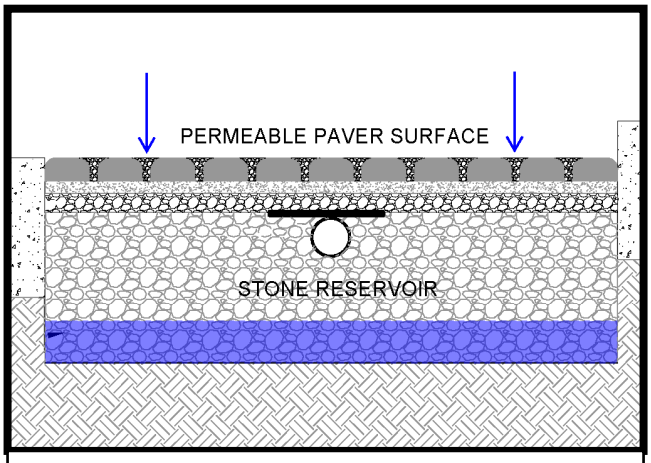


Figure 1: Typical permeable pavement detail.

Figure 2: Aerial image of CoGB with the project site outlined in red.

Figure 3: Proposed site with permeable pavement areas shown as green rectangles.

Using the Evaluation Process for ROW Projects: This tool guides the designer to whether Green Stormwater Infrastructure (GSI) strategies are feasible for your project, which GSI are the best fit, and a step-by-step process for achieving a successful product. Please follow each tab in this spreadsheet tool (Eval Step 1, Pavement, Building, Green Space, and lastly Design Process Steps). For more information, or with questions, please contact Carrie Bristoll-Groll, PE, ENV SP at AQUALIS: 414.810.1245.

ight of Way Project GSI Evaluation Tool

CIP Project Name: _____

Streets: _____

Project Schedule/CIP Year _____

Roadway/ROW Designer: _____

Design Delivery Department: _____

GSI Design Evaluation Performed by: _____

Place an "x" in the box that most fits your response

Project Selection Questions	Rating					Weight
	Yes	Probably	Maybe	Unlikely	No	
Project Schedule and Budget						
Is the project construction scheduled for more than 6 months from today			x			3
Is sufficient budget or grant funding available to allow a GSI device?			x			3
Is the roadway/right-of-way designer on board with adding GSI?			x			3
Do you have the necessary staff available to design GSI for this project?		x				4
Project Area Needs						
Is the project area highly rated for water quality needs according to GSI Map 1?	x					5
Is the project area highly rated to be flood prone according to the GSI Map 2?					x	1
Does the project appear in the City's GSI Plan?					x	1
Is there interest for GSI here for other reasons not yet listed?			x			3
Project Area Constraints						
Does the area have high bedrock or high water table (see Map 5)			x			3
Does the area have sandy soils?	x		x			5
Are buried or overhead utilities buried constraints to the project area?*		x				2
Do residents or abutting property owners in favor of GSI?		x				4
Likelihood of Moving Project Forward	Yes				No	
TOTAL (RECOMMENDED SCORES OVER 60% TO PROCEED)						**62%**

Scores over 70% have a good likelihood of success and the designer should proceed to the next step. Scores between 60%-70%, project is possible with some added effort. Scores less than 60% need additional assistance, champions for the project, or funding. See tabs below to continue evaluation depending on your project area. If pavement project, see the Pavement Tab. If a building project, see the Building Tab, if a Parks, School or other greenspace project, see Green Space Tab

Green Stormwater Infrastructure for Pavement

Does your Project Area Have

.

Best GSI Options

	Regenerative Stormwater Conveyance	Bioswale	Native Landscaping	Porous Pavement	Remove Pavement	Stormwater Trees
Unused/Underused Pavement						
Roadways						
Min. of 10' between curb and bldg						
With vegetated islands						
With Rural Cross-section/ditches						
Has inverted crown (alley pavement)						
Scheduled to be repaved only						
Parking Areas						
With vegetated islands						
Sloped towards vegetated permimeter						
Does not drain towards vegetated perimeter						
Scheduled to be repaved only						
Paths and Sidewalks						

Green Stormwater Infrastructure for Buildings

Does your Project Area Have

.

Best GSI Options

	Removal of Structure	Rain barrel/Cistern/StormGUARDen	Blue Roof	Green Roof
Existing Land Use				
Flat/Shallow Roof				
No Vegetation Desired				
Garden or Courtyard				
External Drainage*				
Steep Roof				
External Drainage*				
Access to Internal Drainage				
Outbuilding				
Structure Not Used				
Structure function can be provided elsewhere				
External Drainage				

Green Stormwater Infrastructure for Green Space

Does your Project Area Have

Best GSI Options

	Wetland Construction/Restoration	Stormwater Trees	Bioswale	Rain Garden	Porous Turf*	Porous Pavers	Greenway	Soil Amendments	Native Plantings
Existing Land Use									
Athletic Fields									
Terrace Area in Right of Way									
Within 10 feet of building with basement									
Within 10 feet of building with no basement									
10+ feet away from building									
Buffers									
Along pathways									
Along buildings									
Adjacent to pavement									
Receiving rainwater from downspout									
Entrance Areas to Buildings									
Gardens									
Receiving rainwater from downspout									
Landscaping									
Within 10 feet of building with basement									
Within 10 feet of building with no basement									
10+ feet away from building									
Space where grass does not grow well									
Natural Play Zone									
Mulched areas									
Areas where grass does not grow well									
Perimeter of play zone									
Open Green Space									
Large open spaces									
Large spaces that remain wet									
Small spaces that remain wet									
Space where grass does not grow well									
Courtyards									
Within 10 feet of building with basement									
Within 10 feet of building with no basement									
10+ feet away from building									
Outdoor Classroom									
Large spaces that remain wet and muddy									
Small spaces that remain wet and muddy									

Perimeter of classroom area									

Design Process
Now that you have determined that your public right of way space could be a good candidate for GSI, and you have decided, using the tabs in this tool, what type of GSI would be a good fit, the following inforamtion is needed to proceed.

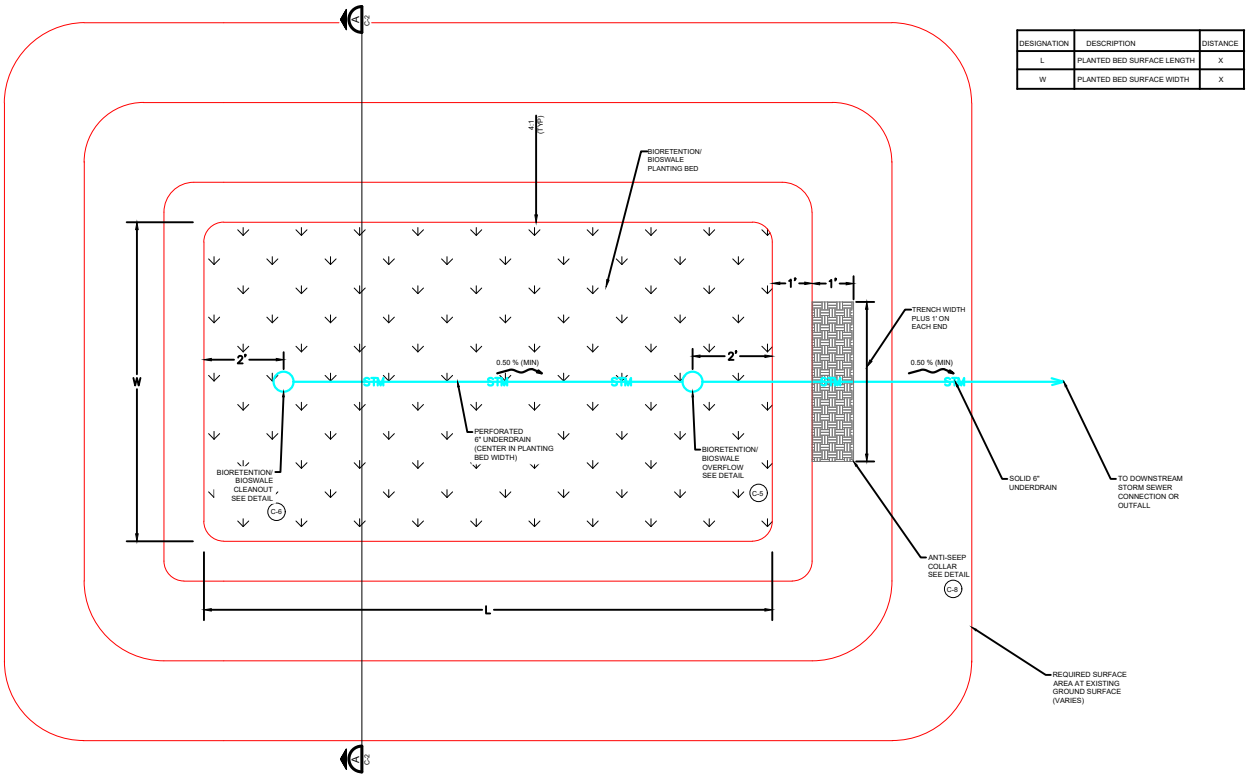
Consult your City drainage or GSI design team, or call AQUALIS for assistance in moving forward (414) 810-1245.

Right of Way Project GSI Design Process

CIP Project Name: _____
Streets: _____
Project Schedule/CIP Year _____
Roadway/ROW Designer: _____
Design Delivery Department: _____
GSI Design Evaluation Performed by: _____

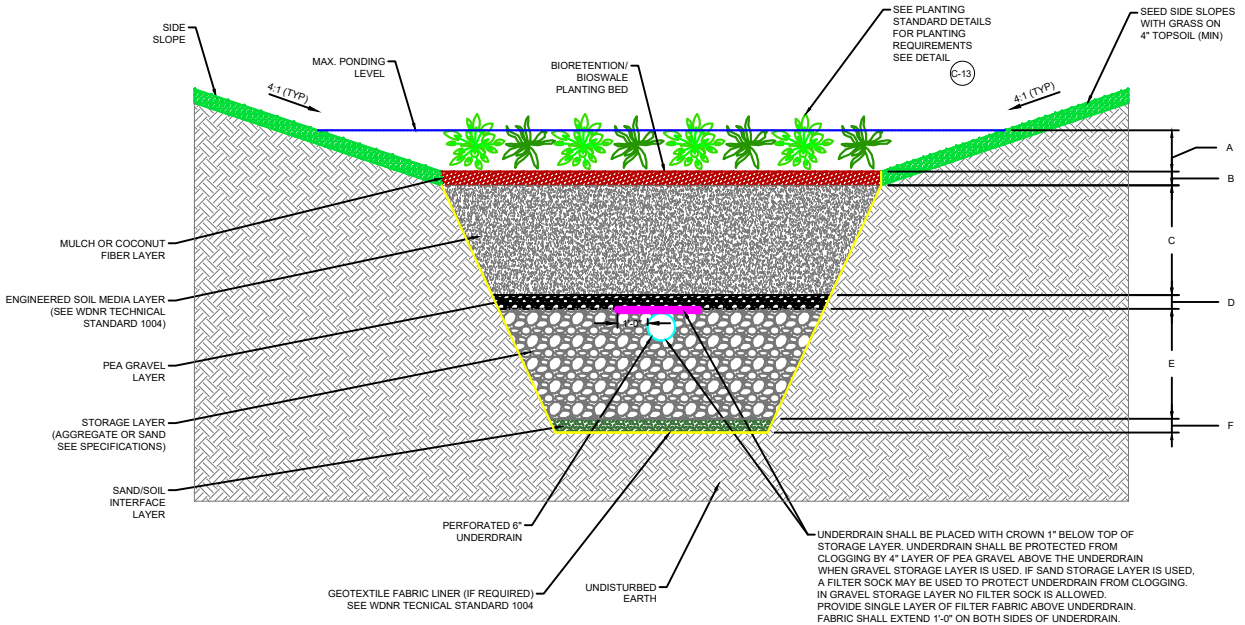
	Assigned to	Completed date	Reviewed by
Project Area - Concept Plan			
Request site survey including all utilities, property lines, and easements			
Review WDNR Brrts for soil contamination concerns			
If concerns from Brrts review, discuss Environmental Phase 1 Evaluation with Project Team			
Perform hydrology and hydraulic (H&H) calculations for sizing GSI based on chosen design storm			
Perform initial WinSLAMM model to determine potential TSS and TP removals			
Prepare Conceptual Engineer's Estimate for Construction Cost and confirm budget			
Perform initial layout and create Concept Plan. Route to Roadway Design team for review			
Preliminary Design			
Review roadway design team comments and address			
Confirm GSI is located at least 3' horizontally from any other utility			
Discuss proximity to existing trees with City Arborist or Forestry Dept			
Determine if GSI needs a liner based upon depth to groundwater, contaminated soils, other			
Perform prelim H&H			
Review layout to Preliminary Design Plan. Use GSI standard details			
Perform preliminary WinSLAMM model			
Determine if project still qualifies for grants, captures the anticipated gallons			
Review standard specifications to ID which are needed for project			
Prepare Prelim Engineer's Estimate for Construction Cost and confirm budget			
Prepare Preliminary Plans and route to Roadway Design Team for review			
Final Design			
Review roadway design team comments and address			
Prepare final Plans, Details, Specifications, and Engineer's Construction Estimate			
Prepare permit documents as needed			
Prepare public information meeting documents to discuss benefits of GSI			
Inform City's street maintenance crews of future GSI O&M manual sections			
Construction Management			
Assist in pre-bid and pre-construction meetings with information on GSI			
Review questions from field and perform site inspections as needed			
Prepare as-built information and upload to City's ArcMAP for GSI			
Futute O&M and DNR reporting			
Inspect GSI at minimum quarterly as directed by GSI O&M Manual			
Document maintenance needs and costs as appropriate and upload to City' ArcMAP for GSI			
Update city's DNR TMDL permit compliance with WinSLAMM model updates of GSI			

Congratulations! You have been an instrumental part in protecting the health of our valued water resources for the future!



DESIGNATION	DESCRIPTION	DISTANCE
L	PLANTED BED SURFACE LENGTH	X
W	PLANTED BED SURFACE WIDTH	X

C-3 BIORETENTION / BIOSWALE TYPICAL PLAN VIEW
(SLOPED SIDES)
NTS



C-5 C-6 C-7 C-9 C-11

DIMENSION	LAYER NAME	DEPTH
A	SURFACE PONDING	X
B	MULCH OR COCONUT FIBER	X
C	ENGINEERED SOIL MEDIA	X
D	PEA GRAVEL	X
E	STORAGE	X
F	SAND/SOIL INTERFACE	X

C-4 BIORETENTION / BIOSWALE TYPICAL CROSS-SECTION (SLOPED SIDES)

SECTION A
NTS C-1

DESIGNATION	DESCRIPTION	DISTANCE
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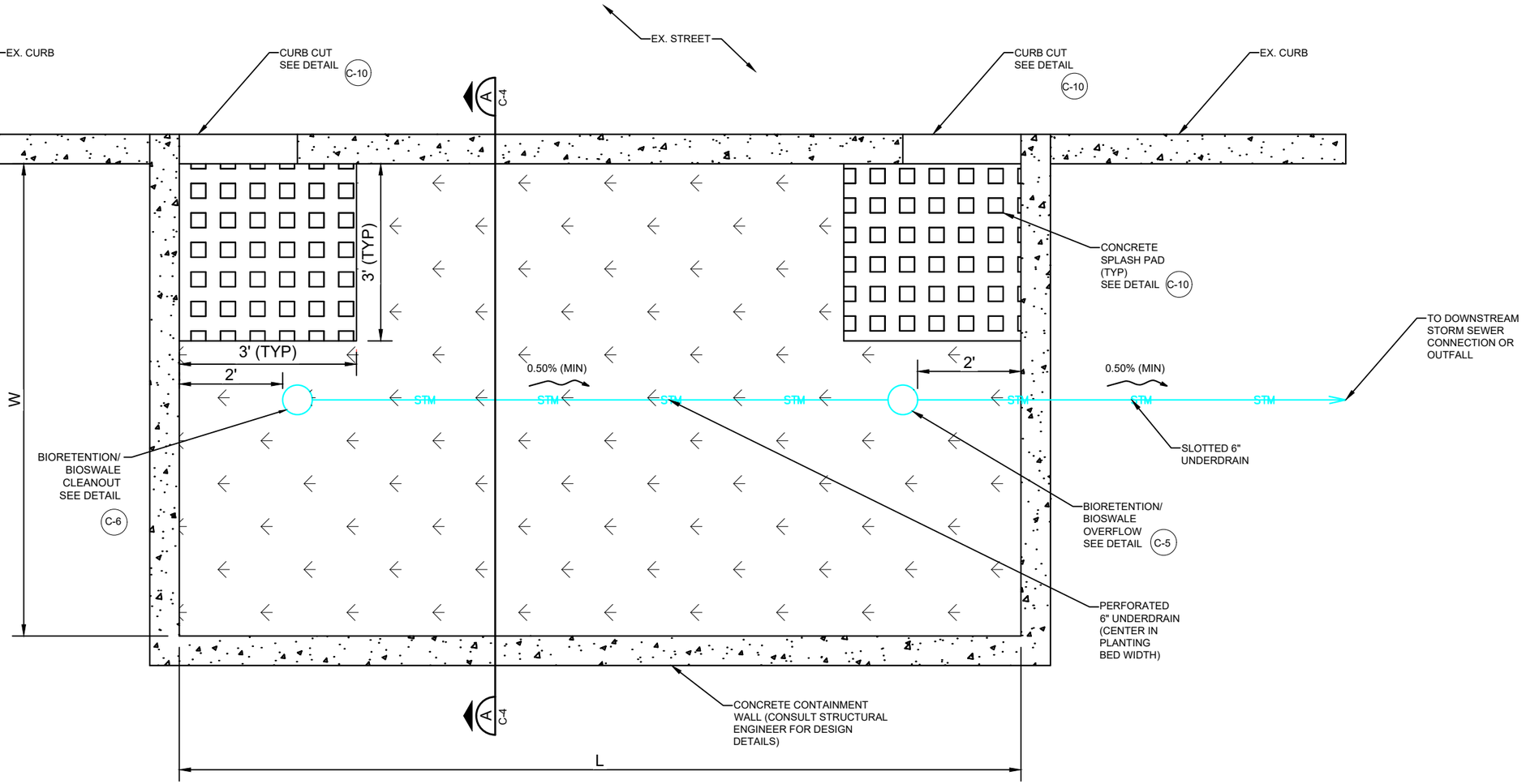
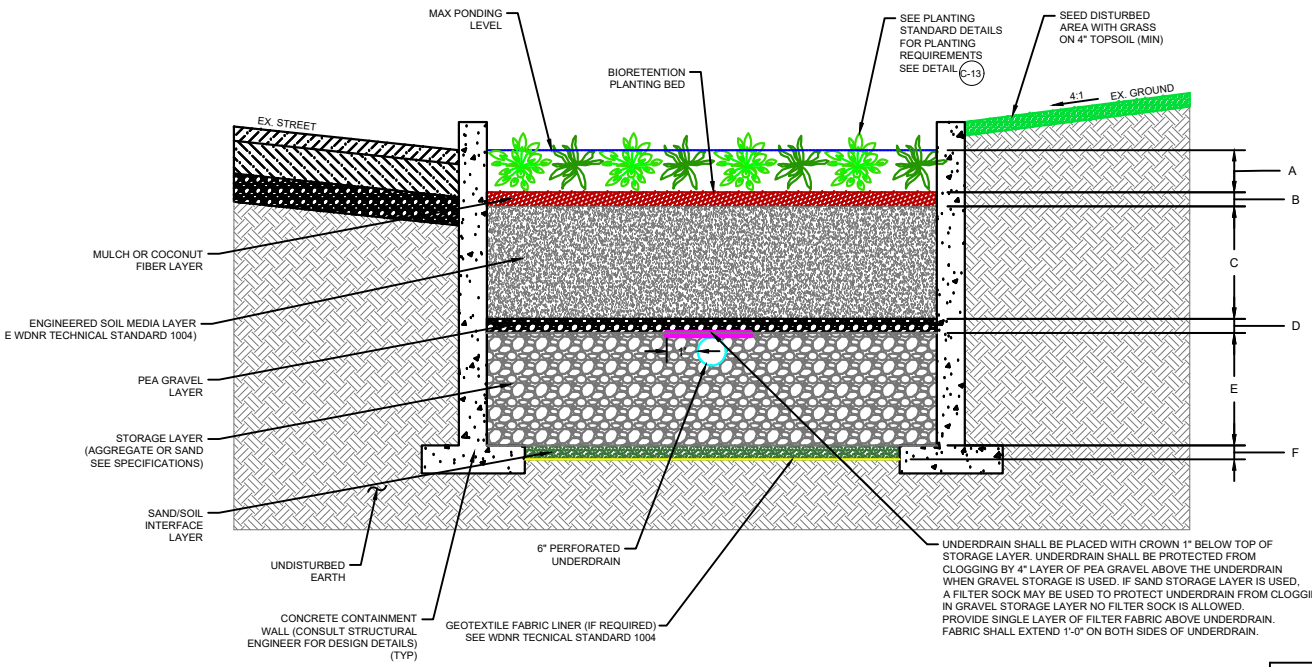
W	PLANTED BED SURFACE WIDTH	X



C-5 BIORETENTION TYPICAL PLAN VIEW (CONCRETE PERIMETER CURB)

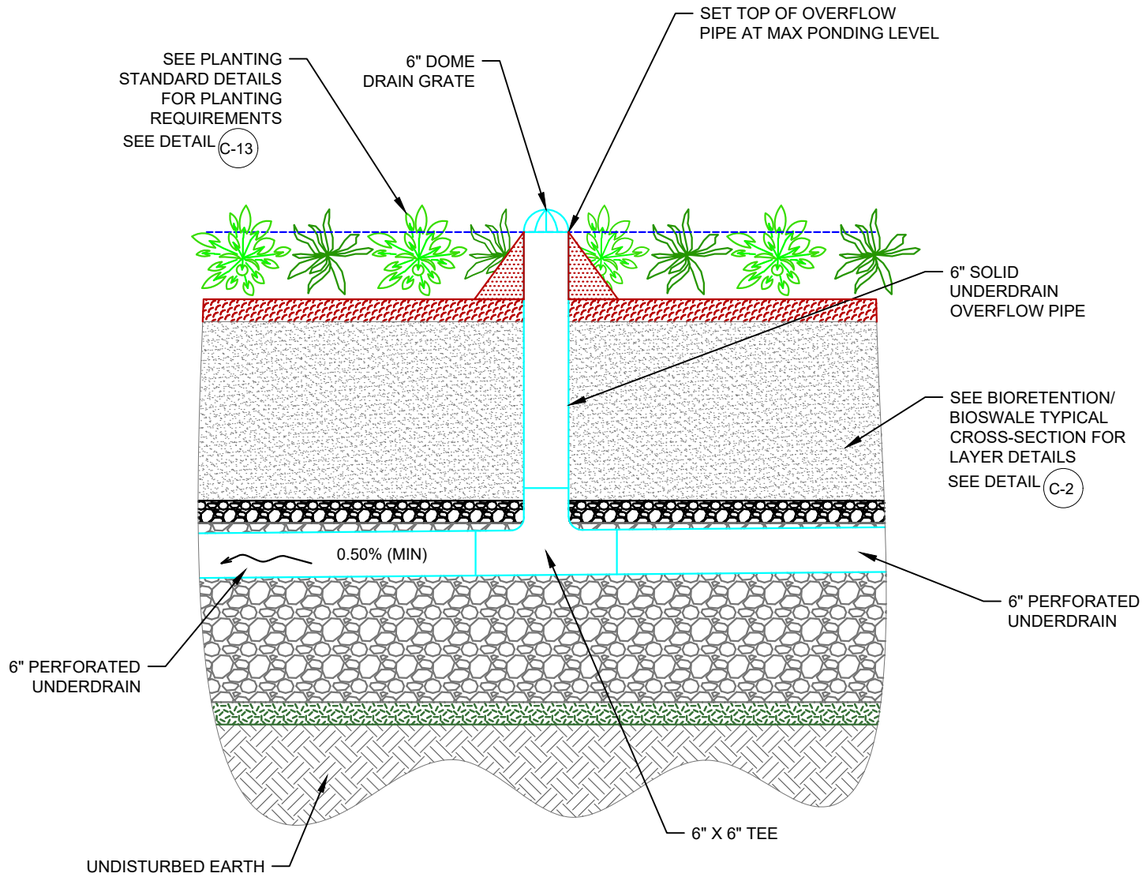
NTS



DIMENSION	LAYER NAME	DEPTH
A	SURFACE PONDING	X
B	MULCH OR COCONUT FIBER	X
C	ENGINEERED SOIL MEDIA	X
D	PEA GRAVEL	X
E	STORAGE	X
F	SAND/SOIL INTERFACE	X

BIORETENTION TYPICAL CROSS-SECTION (CONCRETE PERIMETER CURB)

SECTION A
NTS C-3

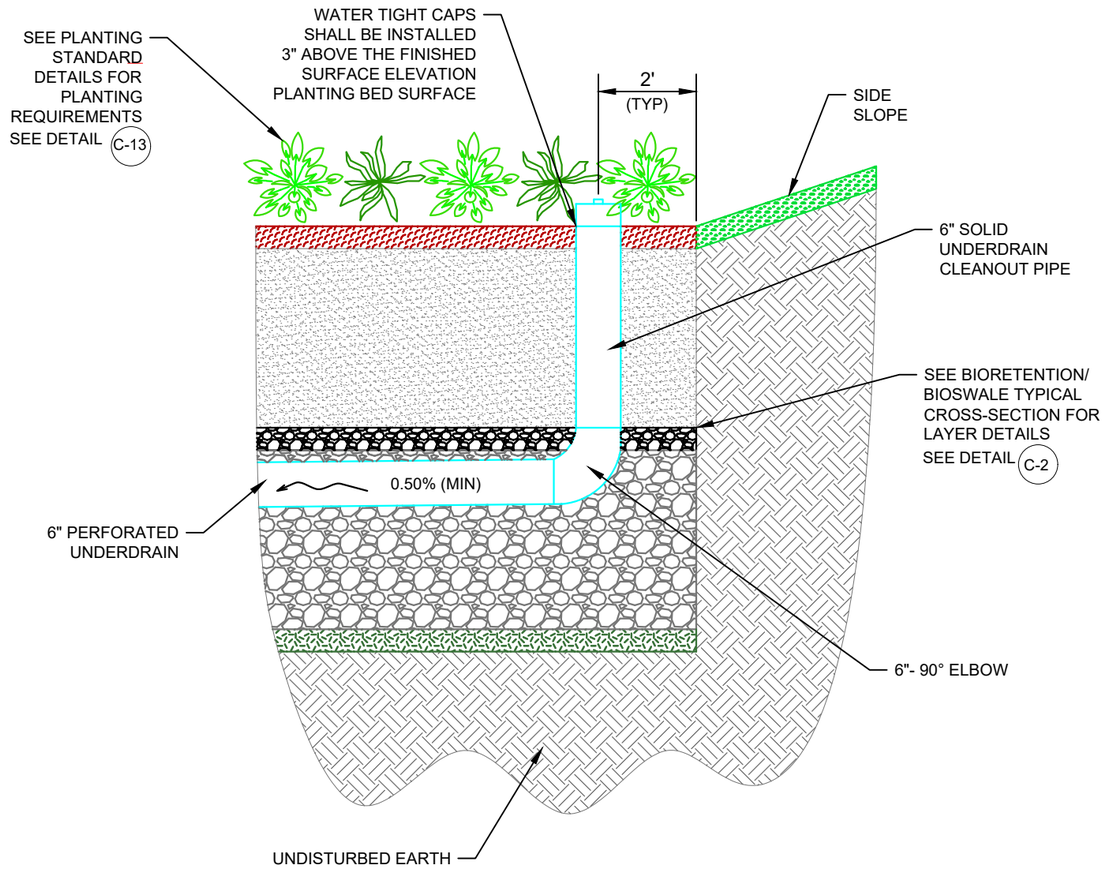


C-7 BIORETENTION / BIOSWALE OVERFLOW

NTS

DETAIL 5 C-1 / 5 C-3

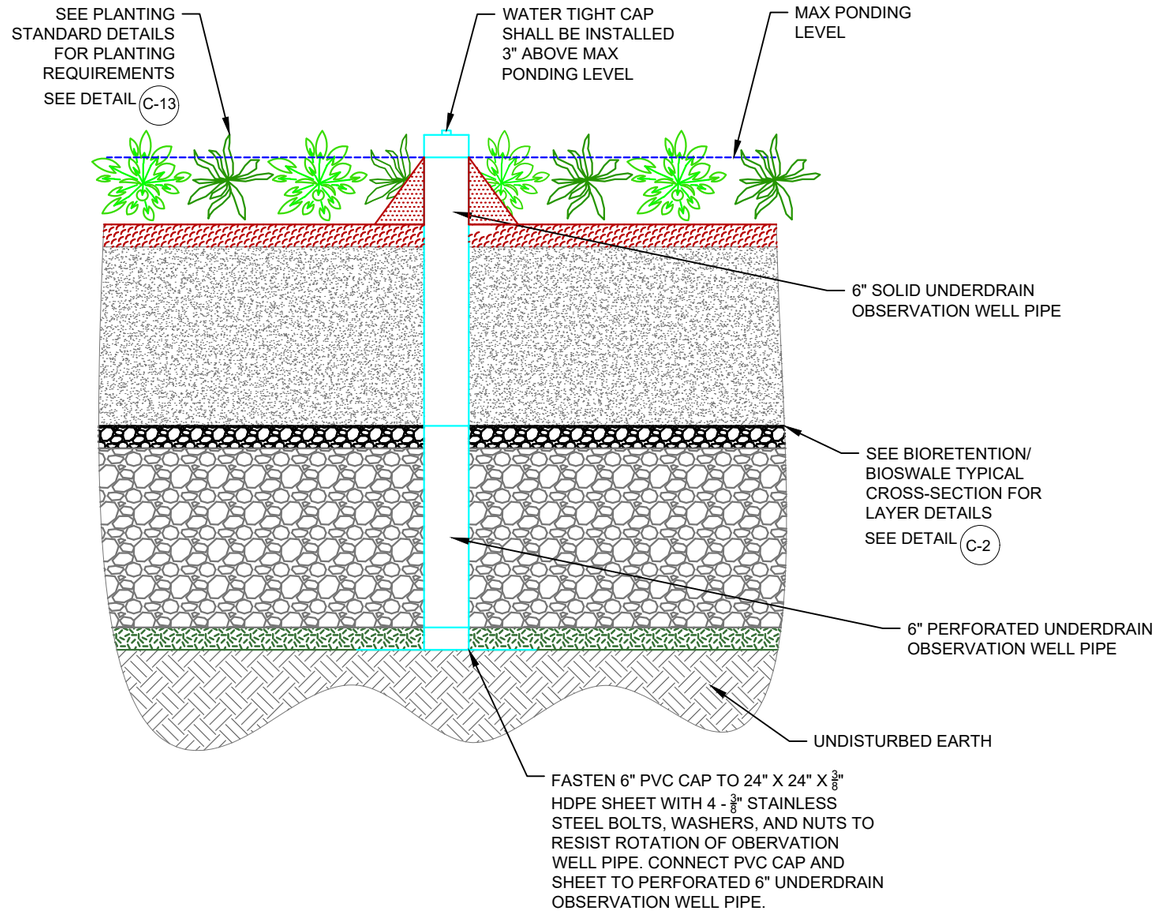
NTS



C-8 BIORETENTION / BIOSWALE CLEANOUT

DETAIL
NTS

6 C-1 | 6 C-3 | 6 C-11



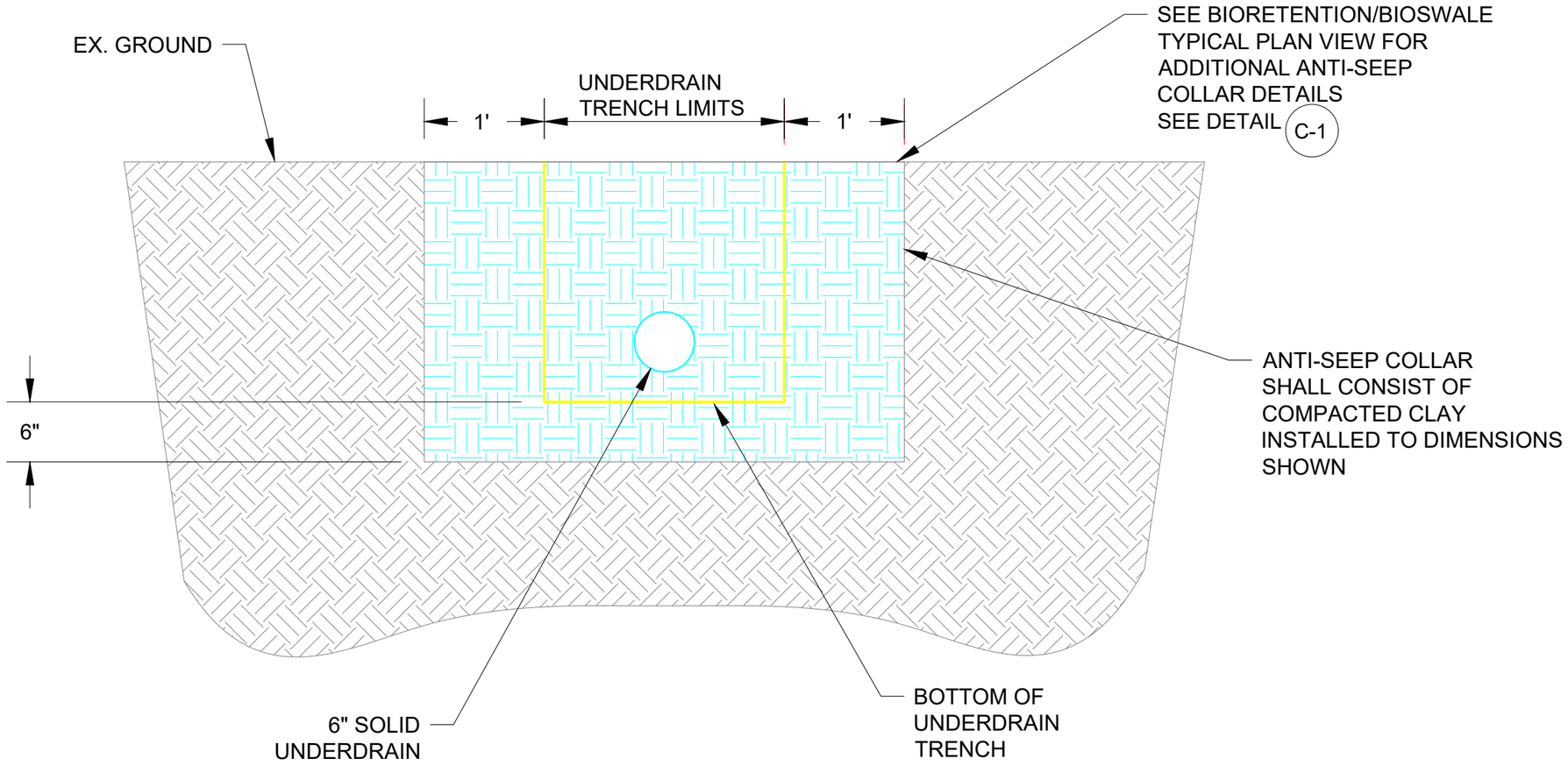
NOTE

1. ONE OBSERVATION WELL REQUIRED PER 1,000 SQUARE FEET OF SURFACE AREA LOCATED IN CENTER

C-9 BIORETENTION / BIOSWALE OBSERVATION WELL

DETAIL 7

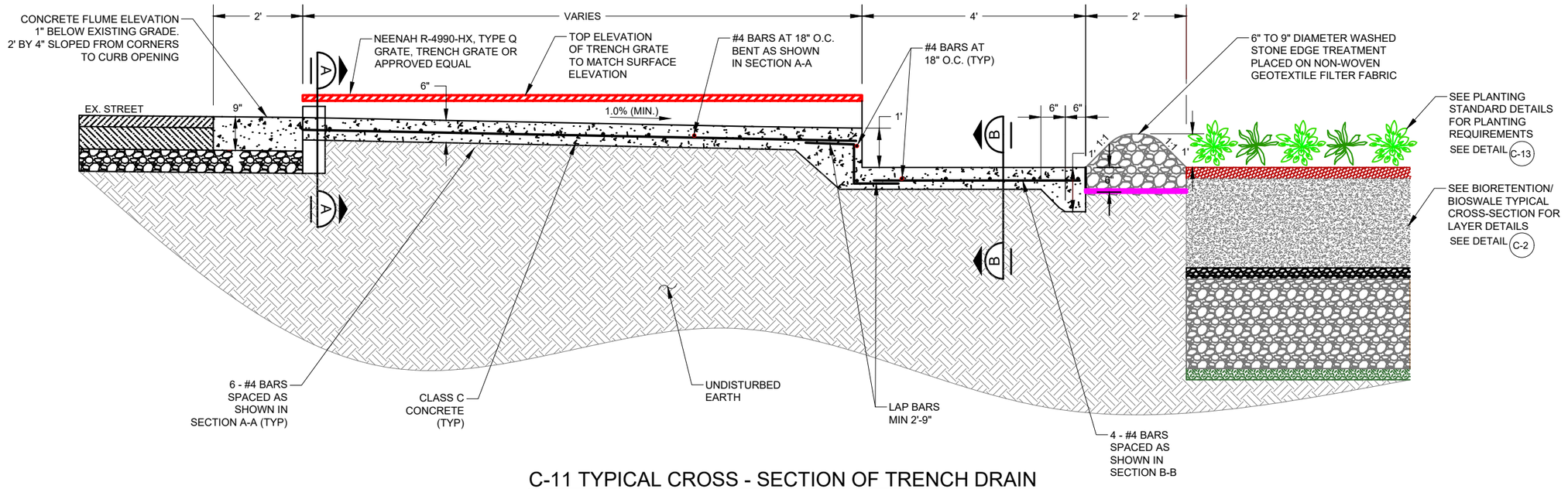
NTS



ANTI - SEEP COLLAR

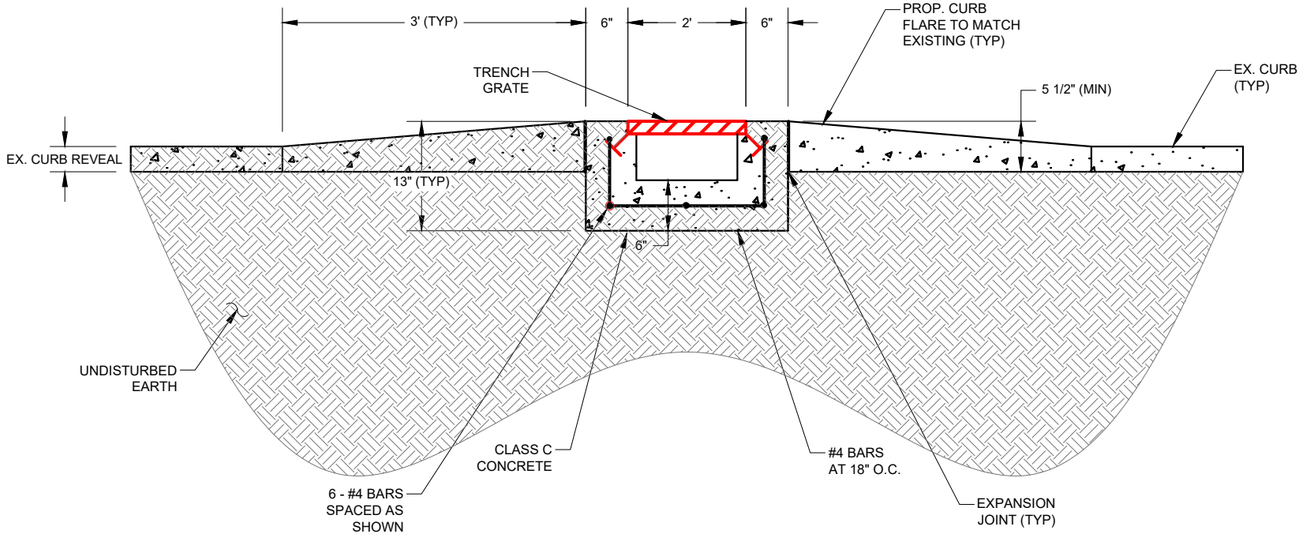
DETAIL 1

NTS C-8



C-11 TYPICAL CROSS - SECTION OF TRENCH DRAIN

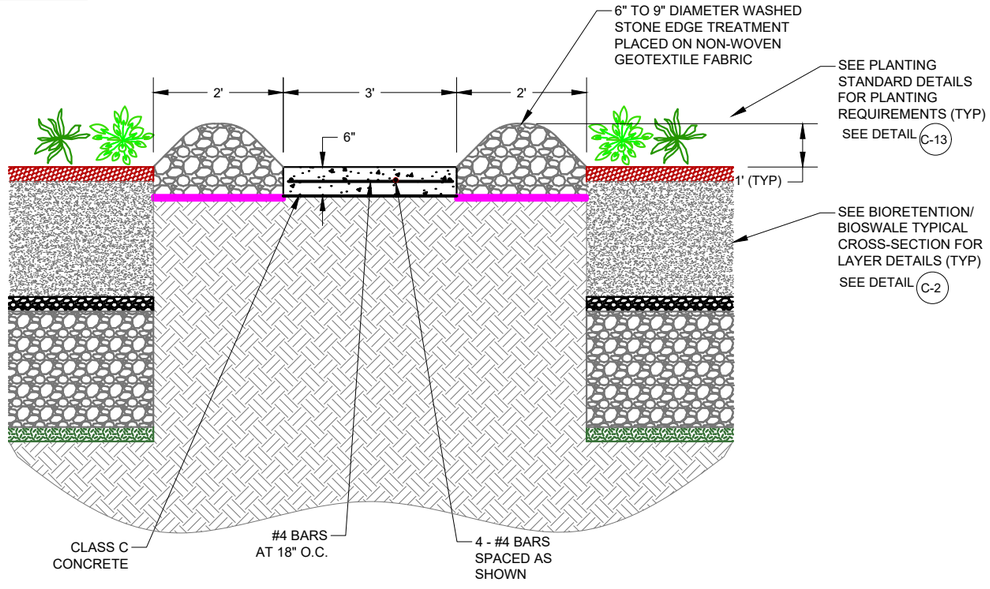
NTS



TRENCH DRAIN TYPICAL CROSS - SECTION

SECTION A

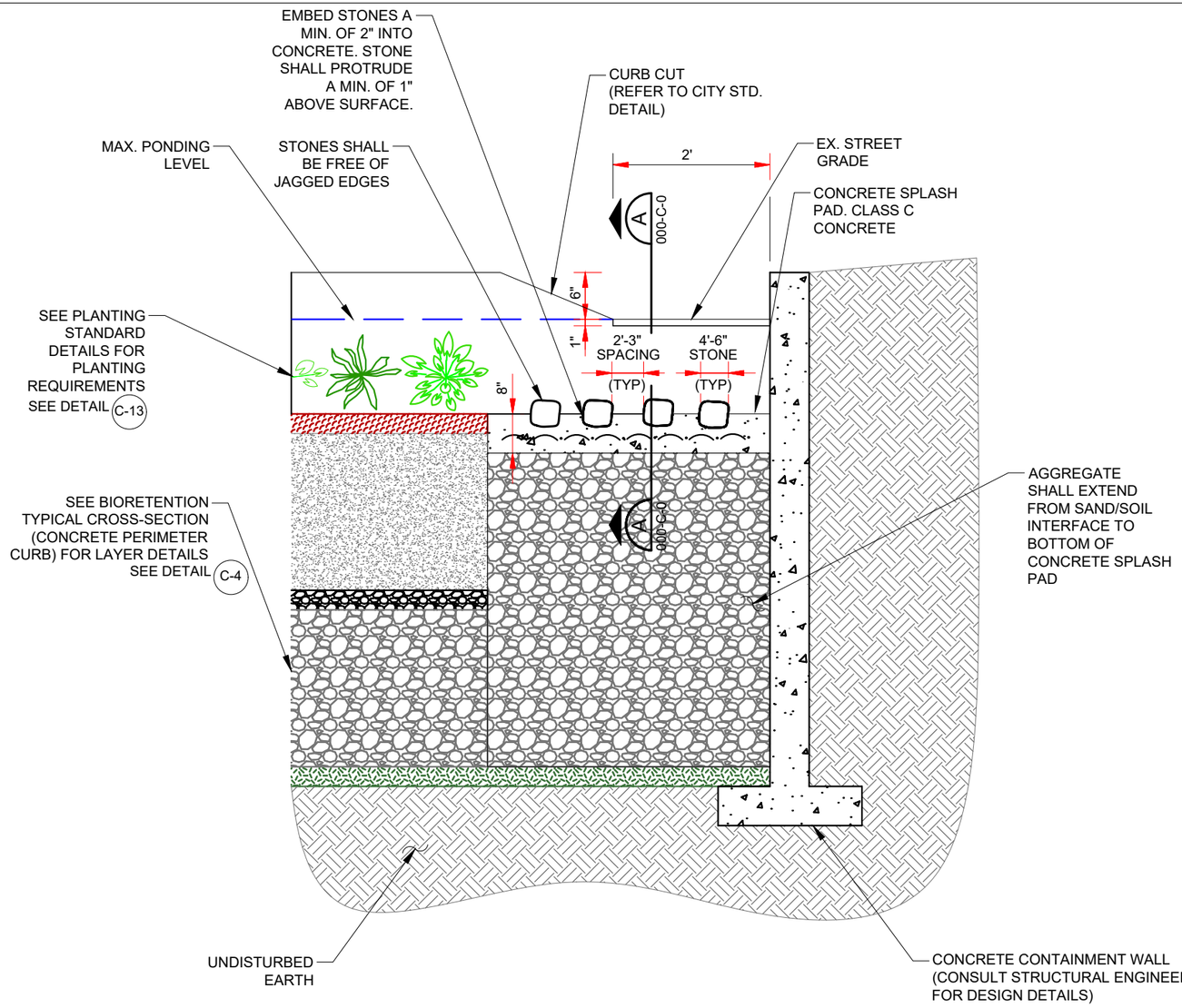
NTS



TRENCH DRAIN TYPICAL CROSS - SECTION

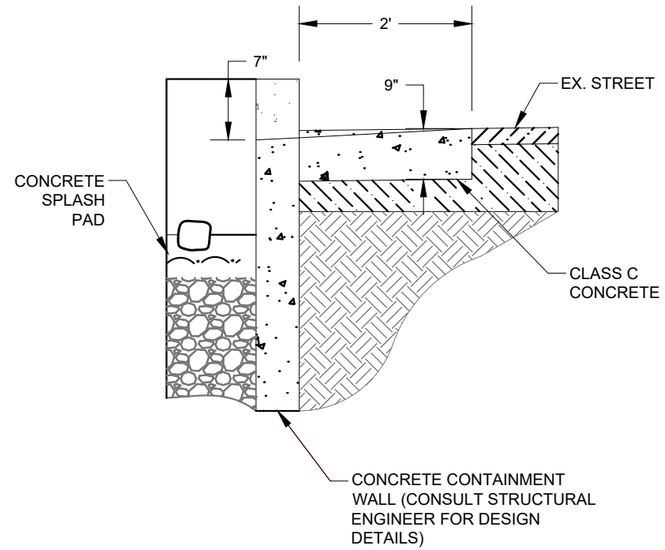
SECTION B

NTS



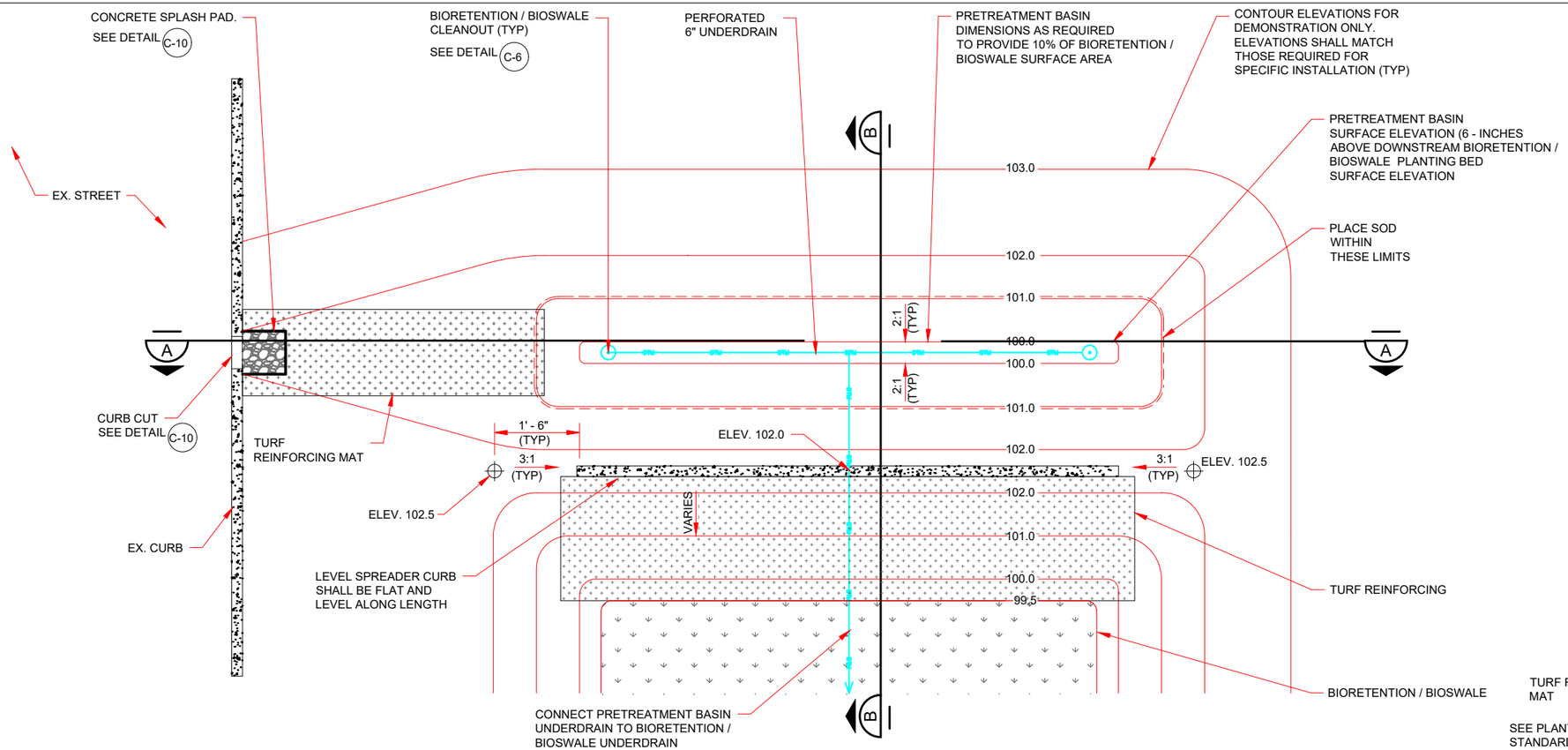
C-12 CONCRETE SPLASH PAD AND CURB CUT TYPICAL CROSS - SECTION

DETAIL 10 C-3 / 10 C-11
NTS



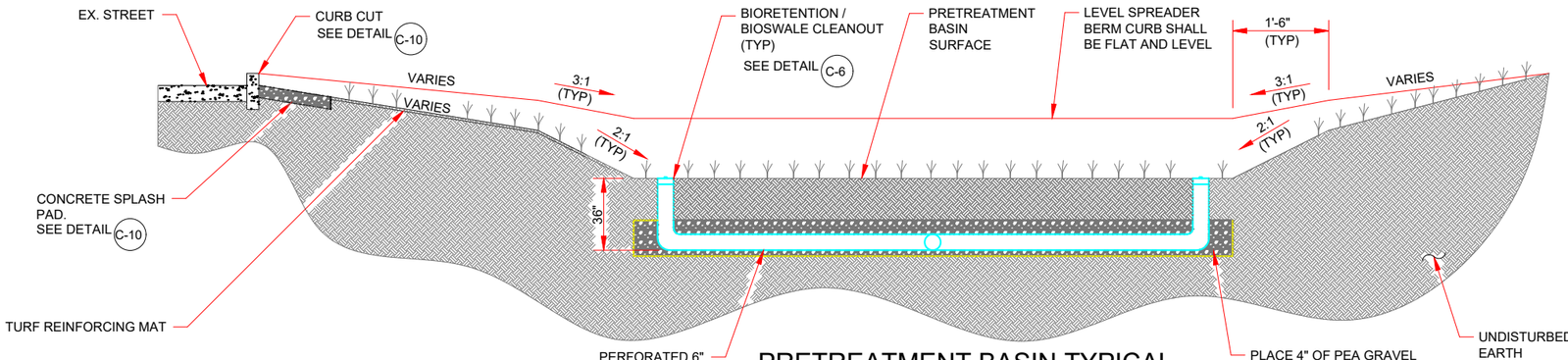
CONCRETE SPLASH PAD AND CURB CUT TYPICAL CROSS - SECTION

SECTION A C-11
NTS



C-13 PRETREATMENT BASIN TYPICAL PLAN VIEW

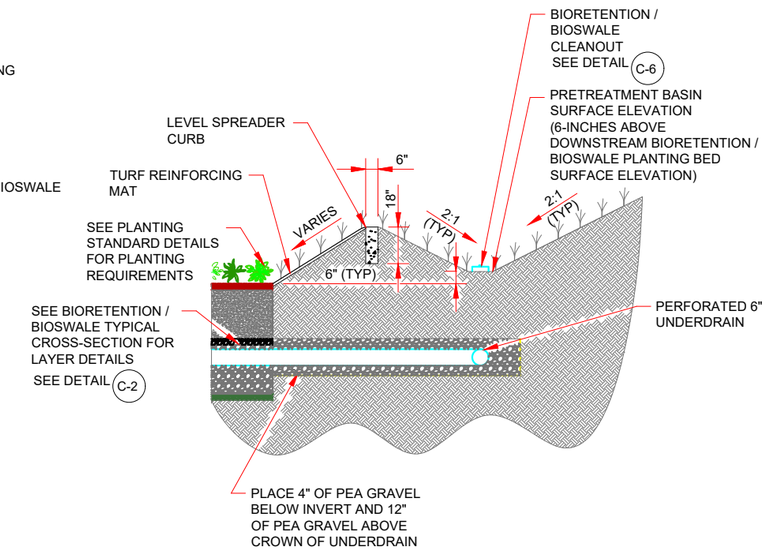
NTS



PRETREATMENT BASIN TYPICAL CROSS - SECTION

SECTION A

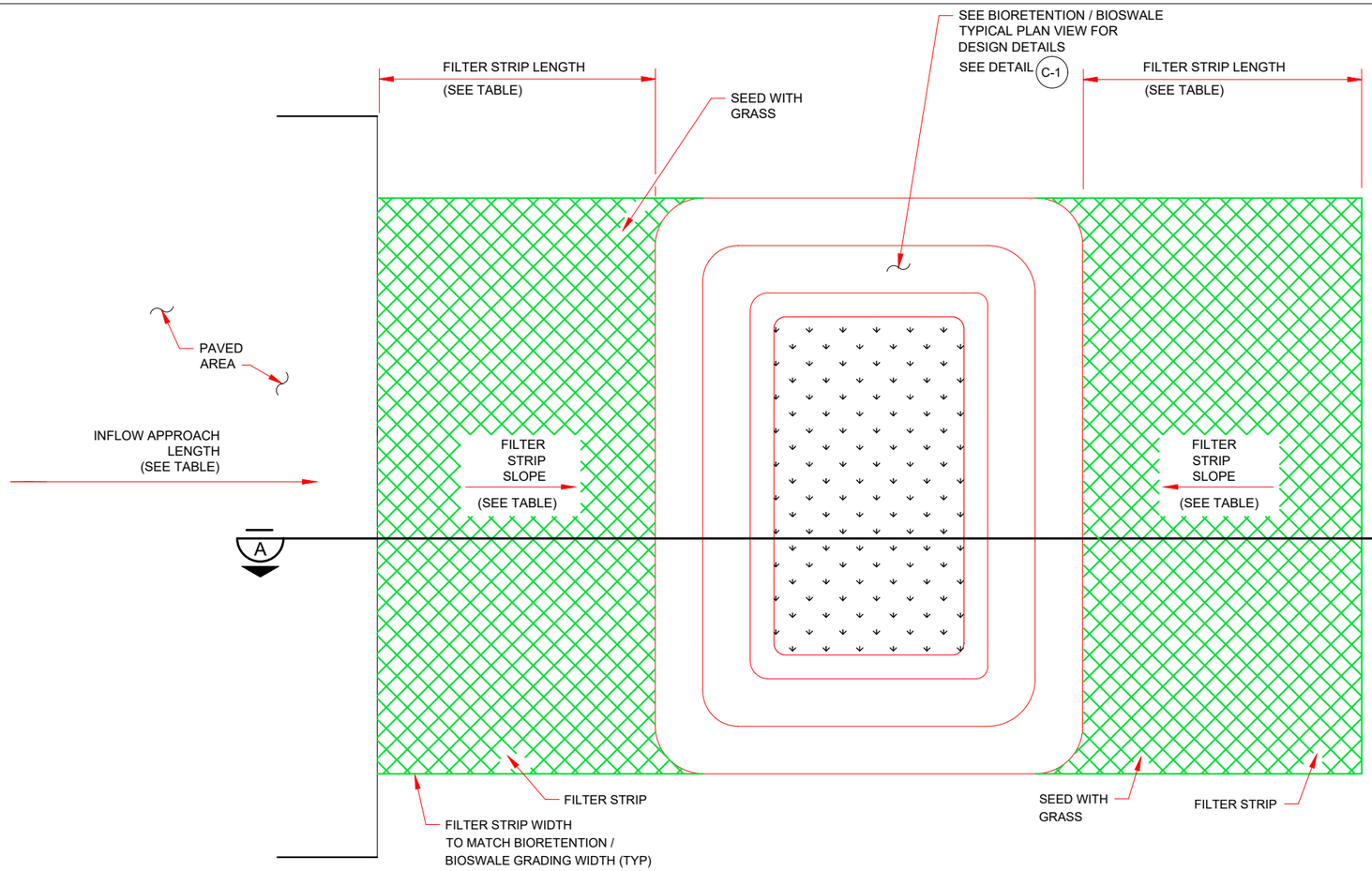
NTS



PRETREATMENT BASIN TYPICAL CROSS - SECTION

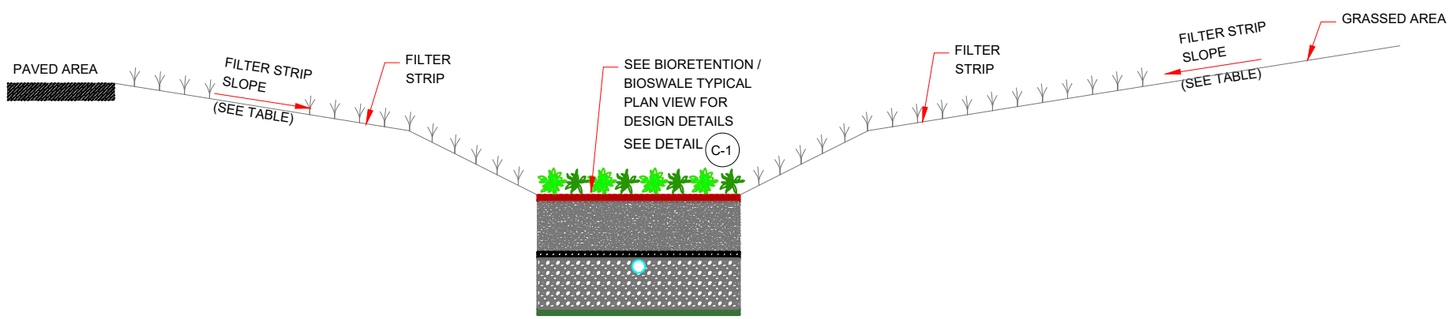
SECTION B

NTS



FILTER STRIP TYPICAL PLAN VIEW

NTS



FILTER STRIP TYPICAL CROSS SECTION

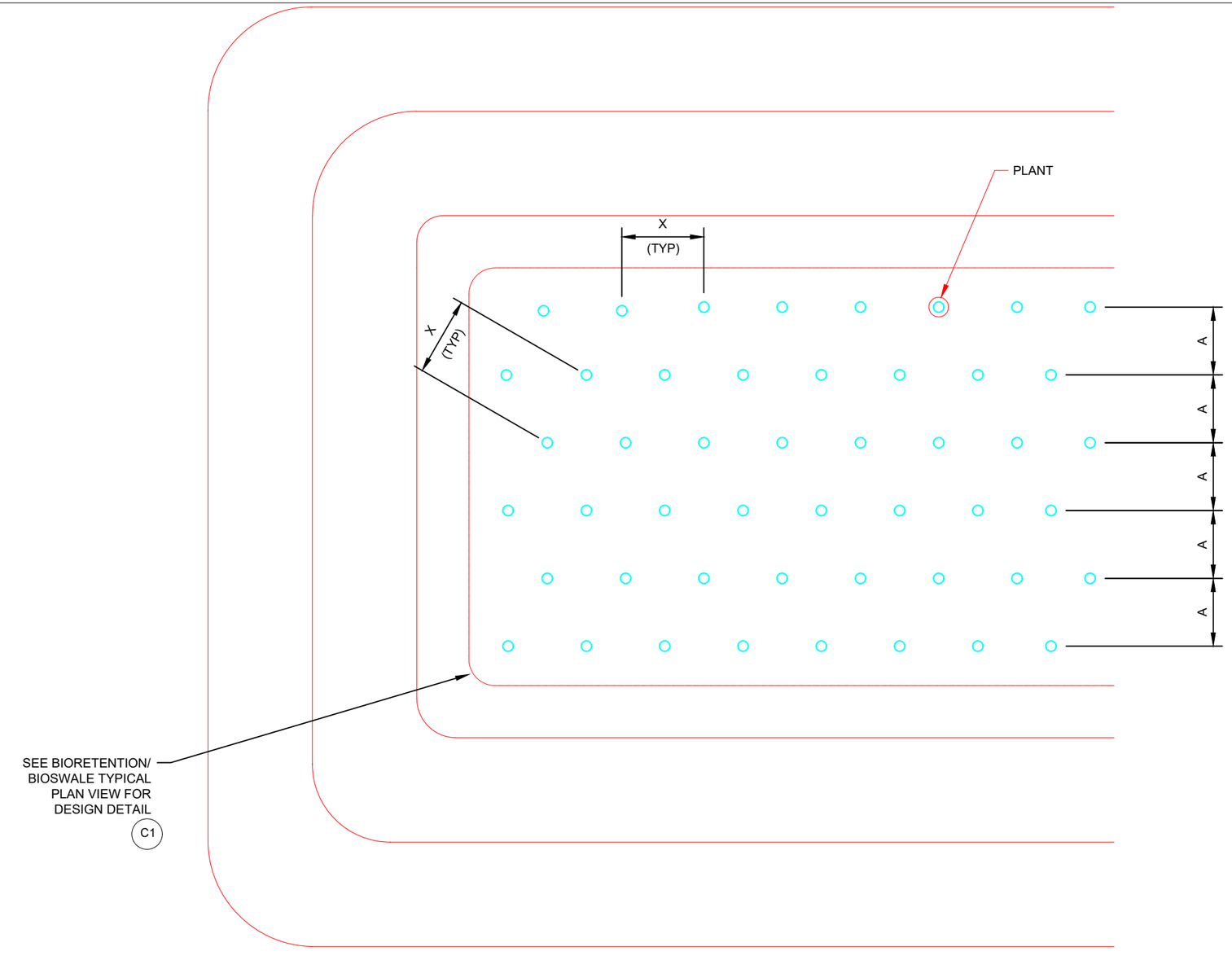
SECTION A

NTS

PRETREATMENT FILTER STRIP SIZING GUIDANCE

PARAMETER	STORMWATER RUNOFF INFLOW APPROACH FROM IMPERVIOUS PARKING LOTS				STORMWATER RUNOFF INFLOW APPROACH FROM LAWNS / LANDSCAPED AREAS				NOTES
MAXIMUM INFLOW APPROACH LENGTH (FEET)	35		75		75		150		
	<2%	>2%	<2%	>2%	<2%	>2%	<2%	>2%	MAXIMUM
FILTER STRIP SLOPE									SLOPE = 6%
FILTER STRIP MINIMUM LENGTH	10'	15'	20'	25'	10'	12'	15'	18'	

EXAMPLE: TO PRETREAT RUNOFF THAT FLOWS 75 FEET ACROSS A PARKING LOT BEFORE REACHING THE BIORETENTION DEVICE, THE FILTER STRIP SHOULD BE 20 FEET LONG IF THE FILTER STRIP SLOPE IS LESS THAN OR EQUAL TO 2% AND 25 FEET LONG IF THE FILTER STRIP SLOPE IS OVER 2%.

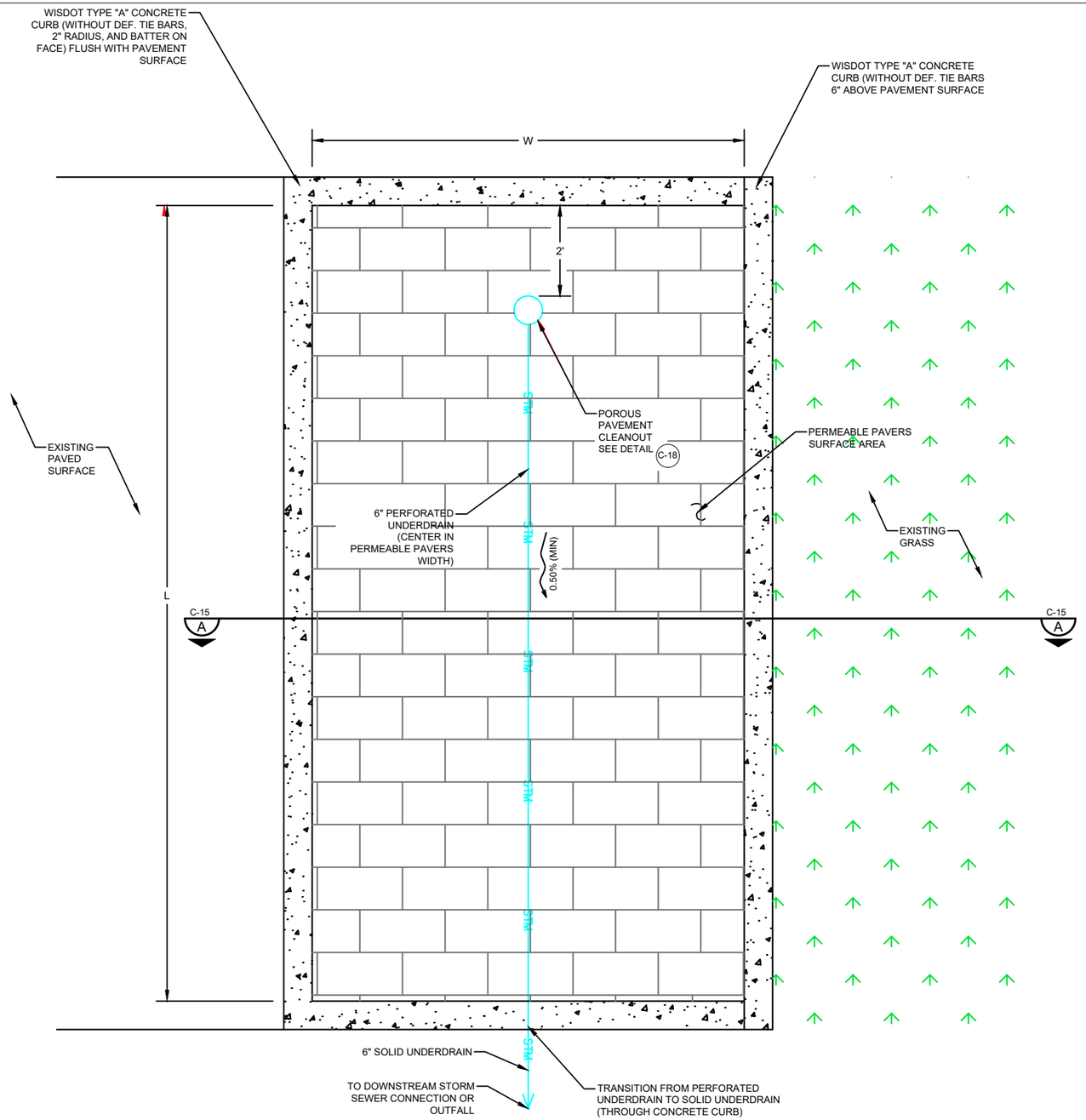


SPACING SCHEDULE	
SPACING "X" (SUGGESTED PLANT SPACING)	SPACING "A"
8" O.C.	7"
12" O.C.	10 1/2"
18" O.C.	15 1/2"
24" O.C.	20 3/4"
30" O.C.	26"
36" O.C.	31"
42" O.C.	36"
60" O.C.	52"

BIORETENTION / BIOSWALE
PLANT SPACING

DETAIL
NTS

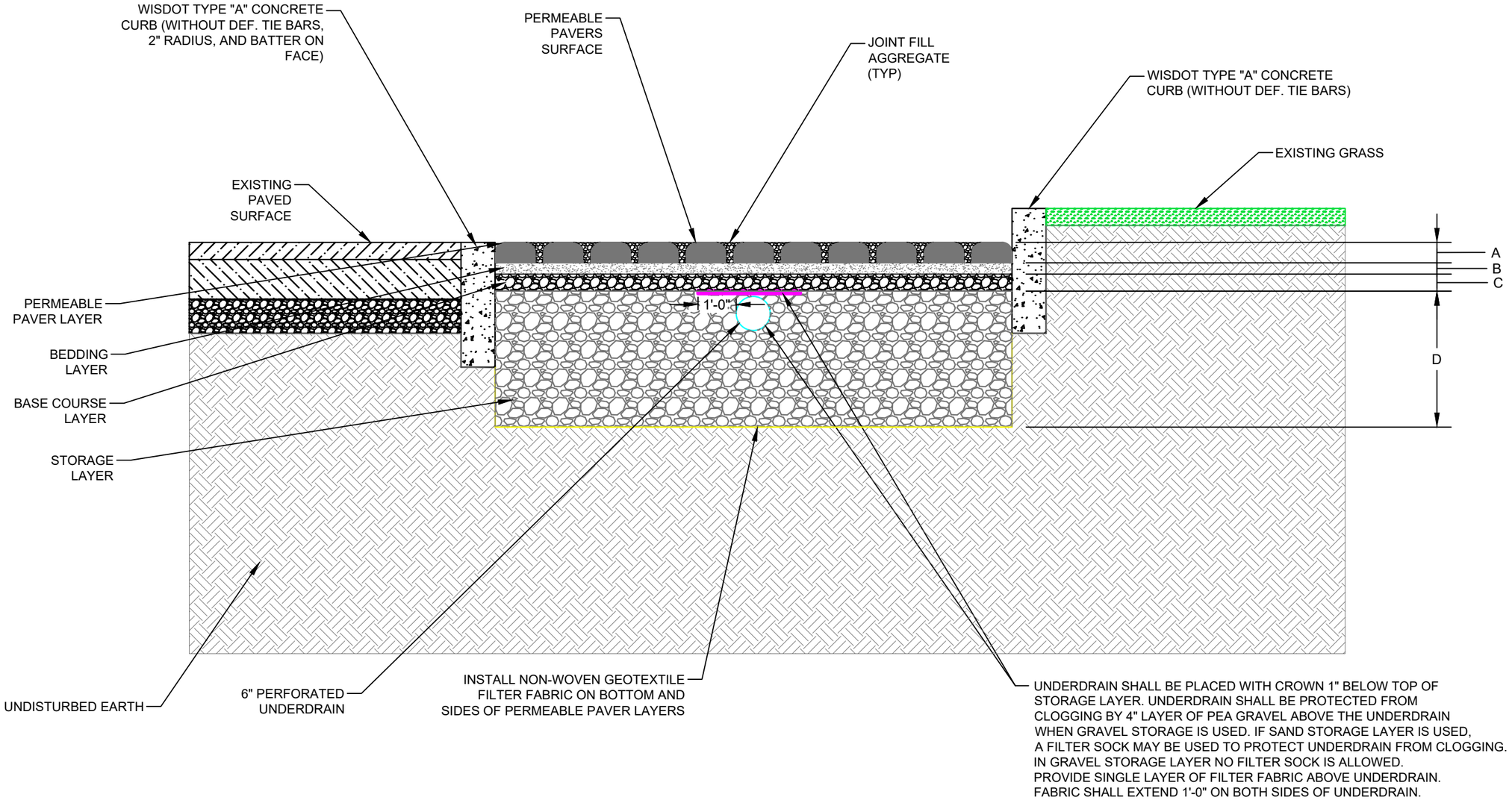
13 C-2 | 13 C-4 | 13 C-5 | 13 C-6 | 13 C-9 | 13 C-10



DIMENSION	DESCRIPTION	DISTANCE
L	PERMEABLE PAVERS SURFACE LENGTH	X
W	PERMEABLE PAVERS SURFACE WIDTH	X

C-16 PERMEABLE PAVERS TYPICAL PLAN VIEW

NTS



DIMENSION	LAYER NAME	DEPTH
A	PERMEABLE PAVERS	X*
B	BEDDING	X*
C	BASE COURSE	X*
D	STORAGE	24"-36" (12" min)

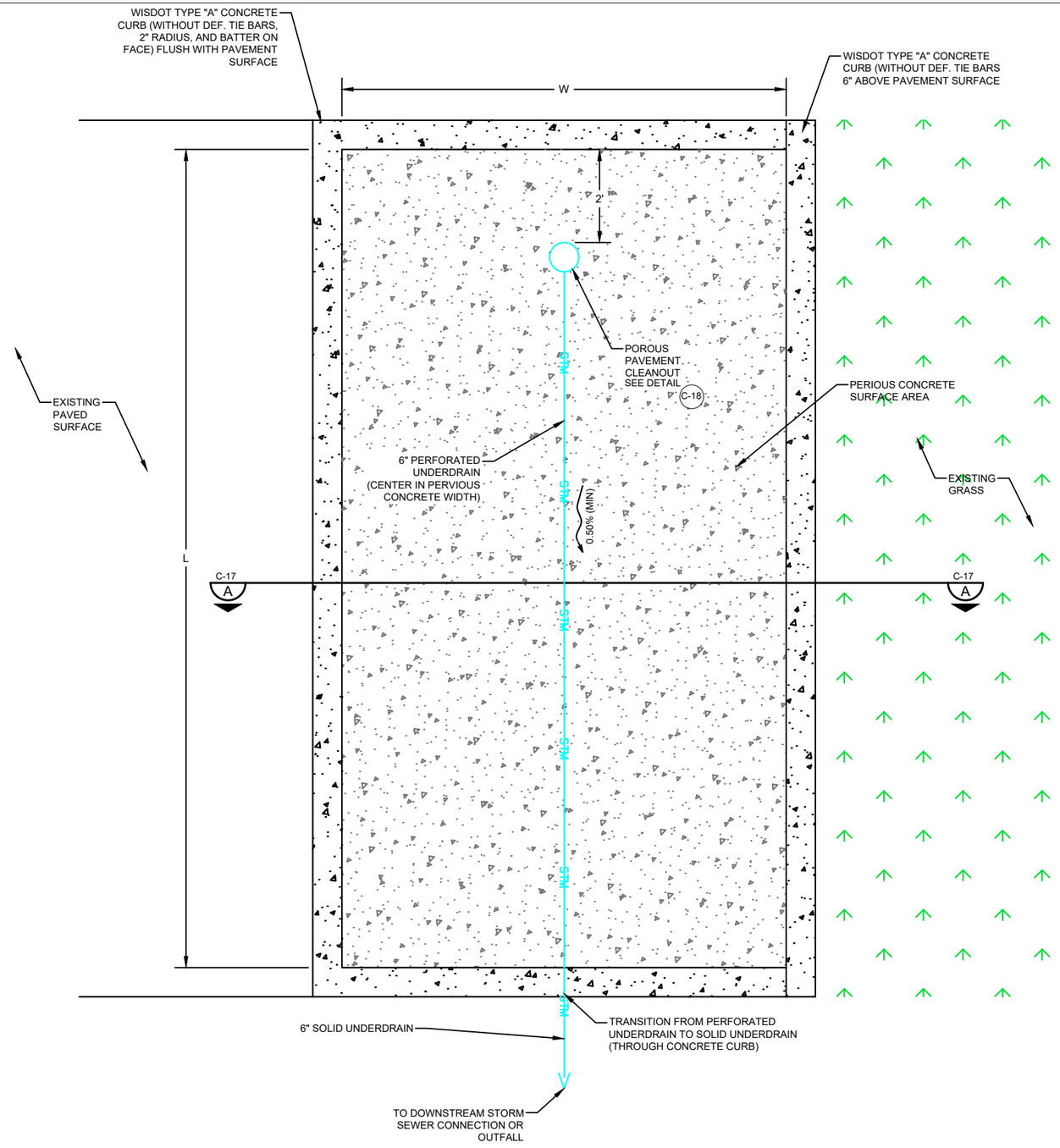
* DEPTHS WILL VARY BASED ON MANUFACTURER'S SPECIFICATIONS

PERMEABLE PAVERS TYPICAL CROSS-SECTION

SECTION A

NTS

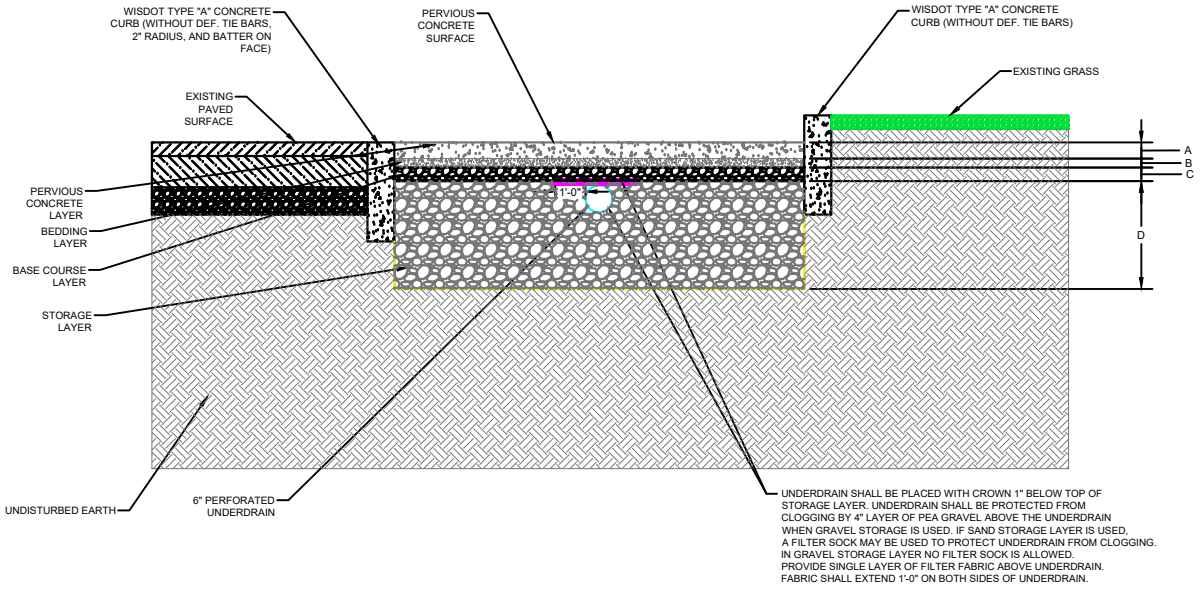
C-14



DIMENSION	DESCRIPTION	DISTANCE
L	PERVIOUS CONCRETE/ POROUS ASPHALT SURFACE LENGTH	X
W	PERVIOUS CONCRETE/ POROUS ASPHALT SURFACE WIDTH	X

C-18 PERVIOUS CONCRETE TYPICAL PLAN VIEW

NTS

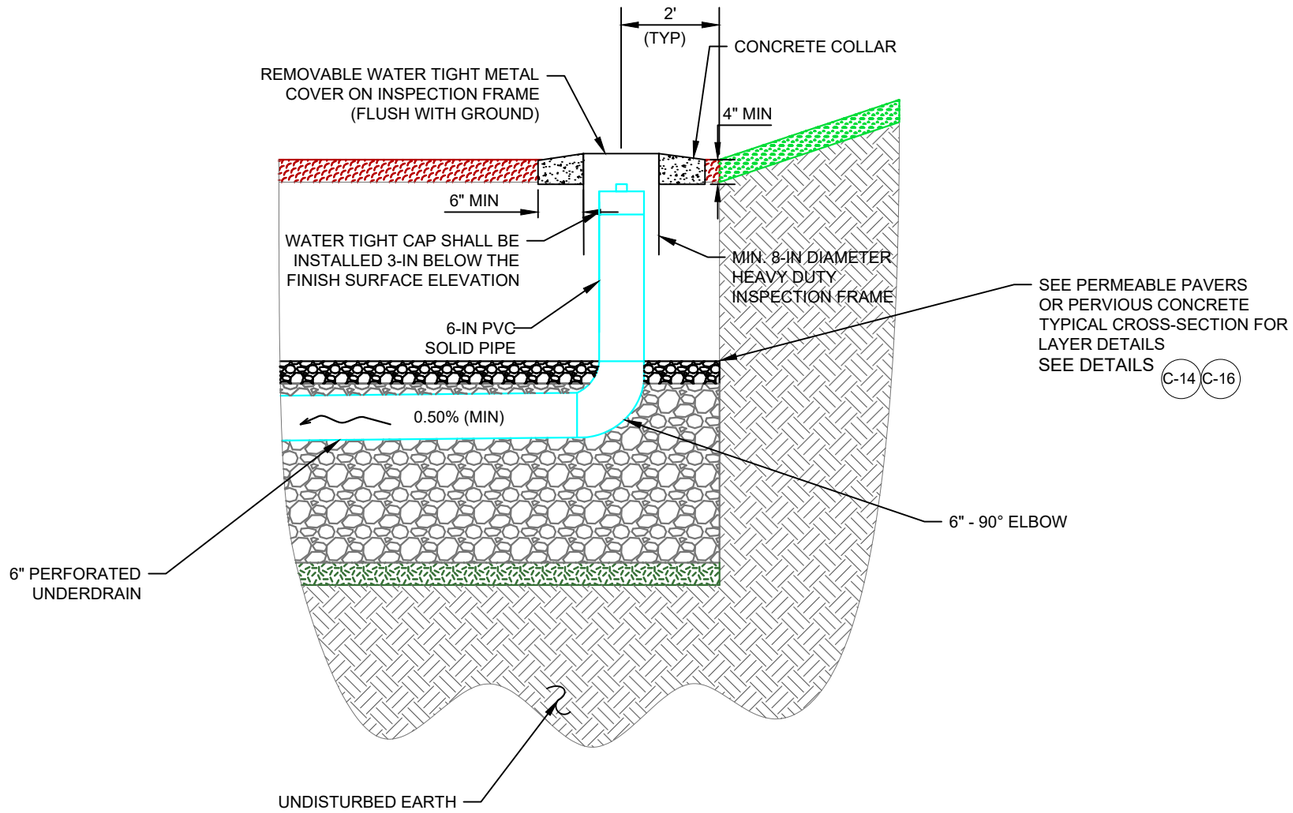


DIMENSION	LAYER NAME	DEPTH
A	PERVIOUS CONCRETE / POROUS ASPHALT	X
B	BEDDING	X
C	BASE COURSE	X
D	STORAGE	X

PERVIOUS CONCRETE TYPICAL CROSS-SECTION

SECTION A

NTS C-16



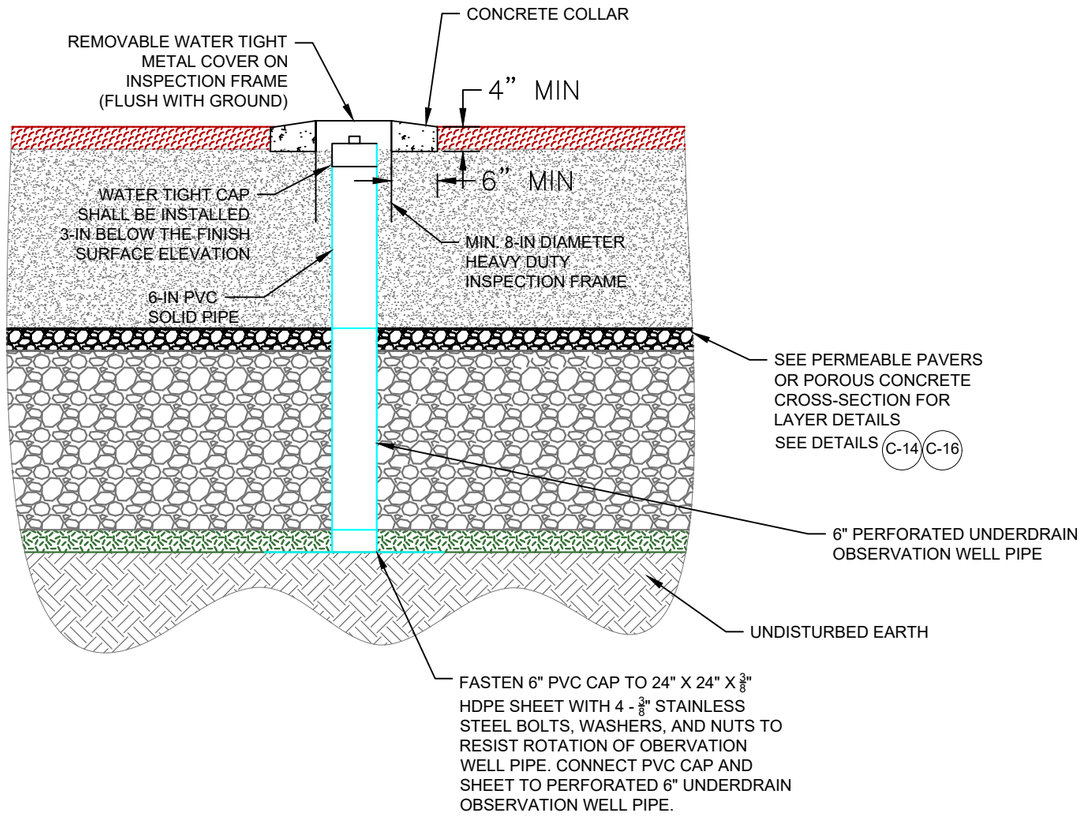
C-20 POROUS PAVEMENT CLEANOUT

DETAIL 6 C-14 6 C-16

NTS

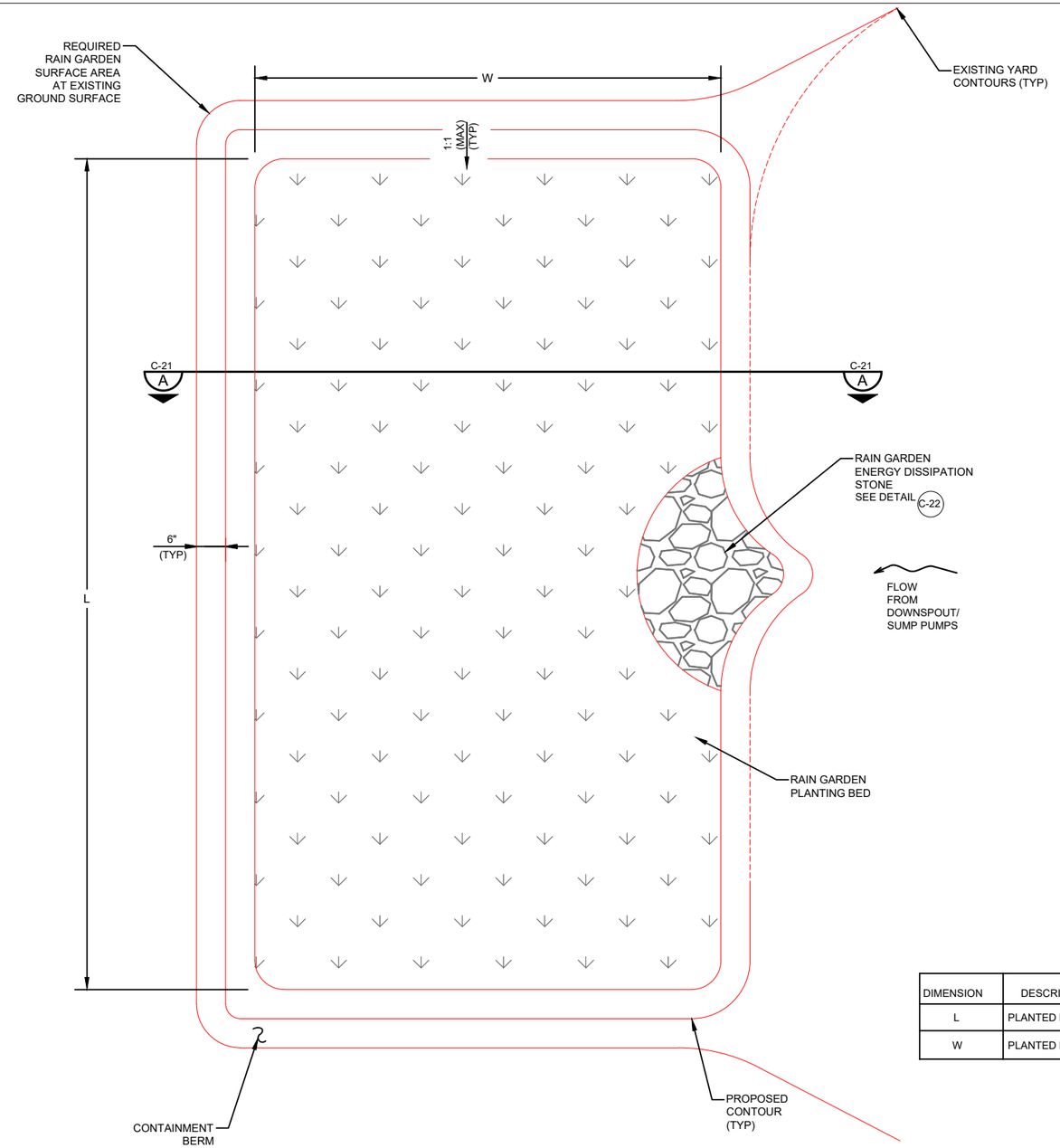
NOTE

1. ONE OBSERVATION WELL REQUIRED PER ACRE OF SURFACE AREA LOCATED IN CENTER OF AREA.



C-21 POROUS PAVEMENT OBSERVATION WELL

NTS

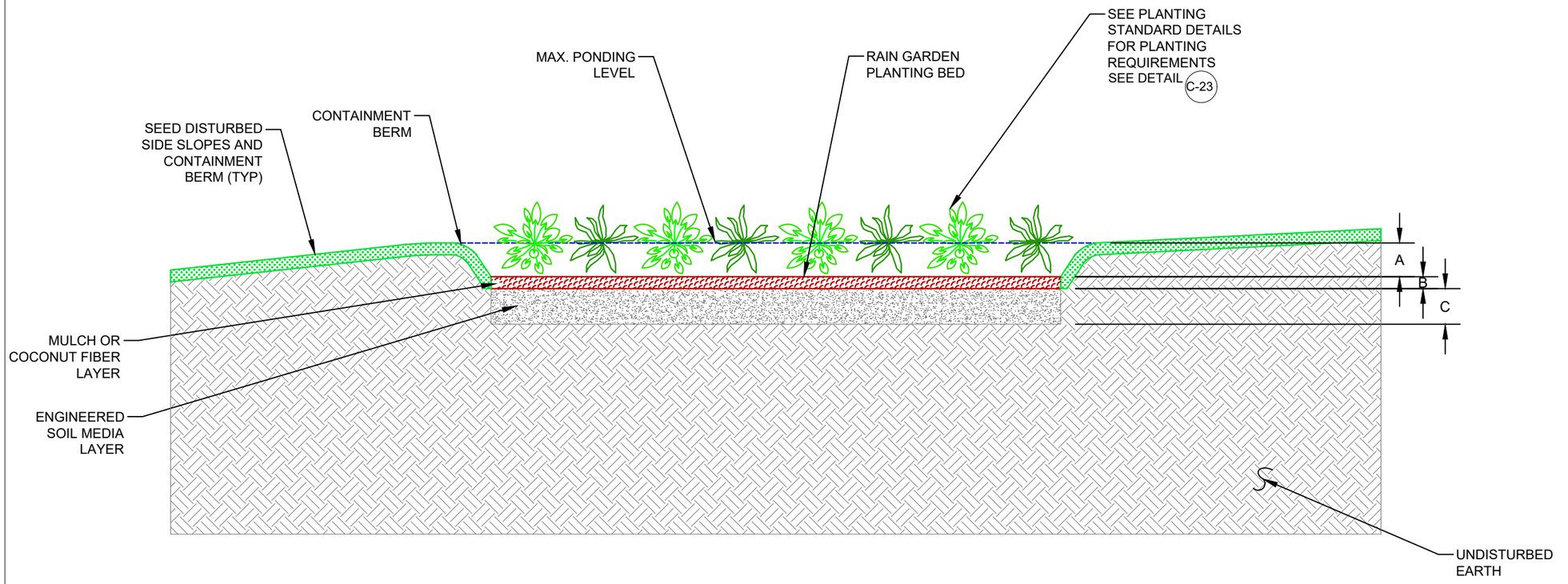


DIMENSION	DESCRIPTION	DISTANCE
L	PLANTED BED SURFACE LENGTH	X
W	PLANTED BED SURFACE WIDTH	X

RAIN GARDEN TYPICAL PLAN VIEW

NTS

DETAIL 20 C-22 20 C-23

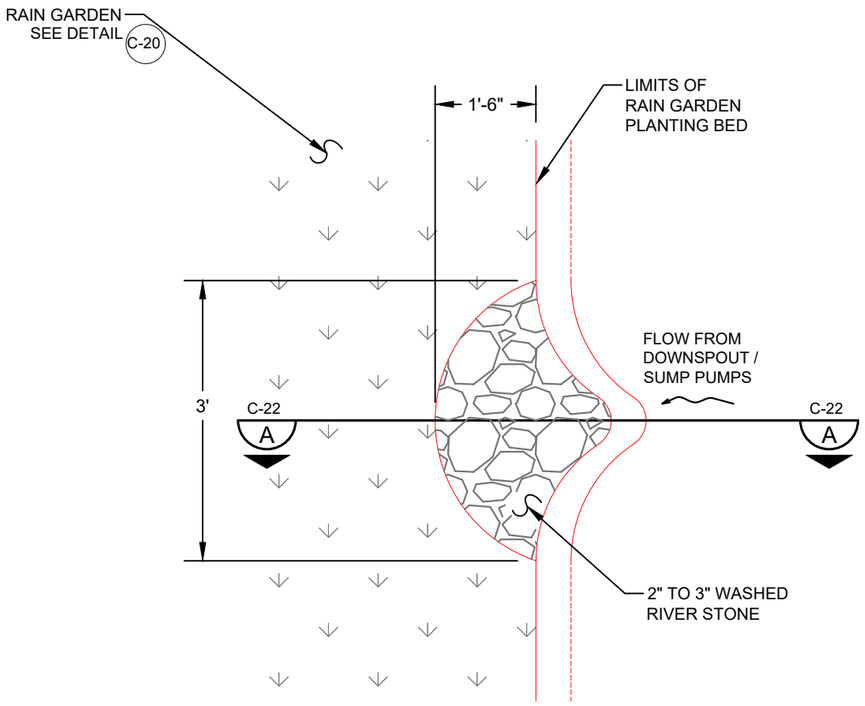


DIMENSION	LAYER NAME	DEPTH
A	SURFACE PONDING	X
B	MULCH OR COCONUT FIBER	X
C	ENGINEERED SOIL MEDIA	X

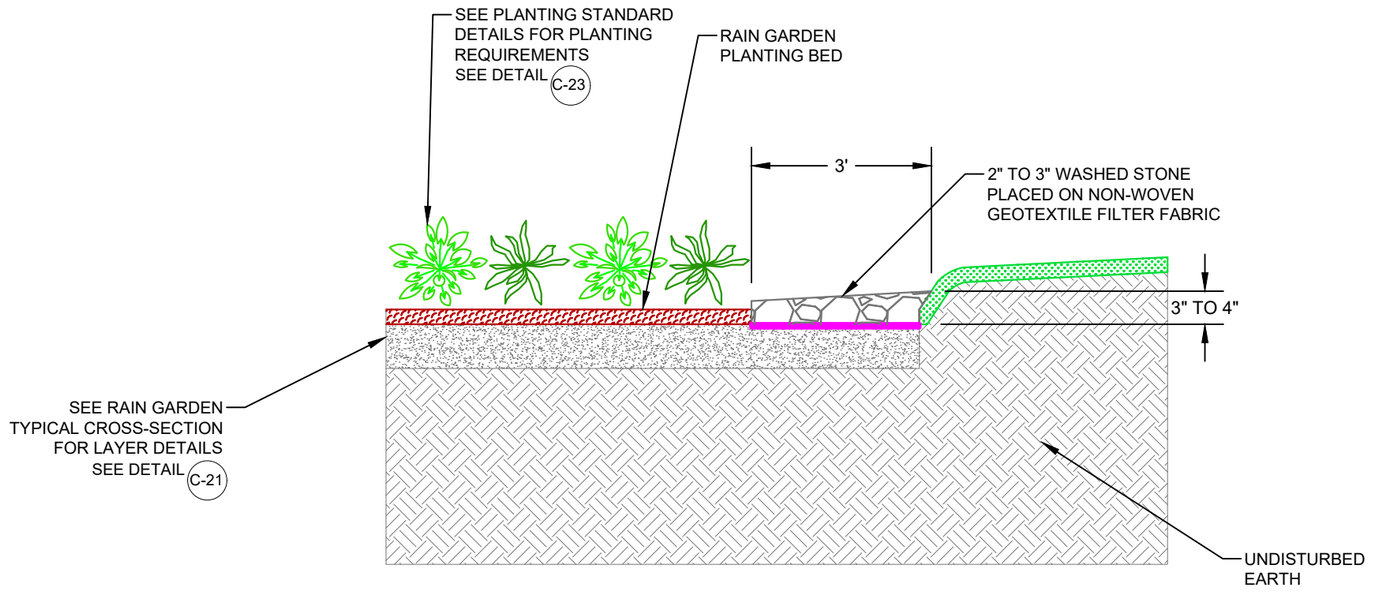
RAIN GARDEN TYPICAL CROSS-SECTION

SECTION A
NTS C-20

DETAIL 21
C-22



PLAN VIEW

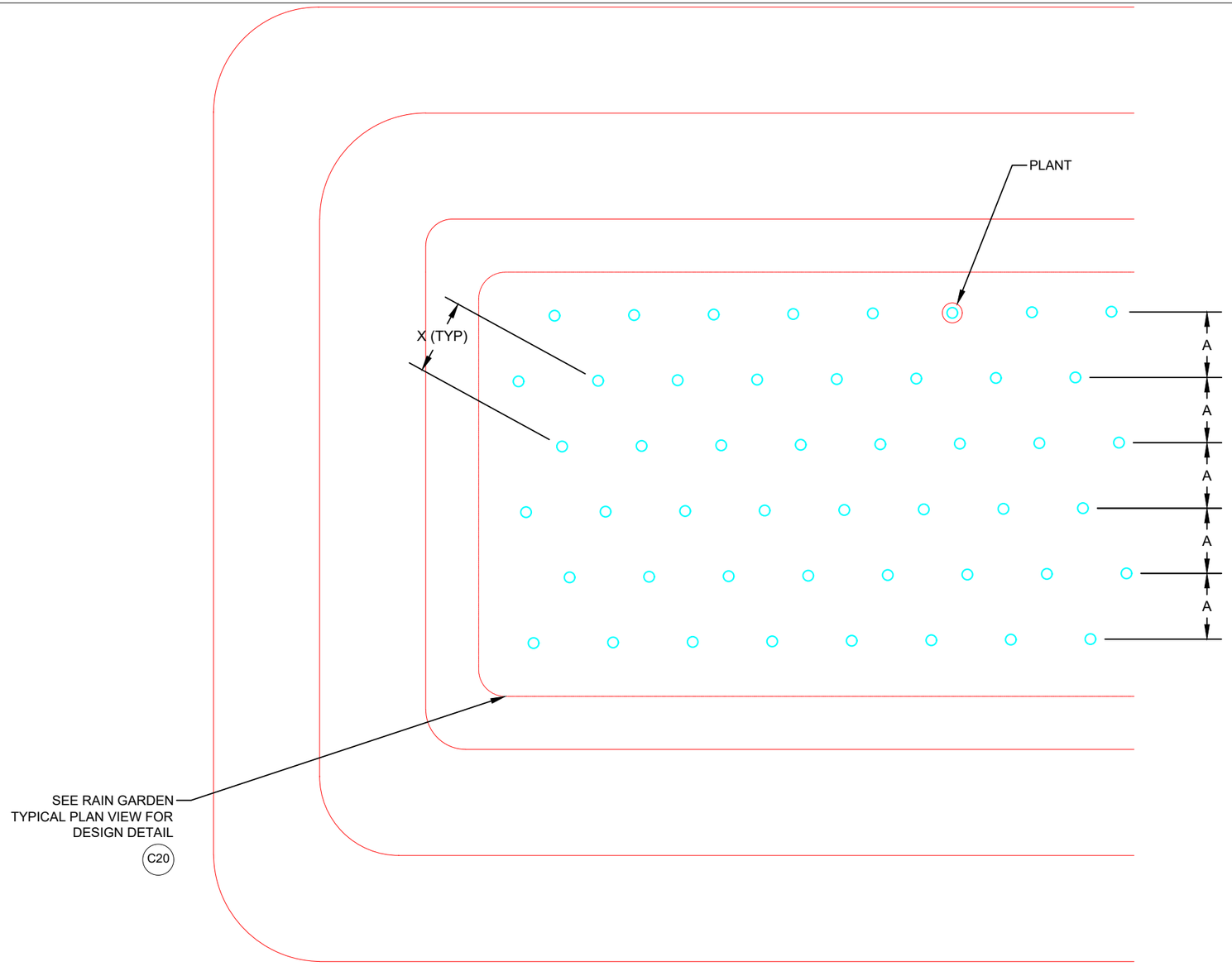


SECTION A

RAIN GARDEN ENERGY DISSIPATION STONE

NTS

DETAIL 22
C-20

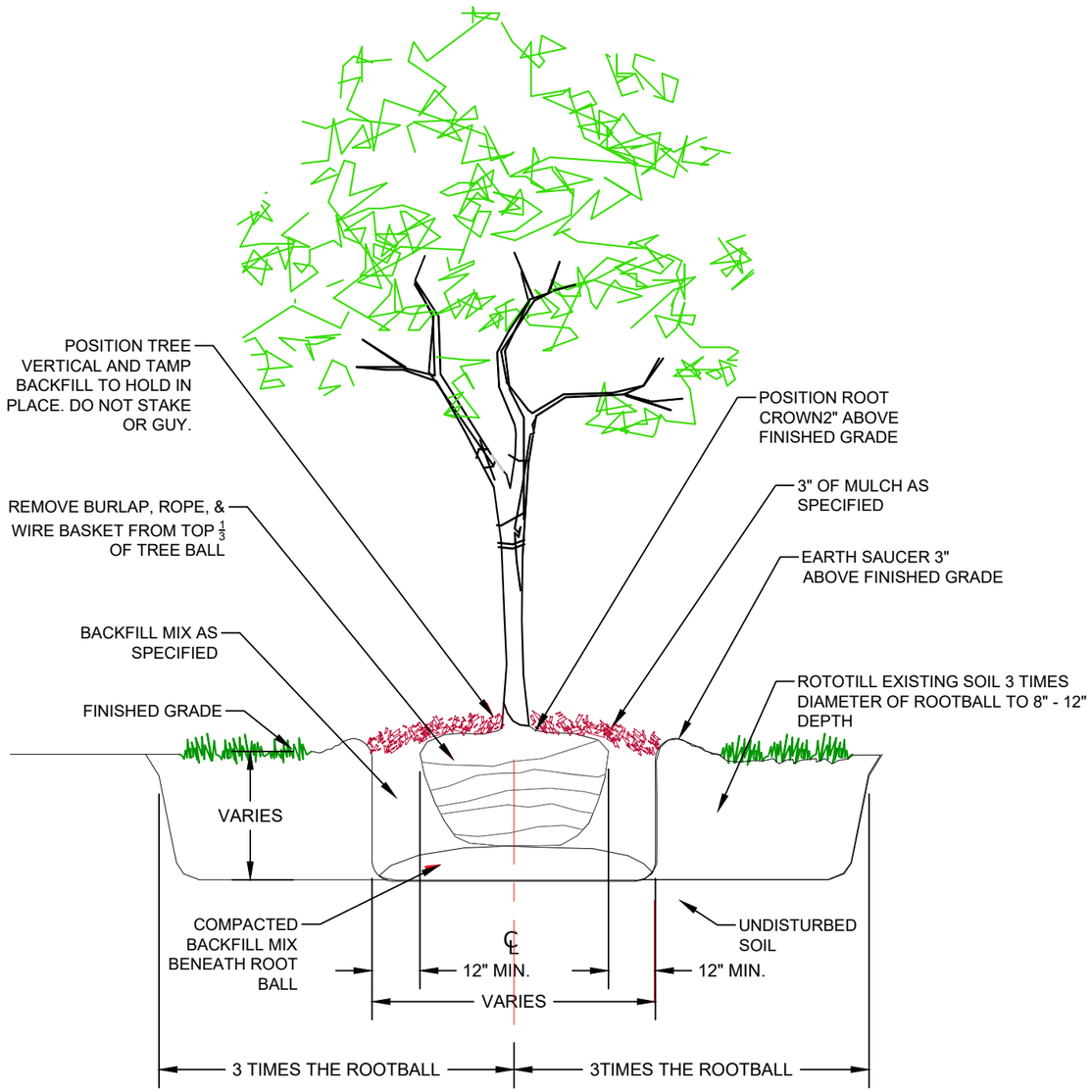


SPACING SCHEDULE	
SPACING "X" (SUGGESTED PLANT SPACING)	SPACING "A"
8" O.C.	7"
12" O.C.	10 1/2"
18" O.C.	15 1/2"
24" O.C.	20 3/4"
30" O.C.	26"
36" O.C.	31"
42" O.C.	36"
60" O.C.	52"

RAIN GARDEN
PLANT SPACING

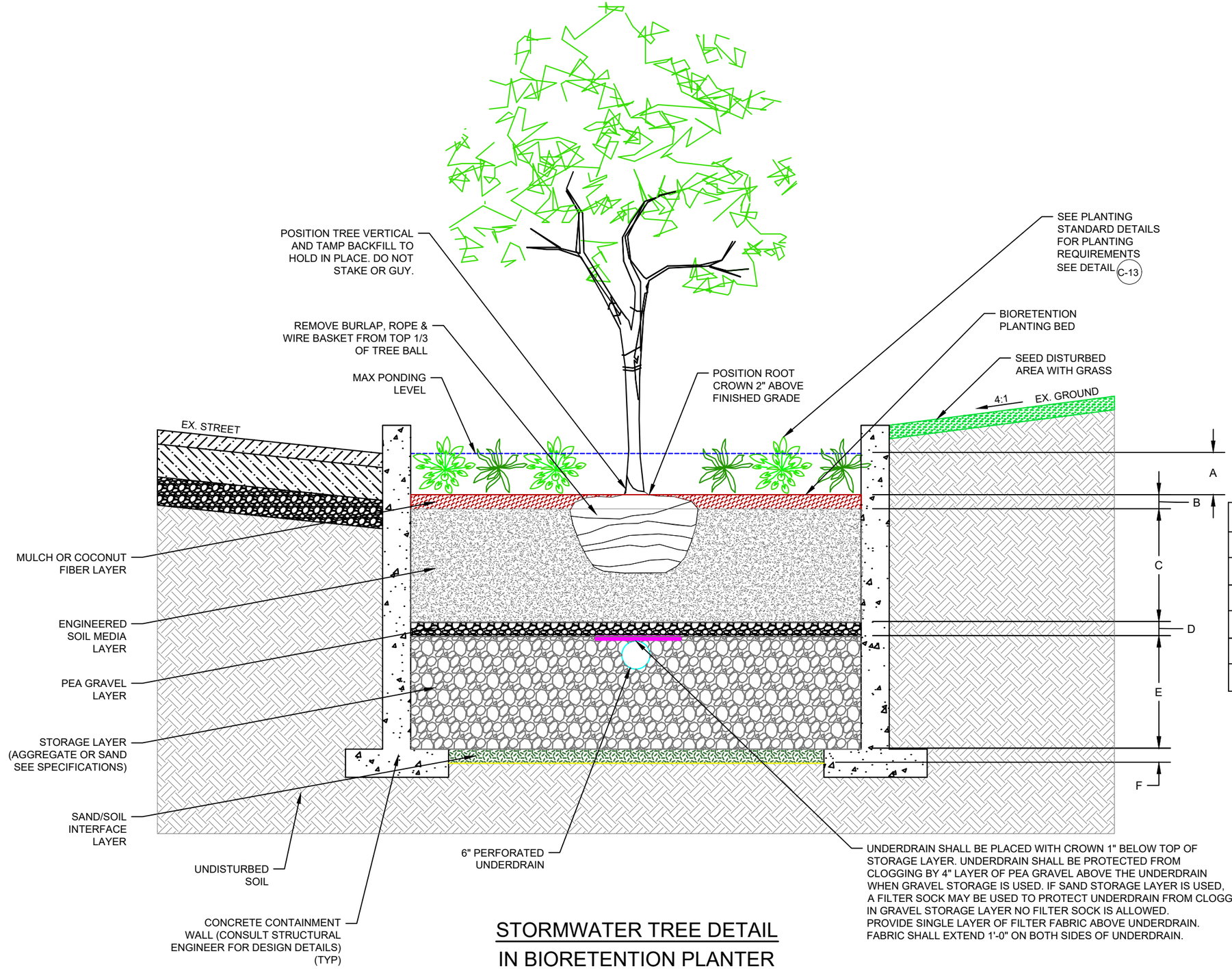
DETAIL 23 C-21 23 C-22

NTS



STORMWATER TREE DETAIL

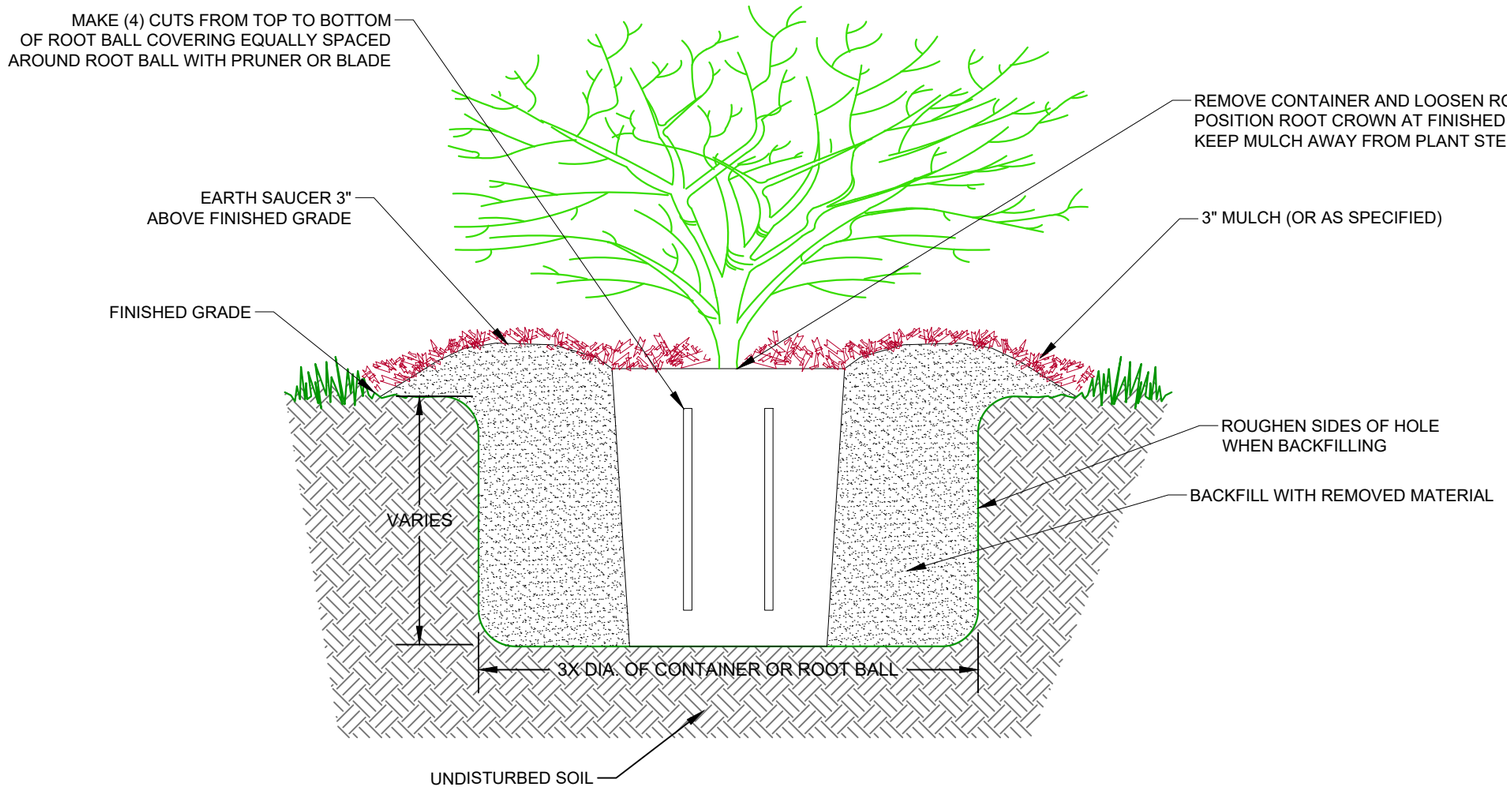
NTS



DIMENSION	LAYER NAME	DEPTH
A	SURFACE PONDING	X
B	MULCH OR COCONUT FIBER	X
C	ENGINEERED SOIL MEDIA	X
D	PEA GRAVEL	X
E	STORAGE	X
F	SAND/SOIL INTERFACE	X

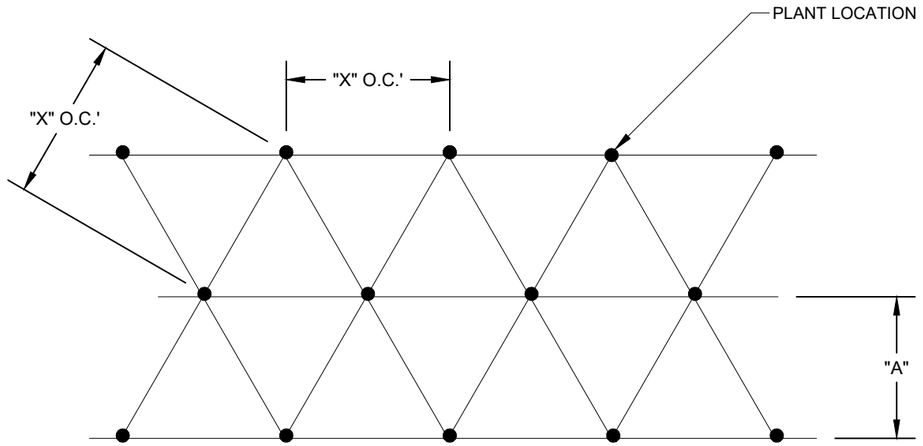
STORMWATER TREE DETAIL IN BIORETENTION PLANTER

NTS



NATIVE LANDSCAPING DETAIL

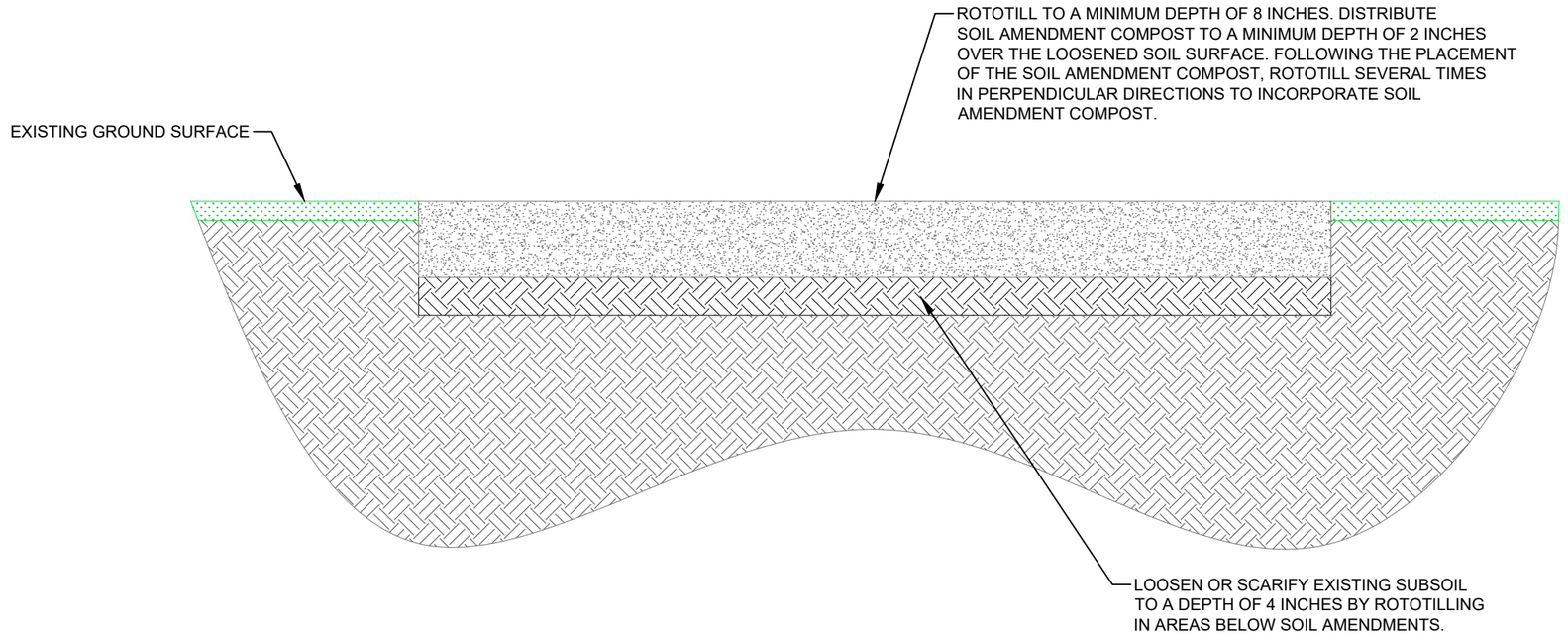
NTS



SPACING SCHEDULE	
SPACING "X"	ROW "A"
9" O.C.	7 3/4"
12" O.C.	10 1/2"
18" O.C.	15 1/2"
24" O.C.	20 3/4"
30" O.C.	26"
36" O.C.	30"
4' O.C.	3'-6"
5' O.C.	4'-4"

NATIVE LANDSCAPING SPACING

NTS



NOTE

1. AFTER ROTOTILLING SOIL AMENDMENT COMPOST, WATER OR HAND ROLL FOR COMPACTION AND RAKE TO FINE GRADE TO MATCH EXISTING GROUND SURFACE.

SOIL AMMENDMENT
TYPICAL CROSS-SECTION

NTS

SECTION XXX

STORMWATER BIOSWALE

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Stormwater Bioswale
   2. Erosion Mat
   3. Site stormwater drainage piping, fitting and accessories.
   4. Cobble Channel Inlet
   5. Cobble Drain Inlet

B. Related Sections:
   1. Section 303 - EXCAVATION.
   2. Section 305 - FILL.
   3. Section 306 – GRANULAR BACKFILL.
   4. Section 308 – PREPARING THE FOUNDATION
   5. Section 313 – EROSION CONTROL.
   6. Section 314 – CONSTRUCTION STAKING.
   7. Section 404 – TRENCH EXCAVATION, BEDDING AND BACKFILL
   8. Section 413 – SEWER PIPE MATERIALS.
   9. Section 415 – STORM SEWER PIPES AND LATERALS
   10. Section 416 – STORM SEWER TRACH GRATES
   11. Section 418 – CULVERT PIPES
   12. Section 419 – SEWER STRUCTURES
   13. Section 421 – MINI STORM SEWERS
   14. Section 422 – MANHOLE REHABILITATION

1.2 REFERENCES

A. State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction:
   1. Section 310 – Open-Graded Base.

B. WisDOT Product Acceptability List (PAL).
   a. Wisconsin Erosion Control

C. WI DNR
   1. Standard 1004 – Bioretention for Infiltration.

2. S100 – Specification for Compost.

D. ASTM C76 – Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe.

E. ASTM D1557 – Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb (4.54 Kg) Rammer and 18 inch (457 mm) Drop.

F. Specification: Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition.

G. Specification: Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction, latest Edition.

H. ASTM C14 – Concrete Sewer, Storm Drain, and Culvert Pipe.

I. ASTM D2729 – Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.

J. ASTM D3033 – Type PSP Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.

K. ASTM D3034 – Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
1.

1.3 SUBMITTALS

A. See Section 108 – CONTROL OF MATERIALS.

B. Materials Source: Submit name of media materials suppliers.

C. Product Data:
1. Submit product data for pipe and erosion mat.
2. Provide product data for engineered soil blend components: Sand and Compost in compliance with WI DNR Standard 1004 – Bioretention for Infiltration for review and approval by the Engineer.

1.4 QUALITY ASSURANCE

A. Furnish each media material from single source throughout the work.

B. Contractor shall submit, in writing to the Engineer, a certification from compost supplier that any compost used on the project is in compliance with the requirements outlined in WI DNR Specification S100.

C. Contractor shall submit, in writing to the Engineer, a certification from engineered soil supplier that any engineered soil used on the project is in compliance with the requirements outlined in WI DNR Standard 1004 – Bioretention for Infiltration.

PART 2 PRODUCTS

2.1 PIPE

A. Underdrain Pipe
   1. Storm sewer pipe as indicated on the plans shall be Type PSM SDR-35 ASTM D3034 Poly (Vinyl Chloride) (PVC) sewer pipe and fittings, with bell and spigot ends with rubber gasketed joints in accordance with Chapter 6.10.0 of the Standard Specifications for Sewer and Water Construction. Joints shall conform to ASTM D 3212.
   2. All fittings shall conform to AASHTO M252.
   3. The underdrain shall be perforated unless otherwise noted on the plans.

B. Cleanout Pipe
   1. The cleanout pipe shall be rigid, non-perforated PVC pipe. Cast iron lid and fittings shall be connected to the PVC pipe using a Zurn Neo-loc adapter or equivalent.

C. Standpipe and Beehive Grate:
   1. Refer to Section 419 Sewer Structures for standpipe and beehive grate specifications.

D. Accessories
   1. Underground Warning Tape:
      a. Manufacturer: Thor Enterprises Magnetic, or equal as manufactured by Carlton, MSI Marking Services, or Seton.
      b. 5.0 mil overall thickness, 6” width, .00035” thick aluminum foil core with polyethylene jacket bonded to both sides. Color code tape and print caution along with name of buried service in bold letters on face of tape.
   2. Animal Guard
      a. Animal guard shall be stainless steel welded bars and hardware material. Size of guard to fit discharge pipe into bioswale.
      b. Approved Manufacturer: Agri Drain
         1) Stainless Steel Rat Guard
         2) Or approved equivalent.

2.2 AGGREGATES

A. All aggregates used in the construction of Stormwater Bioswale devices shall be double washed and free of organic material and fines.

B. No. 1 Clear stone shall be double washed, angular stone.
   1. Gradation requirements: Comply with those specified in Table A at the end of this Section.

C. Pea Gravel shall be double washed.
   1. Gradation requirements: Comply with those specified in Table A at the end of this Section.

2.3 ENGINEERED SOIL

A. Engineered soil shall comply with WI DNR Standard 1004. Engineered Soil shall be a blend of Sand and Compost

B. Sand
   1. The preferred sand component consists of mostly SiO_2, but sand consisting of dolomite or calcium carbonate may also be used.
   2. Manufactured sand and stone dust is not allowed.
   3. The sand shall be washed and drained to remove clay and silt particles prior to mixing.
   4. Sand shall meet one of the following gradation requirements:
      a. USDA Course Sand (0.02 to 0.04 inches)
      b. ASTM C33 (Fine Aggregate Concrete Sand)
      c. WisdDOT SSHSC Section 501.2.5.3.4 (Fine Aggregate Sand)

C. Compost
   1. Compost shall meet the requirements of WI DNR Specification S100 – Compost.

D. Engineered soil shall consist of a mixture of 70% to 85% sand and 15% to 30% compost. The percentages are based on volume.

E. Engineered soil mix shall be free of rocks, stumps, roots, brush, or other material over 1 inch in diameter. No other materials shall be mixed with the planting soil that may be harmful to plant growth or prove a hinderance to planting or maintenance.

F. Thoroughly blend engineered soil off-site before delivering to site and installing.

G. Engineered soil shall be delivered to the site and stored on plastic sheeting.

H. The moisture content shall be low enough to prevent clumping and compaction during placement.

2.4 EROSION MAT

A. Erosion Mat shall comply with the PAL for Urban, Class 1, Type B.

2.5 COBBLE INLET CHANNEL AND COBBLE DRAIN INLETS

A. The cobble inlet consists of medium cobble laid over a geotextile and stabilized with Polymeric Stone Dust.

B. Geotextile

1. The geotextile shall be WisDOT Type R and conform to the testing standards described in WisDOT Specifications Section 645.2.2.6.
2. Refer to Section 02321

C. Medium Cobble
1. The Cobble shall be rounded granite cobblestone varying between 6 and 10 inches in diameter.

D. Polymeric Stone Dust
1. The Polymeric Stone Dust shall consist of a mixture of polymer binders and calibrated stone that is applicable of stone joints ½" to 6" wide. Color to compliment medium cobble colors.

PART 3 EXECUTION

3.1 PROTECTIVE MEASURES

A. Pre-Installation Meeting
1. Prior to the installation of the Stormwater Bioswale device(s), the Engineer and the Contractor shall conduct a pre-installation meeting.

B. Utilities
1. The Contractor shall protect from damage private and public utilities. Verify the locations of underground utilities minimum 48 hours prior to project commencement.

C. Stabilization
1. Construction of the Stormwater Bioswale device(s) shall not begin until after the contributing drainage area has been stabilized with vegetation and/or hardscapes. Construction site runoff from disturbed areas shall not be allowed to enter the stormwater bioswale.

D. Weather
1. Construction shall be suspended during periods of rainfall or snowmelt. Construction shall remain suspended if ponded water is present or if residual soil moisture contributes significantly to the potential for soil smearing, clumping, or other forms of compaction.
2. Delays resultant from weather shall not serve as a basis for a Change Order.

E. Compaction Avoidance
1. Compaction and smearing of the soils beneath the floor and side slopes of the Stormwater Bioswale area, and compaction of the soils used for backfill shall be minimized.
2. During construction, the area dedicated to the Stormwater Bioswale device(s) shall be cordoned off to prevent access by heavy equipment.

3. Acceptable equipment for construction of the Stormwater Bioswale device(s) include excavation hoes, light equipment with turf type tires, marsh equipment, or wide-track loaders.

F. Compaction Remediation
   1. If compaction occurs at the base of the Stormwater Bioswale, the soil shall be refractured to a depth of at least 24-inches.
   2. If smearing occurs, the smeared areas shall be corrected by raking or roto-tilling.
   3. Compaction and smearing remediation shall be conducted by the Contractor at no additional cost to the Owner.

3.2 TEMPROARY EROSION AND SEDIMENT CONTROLS

A. The Contractor shall install temporary erosion and sediment controls prior to beginning construction of the Stormwater Bioswale device(s). The temporary erosion and sediment controls shall divert stormwater runoff away from the Stormwater Bioswale device(s) until it is competed.

3.3 EXCAVATION

A. Excavation equipment shall work from the sides of the Stormwater Bioswale device to excavate the area to the depths and dimensions as sown on the Drawings. Excavation equipment shall have adequate reach so that they do not need to be located within the footprint of the Stormwater Bioswale device to excavate it.

B. Any accidental compaction shall be remediated as prescribed above.

C. Over-excavation shall be corrected using No. 1 clear stone without compaction, as described in Section 02223.

3.4 AGGREGATE LAYERS

A. Place the No.1 clear stone layer 6 inches deep.

B. Install underdrain as indicated in the Drawings and below.

C. Place the remaining No. 1 clear stone to the final depth as indicated in the Drawings.

D. Where storage blocks are being utilized instead of the No. 1 clear stone layer, refer to the Underground Cistern specification.

E. Place the Pea Gravel stone over the No. 1 clear stone to the depth indicated in the Drawings.

3.5 UNDERDRAIN PIPE

A. Installed underdrain pipe at the invert elevations indicated in the Drawings. Pipe shall be installed with a minimum slope of 0.001%. Pipe joints shall be made in accordance with the manufacturer's recommendation. Standard pipe fittings shall be used.

B. Place pipe with perforations facing down.

C. Identify all piping with underground warning tape. Place tape along entire length of pipe prior to backfilling.

D. Install cleanouts where shown. Cleanouts shall be installed with a cast iron, watertight, lockable cap to an elevation 3 inches above the surface of the bioswale.

E. Connect pipe to drainage structure as indicated in the Drawings.

3.6 ENGINEERED SOIL

A. Verify that the moisture condition of the Engineered Soil is low enough to prevent clumping and compaction during placement. Engineered Soil shall not be placed unless it meets these conditions.

B. Place Engineered Soil in lifts not to exceed 12 inches in depth until the desired elevation of the Stormwater Bioswale device is achieved.

C. Re-examine the surface within 48 to 72 hours following the placement of the Engineered Soil. Place additional Engineered Soil until the desired elevation of the Stormwater Bioswale device is achieved at no additional costs to the Owner.

D. Steps may be taken to induce mild settling of the Engineered Soil as needed to prepare a stable planting medium and to stabilize the ponding depth.

E. Vibrating plate style compactors shall not be used to induce settling.

F. No equipment travel on or across placed Engineered Soil is permitted.

G. Install silt fence or other means of erosion control around the perimeter of the Stormwater Bioswale to protect from siltation or contamination from adjacent landscape or paved surfaces and construction activities. Leave erosion control in place until site landscape establishment and construction is complete.

3.7 EROSION MAT

A. Install Erosion Mat on top of surface of Stormwater Bioswale.

B. Install Erosion Mat per manufacturers recommendations along the slopes.

3.8 TABLES

A. Gradation Requirements for Clear Stone and Pea Gravel.

Sieve Sizes	Passing by Weight
No. 1 Clear Stone	
1 inch	100%
3/4 inch	90% - 100%
3/8 inch	20% - 55%
No. 4	0% - 10%
No. 8	0% - 5%
Pea Gravel	
1/2 inch	100%
3/8 inch	85 – 100%
No. 4	10 – 30%
No. 8	0 – 10%
No. 16	0 – 5%

END OF SECTION

SECTION XXX

EXTERIOR SEWERS AND STORM DRAINAGE

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Exterior storm sewer piping.
   2. Fittings, Endwalls, and other Specialty Structures.
   3. Standpipe and beehive grate
   4. PVC Gate valve and valve extension stem
   5. NDS catch basin and inlets
   6. Underground pipe markers.
   7. Manholes and manhole bases.
   8. Adjustment rings.
   9. Catch basins and inlets.
   10. Trench drains.
   11. Exterior sewer cleanouts.
   12. Bedding and cover materials

B. All work shall be provided at a point 5 feet outside of the building wall, unless otherwise specified, to provide a fully functioning sewer system as provided for in these specifications and on the drawings.

C. Related Sections:
   1. Section 303 - EXCAVATION.
   2. Section 305 - FILL.
   3. Section 306 – GRANULAR BACKFILL.
   4. Section 308 – PREPARING THE FOUNDATION
   5. Section 313 – EROSION CONTROL.
   6. Section 314 – CONSTRUCTION STAKING.
   7. Section 404 – TRENCH EXCAVATION, BEDDING AND BACKFILL
   8. Section 413 – SEWER PIPE MATERIALS.
   9. Section 415 – STORM SEWER PIPES AND LATERALS
   10. Section 416 – STORM SEWER TRACH GRATES
   11. Section 418 – CULVERT PIPES
   12. Section 419 – SEWER STRUCTURES
   13. Section XXX – STORMWATER BIOSWALE.

1.2 REFERENCES

A. City of Green Bay Standard Specifications & Construction Standards, latest edition, is considered to be part of this specification. Where there are any conflicts between this specification section and the City Standard specifications, the City specifications shall overrule this specification section.

B. Abbreviations of standards organizations referenced in this and other sections are as follows:

1. ANSI B16.5 - Pipe Flanges and Flanged Fittings
2. ASTM A74 - Cast Iron Soil Pipe and Fittings
3. ASTM A105 - Forgings, Carbon Steel, for Piping Components
4. ASTM A126 - Gray Cast Iron Castings for Valves, Flanges, and Pipe Fittings
5. ASTM A234 - Pipe Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and Elevated Temperatures
6. ASTM C76 - Reinforced Concrete Culvert, Storm Drain and Sanitary Pipe
7. ASTM C443 - Joints for Circular Concrete Pipe Sewer and Culvert Pipe Using Rubber Gaskets
8. ASTM C564 - Rubber Gaskets for Cast Iron Soil Pipe and Fittings
9. ASTM D1785 - Polyvinyl Chloride (PVC) Plastic Pipe
10. ASTM D2321 - Underground Installation of Flexible Thermoplastic Sewer Pipe
11. ASTM D2241 - Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)
12. ASTM D2564 - Solvent Cements for Polyvinyl Chloride (PVC) Plastic Pipe and Fittings
13. ASTM D2665 - Polyvinyl Chloride (PVC) Plastic Drain, Waste and Vent Pipe and Fittings
14. ASTM D2729 - Polyvinyl Chloride (PVC) Sewer Pipe and Fittings
15. ASTM D2774 - Recommended Practice for Underground Installation of Thermoplastic Pressure Piping
16. ASTM D2855 - Making Solvent Cemented Joints with Polyvinyl Chloride (PVC) Pipe and Fittings
17. ASTM D3034 - Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings
18. ASTM D3139 - Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals
19. ASTM D3212 - Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
20. ASTM D3311 - Drain, Waste, and Vent (DWV) Plastic Fitting Patterns
21. ASTM F405 - Corrugated Polyethylene (PE) Tubing and Fittings
22. ASTM F656 - Primers for Use in Solvent Cement Joints of Polyvinyl Chloride (PVC) Plastic Pipe and Fittings
23. AWS A5.8 - Brazing Filler Metal
24. AWWA C104 - Cement Mortar Lining for Ductile Iron Pipe and Fittings for Water
25. AWWA C105 - Polyethylene Encasement for Ductile Iron Piping for Water

26. AWWA C110 - Ductile Iron and Gray Iron Fittings, 3 In. Through 48 In., for Water and Other Liquids
27. AWWA C111 - Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings
28. AWWA C151 - Ductile Iron Pipe, Centrifugally Cast in Metal Molds or Sand-Lined Molds for Water or Other Liquids
29. AWWA C153 - Ductile Iron Compact Fittings, 3 In. Through 48 In., for Water and Other Liquids
30. SPI 310 - Couplings For Use In Connection With Hubless Cast Iron Soil Pipe And Fittings For Sanitary And Storm Drain, Waste And Vent Piping Applications

1.3 REGULATORY REQUIREMENTS

A. All work at a minimum shall be performed in compliance with the City of Green Bay Standard Specifications & Construction Standards, latest edition. This will be referred to as the City of Green Bay Specifications in this document. Where more stringent requirements are provided within this Specification Section, they shall be adhered to in lieu of the City's Specifications.

B. The Contractor shall obtain all permits and approvals as required for connection to the existing sewer system, and all work of this Section must be completed by a licensed plumber.

1.4 QUALITY ASSURANCE

A. Order all cast iron, PVC and polyethylene pipe with each length marked with the name or trademark of the manufacturer and type of pipe; with each shipping unit marked with the purchase order number, metal or alloy designation, temper, size, and name of supplier.

B. Any installed material not meeting the specification requirements must be replaced with material that meets these specifications without additional cost to the City of Green Bay.

C. Manufacturer regularly engaged in manufacture of pipe, tube and fittings of types and sizes required, whose products have been in satisfactory use in similar service for not less than 5 years.

1.5 SUBMITTALS

A. Section 01300 – Submittals: Submittal requirements.

B. Submit catalogue cuts, specifications, installation instructions, and dimensioned drawings for each type of pipe, tube, and fitting. Submit piping schedule showing manufacturer, pipe or tube weight, fitting type, joint type and pressure rating for each piping system.

C. Statement from manufacturer on his letterhead that pipe furnished meets the ASTM, AWWA or CISPI specification contained in this section.

1.6 CLOSEOUT SUBMITTALS

A. Section 01700 – Project Closeout: Requirements for submittals.

B. Project Record Documents:
   1. Accurately record actual locations of pipe runs, connections, catch basins, inlets, cleanouts, and invert elevations.

C. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

1.7 DELIVERY, STORAGE AND HANDLING

A. Protect all materials, pipe, tube, fittings, equipment, components, etc. so they are not damaged. Where end caps are provided or specified, take precautions so the caps remain in place. Protect materials, fittings, flanges, unions, components shipped loose, etc. by storage inside or by durable, waterproof, above ground packaging.

1.8 COORDINATION

A. Coordinate the Work with termination of storm sewer connection outside building, trenching, connection to foundation drainage system and/or municipal sewer utility service, and asphalt and concrete paving.

PART 2 PRODUCTS

2.1 GENERAL

A. All materials shall conform to the size and type shown on the plans or as called for in the specifications. All work shall conform to applicable Laws, Codes, and Ordinances.

B. The Contractor shall be responsible for the safe storage and handling of all materials utilized in the work - including any materials furnished by the Owner. All materials shall be stored in areas designated by the engineer in cooperation with the owner. At no time shall the storage or handling of materials adversely affect traffic, drainage, fire protection, or public safety. Inconveniences to the general public from the storage and handling of materials shall be kept to a minimum.

C. All joining and other work shall be made in accordance with any applicable manufacturer's instructions.

2.2 PIPE

A. Each type of pipe used on a project, shall be supplied by the same manufacturer and shall be the same type, unless otherwise specified or approved in advance by the engineer.

B. PVC Sewer Pipe:
   1. Shall conform to ASTM D-3034 with solvent weld or elastomeric joints. Installation shall conform to ASTM D-2321-72.
   2. Profiled wall PVC pipe shall meet all material and service test requirements of ASTM D-3034 except for dimensions.
   3. Composite pipe shall conform to ASTM D-2680 with solvent weld or gasket joint.
   4. Do not mix different manufacturer's products or fittings.
   5. Only pipe, joints, material and installation approved by Wisconsin Department of Natural Resources shall be used.

C. PVC Pipe used for sewers shall conform to AWWA C-900 with gasket joints. Pipe shall be pressure Class 150 with cast iron equivalent outside diameter. Fittings shall conform to manufacturer's specification. Pipe shall be approved by the Department of Natural Resources.

D. Underdrain Pipe
   1. Storm sewer pipe as indicated on the plans shall be Type PSM SDR-35 ASTM D3034 Poly (Vinyl Chloride) (PVC) sewer pipe and fittings, with bell and spigot ends with rubber gasketed joints in accordance with Chapter 6.10.0 of the Standard Specifications for Sewer and Water Construction. Joints shall conform to ASTM D 3212.
   2. All fittings shall conform to AASHTO M252.

2.3 FITTINGS, ENDWALLS, AND OTHER SPECIALTY STRUCTURES

A. Unless otherwise specified, or approved by the Project Engineer of Record in advance, all fittings, or other such specialties shall be of the same material, thickness, and construction as the pipe section to which it is connected.

2.4 STANDPIPE AND BEEHIVE GRATE

A. Bioswale Overflow Standpipes shall be Type PSM SDR-35 ASTM D3034 Poly (Vinyl Chloride) (PVC) pipe and fittings in accordance with Chapter 6.10.0 of the Standard Specifications for Sewer and Water Construction. Joints shall conform to ASTM D 3212.

B. Standpipes shall be fitted with a beehive grate or a solid heavy duty cast iron cap as indicated on the drawings. **All grates or cap shall be bolted.**
   1. Beehive grate shall be Nyloplast Beehive Grate 1899CGD configuration for the respective standpipe size or equivalent.

2. Solid Covers shall be cast iron for the respective standpipe size or equivalent.

C. Fabco Beehive overflow filter to be installed on standpipes with a beehive grate for the respective standpipe size as indicated on the plans.

D. 2” PVC stilling well to be added in standpipes as indicated on the drawings. Fixtures used to attach standpipe to the side of the standpipe shall be watertight. Provide 6” sump below the bottom of the stilling well and the top of the standpipe.

2.5 PVC VALVE AND VALVE EXTENSION STEM

A. The cistern water level shall be controlled by a 4-inch PVC gate valve or a 6-inch PVC gate valve with socket and threaded ends. The valve shall be compatible with valve extension stem.

B. Valve extension stem shall include an extension rod, a handwheel, and a bottom wrench nut coupling.

2.6 NDS CATCH BASIN AND INLETS

A. 9”X9” NDS catch basin kit
1. See drawings for details on size, inverts, covers, and grates.
2. Provide 9” catch basin filter
3. Provide 6” raiser as indicated to reach inverts.

2.7 MANHOLES AND CATCH BASINS

A. Manholes and catch basins and inlets shall be constructed to the shape and dimensions of the detail drawings and shall be of precast concrete construction unless otherwise approved by the Engineer.

B. Precast Concrete Manholes shall conform to ASTM C-478.
1. Manholes with inside diameters 42" and larger shall have a minimum wall thickness of 5”.
2. Manholes with inside diameters 36" and less shall have a minimum wall thickness of 4½”.
3. Precast top shall be an eccentric cone or approved flattop. Flattop must have minimum thickness of 8”.

C. Catch basin or manhole riser and barrel sections, cones, and flattops, shall have bell and spigot joints sealed watertight with prefabricated rubber or plastic gaskets or a formed in place butyl rubber seal conforming to Kent Seal, ConSeal, or equal.

D. Catch basin or manhole and pipe connections
1. Sanitary Sewers: Flexible, watertight, manhole sleeves: Kor-N-Seal, Interpace, A-Lok, or an approved equal.

2. Storm Sewers: Watertight and shall consist of brick and mortar connections for concrete pipe materials; and approved mortar and pipe waterstop connections for other pipe materials.

E. A 2'-0", sump below the outlet invert shall be typical on all catch basins unless otherwise specified or noted on the plans. Unless otherwise specified, manhole steps shall be provided in all catch basins with a depth from the top of casting to the lowest pipe invert of (5) feet or greater.

2.8 ADJUSTMENT RINGS AND GASKETING

A. Adjustment of manhole castings shall be watertight and shall be made with precast concrete rings of adequate diameter to sufficiently support the casting on the manhole cone without interfering with the manhole opening. With the prior approval of the engineer, concrete bricks may be substituted for precast adjusting rings in instances where precast rings are not permitted by field conditions. The use of concrete bricks shall not diminish the requirement for water tightness.

B. All all-weather, precompressed butyl rubber gasket (E-Z Stik, or equal) ½" x 3½" shall be used between the manhole casting and adjusting rings or bricks, and the individual layers of adjusting rings or bricks.

2.9 MANHOLE STEPS

A. Manhole steps shall be per ASTM C-478 under "Manhole Steps and Ladders".

B. All manholes shall have steps located over a bench, starting at a point 16" above the bench and continuing to the manhole opening at 16" centers to a point not closer than 16" to the bottom of the manhole chimney (the small diameter portion of the manhole).

C. Steps shall be of the same type throughout the manhole and shall be steel reinforced polypropylene plastic, with a minimum 1" diameter deformed reinforcing bar as manufactured by M.A. Industries, Inc., Peachtree City, Georgia or approved equal.

2.10 CATCH BASIN AND MANHOLE FRAMES AND COVERS

A. Catch basin and manhole frame and cover castings shall be as manufactured by Neenah Foundry Company, unless otherwise noted on the plan.

B. See drawings and details for Neenah frame and cover types and models.

C. All solid cover castings shall be self-sealing type to prevent water from entering the catch basin or manhole.

D. Inlet filter to be installed on catch basins which discharge enters underground cisterns (Riley). Refer to Drawings for details.

2.11 MANHOLE FLOWLINES

A. In all manhole construction, the flow line shall be a channel formed by building concrete benches as high as the top of the pipe and sloping the top of the bench at 1" per foot toward the wall. Wherever possible, the sewer pipe shall be laid through the manhole and the bottom of the pipe below the springline shall form the manhole flowline. The top of the pipe above the springline through the manhole shall removed following, or as part of, the bench construction.

2.12 DROP MANHOLES

A. Vertical drops in sanitary manholes of greater than 2 feet between the elevation of the incoming invert and the outgoing springline shall be conducted via an outside drop to an elevation of the springline of the lowest invert.

B. The outside drop shall be constructed of the same size and type of pipe as the sewer, with a tee into the manhole at the top on the line and grade of the sewer and a one-quarter bend into the manhole at the bottom.

2.13 CAST-IN-PLACE CONCRETE

A. All concrete used in the field for manhole bases, field connections, concrete cradles, etc. shall be ready mixed (unless otherwise approved for small quantities by the engineer) with a minimum of a six (6) bag mix, and air entrainment for any concrete which will be exposed directly or indirectly to the weather or freezing temperatures.

2.14 TRENCH DRAINS

A. Frame and Grate:

a. NDS dura slope trench (DS-102 and DS-103) with bottom outlet.
1) See drawing details for details on trench length, inverts, covers, and grates.

2.

a. NDS dura slope trench (DS-103N) with bottom outlet.
b. See drawing details for trench length, inverts, covers, and grates.

2.15 EXTERIOR SEWER CLEANOUTS

A. Exterior sewer cleanouts shall be as manufactured by Scheir or approved equal.

B. Exterior sewer cleanout shall be complete with riser cleanout pipe with "WYE" pattern fitting and top cleanout, frost sleeve and frost sleeve cover.

C. Clean out and frost sleeve: Zurn 1474 or equal as manufactured by Josam or JR Smith.
1. Top cleanout top shall be size as indicated on drawings.
2. Frost sleeve top shall have a 10,000 LBS load minimum limit.

D. Where cleanout is to be installed in an area which is subject to vehicular traffic, provide a 4" thick poured concrete pad of a size that is 9" away from the frost sleeve cover on all sides.

2.16 UNDERGROUND WARNING TAPE

A. Tape shall be equal to Thor Enterprises "Magnatec".

B. Detectable underground warning tape shall be 5.0 mil overall thickness, 6" width, .00035" thick aluminum foil core with polyethylene jacket bonded to both sides. Color code tape and print caution along with name of buried service in bold letters on face of tape.

C. Warning tape shall be installed 12" below the finished grade and above all exterior underground piping unless otherwise noted.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verification of existing conditions before starting work.

B. Project Inspector/Architect/Engineer must inspect all installed work before installation of backfill, etc.

3.2 LAYING PIPE

A. Piping shall be installed per elevations and at pitches indicated on drawings.

B. Any pipe or fittings cracked in cutting or handling or otherwise not free from defects shall not be used.

C. All pipe shall be cleaned of any dirt and/or debris inside and out prior to placing in the trench and then laid on a compacted bed of sand or crushed stone. Minimum thickness of the bed shall be 4" after compaction. Where unstable soils or foundations exist in the bottom of the sewer trench, the Contractor shall undercut the trench bottom by a minimum of 4" and replace the undercut material with crushed stone chips. The Contractor shall bed the pipe with additional crushed stone chips to a point 12" above the top of the pipe in all locations where the trench bottom is undercut due to unstable soil conditions.

D. All sewer pipe shall be laid to line and grade shown on the plans with bell ends up hill.

E. Where two sewer pipes are laid on the same trench a minimum spacing of one foot shall be maintained between barrels.

F. Each pipe shall be properly bedded as it is installed and not more than 200 feet of trench shall be left open without backfill above the bedding at any time. All trenches shall be completely backfilled or barrier fenced at the end of each work day.

3.3 MANHOLES, CATCH BASINS AND OTHER STRUCTURES

A. Excavation:
   1. The Contractor shall excavate for manholes and other structures as specified herein under Section 419 – SEWER STRUCTURES.
   2. For manholes and other structures, the excavation shall be limited so as to provide only the necessary amount of space to sufficient prepare the subgrade, set the base, lay the pipe, and set the manhole or structure.
   3. Where excavation occurs below the bottom elevation of the structure's base, the excavation shall be brought to the required elevation by the use of stone chips as specified for undercut excavations in pipe laying.
   4. The manhole or structure shall be carefully set plumb to the line and grade required.

B. Precast Concrete Manholes: Shall be constructed as specified herein and carefully set plumb, and to the line and grade required for all pipe lines into or out of the manhole. Precast manholes without the proper location and/or orientation of the pipe connections, shall be rejected and replaced unless the improper location and/or orientation of the connection points is correctable in the field and the engineer approves, in advance, the use of the precast manhole and field repairs.

C. Drop Manholes: The entire drop shall be encased in 6” of concrete and tied to the manhole all at 2 foot intervals with ¼” rods or an approved strapping on each side of the pipe. The manhole base shall be enlarged at the drop and the drop encasement poured to the base.

D. Adjustments of manholes, catch basins, and inlet castings shall be made with either precast concrete rings or cast-in-place concrete bricks and mortar, of adequate size and shape to sufficiently support the casting on the top of the structure without interfering with the casting opening.

E. Trench Grates: Install per manufacturer’s instructions.

3.4 EXTERIOR SEWER CLEANOUTS

A. For exterior cleanouts, the excavation shall be limited so as to provide only the necessary amount of space to sufficient prepare the subgrade, set the base, lay the pipe, and set the exterior cleanout assembly.

B. Install exterior sewer cleanouts where indicated on drawings and as required by code.

C. Install cleanout assembly complete with all components as detailed on drawings and as recommended by component manufacturer.

3.5 CONNECTIONS TO EXISTING STRUCTURES

A. The Contractor shall make all necessary openings into existing structures or sewers including the reconstruction of existing inverts or benches, as necessary. All openings shall be permanently patched watertight with concrete brick and mortar and, if necessary, waterstops.

3.6 DEFLECTION TESTING

A. PVC sewer pipe (except PVC Composite Pipe) shall be tested in the presence of the engineer by a "go-no-go" deflection test mandrel furnished by the Contractor. The mandrel shall be pulled by hand, or hand operated winches during the test so as to avoid any damages to the pipe that may be caused by mechanized pulling equipment.

B. The maximum allowable vertical deflection of the pipe shall not exceed five (5) percent of the original vertical dimension for pipelines tested regardless of how long after installation the testing takes place.

C. Deflection testing may be done concurrently with any necessary televising of the sewers. When done concurrently with sewer televising, the mandrel may be pulled by mechanized equipment, provided the mandrel is visible in the television picture during the testing.

D. Remove and replace all pipe that fails to pass the five (5) percent vertical deflection testing.

3.7 SEWER TELEVISING

A. In all sewer piping 12” and larger, where specifically required in the contract, or as necessary to meet required testing provisions specified above, the Contractor shall provide for the televising of the actual conditions inside the newly constructed sewers via closed circuit televising equipment. The engineer may or may not be present during sewer inspections via this method.

B. Televising equipment shall be either black & white or color, with a monitor and a camera specially designed and equipped for the conditions of the sewers to be televised. The equipment shall equipped with a VHS format VCR so that the televised picture, any on-screen data, and any audio notes of the sewer inspection may be permanently recorded on VHS video tape.

C. The camera equipment shall be transported through the sewers by means of mechanical or hand operated winches, coordinated to provide speed and directional control necessary to fully observe the sewer interior. A light source shall be provided with the camera to provide for the necessary illumination.

D. The televising equipment shall be equipped with an on-screen distance meter, capable of registering distances in the sewer from the starting manhole, and accurate

to the nearest ½ foot, so as to facilitate in the locating of sewer features and/or defects from the ground surface.

E. The televising equipment shall be equipped with an on-screen date and time clock, so as to permit the verification of the date and time of the television inspection.

F. Video tapes of the sewer inspection shall contain audio notes describing the sewer location, direction of inspection, and a description of any pertinent features observed during the televised inspection (service locations, leaking or faulty joints, debris in the line, offset joints, etc.). In addition, this information shall be recorded on a written log or record, in a format of the contractor's choosing.

G. When requested by the engineer, the contractor shall, at his option, provide originals of these records for inspection and/or copying by the engineer, or accurate copies.

3.8 CLEAN UP

A. Level off all waste disposal areas and clean up all areas used for the storage of materials or the temporary deposit of excavated earth. Remove all surplus material, tools and equipment.

B. Thoroughly clean all sewers and structures and remove and dispose of all debris and mud.

END OF SECTION

SECTION XXX

UNDERGROUND CISTERN (R-TANK SYSTEM)

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Underground Cistern
   2. Geotextile Fabric
   3. Bedding and cover materials

B. Related Sections:
   1. Section 303 - EXCAVATION.
   2. Section 305 - FILL.
   3. Section 306 – GRANULAR BACKFILL.
   4. Section 308 – PREPARING THE FOUNDATION
   5. Section 313 – EROSION CONTROL.
   6. Section 314 – CONSTRUCTION STAKING.
   7. Section 404 – TRENCH EXCAVATION, BEDDING AND BACKFILL
   8. Section 413 – SEWER PIPE MATERIALS.
   9. Section 415 – STORM SEWER PIPES AND LATERALS
   10. Section 416 – STORM SEWER TRACH GRATES
   11. Section 418 – CULVERT PIPES
   12. Section 419 – SEWER STRUCTURES
   13. Section XXX – STORMWATER BIOSWALE.

1.2 REFERENCES

A. City of Green Bay Standard Specifications & Construction Standards, latest edition, is considered to be part of this specification. Where there are any conflicts between this specification section and the City Standard specifications, the City specifications shall overrule this specification section.

B. State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction:
   1. Section 310 – Open-Graded Base.

C. WisDOT Product Acceptability List (PAL).
   a. Wisconsin Erosion Control

1.3 SUBMITTALS

A. Submit proposed R-Tank layout drawings. Drawings shall include typical section details as well as the required base elevation of stone and tanks, minimum cover requirements and tank configuration.

B. Submit manufacturer's product data, including compressive strength and unit weight.

C. Submit manufacturer’s installation instructions.

D. Submit R-Tank sample for review. Reviewed and accepted samples will be returned to the Contractor.

E. Submit material certificates for geotextile, geogrid, base course and backfill materials.

F. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening. Review package should include third party reviewed performance data that meets or exceeds criteria in Table 1

1.4 QUALITY ASSURANCE

A. A. All materials shall be manufactured in ISO certified facilities.

B. Installation Contractor shall demonstrate the following experience:
   1. A minimum of three R-Tank or equivalent projects completed within 2 years; and,
   2. A minimum of 25,000 cubic feet of storage volume completed within 2 years.
   3. Contractor experience requirement may be waived if the manufacturer’s representative provides on-site training and review during construction.

C. Installation Personnel: Performed only by skilled workers with satisfactory record of performance on bulk earthworks, pipe, chamber, or pond/landfill construction projects of comparable size and quality.

D. Contractor must have manufacturer’s representative available for site review if requested by Owner.

1.5 CLOSEOUT SUBMITTALS

A. Project Record Documents:
   1. Accurately record actual locations cistern corners, pipe runs, connections, inlets, cleanouts, and invert elevations.

B. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

1.6 DELIVERY, STORAGE AND HANDLING

A. Protect R-Tank and other materials from damage during delivery, and store UV sensitive materials under tarp to protect from sunlight when time from delivery to installation exceeds two weeks. Storage of materials should be on smooth surfaces, free from dirt, mud and debris.

B. Handling is to be performed with equipment appropriate to the materials and site conditions, and may include hand, handcart, forklifts, extension lifts, etc.

C. Cold weather:
   1. Care must be taken when handling plastics when air temperature is 40 degrees or below as plastic becomes brittle.
   2. Do not use frozen materials or materials mixed or coated with ice or frost.
   3. Do not build on frozen ground or wet, saturated or muddy subgrade.

1.7 COORDINATION

A. Section 01039 – Coordination and Meetings: Coordination and project conditions.

B. Prior to the start of the installation, a preinstallation conference shall occur with the representatives from the design team, the general contractor, the excavation contractor, the R-Tank installation contractor, and the manufacturer's representative.

PART 2 PRODUCTS

2.1 GENERAL

A. All materials shall conform to the size and type shown on the plans or as called for in the specifications. All work shall conform to applicable Laws, Codes, and Ordinances.

B. The Contractor shall be responsible for the safe storage and handling of all materials utilized in the work - including any materials furnished by the Owner. All materials shall be stored in areas designated by the engineer in cooperation with the owner. At no time shall the storage or handling of materials adversely affect traffic, drainage, fire protection, or public safety. Inconveniences to the general public from the storage and handling of materials shall be kept to a minimum.

C. All joining and other work shall be made in accordance with any applicable manufacturer's instructions.

2.2 R-Tank Units

A. R -Tank - Injection molded plastic tank plates assembled to form a 95% void modular structure of predesigned height (custom for each project).

B. R-Tank units shall meet the following Physical & Chemical Characteristics:

Table 1

PROPERTY	DESCRIPTION	R-Tank^{LD} VALUE	R-Tank^{HD} VALUE	R-Tank^{SD} VALUE	R-Tank^{UD} VALUE
Void Area	Volume available for water storage	95%	95%	95%	95%
Surface Void Area	Percentage of exterior available for infiltration	90%	90%	90%	90%
Vertical Compressive Strength	ASTM D 2412 / ASTM F 2418	30.0 psi	33.4 psi	42.9 psi	134.2 psi
Lateral Compressive Strength	ASTM D 2412 / ASTM F 2418	20.0 psi	22.4 psi	28.9 psi	N/A
HS-20 Minimum Cover	Cover required to support HS-20 loads	N/A	20”	18”	12” (Stone Backfill)
HS-25 Minimum Cover	Cover required to support HS-25 loads	N/A	24”	19”	15” (Stone Backfill)
Maximum Cover	Maximum allowable cover depth	3 feet	< 7 feet	< 10 feet	5 feet
Unit Weight	Weight of plastic per cubic foot of tank	3.29 lbs / cf	3.62 lbs/cf	3.96 lbs / cf	4.33 lbs / cf
Rib Thickness	Thickness of load-bearing members	0.18 inches	0.18 inches	0.18 inches	N/A
Service Temperature	Safe temperature range for use	-14 – 167° F	-14 – 167° F	-14 – 167° F	-14 – 167° F

C. **R-Tank Supplier:**

a. ACF Environmental 2831 Cardwell Road Richmond, VA 23234 (T):800-448-3636; (F):804-743-7779 www.acfenvironmental.com
b. Or approved equivalent.

2.3 Geosynthetics

A. Geotextile. A geotextile envelope is required to prevent backfill material from entering the R-Tank modules.

B. Infiltration Applications: When water must infiltrate/exfiltrate through the geotextile as a function of the system design:
   1. Geotextile Fabric Type DF, Schedule B per WisDOT Standard Specifications

C. In areas where water does not have to infiltrate/exfiltrate through the geotextile as a function of the system design:
   1. Geotextile Fabric Type R, per WisDOT
   2. Refer to Section 601 – AGGREGATES & BASE for material.

D. Geogrid. For installations subject to traffic loads and/or when required by project plans, install geogrid (ACF BX12 or equivalent) to reinforce backfill above the R-Tank system.

2.4 Backfill & Cover Materials

A. Bedding Materials: Stone (angular and smaller than 1.5” in diameter) or soil (GW, GP, SW, or SP as classified by the Unified Soil Classification System) shall be used below the R-Tank system (3” minimum). Material must be free from lumps, debris, and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation. For infiltration applications bedding material shall be free draining.

B. Side and Top Backfill: Material must be free from lumps, debris and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation.

C. Traffic Applications - Free draining material shall be used adjacent to (24” minimum) and above (for the first 12”) the R-Tank system.

D. For HD, and SD modules, backfill materials shall be free draining stone (angular and smaller than 1.5” in diameter) or soil (GW, GP, SW, or SP as classified by the Unified Soil Classification System).

E. For UD modules with less than 14” of top cover, backfill materials shall be free draining stone (angular and smaller than 1.5” in diameter). The use of soil backfill on the sides and top of the UD module is not permitted unless the modules are installed outside of traffic areas or with cover depths of 14” or more. Top backfill material (from top of module to bottom of pavement base or 12” maximum) must be consistent with side backfill.

F. Non-Traffic / Green Space Applications - For all R-Tank modules installed in green spaces and not subjected to vehicular loads, backfill materials may either follow the guidelines for Traffic Applications above, or the top backfill layer (12" minimum) may consist of AASHTO #57 stone blended with 30-40% (by volume) topsoil to aid in establishing vegetation.

G. Additional Cover Materials: Structural Fill shall consist of granular materials meeting the gradational requirements of SM, SP, SW, GM, GP or GW as classified by the Unified Soil Classification System. Structural fill shall have a maximum of 25 percent passing the No. 200 sieve, shall have a maximum clay content of 10 percent and a maximum Plasticity Index of 4. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation.

2.5 Other Materials

A. Utility Marker: Install metallic tape at corners of R-Tank system to mark the area for future utility detection.

PART 3 EXECUTION

3.1 EXAMINATION

A. Coordinate installation for the R-Tank system with other on-site activities to eliminate all non-installation related construction traffic over the completed R-Tank system. No loads heavier than the design loads shall be allowed over the system, and in no case shall loads higher than a standard AASHTO HS20 (or HS25, depending on design criteria) load be allowed on the system at any time.

B. Protect adjacent work from damage during R-Tank system installation.

C. All pre-treatment systems to remove debris and heavy sediments must be in place and functional prior to operation of the R-Tank system. Additional pretreatment measures may be needed if unit is operational during construction due to increased sediment loads.

D. Contractor is responsible for any damage to the system during construction.

3.2 ASSEMBLY OF R-TANK UNITS

A. Assembly of modules shall be performed in accordance with the R-Tank Installation Manual, Section 2.

3.3 LAYOUT AND EXCAVATION

A. Installer shall stake out, excavate, and prepare the subgrade area to the required plan grades and dimensions, ensuring that the excavation is at least 2 feet greater than R-Tank dimensions in each direction allowing for installation of geotextile filter fabric, R-Tank modules, and free draining backfill materials.

B. All excavations must be prepared with OSHA approved excavated sides and sufficient

working space.

C. Protect partially completed installation against damage from other construction traffic by establishing a perimeter with high visibility construction tape, fencing, barricades, or other means until construction is complete.

D. Base of the excavation shall be uniform, level, and free of lumps or debris and soft or yielding subgrade areas. A minimum 2,000 pounds per square foot bearing capacity is required.
   1. Standard Applications: Compact subgrade to a minimum of 95% of Standard Proctor (ASTM D698) density or as required by the Owner's engineer.
   2. Infiltration Applications: Subgrade shall be prepared in accordance with the contract documents. Compaction of subgrade should not be performed in infiltration applications.

E. Unsuitable Soils or Conditions: All questions about the base of the excavation shall be directed to the owner's engineer, who will approve the subgrade conditions prior to placement of stone. The owner's engineer shall determine the required bearing capacity of the R-Tank subgrade; however in no case shall a bearing capacity of less than 2,000 pounds per square foot be provided.
   1. If unsuitable soils are encountered at the subgrade, or if the subgrade is pumping or appears excessively soft, repair the area in accordance with contract documents and/or as directed by the owner's engineer.
   2. If indications of the water table are observed during excavation, the engineer shall be contacted to provide recommendations.
   3. Do not start installation of the R-Tank system until unsatisfactory subgrade conditions are corrected and the subgrade conditions are accepted by the owner's engineer.

3.4 PREPARATION OF BASE

1. Place a thin layer (3" unless otherwise specified) of bedding material, over the subgrade to establish a level working platform for the R-Tank modules. Level to within ½" (+/- ¼") or as shown on the plans.
2. Standard Applications: Static roll or otherwise compact bedding materials until they are firm and unyielding.
3. Infiltration Applications: Bedding materials shall be prepared in accordance with the contract documents.

A. Outline the footprint of the R-Tank system on the excavation floor using spray paint or chalk line to ensure a 2' perimeter is available around the R-Tank system for proper installation and compaction of backfill.

3.5 INSTALLATION OF THE R-TANKS

A. Where a geotextile wrap is specified on the stone base, cut strips to length and install in excavation, removing wrinkles so material lays flat. Overlap geotextile a minimum 12" or as recommended by manufacturer. Use tape, special adhesives, sandbags or other ballast to secure overlaps. As geotextiles can be damaged by extreme heat, smoking is not permissible on/near the geotextile, and tools using a flame to tack the overlaps, such as propane torches, are prohibited.

B. Where an impervious liner (for containment) is specified, install the liner per manufacturer's recommendations and the contract documents. The R-Tank units shall be separated from impervious liner by a non-woven geotextile fabric installed accordance with Section 3.04A.

C. Install R-Tank modules by placing side by side, in accordance with the design drawings. No lateral connections are required. It is advisable to use a string line to form square corners and straight edges along the perimeter of the R-Tank system. The modules are to be oriented as per the design drawing with required depth as shown on plans.
   1. For LD, HD, and SD installations, the large side plate of the tank should be placed on the perimeter of the system. This will typically require that the two ends of the tank area will have a row of tanks placed perpendicular to all other tanks. If this is not shown in the construction drawings, it is a simple field adjustment that will have minimal effect on the overall system footprint. Refer to R-Tank Installation Guide for more details
   2. For UD installations, there is no perpendicular end row required.

D. Wrap the R-Tank top and sides in specified geotextile. Cut strips of geotextile so that it will cover the sides and top, encapsulating the entire system to prevent backfill entry into the system. Overlap geotextile 12" or as recommended by manufacturer. Take great care to avoid damage to geotextile (and, if specified, impervious liner) during placement.

E. Identify locations of inlet, outlet and any other penetrations of the geotextile (and optional liner). These connections should be installed flush (butted up to the R-Tank) and the geotextile fabric shall be cut to enable hydraulic continuity between the connections and the R-Tank units. These connections shall be secured using pipe boots with stainless steel pipe clamps. Support pipe in trenches during backfill operations to prevent pipe from settling and damaging the geotextile, impervious liner (if specified) or pipe. Connecting pipes at 90 degree angles facilitates construction, unless otherwise specified. Ensure end of pipe is installed snug against R-Tank system.

F. Install Inspection and Maintenance Ports in locations noted on plans. At a minimum one maintenance port shall be installed within 10' of each inlet & outlet connection, and with a maximum spacing of one maintenance port for every 2,500 square feet. Install all ports as noted in the R-Tank Installation Guide.

G. If required, install ventilation pipes and vents as specified on drawings to provide ventilation for proper hydraulic performance. The number of pipes and vents will depend on the size of the system. Vents are often installed using a 90 degree elbow with PVC pipe into a landscaped area with 'U" bend or venting bollard to inhibit the ingress of debris. A ground level concrete or steel cover can be used.

3.6 BACKFILLING OF THE R-TANK UNITS

A. Backfill and fill with recommended materials as follows:

   1. Place freely draining backfill materials (Section 2.03 B) around the perimeter in lifts with a maximum thickness of 12". Each lift shall be placed around the entire perimeter such that each lift is no more than 24" higher than the side backfill along any other location on the perimeter of the R-Tank system. No fill shall be placed over top of tanks until the side backfill has been completed.

   2. Each lift shall be compacted at the specified moisture content to a minimum of 95% of the Standard Proctor Density until no further densification is observed (for self-compacting stone materials). The side lifts must be compacted with walk behind compaction equipment. Even when "self-compacting" backfill materials are selected, a walk behind vibratory compactor must be used.

3. Take care to ensure that the compaction process does not allow the machinery to come into contact with the modules due to the potential for damage to the geotextile and R-Tank units.
4. No compaction equipment is permissible to operate directly on the R-Tank modules.
5. Top Backfill: Only low pressure track vehicles shall be operated over the R-Tank system during construction. Dump Trucks and Pans shall not be operated within the R-Tank system footprint at any time. Heavy equipment should unload in an area adjacent to the R-Tank system and the material should be moved over the system using tracked equipment with an operating weight of less than 10 tons.
    a. Typical Applications: Install a 12" (or as shown on plans) lift of freely draining material over the R-Tank Units, maintaining 12" between equipment tracks and R-Tank System. Lightly compacted using a walk-behind trench roller. Alternately, a roller (maximum gross vehicle weight of 6 tons) may be used. Roller must remain in static mode until a minimum of 24" of cover has been placed over the modules. Sheep foot rollers should not be used.
    b. Shallow Applications (< 18" total cover): Install top backfill in accordance with plans.
6. If required, install a geogrid as shown on plans. Geogrid shall extend a minimum of 3 feet beyond the limits of the excavation wall.
7. Following placement and compaction of the initial cover, subsequent lifts of structural fill (Section 2.03 C) shall be placed at the specified moisture content and compacted to a minimum of 95% of the Standard Proctor Density and shall cover the entire footprint of the R-Tank system. During placement of fill above the system, unless otherwise specified, a uniform elevation of fill shall be maintained to within 12" across the footprint of the R-Tank system. Do not exceed maximum cover depths listed in Table 2.01 B.
8. Place additional layers of geotextile and/or geogrid at elevations as specified in the design details. Each layer of geosynthetic reinforcement placed above the R-Tank system shall extend a minimum of 3 feet beyond the limits of the excavation wall.

B. Ensure that all unrelated construction traffic is kept away from the limits of excavation until the project is complete and final surface materials are in place. No non-installation related loading should be allowed over the R-Tank system until the final design section has been constructed (including pavement).

C. Place surfacing materials, such as groundcovers (no large trees), or paving materials over the structure with care to avoid displacement of cover fill and damage to surrounding areas.

D. Backfill depth over R-Tank system must be within the limitations shown in the table in Section 2.01 B. If the total backfill depth does not comply with this table, contact engineer or manufacturer's representative for assistance.

3.7 MAINTENANCE REQUIREMENTS

A. A routine maintenance effort is required to ensure proper performance of the R-Tank system. The Maintenance program should be focused on pretreatment systems. Ensuring these structures are clean and functioning properly will reduce the risk of contamination of the R-Tank system and stormwater released from the site. Pre-treatment systems shall be inspected yearly, or as directed by the regulatory agency and by the manufacturer (for proprietary systems). Maintain as needed using acceptable practices or following manufacturer's guidelines (for proprietary systems).

B. All inlet pipes and Inspection and/or Maintenance Ports in the R-Tank system will need to be inspected for accumulation of sediments at least quarterly through the first year of operation and at least yearly thereafter.

C. If sediment has accumulated to the level noted in the R-Tank Maintenance Guide or beyond a level acceptable to the Owner's engineer, the R-Tank system should be flushed.

D. All inspection and maintenance activities should be performed in accordance with the R-Tank Operation, Inspection & Maintenance Manual.

END OF SECTION

SECTION XXX

PERMEABLE INTERLOCKING CONCRETE PAVERS

(Unilock)

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Permeable Interlocking Concrete Pavers.
   2. Joint and Betting material (No. 8 Stone).
   3. Open Graded Base (No. 1 clear stone).
   4. Accessories.

B. Related Sections:
   1. Section 303 – Excavation
   2. Section 305 - Fill

1.2 SUBMITTALS

A. Samples:
   1. Submit color samples prior to selection of concrete pavers.
   2. Submit, in air-tight containers, 10 lb sample of each type of media material for the pavers, including No. 1 Clear Stone and No. 8 Clear Stone.

B. Materials Source: Submit name of media materials suppliers.
   1. Permeable Interlocking Concrete Pavers.
   2. Geotextile.
   3. Permeable Paver Edge Restraint.

C. Manufacturer's Certificate: Certify Products meet or exceed specified requirements

1.3 QUALITY ASSURANCE

A. Paving Subcontractor Qualifications:
   1. Utilize an installer having successfully completed concrete paver installation similar in design, material and extent indicated on this project.

B. Regulatory Requirements and Approval: Provide applicable licensing, bonding or other requirements of regulatory agencies.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
   1. Install a 7 feet by 7 feet paver area.
   2. This area shall be used to determine surcharge of the bedding sand layer, joint sizes, and lines, laying pattern, color and texture of the installation, jointing materials, and cleaning and sealing agents and compounds.
   3. This area shall be used as the standard by which the work will be judged.

4. Do not proceed with remaining work until workmanship, patterns, types, colors, textures, finishes, shape, and cleaning and sealing agents and applications and methods are approved by Architect.
5. Rework mock-up area as required to produce acceptable work.
6. Subject to acceptance by Owner, mock-up may be retained as part of finished work.
7. If mock-up is not retained, remove and properly dispose of mock-up after completion of installation.

1.4 REFERENCES

A. ASTM C 33, Standard Specification for Concrete Aggregates.

B. ASTM C 67, Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile, Section 8, Freezing and Thawing.

C. ASTM C 131, Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.

D. ASTM C 136, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.

E. ASTM C 140, Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units.

F. ASTM C 144, Standard Specification for Aggregate for Masonry Mortar.

G. ASTM D 448, Standard Classification for Sizes of Aggregate for Road and Bridge Construction.

H. ASTM C 936, Standard Specification for Solid Concrete Interlocking Paving Units.

I. ASTM C 979, Standard Specification for Pigments for Integrally Colored Concrete.

J. ASTM C 1781, Standard Test Method for Surface Infiltration Rate of Permeable Unit Pavement Systems.

K. ASTM D 698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,000 ft-lbf/ft3 (600 kN-m/m3)).

L. ASTM D 1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3)).

M. ASTM D 1883, Test Method for California Bearing Ratio of Laboratory-Compacted Soils.

N. ASTM D 2922 Standard Test Methods for Density of Soil and Soil-Aggregate In-Place by Nuclear Methods (Shallow Depth).

O. ASTM D 2940, Specification for Graded Aggregate Material for Bases or Subbases for Highways or Airports.

P. ASTM D 4254, Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density.

Q. ASTM D 6758, Standard Test Method for Measuring Stiffness and Apparent Modulus of Soil and Soil-Aggregate In-Place by Electro-Mechanical Method.

R. ASTM E 2835, Standard Test Method for Measuring Deflections using a Portable Impulse Plate Load Test Device

S. C 29 Bulk Density and Voids in Aggregate Materials.

T. C 33, Standard Specification for Concrete Aggregates.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers:

1. Unilock, 301 E. Sullivan Rd., Aurora, IL 60505. Tel: 630-892-9191; Web: https://unilock.com/

B. Substitutions as approved by Engineer.

2.2 PERMEABLE INTERLOCKING CONCRETE PAVER UNITS

1. Unilock: Paver Type: Eco-Priora manufactured by Unilock.
   a. Color: To be determined by Owner.
   b. Pattern: To be determined by Owner.
   c. Size: To be determined by Owner

B. Joint and Bedding Stone (No. 8 Stone):
1. Crushed stone with 90 percent fractured faces, LA Abrasion < 40 per ASTM C 131.
2. Do not use rounded river gravel for vehicular applications.
3. All stone materials shall be washed with less than 2 percent passing the No. 200 sieve.
4. No. 8 Bedding and Joint/Opening Filler shall be double washed, angular stone.
   a. Gradation requirements: Comply with those specified in Table 1 at the end of this Section.

C. Open Graded Base (No. 1 Clear Stone):
1. Open Graded Base (No. 1 Clear Stone) shall be double washed, angular stone.
   a. Gradation requirements: Comply with those specified in Table 2 at the end of this Section.

D. Accessories:

1. Geotextile Fabric Type DF, Schedule B per WisDOT Standard Specifications
    a. A nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Provide Geotextile inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.
    b. Grab Tensile Strength: ASTM D 462: MD 180 lbs
    c. Minimum Puncture Strength: ASTM D 6241: 350 lbs
    d. Apparent Opening Size (AOS): ASTM D 4751: 300 um
    e. Permittivity: D 4491: 1.45 sec-1

2. Edging: Galvanized Steel .120 - .125 inch average thickness. Vertical length specified in plans.

PART 3 EXECUTION

3.1 PREPARATION

A. Verify that the subgrade soil is free from standing water.

3.2 INSTALLATION

A. Geotextiles:
    1. Place on bottom and sides of soil subgrade. Secure in place to prevent wrinkling from vehicle tires and tracks. Overlap a minimum of 0.3 m (12 in.) 0.6 m (24 in.) in the direction of drainage.

B. Open-Graded Base:
    1. Moisten, spread and compact the No. 1 Clear Stone base layer in one 6 in. thick lift. On this layer, make at least two passes in the vibratory mode then at least two in the static mode with a minimum 10 t vibratory roller until there is no visible movement of the No. 1 Clear Stone. Do not crush aggregate with the roller.
    2. The surface tolerance of the compacted No. 1 Clear Stone base should not deviate more than plus or minus 1 in. over a 10 ft straightedge.
    3. Install underdrain and cleanouts as indicated on the drawings. Refer to Specification 02360 – Stormwater Bioswale for pipe specifications.

C. Bedding Layer:
    1. Moisten, spread and screed the No. 8 stone bedding material.
    2. Fill voids left by removed screed rails with No. 8 stone.
    3. The surface tolerance of the screeded No. 8 bedding layer shall be plus or minus 3/8 in (10 mm) over a 10 ft straightedge.
    4. Do not subject screeded bedding material to any pedestrian or vehicular traffic before paving unit installation begins

D. Edge Restraints:

1. Provide edging as detailed on Drawings.
   a. Against landscaped areas, edge pavers with galvanized steel edging as specified.
   b. Utilize clean asphalt cut edge or concrete edge as paver edging when adjacent to those surfaces.
   c. Transition of surfaces shall be flush, less than ¼" gap.

E. Permeable interlocking concrete pavers and joint/opening fill material:
   1. Do not use unit pavers with chips, cracks, voids, discolorations, and other defects that might be visible in finished work.
   2. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
   3. Exercise care in handling face mix pavers to prevent surfaces from contacting backs or edges of other units.
   4. Provide Permeable Interlocking Concrete Pavers using joint pattern as indicated. Adjust joint pattern at pavement edges such that cutting of edge pavers is minimized. Cut all pavers exposed to vehicular tires no smaller than one-third of a whole paver.
   5. Place units hand tight against spacer bars. Adjust horizontal placement of laid pavers to align straight.
      1) When installation is performed with mechanical equipment, use only unit pavers with spacer bars on sides of each unit.
   6. Provide space between paver units of 1/32 in. (1 mm) wide to achieve straight bond lines.
   7. Do not exceed joint (bond) lines more than ±1/2 in. (±15 mm) over 50 ft. (15 m) from string lines.
   8. Fill gaps between units or at edges of the paved area that exceed 3/8 inch (10 mm) with pieces cut to fit from full-size unit pavers.
   9. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
   10. Do not allow traffic on installed pavers until Permeable Joint Aggregate has been vibrated into joints. Keep skid steer and forklift equipment off newly laid pavers that have not received initial compaction and Permeable Joint Aggregate material. .
   11. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a to 5000-lbf (22-kN) compaction force at 80 to 90 Hz. Perform at least three passes across paving with vibrator. Vibrate under the following conditions:

a. After edge pavers are installed and there is a completed surface or before surface is exposed to rain.

b. Compact installed concrete pavers to within 6 feet (1,800 mm) of the laying face before ending each day's work. Cover pavers that have not been compacted and leveling course on which pavers have not been placed, with nonstaining plastic sheets to prevent Permeable Setting Bed Aggregate from becoming disturbed.

3.3 FIELD QUALITY CONTROL

A. After sweeping the surface clean, check the final elevations for conformance to the drawings.

B. Lippage: No great than 1/8 in. difference in height between adjacent paver.

C. The surface elevation of paver shall be 1/8 inch to ¼ inch above adjacent drainage inlets, concrete collars or channels.

D. Bond lines for paver courses: +1/2 inch over a 50 ft string line.

E. Verify the surface infiltration at a minimum of 100 in/hour using test method C 1781.

3.4 REPAIRING, CLEANING AND SEALING

A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.

B. Cleaning: Remove excess dirt, debris, stains, grit, etc. from exposed paver surfaces; wash and scrub clean.
   1. Clean Permeable Concrete Pavers in accordance with the manufacturer’s written recommendations.

3.5 PROTECTION

A. Protect completed work from damage due to subsequent construction activity on the site.

3.6 TABLES

A. Gradation Requirements for No. 1 Clear Stone and No. 8 Clear Stone Aggregate.

Sieve Sizes	Passing by Weight

Table 1: Bedding and Joint Stone - No. 8 Clear Stone

1/2 inch	100%
3/8 inch	85 – 100%
No. 4	10 – 30%
No. 8	0 – 10%
No. 16	0 – 5%

Table 2: Open Graded Base - No. 1 Clear Stone

1 inch	100%
3/4 inch	90% - 100%
3/8 inch	20% - 55%
No. 4	0% - 10%
No. 8	0% - 5%

END OF SECTION

City of Green Bay

Green Stormwater Infrastructure (GSI) Operations and Maintenance Plan

AQUALIS
Formerly Stormwater Solutions Engineering

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1 Introduction and Background

Throughout Wisconsin, communities use a combination of traditional and green stormwater infrastructure (GSI) strategies to manage stormwater runoff, mitigate flooding, and protect water quality. GSI strategies such as engineered bioswales (bioretention basins), stormwater trees in structural soils, and permeable pavement provide benefits over and above those of traditional ponds and underground storage systems. GSI strategies can reduce the urban heat island effect, return water to the natural hydrologic cycle, create urban habitats, and beautify urban spaces.

Consistent and effective maintenance is critical to unlocking the full potential of GSI to benefit our communities. GSI involves a broad range of practices and materials whose maintenance needs differ from season to season and place to place. As more GSI measures are being built in public and private spaces, there is a need to develop a stronger base of knowledge and practice around GSI operation and maintenance in the region. This document is intended to support building that base of knowledge and practice in the City of Green Bay by breaking down the operation and maintenance components — labor, materials, equipment and practices — to ensure the long-term success of GSI strategies.

This document offers detailed guidance for the standard maintenance and inspection of the primary GSI strategies used in the City of Green Bay, as defined by the City of Green Bay. Since each GSI strategy has very distinct requirements, this guide is organized by GSI type to ensure that clear standards and practices are outlined for municipal staff and Green Bay Conservation Corps, maintenance contractors, property managers, and the many volunteers who are involved in Green Bay's Garden clubs, conservancies, and watershed groups. The guide supports pre- planning for maintenance activities by outlining recommended tasks, frequencies, equipment and material needs, safety steps, and weather considerations that need to be taken into account for effective GSI maintenance.

This guide is intended to consider maintenance during GSI design to achieve better long-term outcomes for installed GSI strategies. Up-front consideration of the visibility of a GSI strategy on a site, the type of owner and property manager who will be responsible for upkeep, aesthetic needs, and surrounding land uses can prompt different plan or material selections and other design approaches. By assessing the maintenance needs of different practices up-front, using this guide, designers will become important partners in ensuring maintenance success.

With the ever-changing environmental conditions and many stresses affecting the region's urban environments, developing strong, well-informed GSI maintenance practices is one step that can help ensure that investments in GSI are well spent and continue to benefit our city over time. Users of this guide are encouraged to add their own notes and experiences to help the City of Green Bay GSI network become a success story for climate resiliency and water quality.

2 Use of This Document

Successful GSI maintenance begins with good design and carries through construction, inspection, and ongoing maintenance phases. This document was developed to advance seven goals:

1 Ensure the ongoing stormwater management (i.e. volume capture and pollutant removal) function of GSI strategies installed.

2 Maintain the intended aesthetic appearance of plants, planting beds, surfacing, and other components of GSI installations.

3 Ensure that GSI is designed for ease of maintenance, and that the design reflects the level of maintenance that can be reasonably provided after construction. For example, for spaces where regular maintenance is less likely, designers can use this guide to identify low maintenance features to incorporate into designs.

4 Ensure that GSI strategies include appropriate levels and types of pretreatments based on the surrounding land use, runoff patterns, and trash and debris loadings.

5 Ensure staff who are charged with O&M have the necessary information and tools to evaluate the condition and function of different GSI installations, and accurately identify O&M issues.

6 Provide metrics and methods for tracking maintenance activities, both to ensure permit compliance and to assess long-term functionality.

7 Enable managers of multiple GSI strategies or sites to plan and optimize maintenance efforts and resources.

2.1 Intended Users

The document is intended to help many different user groups work effectively with GSI:

- Regulators/Plan Review Staff: Understanding the maintenance needs of different practices to inform the development of permit criteria, technical standards for GSI strategies, and compliance assessments.
- Municipal Engineering and Operations Staff: Supporting capital project and system maintenance planning, contractor selection, and training field staff to maintain GSI effectively.
- Maintenance Contractors: Giving maintenance and landscape contractors the specific information and planning tools needed to provide high-quality service for GSI strategies.
- General Contractors: Identifying crucial elements for construction that can make maintenance easier and more effective, especially during the warranty period.

- Property Owners and Managers: Provide clear, concise outlines of maintenance needs that facilitate good planning and lead to a high-quality product.
- Engineers and Landscape Architects: Point to design approaches, considerations, and features that can be incorporated into project development to facilitate better maintenance outcomes.
- Volunteers: Promote effective planning and strong understanding of the methods, materials, and practices that go into healthy landscapes and working GSI strategies.

3 Green Stormwater Infrastructure (GSI) Operations and Maintenance Overview

3.1 GSI Strategies

Operation and Maintenance Standards were created for the following 10 green stormwater infrastructure strategies.

1) BIORETENTION / BIOSWALES
2) CONSTRUCTED WETLANDS
3) GREEN ROOFS
4) NATIVE LANDSCAPING
5) PERMEABLE PAVEMENT
6) RAIN GARDENS
7) TREE INLET/ CELLS
8) RAINWATER HARVESTING (CISTERNS)
9) SOIL AMENDMENTS
10) STORMWATER TREES

Each green stormwater infrastructure strategy listed above has an individual maintenance standard that includes the following information.

TITLE OF STRATEGY

The title of the individual strategy.

DESCRIPTION

A description of the individual strategy.

COMMON PRACTICES AND APPLICATIONS

Common locations and applications of where individual strategies are installed.

TYPICAL SECTION

A visual representation of the specific GSI strategy that lists the common components, including what is located under the surface.

INSPECTION AND MAINTENANCE

A summary of the expected inspection, operations and maintenance of the individual strategy.

MAINTENANCE TASKS

A table that lists each individual maintenance task that may be provided for when performing operations and maintenance on a specific strategy. The table also includes a brief description of the maintenance tasks, indications of when the task is necessary, and the recommended minimum frequency of the task.

EXPECTED ANNUAL MAINTENANCE SCHEDULE

A table that lists the specific maintenance tasks that are expected to be performed on an annual basis. It lists the task, season (spring, summer, fall, winter, post 2-inch rain event}, and frequency each task is expected to be performed during each season or event.

3.2 GSI Maintenance Tasks

Each green stormwater infrastructure strategy has an individual maintenance standard for the specific activities that are involved in maintenance. Many of these activities, such as water or sediment removal, are common to multiple GSI strategies. The tasks described are:

1) CONCRETE REPAIR
2) DEICING
3) EROSION REPAIR
4) GRAFFITI REMOVAL
5) GRAVEL JOINT FILLING
6) INVASIVE SPECIES CONTROL
7) MANUAL WEED CONTROL
8) MOWING
9) MULCH AMENDMENT & REPLACEMENT
10) ORGANIC DEBRIS REMOVAL
11) PIPE JETTING
12) PLOWING
13) PRUNING (STRUCTURAL)
14) SANITIZING
15) SEDIMENT REMOVAL
16) SEEDING
17) SETTLING REPAIR
18) SOIL AMENDMENT
19) STRUCTURAL CLEARING & MAINTENANCE
20) SURFACE MEDIA RENOVATION

21) TRASH REMOVAL
22) VACUUM CLEANING
23) VEGETATION MAINTENANCE
24) WATERING
25) WOODY VEGETATION REMOVAL

Each maintenance task listed above includes the following information.

TITLE OF MAINTENANCE TASK

The title of the individual maintenance task.

DESCRIPTION

A description of the individual maintenance task.

EQUIPMENT & MATERIALS

A list of equipment and materials needed to perform the individual maintenance task.

INSTRUCTIONS

Step-by-step instructions on how to perform the individual maintenance task.

SPECIAL CONSIDERATIONS

Any special considerations for the individual maintenance task. This is where manufacturer recommendations are included, as well as priority or specialty items. It also includes any other general considerations, observations, and actions that may be needed while performing the individual task.

3.3 General Maintenance Notes

For all GSI installation, inspection, and maintenance activities, there are a number of practices that can facilitate good planning, record-keeping, and facility performance. The list below, while not exhaustive, is a general reference list of recommended practices for anyone installing, inspecting, or maintaining GSI installations.

PLANS, PERMITS & BASELINE PHOTOGRAPHS

It is strongly recommended that for each GSI strategy or suite of strategies, the owner develops a binder, folder, or digital location with key baseline information about the strategy or strategies. This should include planting plans for any vegetated strategies, baseline photos, recommended plant heights, mow/no mow areas, and related stormwater permits, stormwater management plans, and other information supporting operation and maintenance.

O&M FORMS & INSPECTION LOGS

All facility operators should keep inspection and maintenance logs. Operators should record date, description and contractor (if applicable} for all repairs, landscape maintenance, and facility cleanout activities.

SITE INSPECTION

Sites should be inspected at the beginning of every maintenance season (i.e. after snow melt} to assess maintenance needs, especially for any facilities with unusual conditions or needs. Sites should also be inspected after every 2-inch (or greater} rainfall, with special attention to areas where debris may collect.

PHOTO DOCUMENTATION

Photo documentation is especially valuable for GSI strategies. Photos should always be taken prior to starting maintenance activities and at their conclusion to document how the facility is performing, what maintenance activities have been completed, and how the strategy looks before and after maintenance.

FERTILIZERS/PESTICIDES/HERBICIDES

The use of fertilizers, pesticides, and herbicides are discouraged for GSI strategies because of the potential for damage to downstream aquatic systems and wildlife. If pesticides and herbicides are required, use the services of licensed applicator, and only use products approved for aquatic use, where required. It is essential to ensure any application is confined to affected plants or areas. Note, the use of chemical herbicides in waters of the state, including stormwater treatment facilities, is regulated by the Wisconsin Department of Natural Resources (WDNR) — Aquatic Plant Management Program under NR 107, Wisconsin Administrative Code. Contact the WDNR prior to using herbicides and/or algaecides.

ACCESS

Maintain ingress/egress per design standards.

INFILTRATION/FLOW CONTROL

All bioretention/bioswale and rain gardens are to be fully drained (i.e. free from standing water) within 48 hours of a 1-inch rainfall. If ponding is observed in a GSI strategy, photograph the ponding and record the time/date, current and antecedent (i.e. last two days} weather conditions, and any other relevant site conditions observed. Water should always be ponded in constructed wetland and no duration of surface ponding is acceptable for permeable pavements and green roofs.

POLLUTION PREVENTION

All sites must implement best management practices to prevent contamination of stormwater. *Never wash spills into a stormwater facility.* If contamination occurs, document the circumstances and the corrective action taken; include the time, date, weather and site conditions.

VECTORS (MOSQUITOS AND RODENTS)

Stormwater facilities must not harbor mosquito larvae or rodents that pose a threat to public health or that undermine the facility structure. Record the time/date, weather, and site conditions when any vector activity is observed, and record the dates when any vector abatement starts and ends.

4 Green Stormwater Infrastructure (GSI) Operations and Maintenance Standards

4.1 Bioretention / Bioswales (also referred to as biofilters, biofiltration, and bioinfiltration)

DESCRIPTION

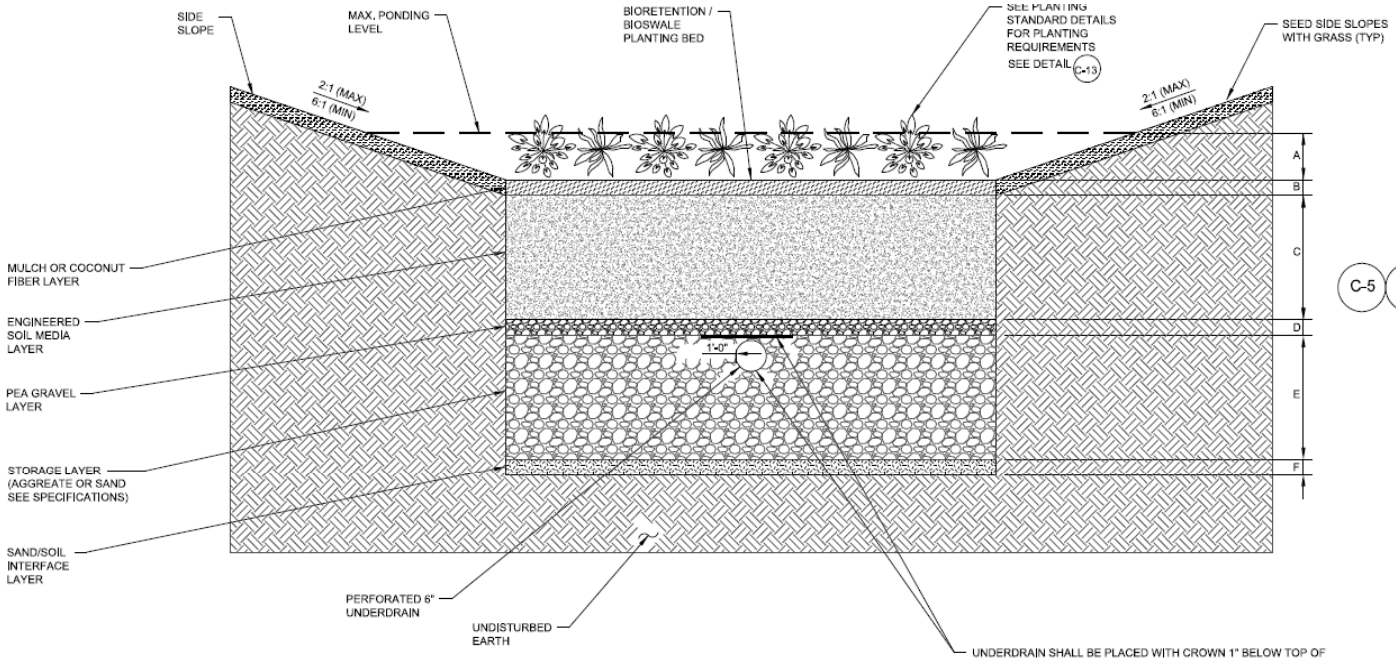
A stormwater management practice that allows water to pool in a depressed vegetated area and then infiltrate through engineered soils and into a gravel layer where water collects and is stored. The infiltrating or engineered soil layer is a special mix that typically includes sand mixed with compost. This layer is typically 18 to 24 inches deep to prevent disturbance of the gravel layer during maintenance activities. Both bioretention and rain gardens include an engineered soil layer. Unlike a rain garden, the bioretention includes a gravel storage layer and sewer systems. These sewer systems often include a section of perforated underdrain located within the gravel layer that carries stormwater to a discharge point. They also typically include cleanouts and a series of overflow structures that control the ponding depth. Bioretention can capture stormwater runoff where it infiltrates through the engineering soil to remove pollutants. Bioretention can also retain the stormwater, slowly discharging to downstream storm sewer systems and waterways.

COMMON PRACTICES & APPLICATIONS

Bioretention can be constructed in a wide range of previously disturbed or developed areas, including areas with insufficient soils. Bioretention/Bioswales can be lined on the bottom, preventing stormwater from infiltrating, or can be purposely constructed in native soils with positive drainage to allow for infiltration of the treated stormwater. The engineered soils are used to provide infiltration and pollutant removal, and the gravel layer is used for collection and storage. Because of their filtration and storage layers, bioswales are well suited for applications with runoff from large impervious surfaces such as parking lots and roadway medians and can be incorporated or retrofitted into these designs.

BIORETENTION / BIOSWALE TYPICAL SECTIONS AND COMPONENTS

(Taken from MMSD's Bioretention-Bioswale GSI Strategy Typical Details which can be found in MMSD's GSI Calculator download. Check the link for the most up-to-date sections: https://www.freshcoastguardians.com/static/GI_calc.zip)



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C-5 C-6 C-7 C-9 C-11

DIMENSION	LAYER NAME	DEPTH
A	SURFACE PONDING	X
B	MULCH OR COCONUT FIBER	X
C	ENGINEERED SOIL MEDIA	X
D	PEA GRAVEL	X
E	STORAGE	X
F	SAND/SOIL INTERFACE	X

BIORETENTION / BIOSWALE TYPICAL CROSS-SECTION (SLOPED SIDES)

SECTION A

NTS C-1

BIORETENTION / BIOSWALE INSPECTION & MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and the upstream land use. Site-specific maintenance plans should always be consulted, as the successful functionality of the bioswale may have specific maintenance requirements that were considered during design.

Referring to Planting Plans & Photos: It is especially important to refer to planting plans and photos that show what types of vegetation should be present, and where maintenance crews should or should not mow.

Timing of Inspections: Bioretention should be inspected in the spring after snow melt, and after the end of the growing season to ensure the system will function as intended. In addition, because inflows from large storm events can damage vegetation, cause erosion, and clog inlets and outfall structures, bioswales should be inspected after any rain event of 2 inches in 24 hours or more. Inspection during the time of weed growth is also especially critical, as it is usually the top maintenance activity associated with these systems. For the City of Green Bay, this will begin in late-May through mid-July.

Inspection Focus: Inspections should focus on the growth and condition of vegetation, including all weeds or invasives; soil conditions (especially sediment build-up or clogging); structural integrity; and stormwater flow paths and erosion. Maintenance of any items identified in the inspections should be completed within seven days of the inspection.

Initial Site Inspection: A site inspection should be performed after snow melt (mid-April) to identify any items that would not be covered in the expected annual maintenance visits. This would include:

- Identifying any bare areas in the bioswales
- Identifying any low or eroded areas in the engineered soil
- Identifying any structural component issues

Manual Weed Control: Depending on establishment and condition of planting bed, as many as 12 weeding visits could occur during the typical six-month growing season of mid-April through mid-October. The weeds grow most aggressively from early May through mid-July (before native warm season grasses have filled out). During this period, visits may need to be weekly. Ornamental landscapes will typically require more visits than naturalized ones, but to begin with, naturalized landscapes will require more visits. As naturalized landscapes are established, the frequency of manual weed control will taper off.

BIORETENTION / BIOSWALE MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down sign.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, sign, or bioswale surfaces.	If graffiti is present on bioswale sign, or adjacent to bioswale area.	As needed
Structural Components			
Concrete Repair	Repair cracks on concrete structures.	If cracks or fractures are present on concrete structures located in bioswale.	As needed
Structural Clearing & Maintenance	Clear trash, debris, sediment, etc. from inlet and outlet structures, including catch basins and curb inlets, to clear and restore to function.	Clogged inlets, outlets, or outfall structures.	Biannually
Pipe Jetting	Jet pipes clogged with trash debris, sediment, etc. to clear and restore to function; maintain at least 50% function.	Clogged inlets, outlets, or outfall structures.	As needed
Vacuum Cleaning	Vacuum out trash, debris, sediment, etc. from clogged structures.	Clogged inlets, outlets, or outfall structures.	As needed
Vegetation Components			

Invasive Species Control	Control invasive species impacting desired plant species in bioswale. Refer to Appendix of Invasive Species for list of the most common invasive species found in GSI strategies in Northeastern WI.	Invasive plants are present in bioswale.	Biannually, or as needed

Task	Description	Maintenance Indicator	Minimum Frequency
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present in bioswale area.	Monthly (spring through fall – more frequently May through July)
Mowing	Mow plants if height of vegetation exceeds recommended heights. Mow perimeter edge of bioswales within vegetated grassy areas.	If height of vegetation exceeds recommended heights.	Annually
Pest Management*	Inspect plants for signs of disease or predation.	Presence of pests or diseased plants.	Biannually
Plant Replacement	Remove and replace dead plants.	If at least 10% of the plants have died.	As needed
Pruning	Remove damaged, diseased or dead branches or woody plants, small trees, or shrubs	If damaged, diseased, or dead branches are present, or if safe line of sight is obstructed.	Annually
Vegetation Maintenance	Trimming and/or transplanting annual herbaceous vegetation.	Presence of decayed material.	Annually

Watering	Water plants as necessary to ensure survival during extended dry periods.	Yellow or brown tips of leaves, dying plants, or wilted/dehydrated leaves or stalks. Note, yellow leaves can also be an indicator that plants are receiving too much water.	As needed, depending on weather
Woody Vegetation Removal	Remove of woody vegetation or saplings.	If unplanned woody vegetation or saplings are present in bioswale.	Annually

Task	Description	Maintenance Indicator	Minimum Frequency
Growing Medium/Planting Bed Components			
Erosion Repair	Stabilize any disturbed areas with seed or live plantings and biodegradable erosion matting.	If minor (<20 sf), nonrecurring erosion is present within the bioswale, or if erosion is deeper than 2 inches.	As needed
Mulch Amendment/ Replacement	Amend (i.e. rake, aerate, and add material) or replace mulch in bioswale.	If visible mulch is observed to have bare spots, depth is less than 2 inches or appears compacted or disarrayed in or around bioswale.	Annually, or as needed
Organic Debris Removal	Remove excess organic debris (e.g., leaves, plant decay, etc.) from bioswale.	If present in bioswale.	Biannually
Sediment Removal	Remove sediment from bioswale basin and surrounding areas, including gutters and sidewalks.	If sediment is present or visible in or around the bioswale, and if sediment is more than 1-inch deep.	Biannually or as needed
Settling Repair	Repair areas of bioswale that have settled.	Area is observed to be lower than surrounding areas of designed elevation of bioswale.	As needed
Surface Media Renovation	Remove top inches of filter media and cultivating the surface.	Bioswale is clogged or not draining properly or within 48 hours of a rainfall.	As needed
Trash Removal	Remove trash from bioswale planting beds and surrounding areas. Report any evidence of dumping.	If present in or around the bioswale.	Monthly (Spring through Fall)
*Integrated Pest Management (IPM) routines are encouraged. This involves inspecting the plants for signs of disease or predation. The IPM approach encourages non-chemical methods for treated diseases or pests as a first resort.			

BIORETENTION / BIOSWALE EXPECTED ANNUAL MAINTENANCE VISITS

It is recommended to complete twelve (12) site visits annually for bioswale maintenance. The timing and the tasks related to each of these site visits is detailed in the table below.

Task	**Spring**	**Summer**	**Fall**	**Winter**	**After 2-inch Rainfall [1]**
Site Inspection	1[2]				2
Mowing			1[3]		
Manual Weed Control	3	3	3		
Pest Management		1	1		
Invasive Species Control		1	1		
Vegetation Maintenance	1				
Trash Removal	2	2	2		2
Organic Debris Removal	1		1		2
Pruning			1		
Structural Clearing & Maintenance	1				2
Woody Vegetation Removal			1		
Sediment Removal	1		1		2
Mulch Amendment/Replacement	1				2
Total Minimum Annual Expected Maintenance	**4**	**3**	**3**		**2**

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

[2] Initial site inspection shall be completed mid-April after snowmelt. The site inspection should be the focus and other maintenance tasks **should not be considered** at this time. Site inspections conducted after 2-inch rainfalls can be combined with other maintenance tasks as needed.

[3] Mowing frequency is based on an established, native landscape. Mowing may take place in late-fall or early-spring depending on plant species.

If the native landscaping is recently established, the mowing is usually conducted in decreasing frequencies from the date of planting. Often five mowings the first full growing season, four the second, three the third, and so on. This allows the native seed to germinated and prevent annual weeds from flowering and setting seed.

If ornamental grasses are used, they are not mown, but usually trimmed back in early spring of each year.

4.2 Constructed Wetlands

DESCRIPTION

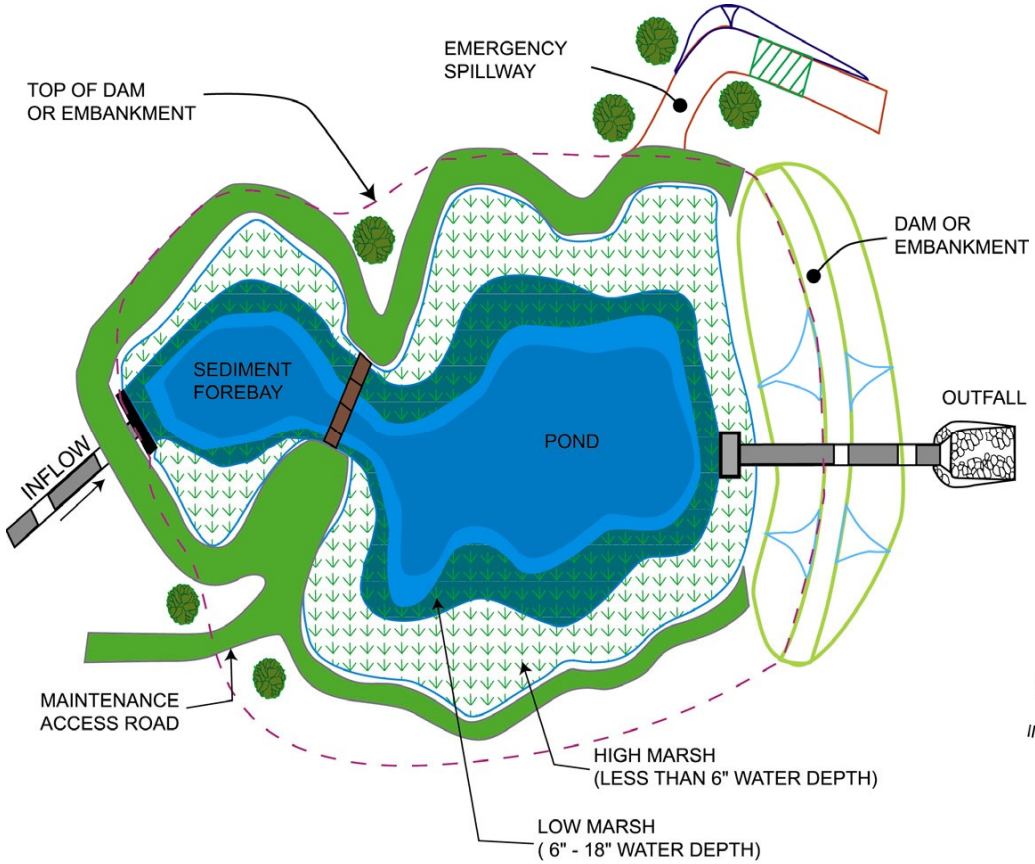
A stormwater management practice designed and constructed to simulate the pollutant removal, stormwater storage and other environmental benefits of natural wetlands. Constructed wetlands are often comprised of multiple inter- connected shallow pools, vegetation and microorganisms that remove pollutants through settling, biological uptake and biodegradation. Constructed wetland islands can be added to enhance pollutant control and improve habitat in constructed wetland systems or existing storm water ponds. Planted vegetation in constructed and natural wetlands are often adaptable to both dry and wet periods during the year. Constructed wetlands are managed and maintained to provide water quality benefits to downstream waterways while providing aquatic and wetland habitat for various species.

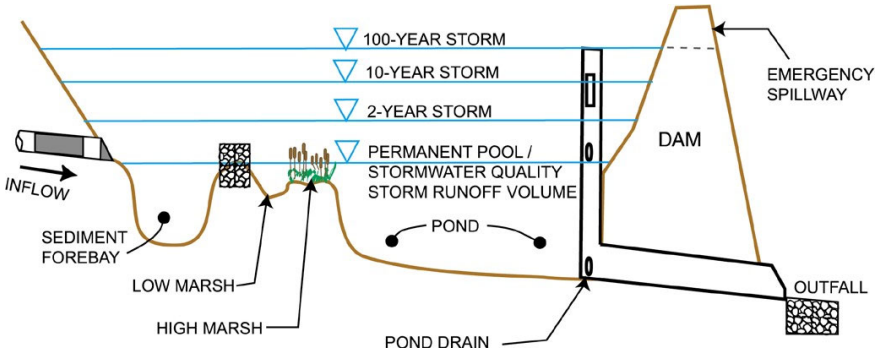
COMMON PRACTICES & APPLICATIONS

The various features of constructed wetlands can be designed to offer habitat for a variety of species. Common site conditions that are favorable to the development of a constructed wetland include surface area equaling approximately 3-5% of the contributing drainage area to mitigate pollutants, minimal species on neighboring properties, and dedicated resources to conduct maintenance over the lifetime of the facility. Public trails and educational displays and signs can be incorporated into constructed wetlands which are often suitable for public spaces.

CONSTRUCTED WETLAND TYPICAL SECTION AND COMPONENTS

(this example was taken from New Jersey Stormwater Best Management Practices Manual – Chapter 9.2: Standard for Constructed Stormwater Wetlands – February 2004 http://www.state.nj.us/dep/watershedmgt/bmpmanualfeb2004.htm)





CONSTRUCTED WETLAND INSPECTION AND MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less-frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and upstream land use. Site-specific maintenance plans should always be consulted as the successful functionality of the constructed wetland may have specific maintenance requirements that were considered during design.

Maintenance Plans: Maintenance of constructed wetlands is a critical component to the success of this type of designed facility. A detailed maintenance plan should be implemented to ensure plant matter is harvested at the appropriate times of year (typically fall), and to ensure the designated water areas do not become clogged with excess vegetative growth.

Burning: Intentionally burning plant growth is a measure sometimes used to control invasives and promote regrowth of desired plant species. Many prairie species flourish in the months following a control burn. This document does not outline burning as a specific maintenance task but recognizes that there are instances where burning may be the most effective method to control invasive species, especially in or around wetlands.

- A burn plan should be developed for the specific best management practice if controlled burns are necessary. The burn plan should include information such as emergency contacts, specific area to be burned, desired/required weather conditions, time-of-year considerations, required equipment, and more.
- Controlled burns are typically conducted in mid-spring. Too much rain in preceding days will make it difficult to maintain the fire, while dry conditions will make it difficult to control the fire and keep the burn in the designated area.
- Burning vegetation in GSI strategies in urban areas should be conducted carefully, as public safety, private property and infrastructure are the primary concerns and considerations when choosing to use this type of control. Burn permits or approvals from the local fire department may be required.
- Controlled burns should not be conducted on windy days to minimize the potential for unintentional impacts or spreading.
- All controlled burned areas should be carefully monitored during and after the burn, to prevent unintentional impacts from spreading and to ensure the fire will not restart.

Referring to Planting Plans & Photos: It is important to refer to planting plans and past photos that show what types of vegetation should be present, and where maintenance crews should or should not remove vegetation. Designed and constructed pools of water or flowing water areas.

should particularly be evaluated per the planting plan, to prevent these areas from becoming clogged over time with excess plant growth.

Timing of Inspections: Regular inspections and maintenance are critical to the effective operation of constructed wetlands as the vegetation needs to be monitored and harvested instead of naturally dying off. The many shallow pools, channels and upland areas need to be inspected and maintained to ensure they remain clear of leaves and debris that could back up water or divert flows. Inspection during the time of weed growth is also critical. For the City of Green Bay, this is late-May through mid-July.

Inspection Focus: Inspections should focus on the growth and condition of vegetation, including any weeds or invasives; wet pool or flowing water areas and specifically plant growth in these areas that was not called for in the planting plans; structural integrity of the inlets/outlets and other artificial structures throughout the constructed wetland; and storm water paths and erosion. Maintenance of any items identified in the inspections should be completed within 30 days of inspection.

Initial Site Inspection: A site inspection should be performed after snow melt (mid-April) to identify any items that would not be covered in the expected annual maintenance visits. This would include:

- Identifying any bare areas in or around the constructed wetland.
- Identifying any low or eroded areas in the embankment or berm.
- Identifying any structural component issues.

Manual Weed Control: Depending on establishment and condition of planting bed, as many as 12 weeding visits could occur during the typical 6 month growing season of mid-April through mid-October. The weeds are growing most aggressively from early May through mid-July (before native warm season grasses have filled out). During this period, visits may need to be weekly. Ornamental landscapes will typically require more visits than naturalized ones, but to begin with, naturalized landscapes will require more visits. As naturalized landscapes are established, the frequency of manual weed control will taper off.

CONSTRUCTED WETLAND MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Signage Care	Wipe down signage.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, signage, or GSI surfaces.	If graffiti is present on GSI signage, or adjacent to GSI area.	As needed
Structural Components			
Concrete Repair	Repair cracks on concrete structures.	If cracks or fractures are present on concrete structures located in wetland area.	As needed
Pipe Jetting	Jet pipes clogged with trash debris, sediment, etc. to clear and restore to functioning.	Clogged inlets, outlets, or outfall Structures.	As needed
Structural Clearing & Maintenance	Clearing trash, debris, sediments from inlet or outlet structures that may be hindering function.	Clogged inlets, outlets, or outfall structures.	Annually or as needed
Vegetation Components			
Invasive Species Control	Controlling invasive species impacting desired plant species in constructed wetland. Refer to Appendix of Invasive Species for list of the most common invasive species found in GSI strategies in Northeastern WI.	Invasive plants or animals are present in constructed wetland.	Biannually, or as needed

Manual Weed Control	Remove weeds by hand weeding.	If weeds are present in wetland area.	Monthly (Spring through Fall – more frequently May through July)

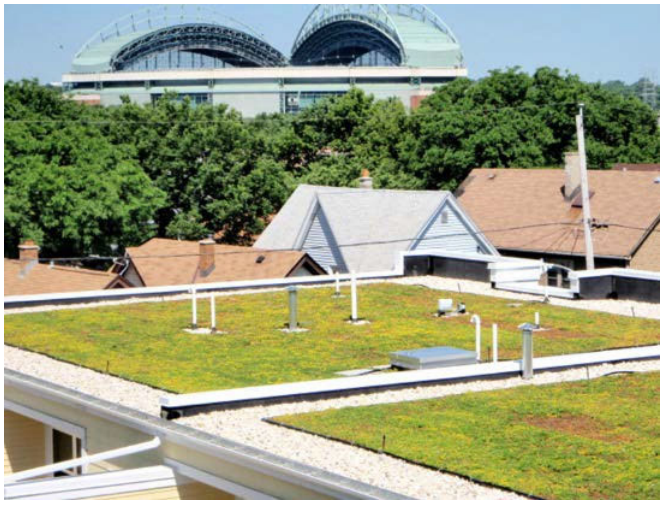
4.3 Green Roof

DESCRIPTION

A green roof refers to a roof structure, often a building, that is either partially or completely planted with vegetation growing in soil or soil medium to absorb rainwater. Green roofs can be planted in waterproof trays or on top of a waterproof barrier. There are two types of green roofs: intensive, and extensive. Intensive are thicker, with a minimum depth of 12.8 cm (5.0 in), and extensive roofs, which are shallower, ranging in depth from 2 cm (0.79 in) to 12.7 cm (5.0 in).

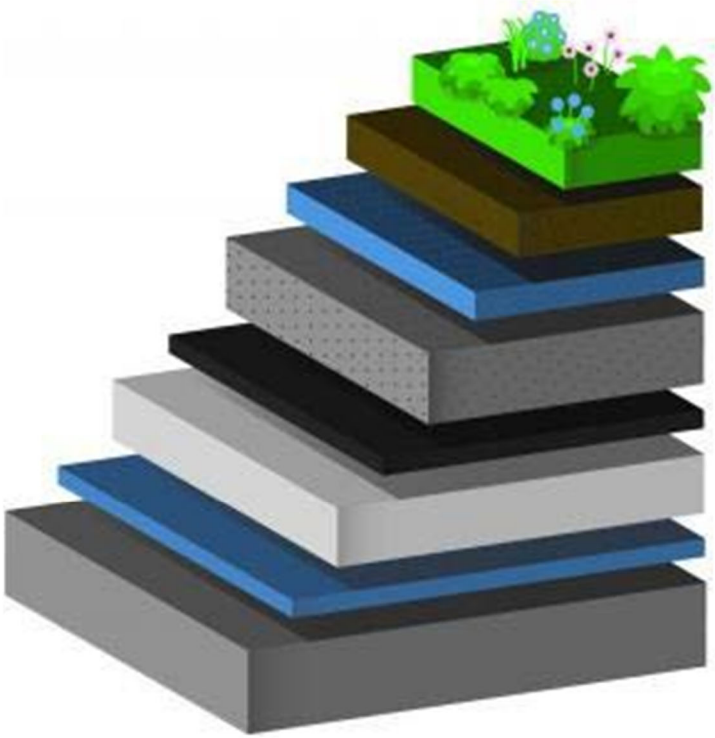
COMMON PRACTICES & APPLICATIONS

Green roofs (also known as eco-roofs) act as stormwater management systems by collecting and managing the stormwater that falls on them. They can be retrofitted on existing buildings or redevelopments, or installed on new buildings, and are especially valuable in urban areas, where green space or pervious area is limited. The type of green roof is dependent on the roof structure and what it can support based on weight. This dictates the design, and ultimately the specific type of maintenance needed for each individual roof.



GREEN ROOF TYPICAL SECTION AND COMPONENTS

(Taken from EPA's Common Green Roof Layers: https://www.epa.gov/heat-islands/using-green-roofs-reduce-heat-islands#types)



Note the figure above represents the most common design of green roof and not all layers shown will be found on every green roof. Extensive green roofs may be simpler than intensive green roofs, and all types of roof will vary by manufacturer.

GREEN ROOF INSPECTION AND MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the number and timing of large storm events, overly wet or dry (i.e. drought), irrigation and access. Site-specific maintenance plans should always be consulted, as the successful functionality of the green roof may have specific maintenance requirements that were considered during design.

Referring to Planting Plan, Design Plans, & Manufacturer Recommendations: It is especially important to refer to planting plans and photos that show what types of vegetation, soil mixture, roof membrane, and drainage structures that should be present. It is also important to refer to design plans and manufacturer recommendations, as green roof components and maintenance are specific to the design and type. Intensive roofs are heavier and tend to require more maintenance, where extensive tend to be lighter and require less (or even) minimal maintenance.

Timing of Inspections: Green roof maintenance is especially important during the first 3-5 years of installation, to ensure proper vegetation establishment. Green roofs should be inspected in the spring after snow melt, and after the end of the growing season to ensure the system will function as intended. In addition, because inflows from large storm events can damage vegetation, cause erosion, and clog inlets and outfall structures, green roofs should be inspected after any rain event of 2 inches in 24 hours or more. It is also important to check to make sure the roof is draining, and that there are no leaks in the membrane of the roof. Inspection during the time of weed growth is also critical. For the City of Green Bay, this is late-May through mid-July.

Inspection Focus: Because of the nature of green roofs and the location of maintenance activities, be sure to consult with the facilities manager and review design plans and manufacturer maintenance recommendations prior to performing any maintenance activities on a green roof. The following are general green roof maintenance considerations.

- **Personal Safety**: Maintenance crews must be trained to work on rooftop environments and must always utilize safety measures, including lines, harnesses, etc. Also, beware of potential nesting birds when approaching the roof.
- **Materials:** Never leave materials out that could blow off the roof and pose a hazard to people on the ground.
- **Roof Membrane:** The roof membrane must always be protected. It prevents water from entering the buildings and/or structures and can be easily damaged by foot traffic and maintenance tools (such as shovels). Anyone working on the roof needs to know what the membrane is, what it looks like, where it occurs in the profile of the roof, and ultimately how it should be protected. Roofs with organic membranes should be protected with a

root barrier, which is usually a sheet of polyethylene, because plants will eat organic membranes (like bitumen). This sheet also needs to be maintained, and if it is damaged, it should be repaired.

- **Weight**: Green roofs are designed to a specific saturated weight, which is the weight of all the material when it is completely wet, this includes soil, drainage components, and plants. It is critical that maintenance workers do not add soil, change plantings, or store materials that would increase the weight of the roof system. This could cause damage to the roof structure, and potentially result in collapse. Rooftop soils are usually specially blended lightweight soils, and therefore planting soil should never be added to a roof without first consulting a design professional (engineer, landscape architect, architect).
- **Wind Scour:** One of the greatest threats to rooftop plantings is wind scour. Wind can desiccate plantings when it rolls over a parapet wall, or around rooftop mechanical equipment. The higher the roof, the more wind scour tends to increase, ultimately creating a bigger problem. Unvegetated soil will quickly blow away, and if the soil was necessary to weigh down a non- adhered roof membrane, then the membrane can become damaged as well.
- **Firebreaks:** A firebreak is a gap in vegetation or other combustible material that acts as a barrier to slow or stop the progress of a fire. Note that many insurers require that firebreaks are established and maintained on large roofs. Consult the facilities manager or design plans to ensure that if necessary, this is properly maintained.
- **Drainage Structures:** In general, pitched roofs have external gutters and downspouts, while flat roofs have internal roof drains. It is important for maintenance to know where the roof is actually draining, since the green roof components can disguise this. Internal drains are often protected in an enclosed metal box that can be accessed by opening a lid. It is important that these features be inspected frequently to make sure they are not clogged.

Site Inspections: A site inspection should be performed once after snow melt (mid-April), once in summer, and once in fall a to identify any items that might occur during expected annual maintenance, but also need special attention to, specific to green roofs:

- Identifying any bare or eroded areas caused by wind scour and/or wind desiccation, especially at roof edges and next to rooftop objects. Note, that some areas may end up being completely inhospitable to vegetation. In those cases, the plantings and planting soil should be replaced with an inorganic ballast (typically rock), that has the same saturated weight as the planned soil and vegetation.
- Identifying any structural component issues, including but not limited to leaks, tears, perforations, or deficiencies in membranes, root barriers, and drains.

- Monitoring weed control, especially if weed growth occurs in gravel beds that might be used to separate vegetation from mechanical features or adjacent building walls. Vegetation can climb behind and/or under flashing and impair the roof seal. This may also include inspecting and maintain firebreaks by removing weedy vegetation in a gravel break or restoring gravel paths that serve as firebreaks.

GREEN ROOF MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down sign.	If dust or grime is present.	Annually
Structural Components			
Membrane and Root Barrier Inspection [1]	Repair any leaks, tears, perforations, or structural deficiencies.	Noticeable leaks, and/or tears or perforations of the membrane, root barrier, or structural components.	Annually, or as needed
Structural Clearing & Maintenance	Clear trash, debris, sediment from conveyance structures, including gutters and/or roof drains draining to and from the green roof.	Clogged gutters, drains, pipes, or structures.	Monthly (spring through Fall) or as needed
Vegetation Components			
Invasive Species Control	Control invasive species impacting desired plant species on green roof. Refer to Appendix of Invasive Species for list of the most common invasive species found in GSI strategies in Northeastern WI.	Invasive plants are present on the green roof.	Biannually
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present on or around green roof, adjacent structures or gravel breaks.	Monthly (spring through Fall – more frequently May through July)
Pest Management*	Inspect plants for signs of disease or predation.	Presence of pests or diseased plants.	Biannually

Plant Replacement	Remove and replace dead plants or sedums.	If at least 10% of the plants have died.	As needed
Vegetation Maintenance	Trimming and/or transplanting annual herbaceous vegetation.	Presence of decayed material.	Annually
Watering	Water plants as necessary to ensure survival during extended dry periods.	Yellow or brown tips of leaves, dying plants, or wilted/dehydrated leaves or stalks. Note, yellow leaves can also be an indicator that plants are receiving too much water.	As needed, depending on weather
Woody Vegetation Removal	Remove of woody vegetation or saplings.	If unplanned woody vegetation or saplings are present on green roof.	Annually
Growing Medium/Planting Bed Components			
Erosion Repair	Stabilize any disturbed areas with seed or an inorganic ballast (typically rock) that has the same saturated weight as the planned soil and vegetation.	If minor (<20 sf), nonrecurring erosion is present within the green roof.	As needed
Organic Debris Removal	Remove excess organic debris (e.g., leaves, plant decay, etc.) from roof system.	If present on green roof.	Biannually
Sediment Removal	Remove sediment from green roof and surrounding areas, including gutters and roof.	If sediment is present/visible in or around the green roof.	Biannually or as needed.
Surface Media Renovation	Remove top inches of filter media and cultivate the surface. Check product type, structure, vegetation depth, and manufacturer recommendations prior to performing renovation.	Green roof is clogged or not draining properly within 48 hours of a rainfall (provided outlets are cleared).	As needed

Trash Removal	Remove trash from green roof planting beds and surrounding areas. Report any observed evidence of dumping.	If present on or around the green roof.	Biannually

[1] Membrane and Root Barrier Maintenance is not included as a maintenance task because membranes, barriers, and structural components of green roofs tend to be specific to manufacturer. Contact manufacturer for repair or replacement of parts.

* Integrated Pest Management (IPM) routines are encouraged. This involves inspecting the plants for signs of disease or predation. The IPM approach encourages non-chemical methods for treated diseases or pests as a first resort.

GREEN ROOF EXPECTED ANNUAL MAINTENANCE

It is recommended to complete eight (8) site visits annually for green roof maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	**Spring**	**Summer**	**Fall**	**Winter**	**After 2-inch Rainfall [1]**
Site Inspection	1	1	1		2
Manual Weed Control	2	2	2		
Pest Management		1	1		
Invasive Species Control		1	1		
Vegetation Maintenance	1				
Trash Removal	1		1		2
Organic Debris Removal	1		1		2
Structural Clearing & Maintenance	1	1	1		2
Woody Vegetation Removal			1		
Sediment Removal	1	1	1		2
Total Minimum Annual Expected Maintenance	2	2	2		2

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

Task	Description	Maintenance Indicator	Minimum Frequency
Mowing	Mowing plants if height of vegetation exceeds recommended heights. Mow perimeter edge of constructed wetland within vegetated grassy areas.	If height of vegetation exceeds recommended heights.	Annually
Pest Management*	Inspect plants for signs of disease or predation.	Presence of pests or diseased plants.	Biannually
Plant Replacement	Remove and replace dead plants.	If at least 10% of the plants have died.	As needed
Pruning	Remove damaged, diseased or dead branches or woody plants, small trees, or shrubs	If damaged, diseased, or dead branches are present, or if safe line of sight is obstructed.	Annually
Vegetation Maintenance	Trimming and/or transplanting annual herbaceous vegetation.	Presence of decayed material.	Annually
Woody Vegetation Removal	Removal of woody vegetation or saplings.	If unplanned woody vegetation or saplings are present in constructed wetland.	Annually
Growing Medium/Constructed Wetland Components			
Erosion Repair	Stabilize any disturbed areas with seed and biodegradable erosion matting.	If minor (<20 sf), nonrecurring erosion is present within the wetland, or if erosion is deeper than 2 inches.	As needed
Organic Debris Removal	Remove excess organic debris (e.g., leaves, plant decay, etc.) from constructed wetland.	If present in constructed wetland.	Biannually
Sediment Removal	Remove sediment from constructed wetland and surrounding areas, including forebay.	If sediment is present or visible in or around the constructed wetland.	Biannually

Settling Repair	Repairing areas of constructed wetland that have settled.	Area is observed to be lower than surrounding areas of designed elevation of constructed wetland.	As needed
Trash Removal	Remove trash from constructed wetland and surrounding areas. Report large dumping.	If present in or around the constructed wetland.	Monthly (Spring through Fall)
* Integrated Pest Management (IPM) routines are encouraged. This involves inspecting the plants for signs of disease or predation. The IPM approach encourages non-chemical methods for treated diseases or pests as a first resort.			

CONSTRUCTED WETLAND EXPECTED ANNUAL MAINTENANCE

It is recommended to complete twelve (12) site visits annually for constructed wetland maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	Spring	Summer	Fall	Winter	After 2-inch Rainfall [1]
Site Inspection	1[2]				2
Mowing			1[3]		
Manual Weed Control	3	3	3		
Pest Management		1	1		
Invasive Species Control		1	1		
Vegetation Maintenance	1				
Trash Removal	2	2	2		2
Organic Debris Removal	1		1		2
Inlet Clearing & Maintenance	1				2
Pruning			1		
Woody Vegetation Removal			1		
Sediment Removal	1		1		2
Total Minimum Annual Expected Maintenance	4	3	3		2

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

[2] Initial site inspection shall be completed mid-April after snowmelt. The site inspection should be the focus and other maintenance tasks **should not be considered** at this time. Site inspections conducted after 2-inch rainfalls can be combined with other maintenance tasks as needed.

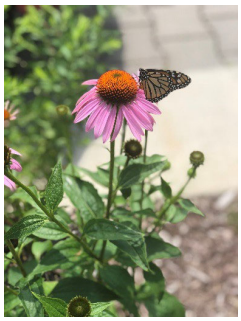
[3] Mowing frequency is based on an established, native landscape. Mowing may take place in late-fall or early-spring depending on plant species.

If the native landscaping is recently established, the mowing is usually conducted in decreasing frequencies from the date of planting. Often five mowings the first full growing season, four the second, three the third, and so on. This allows the native seed to germinated and prevent annual weeds from flowering and setting seed.

If ornamental grasses are used, they are not mown, but usually trimmed back in early spring of each year.

4.4 Native Landscaping

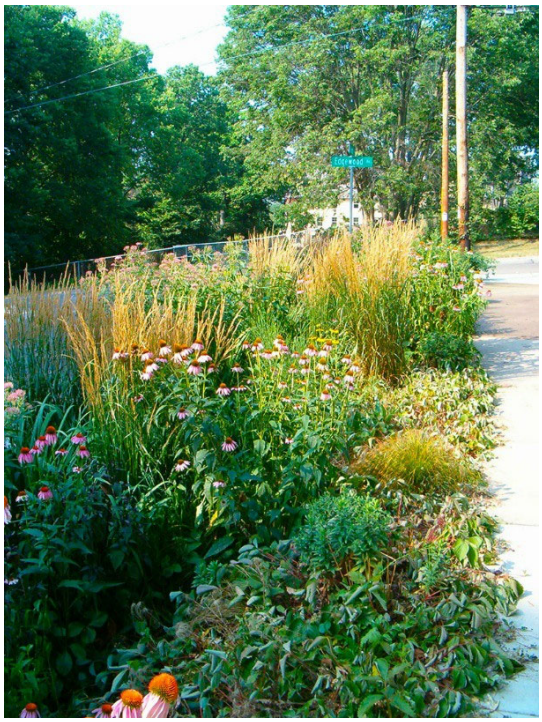
DESCRIPTION



Native landscapes in Northeastern (NE) Wisconsin include a wide variety of plant communities, including forests, grasslands, and wetlands. Native landscaping with grass or sedge dominated plant communities refers to plants with deep growing root systems that increase the infiltration capacity of soils by breaking up hardening soil structures and introducing macropores and organic matter. Native landscaping uses colorful native plants, non-invasive ornamentals, or a combination of the two to create a prairie-type setting. In addition, many native plants and grasses provide important habitat functions for birds, butterflies, and bees. As such, native landscaping can be used as a habitat enhancement feature of stormwater projects to achieve biodiversity goals.

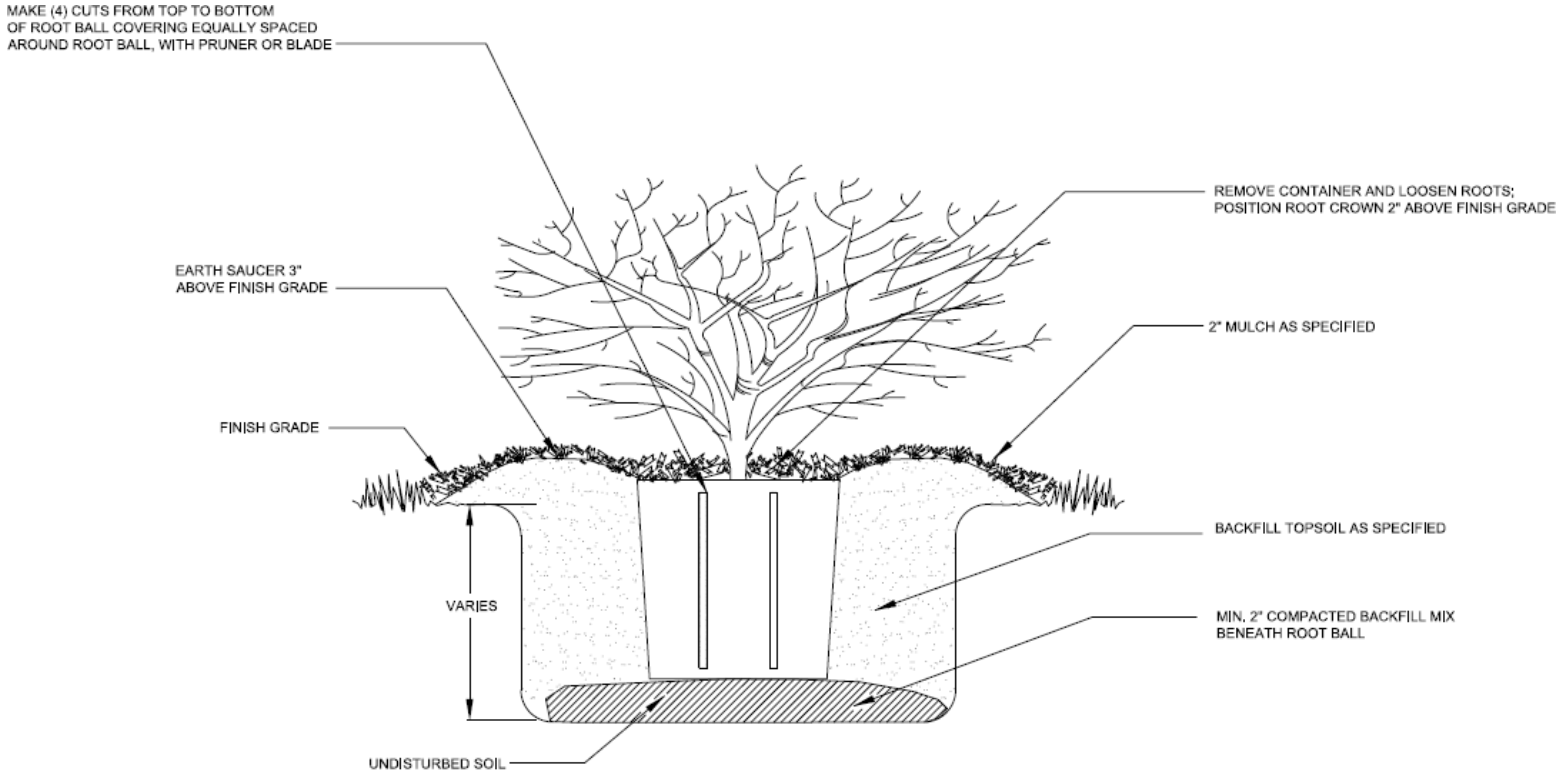
COMMON PRACTICES & APPLICATIONS

Native plant species can tolerate the drought and flooding cycles of an area, have evolved in a particular area, and are adapted to local climate conditions.



NATIVE LANDSCAPING (SHRUB) TYPICAL SECTION AND COMPONENTS

There are other native landscaping details considering the wide variety of plant communities, but the detail shown below is specific to a container grown shrub. (taken from MMSD's Native Landscaping GSI Strategy Typical Details which can be found in MMSD's GSI Calculator download. Check the link for the most up-to-date sections: https://www.freshcoastguardians.com/static/GI_calc.zip)



NATIVE LANDSCAPING DETAIL

NTS

NATIVE LANDSCAPING INSPECTION & MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and upstream land use. Site-specific maintenance plans should always be consulted, as the successful functionality of the plants may have specific maintenance requirements that were considered during design.

Referring to Planting Plans, Photos and Plant Identification: One of the greatest challenges for native landscaping maintenance is plant identification. Maintenance professionals must distinguish healthy desirable plants from weeds and invasive plants. It is especially important to refer to planting plans and photos that show what types of vegetation should be present. There are numerous electronic applications for plant identification that can identify plants at various stages of growth.

Timing of Inspections: Maintenance tasks for native landscaping vary by season. Conducting the right tasks at the right point in the growing season will improve plant survival, aesthetics, and infiltration capacity.

Inspection Focus: It is also important to identify when areas are in the installment and establishment phase, when plant loss is expected, and plant identification may be the most challenging. Maintenance teams should expect approximately 10% of plant material to fail during the first year after planting, and plan accordingly for replacements. Warranties may cover part or all the replacement and are important tools to reduce replacement costs for the expected failure of some plants.

Initial Site Inspection: A site inspection should be performed after snow melt (mid-April) to identify any items that would not be covered in the expected annual maintenance visits. This would include:

- Identifying any bare areas in the landscaping.
- Identifying any low or eroded areas in the landscaped areas.

Manual Weed Control: Depending on establishment and condition of planting bed, as many as 12 weeding visits could occur during the typical six-month growing season of mid-April through mid-October. The weeds are growing most aggressively from early May through mid-July (before native warm season grasses have filled out). During this period, visits may need to be weekly. Ornamental landscapes will typically require more visits than naturalized ones, but to begin with, naturalized landscapes will require more visits. As naturalized landscapes are established, the frequency of manual weed control will taper off.

NATIVE LANDSCAPING MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down sign.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, sign, or GI surfaces.	If graffiti is present on signage, or adjacent to area.	As needed
Vegetation Components			
Invasive Species Control	Remove any invasive species affecting desired plant species in landscaped area. Refer to Appendix of Invasive Species for list of the most common invasive species found in GSI strategies in Northeastern WI.	Invasive plants are present in landscaped area.	Biannually, or as needed
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present in landscaped areas.	Monthly (Spring through Fall – more frequently May through July)
Mowing	If directed by landscape plan, mow plants if height of vegetation exceed recommended heights. Mow perimeter edge of naturalized landscape within vegetated grassy areas.	If height of vegetation exceeds recommended heights.	Annually

Pest Management*	Inspect plants for signs of disease or predation.	Presence of pests or diseased plants.	Biannually
Plant Replacement	Remove and replace dead plants.	If at least 10% of the plants have died.	As needed
Pruning	Remove damaged, diseased or dead branches or woody plants, small trees, or shrubs	If damaged, diseased, or dead branches are present, or if safe line of sight is obstructed.	Annually
Vegetation Maintenance	Trimming and/or transplanting annual herbaceous vegetation.	Presence of decayed material.	Annually
Watering	Water plants as necessary to ensure survival during extended dry periods	Yellow or brown tips of leaves, dying plants, or wilted/dehydrated leaves or stalks. Note, yellow leaves can also be an indicator that plants are receiving too much water.	As needed, depending on weather
Woody Vegetation Removal	Remove woody vegetation or saplings.	If unplanned woody vegetation or saplings are present in landscaped area.	Annually
Growing Medium/Planting Bed Components			
Erosion Repair	Stabilize any disturbed areas with seed or live plants and biodegradable erosion matting.	If minor (<20 sf), nonrecurring erosion is present within the landscaped area, or if erosion is deeper than 2 inches.	As needed
Mulch Amendment/Replacement	Amend (i.e. rake, aerate, and add material) or replace mulch in landscaped areas, if planting plan calls for mulch.	If visible mulch is observed to have bare spots, depth is less than 2 inches or appears compacted or disarrayed in or around landscaped area.	Annually or as needed

Organic Debris Removal	Remove excess organic debris (e.g., leaves, plant decay, etc.) from landscaped surfaces.	If present in landscaped area.	Biannually
Sediment Removal	Remove sediment from landscaping and surrounding areas, including gutters and sidewalks.	If sediment is present or visible in or around the landscaped area, and if sediment is more than 1 inch deep.	Biannually or as needed
Settling Repair	Repair areas of landscaping that have settled.	Area is observed to be lower than surrounding areas of designed elevation of landscaping.	As needed
Trash Removal	Remove trash from landscaped planting beds and surrounding areas. Report any evidence of dumping.	If present in or around the landscaped area.	Monthly (through Spring and Fall)
* Integrated Pest Management (IPM) routines are encouraged. This involves inspecting the plants for signs of disease or predation. The IPM approach encourages non-chemical methods for treated diseases or pests as a first resort.			

NATIVE LANDSCAPING EXPECTED ANNUAL MAINTENANCE

It is recommended to complete twelve (12) site visits annually for native landscaping maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	**Spring**	**Summer**	**Fall**	**Winter**	**After 2-inch Rainfall [1]**
Site Inspection	1[2]				2
Mowing			1[3]		
Manual Weed Control	3	3	3		
Pest Management		1	1		
Invasive Species Control		1	1		
Vegetation Maintenance	1				
Trash Removal	2	2	2		2
Organic Debris Removal	1		1		2
Pruning			1		
Woody Vegetation Removal			1		
Sediment Removal	1		1		2
Mulch Amendment/Replacement	1				2
Total Minimum Annual Expected Maintenance	**4**	**3**	**3**		**2**

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

[2] Initial site inspection shall be completed mid-April after snowmelt. The site inspection should be the focus and other maintenance tasks **should not be considered** at this time. Site inspections conducted after 2-inch rainfalls can be combined with other maintenance tasks as needed.

[3] Mowing frequency is based on an established, native landscape. Mowing may take place in late-fall or early-spring depending on plant species.

If the native landscaping is recently established, the mowing is usually conducted in decreasing frequencies from the date of planting. Often five mowings the first full growing season, four the second, three the third, and so on. This allows the native seed to germinate and prevent annual weeds from flowering and setting seed.

If ornamental grasses are used, they are not mown, but usually trimmed back in early spring of each year.

4.5 Permeable Interlocking Concrete Pavement

DESCRIPTION

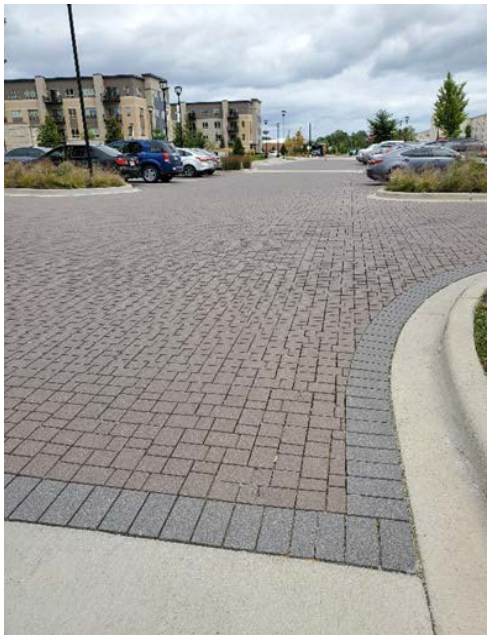
Permeable Interlocking Concrete Pavement (PICP) consists of concrete pavement units or bricks that when assembled into a pattern, creates open joints. These joint openings are typically filled with an open-graded chip stone that allow water to run through. The overall ratio of void space to the paver surface is approximately 13%. The paving units are placed on a bedding layer of permeable aggregates, which is laid over a base and subbase layer of open-graded aggregates. Perforated underdrains are typically placed in bottom storage layer to collect and convey water out of the system if it does not infiltrate within the design period, which is typically 48 to 72 hours.

These systems provide infiltration and groundwater recharge and are capable of tremendous amounts of storage. Of equal importance is the structural functionality of the pavement. PICP is designed as a flexible pavement for structural load, desired storage, and frost depth requirements. The concrete blocks that form the pavers have the added benefit of being a cooler surface than dark pavements and reduce heat island effects.

COMMON PRACTICES & APPLICATIONS

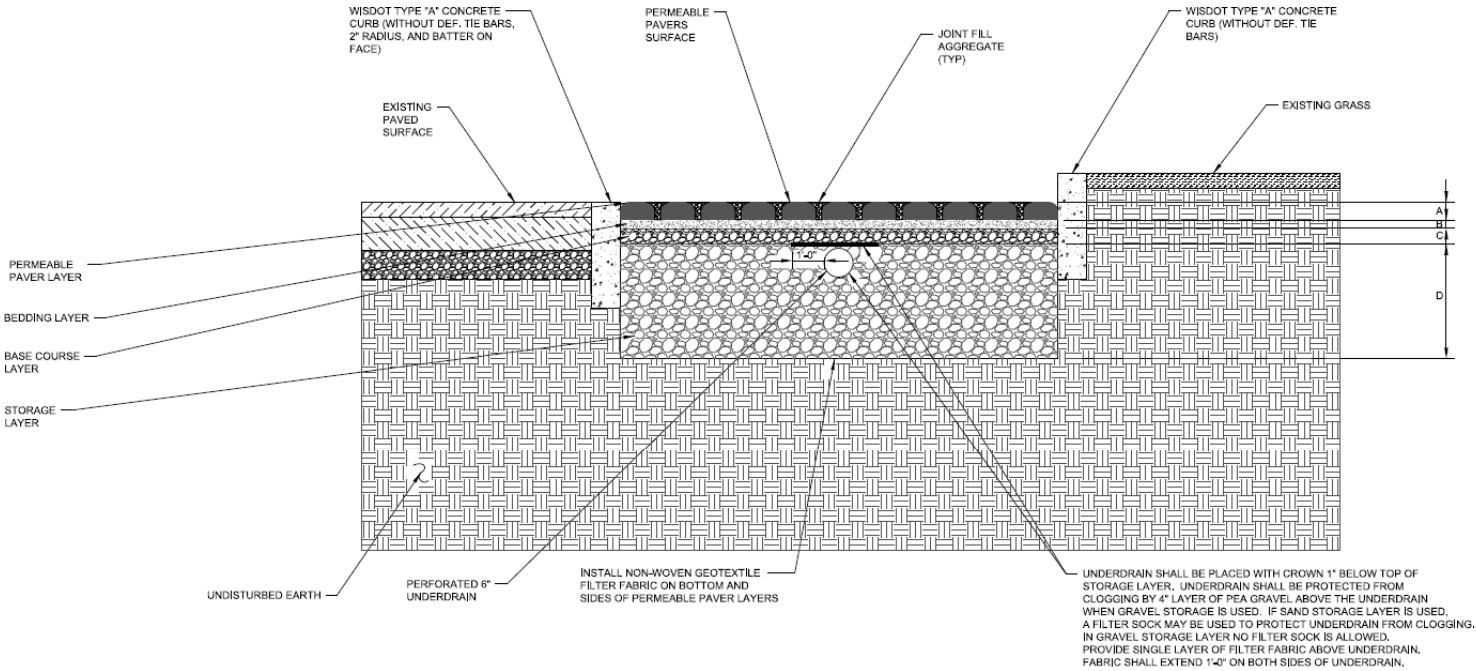
PICP is well-suited for parking areas, sidewalks, recreational areas, driveways, and roadway parking lanes with proper design considerations. PICP has been used in heavy duty applications such as shipping container storage because of its tremendous durability. Heavy duty volume applications require a commitment to proper design, construction quality assurance, and long-term operations and maintenance.

PaveDrain product has been used by the City of Green Bay. Information on maintenance recommendations from PaveDrain can be found at: https://www.pavedrain.com/maintenance



PERMEABLE INTERLOCKING CONCRETE PAVEMENT TYPICAL SECTION AND COMPONENTS

(taken from MMSD's Porous Pavement GSI Strategy Typical Details which can be found in MMSD's GSI Calculator download Check the link for the most up-to-date sections: https://www.freshcoastguardians.com/static/GI_calc.zip)



DIMENSION	LAYER NAME	DEPTH
A	PERMEABLE PAVERS	X
B	BEDDING	X
C	BASE COURSE	X
D	STORAGE	X

PERMEABLE PAVERS TYPICAL CROSS-SECTION

SECTION A
NTS C-14

PERMEABLE INTERLOCKING CONCRETE PAVEMENT INSPECTION & MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and upstream land use. Site-specific maintenance plans should always be consulted, as the successful functionality of the pavement may have specific maintenance requirements that were considered during design.

There are a number of important principles for PICP inspection and maintenance that will extend the life and function of these systems.

Reducing run-on of sediment and debris: Controlling run-on and preventing tracking or transport of debris onto PICP surfaces is key to extending the life of PICP systems. Approaches to this include:

- Practice strict erosion and sediment control on upstream or contributing areas.
- Vacuuming or sweeping of upstream areas that contribute sediment or debris can be effective in minimizing run-on.
- Mow surrounding grass away from the PICP surface. Consider collecting grass clippings to prevent debris from collecting in joints.
- Do not store materials such as sand, salt, mulch, soil, yard waste, and other stockpiles on permeable surfaces.
- Stockpiling snow on PICPs is not recommended and will lead to premature clogging. Stockpiled snow areas on PICPs will require additional maintenance and vacuuming to prevent clogging and deterioration.

Repairing cuts for utilities: Repairs may be needed for cuts made for utilities. Repairs can typically be made by removal and reuse of the existing paver blocks. Subbase repair may be required to match the initial construction standards.

Informational Signs: Posting signs that alert people to the use of PICPs for surfacing are helpful and recommended. Signage should indicate any limitations on design load (i.e. passenger vehicles only, light truck traffic, etc.) as well as, applicable warnings regarding plowing, use of salt, snow stockpiling, and avoiding debris run-on.

Routine PICP Maintenance:

Routine preventative cleaning of PICP is more effective than corrective cleaning, but both practices are feasible and will be needed at some point in the life of the PICP system. At a minimum, if the recommendations above regarding stockpiling and run-on prevention are

followed, 3x yearly vacuum cleaning of the interlocking concrete pavers will remove sediments and contaminants to prevent clogging. All sweepings from routine vacuuming must be disposed of according to appropriate standards. Preventative sweeping is recommended during high-use periods, or if sediment and debris has washed onto PICP areas.

Gravel Joint Filling: The gravel joint fill in PICP tends to settle substantially during the first 3 to 6 months after its initial installation. Construction specifications should require that the contractor revisit the site 6 months after construction to refill the joints with gravel.

Power-washing of PICP should be used for cleaning acutely clogged areas.

- Power-washing activity should only be done in conjunction with use of a high velocity vacuum head so that debris is removed, and not just displaced. A power vacuum, such as Elgin Whirlwind or Tymco 500X is recommended.
- Power-washing may be required prior to vacuum sweeping to dislodge trapped particles in acutely clogged areas.
- Power-washing should occur at mid-pressure, typically less than 500 pounds per square inch, and at a low angle less than 45 degrees, to drive sediment and material out of the void spaces, instead of deeper clogging.
- Replacement of the PICP gap stone may be necessary if vacuum pressure has removed stones.

Additional Standards: This list provides a quick reference for PICP maintenance.

- Never replace permeable pavers with impermeable materials.
- Never use any type of seal coating on PICPs.
- Inspect PICPs annually for pavement deterioration or spalling and replace pavers as needed where these occur.
- Monitor periodically to ensure that the pavement surfaces are draining effectively after storm. Ponding on PICP surfaces should not routinely occur.
- Major clogging may necessitate restoration of PICP by removal of pavers, cleaning of subbase, and reuse of existing pavers.

Winter PICP Maintenance Guidance

Regular winter maintenance is critical to effective and safe operation of PICP.

- Plow after every storm. Special plow blades may be used to prevent scarring but are not necessary. Raised blade plowing is not recommended.
- Salt of any type can damage concrete surfaces and should be used sparingly.

- Apply deicing treatment before plowing to facilitate plowing and break the bond between compacted snow and pavement. Magnesium chloride should not be used, nor should deicers that contain ammonium nitrate or ammonium sulfate. Similar to all types of concrete pavement, pervious concrete has the concern in northern climates for damage from chloride deicing.

Site Inspections: A site inspection should be performed once after snow melt (mid-April) to identify any items that might occur during expected annual maintenance, but also need special attention to, specific to PICP including:

- Identifying any damaged pavement.
- Identifying any structural component issues, including cleanouts and outfalls.
- Identifying need for gravel joint replacement.
- After rainfall, ensure that system is draining and there is no standing water on the pavement system.

PERMEABLE INTERLOCKING CONCRETE PAVEMENT MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down sign.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, sign, or GI strategy surfaces.	If graffiti is present on GSI sign, or adjacent to GSI area.	As needed
Trash Removal	Remove trash from surface and surrounding areas. Report large dumping.	If present in or around the pavement.	Monthly (Spring through Fall)
Structural Components			
Pavement Repair	Repair damaged pavement.	Damaged pavement.	As needed
Power-wash	Power-wash pavement to drive debris and sediment out of joints.	Clogged pavement.	Biannually or as needed
Vacuum Sweep	Vacuum or dry sweep pavement depending on manufacturer recommendations or available equipment.	Standing water on the surface of the pavement after a precipitation event.	3x per Year or as needed
Vegetation			
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present in joints.	Biannually
Leaf Blow or Vacuum Sweep	Remove surface debris by sweeping, vacuuming, or leaf-blowing debris.	If debris and/or sediment accumulate on pavement.	Monthly (Spring through Fall)
Filter Medium Components			

Gravel Joint Filling	Use mechanical sweeping or brush to replace joint aggregate.	Aggregate loss (either by time or after vacuum).	As needed (approximately every 5 years)
Winter Maintenance			
Deicing	Remove ice from pavement surface either by a deicing agent free from magnesium chloride, ammonium nitrate or ammonium sulfate.	Before storm events	As needed
Plowing	Use snowplow to remove snow from surface of pavement.	Storm event.	As needed (during or after storm)

PERMEABLE INTERLOCKING CONCRETE PAVEMENT EXPECTED ANNUAL MAINTENANCE

It is recommended to complete eight (8) site visits annually (not including visits for deicing and plowing) for permeable interlocking concrete pavement maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	**Spring**	**Summer**	**Fall**	**Winter**	**After 2-inch Rainfall [1]**
Site Inspection	1				2
Vacuum Sweep / Leaf Blowing	2	2	2		2
Power-wash	1		2		
Manual Weed Control	1		1		2
Plowing				*	
Deicing				*	
Trash Removal	2	2	2		2
Total Minimum Annual Expected Maintenance	**2**	**2**	**2**	*****	**2**

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

*Plowing and deicing are dependent on number of snowfalls. Plowing should take place during/after every storm event, and deicing should be done prior to storm event.

4.6 Pervious Concrete

DESCRIPTION

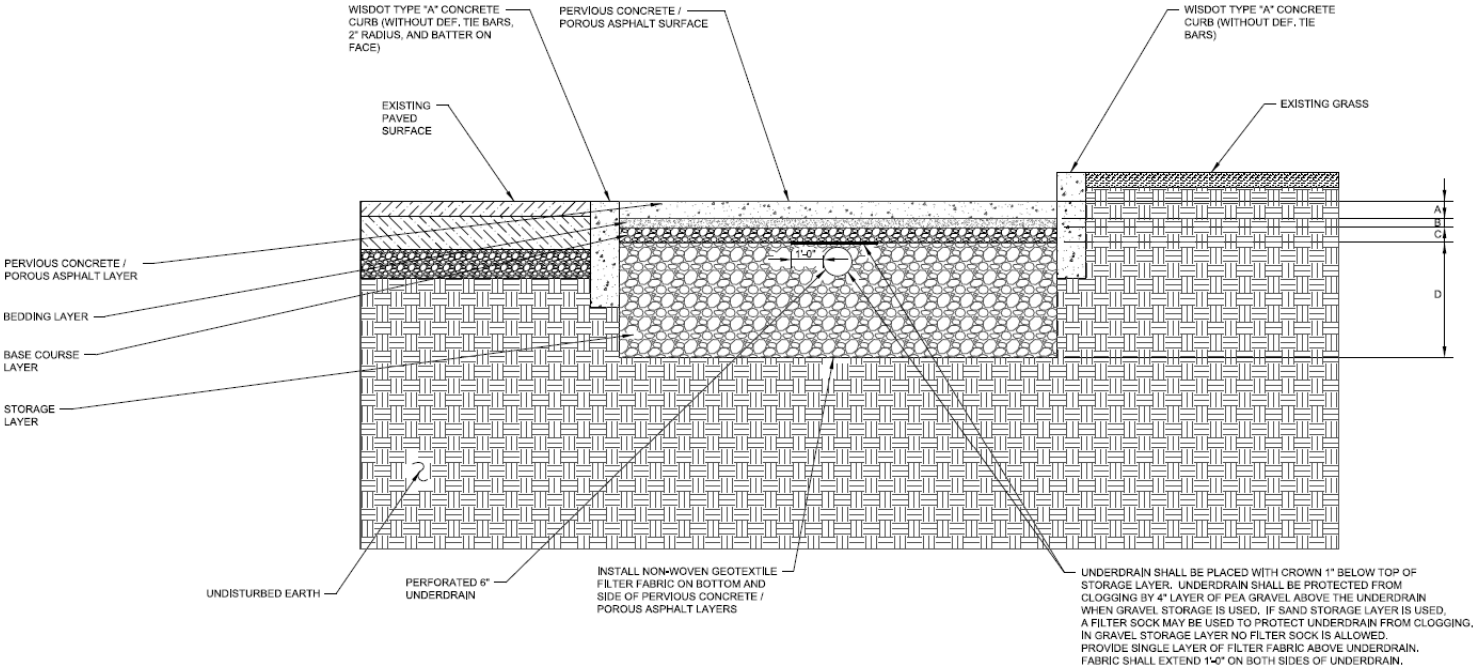
Pervious concrete is an open-graded rigid pavement typically consisting of approximately 20% voids. It lacks the fine aggregates of standard concrete and is primarily comprised of rounded and angular aggregates such as gravel and crushed stone. The appearance of pervious concrete is like that of a Rice-Krispy treat. Pervious concrete provides infiltration and recharge and is capable of a tremendous amount of storage. Of equal importance is the structural pavement functionality. The pavement system depth is designed as a rigid pavement for structural load, desired storage and frost depth requirements. Meltwater readily drains through porous surfaces thereby preventing black ice. Use of added thickness and admixtures are commonly used for heavy duty applications. Pervious concrete systems may include an underdrain in the storage layer to collect and convey water out of the system if it does not infiltrate within the design period, which is typically 48 to 72 hours. Pervious concrete is more resistant to long- term clogging than porous asphalt because, once cured, the pavement does not remain tacky. As such clogged pervious concrete can be more successfully restored. Pervious concrete has the added benefit of being a cooler surface than dark pavements and reduces heat island effects.

COMMON PRACTICES & APPLICATIONS

Pervious concrete is well-suited for parking areas, sidewalks, recreational areas, driveways, and roadways with proper design considerations. Higher volume applications require a commitment to proper design, construction quality assurance, and long-term operations and maintenance. Construction requirements include allowing 7 to 14 days (depending upon mix design and weather conditions) for concrete cure prior to usage. Pervious concrete is best used in locations with low to no usage of chloride deicers. Heavy usage of chloride deicers has resulted in rapid deterioration of pervious concrete.

PERVIOUS CONCRETE TYPICAL SECTION OR COMPONENTS

(taken from MMSD's Porous Pavement GSI Strategy Typical Details which can be found in MMSD's GSI Calculator download Check the link for the most up-to-date sections: https://www.freshcoastguardians.com/static/GI_calc.zip)



DIMENSION	LAYER NAME	DEPTH
A	PERVIOUS CONCRETE / POROUS ASPHALT	X
B	BEDDING	X
C	BASE COURSE	X
D	STORAGE	X

PERVIOUS CONCRETE / POROUS ASPHALT TYPICAL CROSS-SECTION

SECTION A
NTS C-16

PERVIOUS CONCRETE INSPECTION AND MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and the upstream land use. Site-specific maintenance plans should always be consulted, as the successful functionality of the pavement may have specific maintenance requirements that were considered during design.

There are a number of important principles for pervious concrete inspection and maintenance that will extend the life and function of these systems.

Reducing run-on of sediment and debris: Controlling run-on and preventing tracking or transport of debris onto pervious surfaces is key to extending the life of pervious systems. Approaches to this include:

- Practice strict erosion and sediment control on adjacent or contributing areas.
- Vacuuming or sweeping of adjacent non-pervious concrete that contributes sediment or debris can be effective in minimizing run-on.
- Do not store materials such as sand, salt, mulch, soil, yard waste, and other stockpiles on pervious surfaces.
- Stockpiling snow on pervious concrete is not recommended and will lead to premature clogging. Stockpiled snow areas on pervious concrete will require additional maintenance and vacuuming to prevent clogging and deterioration.

Repairing cuts for utilities: Repairs may be needed for cuts made for utilities. Repairs can typically be made using standard (non-porous) concrete for most damages. Repairs using standard concrete should not exceed 15% of the total area.

Informational Signs: Posting signs that alert people to the use of pervious surfaces are helpful and recommended. Signage should indicate any limitations on design load (i.e. passenger vehicles only, light truck traffic, etc.) as well as, applicable warnings regarding plowing, use of salt, snow stockpiling, and avoiding debris run-on.

Surface Raveling: Occurs when surface aggregates loosen and is common only in the first few weeks after concrete is laid. This can be reduced with proper compaction and curing techniques.

Routine Pervious Concrete Maintenance:

Routine preventative cleaning of pervious concrete is more effective than corrective cleaning, but both practices are feasible and will be needed at some point in the life of the pervious system. At

a minimum, if the recommendations above regarding stockpiling and run-on prevention are followed, 3x yearly vacuum cleaning of the interlocking concrete pavers will remove sediments and contaminants to prevent clogging. All sweepings from routine vacuuming must be disposed of according to appropriate standards. Power-washing is recommended during high-use periods, or if sediment and debris has washed onto pervious surfaces.

Power-washing of pervious concrete should be used for cleaning acutely clogged areas.

- Power-washing activity should only be done in conjunction with use of a high velocity vacuum head so that debris is removed, and not just displaced. A power vacuum, such as Elgin Whirlwind or Tymco 500X is recommended.
- Power-washing may be required prior to vacuum sweeping to dislodge trapped particles in acutely clogged areas.
- Power-washing should occur at mid-pressure, typically less than 500 pounds per square inch, and at a low angle less than 45 degrees, to drive sediment and material out of the void spaces, instead of deeper clogging.

Additional Standards: This list provides a quick reference for pervious concrete maintenance:

- No winter sanding of pervious concretes is permitted.
- Minimize application of salt for ice control.
- Never reseal or repave with impermeable materials.
- Inspect annually for pavement deterioration or spalling.
- Monitor periodically to ensure that the pavement surface drains effectively after storms.
- Clean routinely and preventatively during high-use periods using a vacuum sweeper.
- Power-washing may be required prior to vacuum sweeping to dislodge trapped particles in acutely clogged areas.
- Major clogging may necessitate replacement of the paving surface.

Restoration and Cleaning of Acutely Clogged Areas:

Cleaning and rehabilitation of pervious concrete is recommended for pavement areas that are acutely clogged and where standard vacuum cleaning is insufficient. Pavement restoration cleaning can be conducted by using a high-suction vacuum head used in combination with a vacuum/jet truck. The Bunyan Infiltration Restoration Device (BIRD) uses an array of high-pressure water nozzles to loosen material while simultaneously removing the material from the surface by vacuum.

- Restorative cleaning can be very effective and provide a substantial maintenance benefit not achieved through routine cleaning by regenerative air vacuum.

- The cleaning method, while costly due to the intensive labor and equipment needs, can be done effectively after as many as five years after pavement installation.

Winter Pervious Concrete Maintenance Guidance

Regular winter maintenance is critical to effective and safe operation of pervious concrete.

- Plow after every storm. Special plow blades may be used to prevent scarring but are not necessary. Raised blade plowing is not recommended.
- Salt of any type can damage concrete surfaces and should be used sparingly. Salt usage will vary and is heavily dependent upon shading. For shaded areas, pervious concrete may not achieve salt reduction.
- Apply anti or deicing treatment before plowing to control compact snow and ice not removed by plowing. Magnesium chloride should not be used, nor should deicers that contain ammonium nitrate or ammonium sulfate. Similar to all types of concrete pavement, pervious concrete has the concern in northern climates for damage from chloride deicing.

Site Inspections: A site inspection should be performed once after snow melt (mid-April) to identify any items that might occur during expected annual maintenance, but also need special attention to, specific to pervious concrete including:

- Identifying any damaged pavement.
- Identifying any structural component issues, including cleanouts and outfalls.
- After rainfall, ensure that system is draining and there is no standing water on the pavement system.

PERVIOUS CONCRETE MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down sign.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, sign, or GI strategy surfaces.	If graffiti is present on GSI sign, or adjacent to GSI area.	As needed
Trash Removal	Remove trash from surface and surrounding areas. Report large dumping.	If present in or around the pavement.	Monthly (Spring through Fall)
Structural Components			
Pavement Repair	Repair damaged pavement.	Damaged pavement.	As needed
Power-wash	Power-wash pavement to drive debris and sediment out of joints.	Clogged pavement.	Monthly (Spring through Fall)
Vacuum Sweep	Vacuum or dry sweep pavement depending on manufacturer recommendations or available equipment.	Standing water on the surface of the pavement after a precipitation event.	3x per Year or as needed
Vegetation			
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present in joints.	Biannually
Leaf Blow or Vacuum Sweep	Remove surface debris by sweeping, vacuuming, or leaf-blowing debris.	If debris and/or sediment accumulate on pavement.	Monthly (Spring through Fall)
Winter Maintenance			

Deicing	Remove ice from pavement surface either by a deicing agent free from magnesium chloride, ammonium nitrate or ammonium sulfate.	Before storm events	As needed
Plowing	Use snowplow to remove snow from surface of pavement.	Storm event.	As needed (during or after storm)

PERVIOUS CONCRETE EXPECTED ANNUAL MAINTENANCE

It is recommended to complete eight (8) site visits annually (not including visits for deicing and plowing) for pervious concrete. The timing and the tasks related to each of these site visits are detailed in the below table.

Task	**Spring**	**Summer**	**Fall**	**Winter**	**After 2-inch Rainfall [1]**
Site Inspection	1				2
Vacuum Sweep	1	1	1		2
Power-wash	2	2	2		2
Manual Weed Control	1		1		2
Plowing				*	
Deicing				*	
Trash Removal	2	2	2		2
Total Minimum Annual Expected Maintenance	**2**	**2**	**2**	*****	**2**

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

*Plowing and deicing are dependent on number of snowfalls. Plowing should take place during/after every storm event, and deicing should be done prior to storm event.

4.7 Porous Asphalt

DESCRIPTION

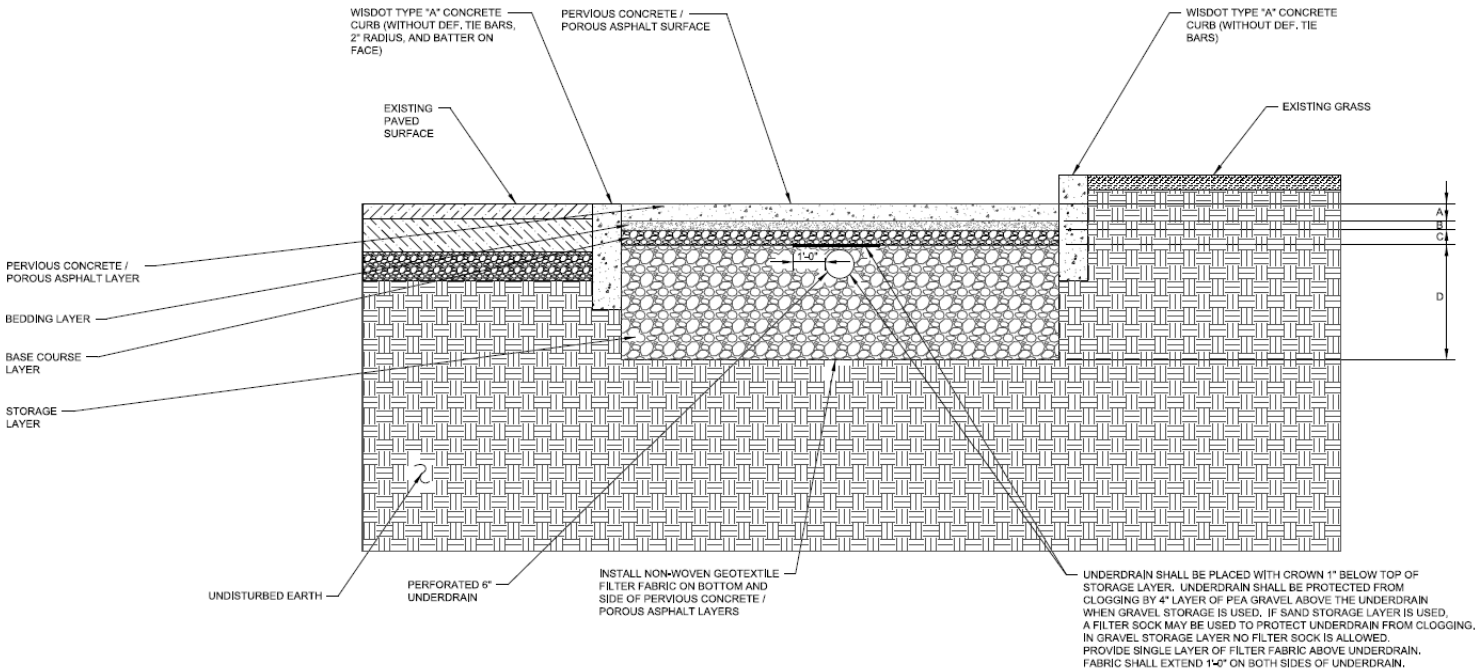
Porous asphalt pavements are an open graded flexible pavement combined of coarse aggregate and asphalt binder and commonly a strength modifier. Typically, porous asphalt has about 18% or greater voids and an aggregate storage reservoir road base. Porous pavements provide infiltration and recharge and are capable of a tremendous amount of storage. Of equal importance is the structural pavement functionality. The pavement system depth is designed for structural load, desired storage and frost depth requirements. Porous pavement systems may include an underdrain and liner if necessary.

COMMON PRACTICES & APPLICATIONS

Porous asphalt is well-suited for parking areas, recreational areas (e.g., basketball and tennis courts), driveways, and roadways with proper design considerations. Porous asphalt can also be used for sidewalks and pathways. Higher volume roads and highways have also been constructed of porous asphalt with some success but require a commitment to proper design, construction quality assurance, and long-term operations and maintenance.

POROUS ASPHALT TYPICAL SECTION OR COMPONENTS

(taken from MMSD's Porous Pavement GSI Strategy Typical Details which can be found in MMSD's GSI Calculator download Check the link for the most up-to-date sections: https://www.freshcoastguardians.com/static/GI_calc.zip)



DIMENSION	LAYER NAME	DEPTH
A	PERVIOUS CONCRETE / POROUS ASPHALT	X
B	BEDDING	X
C	BASE COURSE	X
D	STORAGE	X

PERVIOUS CONCRETE / POROUS ASPHALT TYPICAL CROSS-SECTION

SECTION A
NTS C-16

POROUS ASPHALT INSPECTION AND MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and upstream land use. Site-specific maintenance plans should always be consulted, as the successful functionality of the porous asphalt may have specific maintenance requirements that were considered during design.

There are a number of important principles for porous asphalt inspection and maintenance that will extend the life and function of these systems.

Reducing run-on of sediment and debris: Controlling run-on and preventing tracking or transport of debris onto porous surfaces is key to extending the life of porous systems. Approaches to this include:

- Practice strict erosion and sediment control on adjacent or contributing areas.
- Vacuuming or sweeping of adjacent non-porous asphalt that contributes sediment or debris can be effective in minimizing run-on.
- Do not store materials such as sand, salt, mulch, soil, yard waste, and other stockpiles on porous surfaces.
- Stockpiling snow on porous asphalt is not recommended and will lead to premature clogging. Stockpiled snow areas on porous asphalt will require additional maintenance and vacuuming to prevent clogging and deterioration.

Repairing cuts for utilities: Repairs may be needed for cuts made for utilities. Repairs can typically be made using standard (non-porous) asphalt for most damages. Repairs using standard asphalt should not exceed 15% of the total area.

Informational Signs: Posting signs that alert people to the use of porous surfaces are helpful and recommended. Signage should indicate any limitations on design load (i.e. passenger vehicles only, light truck traffic, etc.) as well as, applicable warnings regarding plowing, use of salt, snow stockpiling, and avoiding debris run-on.

Routine Porous Asphalt Maintenance:

Routine preventative cleaning of porous asphalt is more effective than corrective cleaning, but both practices are feasible and will be needed at some point in the life of the pervious system. At a minimum, if the recommendations above regarding stockpiling and run-on prevent are followed, 3x yearly vacuum cleaning of the porous asphalt will remove sediments and contaminants to prevent clogging. All sweepings from routine vacuuming must be disposed of according to

appropriate standards. Power- washing is recommended during high-use periods, or if sediment and debris has washed onto porous surfaces.

Power-washing of porous asphalt should be used for cleaning acutely clogged areas.

- Power-washing activity should only be done in conjunction with use of a high velocity vacuum head so that debris is removed, and not just displaced. A power vacuum, such as Elgin Whirlwind or Tymco 500X is recommended.
- Power-washing may be required prior to vacuum sweeping to dislodge trapped particles in acutely clogged areas.
- Power-washing should occur at mid-pressure, typically less than 500 pounds per square inch, and at a low angle less than 45 degrees, to drive sediment and material out of the void spaces, instead of deeper clogging.

Additional Standards: This list provides a quick reference for porous asphalt maintenance:

- No winter sanding of porous asphalt is permitted.
- Minimize application of salt for ice control.
- Never reseal or repave with impermeable materials.
- Inspect annually for pavement deterioration or spalling.
- Monitor periodically to ensure that the pavement surface drains effectively after storms.
- Clean routinely and preventatively during high-use periods using a vacuum sweeper.
- Power-washing may be required prior to vacuum sweeping to dislodge trapped particles in acutely clogged areas.
- Major clogging may necessitate replacement of the paving surface.

Restoration and Cleaning of Acutely Clogged Areas:

Cleaning and rehabilitation of porous asphalt is recommended for pavement areas that are acutely clogged and where standard vacuum cleaning is insufficient. Pavement restoration cleaning can be conducted by using a high-suction vacuum head used in combination with a vacuum/jet truck. The Bunyan Infiltration Restoration Device (BIRD) uses an array of high-pressure water nozzles to loosen material while simultaneously removing the material from the surface by vacuum.

- Restorative cleaning can be very effective and provides a substantial maintenance benefit not achieved through routine cleaning by regenerative air vacuum.
- The cleaning method, while costly due to the intensive labor and equipment needs, can be done effectively after as many as five years after pavement installation.

Winter Porous Asphalt Maintenance Guidance

Regular winter maintenance is critical to effective and safe operation of porous asphalt.

- Plow after every storm. Special plow blades may be used to prevent scarring but are not necessary. Raised blade plowing is not recommended.
- Up to ~75% net salt reduction for porous asphalt has been documented. Excess salt applications may be needed during challenging storm events, but salt reductions typically occur between storm events with no black ice formation.
- Apply anti or deicing treatment before plowing to control compact snow and ice not removed by plowing. Magnesium chloride should not be used, nor should deicers that contain ammonium nitrate or ammonium sulfate.

Site Inspections: A site inspection should be performed once after snow melt (mid-April) to identify any items that might occur during expected annual maintenance, but also need special attention to, specific to porous asphalt including:

- Identifying any damaged pavement.
- Identifying any structural component issues, including cleanouts and outfalls.
- After rainfall, ensure that the system is draining and there is no standing water on the pavement system.

POROUS ASPHALT MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down sign.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, sign, or GI strategy surfaces.	If graffiti is present on GSI sign, or adjacent to GSI area.	As needed
Trash Removal	Remove trash from surface and surrounding areas. Report large dumping.	If present in or around the pavement.	Monthly (Spring through Fall)
Structural Components			
Pavement Repair	Repair damaged pavement.	Damaged pavement.	As needed
Power-wash	Power-wash pavement to drive debris and sediment out of joints.	Clogged pavement.	Monthly (Spring through Fall)
Vacuum Sweep	Vacuum or dry sweep pavement depending on manufacturer recommendations or available equipment.	Standing water on the surface of the pavement after a precipitation event.	3x per Year or as needed
Vegetation			
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present.	Biannually
Leaf Blow or Vacuum Sweep	Remove surface debris by sweeping, vacuuming, or leaf-blowing debris.	If debris and/or sediment accumulate on pavement.	Monthly (Spring through Fall)
Winter Maintenance			

Deicing	Remove ice from pavement surface either by a deicing agent free from magnesium chloride, ammonium nitrate or ammonium sulfate.	Before storm events.	As needed
Plowing	Use snowplow to remove snow from surface of pavement.	Storm event.	As needed (during or after storm)

POROUS ASPHALT EXPECTED ANNUAL MAINTENANCE

It is recommended to complete eight (8) site visits annually (not including visits for deicing and plowing) for porous asphalt maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	**Spring**	**Summer**	**Fall**	**Winter**	**After 2-inch Rainfall [1]**
Site Inspection	1				2
Vacuum Sweep	1	1	1		2
Power-wash	2	2	2		2
Manual Weed Control	1		1		2
Plowing				*	
Deicing				*	
Trash Removal	2	2	2		2
Total Minimum Annual Expected Maintenance	**2**	**2**	**2**	*****	**2**

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

*Plowing and deicing are dependent on number of snowfalls. Plowing should take place during/after every storm event, and deicing should be done prior to storm event.

4.8 Rain Garden

DESCRIPTION

A stormwater management practice consisting of a depression in the soil that is planted with dense, herbaceous vegetation, including both flowers and grasses, designed to capture stormwater runoff and melting snow, naturally absorbing them into the ground. Though rain gardens and bioswales appear similar from above, rain gardens often use the surrounding native topsoil and they are not constructed with the gravel storage layer or underdrain and sewer system functions.

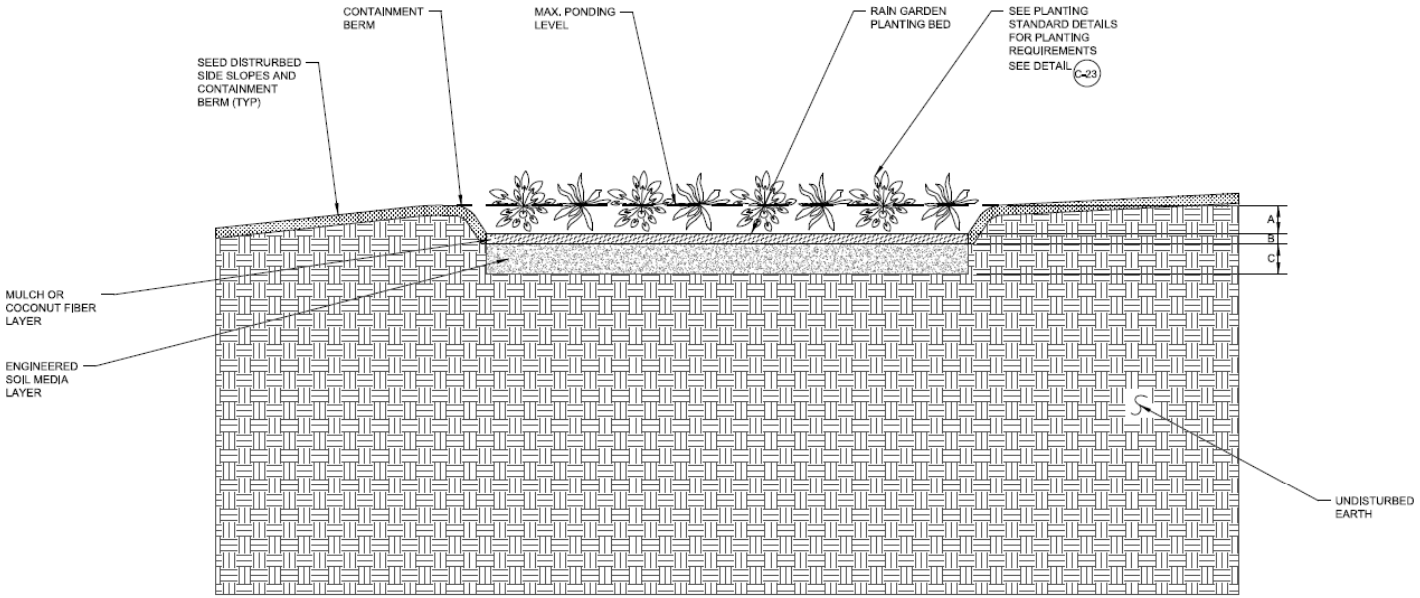
Rain gardens are completely reliant on the native subgrade to infiltrate the collected runoff, in addition to minor amounts of evapotranspiration. It is important that the subgrade soils are well draining, otherwise rain gardens will begin to pool and fail to drain properly.

COMMON PRACTICES & APPLICATIONS

Rain gardens are most applicable to small drainage areas, making them most applicable for use on residential properties. Commonly, downspouts from rooftops are directed to drain into rain gardens. However, they can also be designed to collect and absorb water from hillsides, driveways, and other impervious surfaces.

RAIN GARDEN TYPICAL SECTION OR COMPONENTS

(taken from MMSD's Rain Garden GSI Strategy Typical Details which can be found in MMSD's GSI Calculator download Check the tool for the most up-to-date sections: https://www.freshcoastguardians.com/static/GI_calc.zip)



DIMENSION	LAYER NAME	DEPTH
A	SURFACE PONDING	X
B	MULCH OR COCONUT FIBER	X
C	ENGINEERED SOIL MEDIA	X

RAIN GARDEN TYPICAL CROSS-SECTION

SECTION A C-20
NTS

DETAIL 21 C-22

RAIN GARDEN INSPECTION AND MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and upstream land use. Site-specific maintenance plans should always be consulted, as the successful functionality of the rain garden may have specific maintenance requirements that were considered during design.

Referring to Planting Plans & Photos: It is especially important to refer to planting plans and photos that show what types of vegetation should be present, and where maintenance crews should or should not mow.

Timing of Inspections: Rain gardens maintenance can typically be performed as part of standard landscaping. Regular inspection and maintenance, beginning after snow melt, is critical to the effective operation of rain gardens to insure they remain clear of leaves and debris, support healthy vegetation, and are free draining. In addition, because erosion and inflows from large storm events can damage vegetation, cause erosion and ponding, and clog downspouts, rain gardens should be inspected after any rain event of 2 inches in 24 hours or more. Inspection during the time of weed growth is also especially critical, as it is usually the top maintenance activity associated with these systems. For the City of Green Bay, this will begin in late May / early June.

Inspection Focus: Inspections should focus on the growth and condition of vegetation, including any weeds or invasives; soil conditions (especially sediment build-up or clogging); and stormwater flow paths and erosion. Maintenance of any items identified in the inspections should be completed within 7 days of the inspection.

Initial Site Inspection: A site inspection should be performed after snow melt (mid-April) to identify any items that would not be covered in the expected annual maintenance visits. This would include:

- Identifying any bare areas in the rain gardens
- Identifying any low or eroded areas in the engineered soil
- Identifying any structural component issues

Manual Weed Control: Depending on establishment and condition of planting bed, as many as 12 weeding visits could occur during the typical six-month growing season of mid-April through mid-October. The weeds are growing most aggressively from early May through mid-July (before native warm season grasses have filled out). During this period, visits may need to be weekly. Ornamental landscapes will typically require more visits than naturalized ones, but to begin with, naturalized landscapes will require more visits. As naturalized landscapes are established, the frequency of manual weed control will taper off.

RAIN GARDEN MAINTENANCE TASKS, INDICATORS AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down sign.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, sign, or GI strategy surfaces.	If graffiti is present on GSI sign, or adjacent to GSI area.	As needed
Structural Components			
Structural Clearing & Maintenance	Clear trash, debris, sediments, etc. from conveyance structures or gutters draining to the rain garden.	Clogged downspouts, gutters, pipes, or structures.	Biannually
Vegetation Components			
Invasive Species Control	Control invasive species impacting desired plant species in rain garden. Refer to Appendix of Invasive Species for list of the most common invasive species found in GSI strategies in Northeastern WI.	Invasive plants are present in rain garden.	Biannually
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present in rain garden.	Monthly (Spring through Fall – more frequently May through July)

Mowing	Mow plants if height of vegetation exceeds recommended heights. Mow perimeter edge of naturalized GSI within vegetated grassy areas.	If height of vegetation exceeds recommended heights.	Annually
Pest Management*	Inspect plants for signs of disease or predation.	Presence of pests or diseased plants.	Biannually
Plant Replacement	Remove and replace dead plants.	If at least 10% of the plants have died.	As needed
Pruning	Remove damaged, diseased or dead branches or woody plants, small trees, or shrubs	If damaged, diseased, or dead branches are present, or if safe line of sight is obstructed.	Annually
Vegetation Maintenance	Trimming and/or transplanting annual herbaceous vegetation.	Presence of decayed material.	Annually
Watering	Water plants as necessary to ensure survival during extended dry periods.	Yellow or brown tips or leaves, dying plants, or wilted/dehydrated leaves or stalks. Note, yellow leaves can also be an indicator that plants are receiving too much water.	As needed, depending on weather
Woody Vegetation Removal	Remove woody vegetation or saplings.	If unplanned woody vegetation or saplings are present in rain garden.	Annually
Growing Medium/Planting Bed Components			
Erosion Repair	Stabilize any disturbed areas with live plantings or seed and biodegradable erosion matting.	If minor (<20 sf), nonrecurring erosion is present within the rain garden, or if erosion is deeper than 2 inches.	As needed

Mulch Amendment/Replacement	Amend (i.e. rake, aerate, and add material), or replace mulch in rain garden.	If visible mulch is observed to have bare spots, depth is less than 2 inches or appears compacted or disarrayed in or around the rain garden.	Annually or as needed
Organic Debris Removal	Remove excess organic debris (e.g., leaves, plant decay, etc.) from rain garden surfaces.	If present in rain garden.	Biannually
Sediment Removal	Remove sediment from rain garden basin and surrounding areas, including gutters and sidewalks.	If sediment is present or visible in or around the rain garden, and if sediment is more than 1 inch.	Biannually or as needed
Settling Repair	Repair rain garden areas that have settled.	Area is observed to be lower than surrounding areas of designed elevation of the rain garden.	As needed
Surface Media Renovation	Remove top inches of filter media and cultivating the surface.	Rain garden area is clogged or not draining properly within 48 hours of a rainfall.	As needed
Trash Removal	Remove trash from rain garden planting beds and surrounding areas. Report any evidence of dumping.	If present in or around the rain garden.	Monthly (Spring through Fall)
* Integrated Pest Management (IPM) routines are encouraged. This involves inspecting the plants for signs of disease or predation. The IPM approach encourages non-chemical methods for treated diseases or pests as a first resort.			

RAIN GARDEN EXPECTED ANNUAL MAINTENANCE

It is recommended to complete twelve (12) site visits annually for rain garden maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	Spring	Summer	Fall	Winter	After 2-inch Rainfall [1]
Site Inspection	1[2]				2
Mowing			1[3]		
Manual Weed Control	3	3	3		
Pest Management		1	1		
Invasive Species Control		1	1		
Vegetation Maintenance	1				
Trash Removal	2	2	2		2
Organic Debris Removal	1		1		2
Pruning			2		
Structural Clearing & Maintenance	1				2
Woody Vegetation Removal			1		
Sediment Removal	1		1		2
Mulch Amendment/Replacement	1				2
Total Minimum Annual Expected Maintenance	4	3	3		2

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

[2] Initial site inspection shall be completed mid-April after snowmelt. The site inspection should be the focus and other maintenance tasks **should not be considered** at this time. Site inspections conducted after 2-inch rainfalls can be combined with other maintenance tasks as needed.

[3] Mowing frequency is based on an established, native landscape. Mowing may take place in late-fall or early-spring depending on plant species.

If the native landscaping is recently established, the mowing is usually conducted in decreasing frequencies from the date of planting. Often five mowings the first full growing season, four the second, three the third, and so on. This allows the native seed to germinated and prevent annual weeds from flowering and setting seed.

If ornamental grasses are used, they are not mown, but usually trimmed back in early spring of each year.

4.9 Rainwater Harvesting (Cisterns)

DESCRIPTION

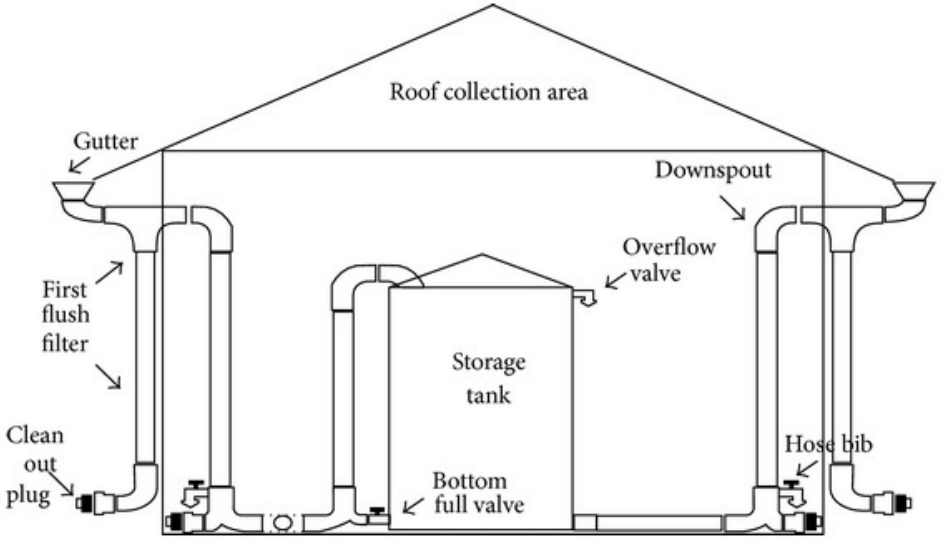
Rainwater harvesting systems typically divert and store runoff from residential and commercial roofs. They tend to be lower maintenance than most GSI strategies and might only require periodic cleaning of leaf debris and rooftop particulates. Rainwater harvesting can collect water from fields and parking as well. Rooftop runoff is typically considered 'clean' runoff; however, it may contain airborne pollutants (nutrients), pollutants from roofing materials (metals or hydrocarbons), and bacteria from birds. Rooftop runoff contamination is usually at low levels of concern in comparison with other impervious surfaces. Rainwater harvesting systems typically capture rooftop runoff by diverting downspouts through a prefilter and into a rain barrel or cistern. Cisterns and barrels are commonly dark opaque materials to prevent algae growth, with large systems often underground. Non-potable uses are most common which require a separate plumbing system for irrigation. The basic components of a rainwater harvesting system include a catchment surface, gutters and downspouts, leaf screens, first-flush diverters, and roof washer, one (or more) storage tanks, delivery system, and treatment/purification. Rain barrels tend to be more simplified versions of rainwater harvesting systems but include many of the same components.

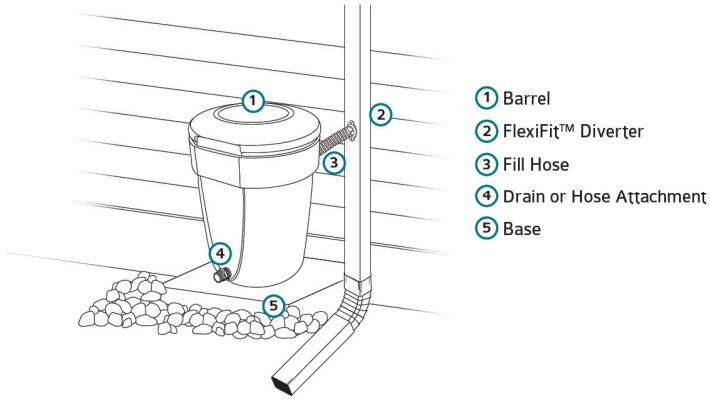
COMMON PRACTICES & APPLICATIONS

Rainwater harvesting can be used to capture and store water for reuse for small residential applications to large scale commercial and industrial. Rainwater reuse is typically non-potable and used for irrigation, graywater systems (toilets and laundry), and fire suppression with proper considerations for usage and demand. Rainwater harvesting can be easily converted to drinking water quality standards with the proper disinfection and testing needs. Rainwater harvesting often is not used for large volume control for stormwater management simply because of the large volumes required. For example, rain barrels commonly capture 50 gallons of rooftop runoff and a 1,200 square-foot rooftop generates approximately 695 gallons for a 1-inch rain. Though that is not always the case, another reason they are not always used for volume control is because the systems need to be emptied after rain events, and to be used as a water source, the systems need to be full. For rainwater harvesting to be a feasible type of stormwater management requires substantial storage volume, planning, and design.

RAINWATER HARVESTING TYPICAL SECTIONS OR COMPONENTS

(Schematic of rainwater harvesting system (Shitirah Akib). from https://www.researchgate.net/figure/Schematic-of-a-rainwater-harvesting-system_fig8_259923841)





RAINWATER HARVESTING INSPECTION AND MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events and type of system. Site-specific maintenance plans should always be consulted, as the successful functionality of the rainwater harvesting system may have specific maintenance requirements that were considered during design.

Inspection Focus: Rainwater collection and storage facilities require a variety of forms of routine maintenance. Some of the routine maintenance activities that are needed periodically are:

- Removing debris from the roof, leaf guard, gutter, gutter screen, and first-flush diverter.
- Inspecting and repairing vent screens.
- Removing sediment from the tank.
- Testing the coliform bacteria levels in your untreated-water storage tank. Note for rain barrels, if purpose of rainwater collection is non-potable uses, testing is not necessary.
- Disinfecting the water storage tank if total coliform levels reach 500 colony-forming units per 100 milliliters (500 CFU/100 ml) or if fecal coliform levels reach 100 CFU/100 ml.

Untreated water with total coliform levels above 500 CFU/100 ml or where fecal coliform levels rise above 100 CFU/100 ml should not be used, even for non-potable purposes until it has been disinfected. Disinfection can also help prevent heavy biological growths that can foul your treatment system and contaminate your plumbing system. The most convenient way to control biological growth in the storage tank is for them to be constructed below ground surface or in a dark opaque container. If biological growth occurs, the addition of a small amount of chlorine bleach periodically.

Rainwater harvesting systems almost always require a pump to pressurize the water and deliver it to its intended use. When the use is located in the building, there is usually a day tank involved so that any sanitation required is only sanitizing a small amount of water, not the entire system. Other system set ups use an on-demand pump. In this case, there would be a fine filter involved, similar to a cartridge filter, especially if the water is used for drip irrigation or in a building.

Depending on the type of rainwater harvesting system, the maintenance tasks may be refined, but the tasks, indicators, and expected frequency are general recommendations. Refer to manufacturer recommendations for specific maintenance activities and recommendations.

Initial Site Inspection: A site inspection should be performed after snow melt (mid-April) to identify any items that would not be covered in the expected annual maintenance visits. This would include:

- Installing the system components after winter, if necessary. This includes disinfecting the system if it was not used during winter months.
- Identifying any structural component issues.

RAINWATER HARVESTING MAINTENANCE TASKS, INDICATORS, AND EXPECTED FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down signage.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from structure or signs.	If graffiti is present on structures or adjacent signs and structures.	As needed
Structural Components			
Sanitizing	Sanitizing if positive tests for contamination.	Positive test for contamination.	Monthly (Spring through Fall)
Sediment Removal	Removal sediment from prefilter and tank.	Visible sediment in prefilter or tank.	Monthly (Spring through Fall)
Structural Clearing & Maintenance	Clearing trash, debris, sediment from screens, conveyance structures, including roof and gutters draining to the cistern.	Clogged gutters, cisterns, or conveyance structures.	Biannually or as needed
Testing	Testing the coliform bacteria levels in tank.	Presence of biological growth.	Monthly (Spring through Fall)
Winterizing	Winterize system per manufacturer recommendations prior to freeze thaw conditions.	Prior to freeze thaw conditions.	Annually
Many components of rainwater harvesting systems tend to be specific to manufacturer. Refer to manufacturer recommendations for specific maintenance activities and contact the manufacturer for repair or replacement of parts.			

RAINWATER HARVESTING EXPECTED ANNUAL FREQUENCY

It is recommended to complete ten (10) site visits annually for rainwater harvesting maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	Spring	Summer	Fall	Winter	After 2-inch Rainfall [1]
Site Inspection	1[2]		1		2
Sanitizing	2	2	2		
Sediment Removal	2	2	2		
Structural Clearing & Maintenance	1		1		
Testing[3]	2	2	2		2
Winterizing			1[4]		
Total Minimum Annual Expected Maintenance	3	2	3		2

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

[2] Initial site inspection shall be completed mid-April after snowmelt. The site inspection should be the focus and other maintenance tasks **should not be considered** at this time. Site inspections conducted after 2-inch rainfalls can be combined with other maintenance tasks as needed.

[3] For rain barrels, if purpose of rainwater collection is non-potable uses, testing is *not* necessary.

[4] Winterizing instructions shall be followed according the specific product and manufacturer recommendations. The focus of this inspection is to winterize or disconnect the system and should be performed separate from other maintenance tasks.

4.10 Soil Amendments

DESCRIPTION

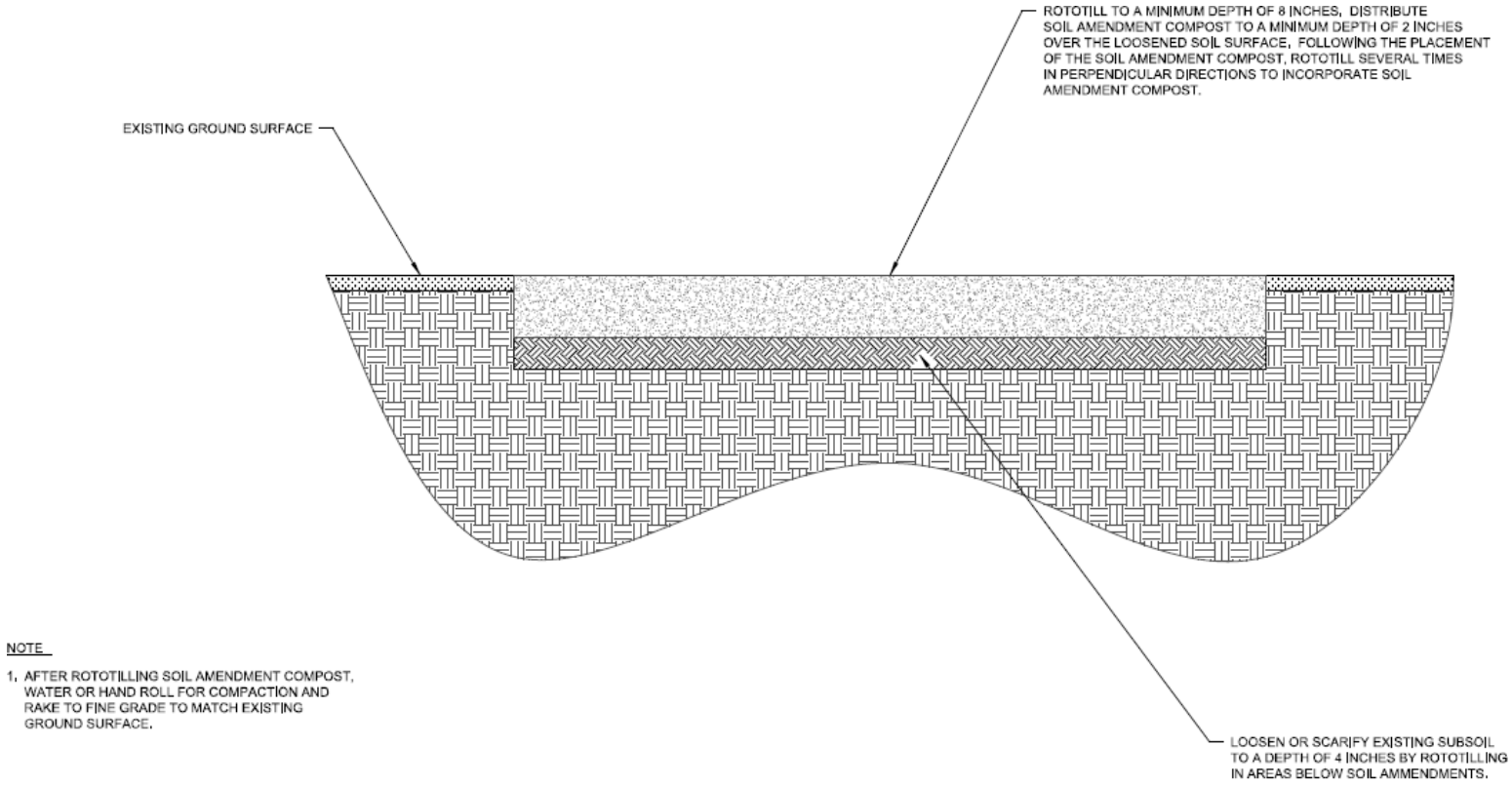
Soil amendments transform lawns to act like stormwater sponges. Healthy lawns develop thick root systems that help absorb more rain, reduce water pollution, and the amount of water that gets into sewers. Grasses with thick root systems become more drought-tolerant and out-compete weeds.

COMMON PRACTICES & APPLICATIONS

Soil amendments may include top-dressing areas of vegetation, or removing, amending, and replacing soil by excavation. For turfgrass applications, the use of sod is discouraged, and seed is recommended. Soil amendments can be implemented in almost all sites with lawns but are commonly found on residential lawns.

SOIL AMENDMENT TYPICAL SECTION AND COMPONENTS

(taken from MMSD's Soil Amendment GSI Strategy Typical Details which can be found in MMSD's GSI Calculator download) Check the link for the most up-to-date sections: https://www.freshcoastguardians.com/static/GI_calc.zip)



SOIL AMMENDMENT
TYPICAL CROSS-SECTION
NTS

SOIL AMENDMENT INSPECTION AND MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and the upstream land use. Site-specific maintenance plans should always be consulted, as the successful functionality of the soil amendments may have specific maintenance requirements that were considered during design.

Referring to Planting Plans & Photos: It is especially important to refer to planting plans to note the type of soil amendment that was installed.

Inspection Focus: The maintenance steps are site dependent and must be adapted to site and soil conditions. In some cases, soil may simply be aerated to alleviate compaction. In other cases, soils may need to be excavated and a portion replaced with one of several types of soil amendment materials. In all cases, care must be taken to ensure the proper revegetation and erosion control are practices for disturbed areas.

SOIL AMENDMENT MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Sign Care	Wipe down sign.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, signage, or surrounding surfaces.	If graffiti is present on GSI signage, or adjacent to GSI area.	As needed
Vegetation Components			
Invasive Species Control	Control invasive species impacting desired plant species in amended area. Refer to Appendix of Top 10 Invasive Species for list of the most common invasive species found in GSI strategies in Southeastern WI.	Invasive plants are present in amended area.	Biannually or as needed
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present in amended soil areas.	Monthly (Spring through Fall)
Pest Management*	Inspect plants for signs of disease or predation.	Presence of pests or diseased plants.	Biannually
Watering	Water plants as necessary to ensure survival during extended dry periods.	Brown tips of grass, or grass or seed is not growing.	As needed, depending on weather
Growing Medium/Planting Bed Components			
Erosion Repair	Stabilize any disturbed areas with seed and biodegradable erosion matting.	If minor (<20 sf), nonrecurring erosion is present within the area, or if erosion is deeper than 2 inches.	As needed

Organic Debris Removal	Remove excess organic debris (e.g., leaves, plant decay, etc.) from soil surfaces.	If present in or around the amended areas.	Biannually
Settling Repair	Repairing areas of practice that have settled.	Area is observed to be lower than surrounding areas of designed elevation.	As needed
Trash Removal	Remove trash from amended and surrounding areas. Report any evidence of dumping.	If present in or around the amended areas.	Monthly (Spring through Fall)
* Integrated Pest Management (IPM) routines are encouraged. This involves inspecting the plants for signs of disease or predation. The IPM approach encourages non-chemical methods for treated diseases or pests as a first resort.			

SOIL AMENDMENT EXPECTED ANNUAL FREQUENCY

It is recommended to complete eight (8) site visits annually for soil amendment maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	Spring	Summer	Fall	Winter	After 2-inch Rainfall [1]
Site Inspection	1				2
Manual Weed Control	2	2	2		
Pest Management		1	1		
Invasive Species Control		1	1		
Trash Removal	2	2	2		2
Organic Debris Removal	1		1		2
Mulch Amendment/Replacement	1				2
Total Minimum Annual Expected Maintenance*	2	2	2		2

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

*These visits are separate from those made to mow the turfgrass, of which there are approximately 26.

4.11 Stormwater Trees

DESCRIPTION

Stormwater trees are trees can hold rainwater in their leaves and branches, infiltrate it into the ground, absorb it through their root systems, and evapotranspire it into the atmosphere. They can be used in conjunction with engineered soils and other types of GSI and work best when they are mature. Per City Code of Ordinances Sec.16-79, "Stormwater tree means a tree selected and installed, either with or without an engineered box or structure, as an integral and intentional component of a stormwater management or landscape plan, at points or sites where the tree will have the effect of capturing stormwater runoff and increasing tree canopy coverage."

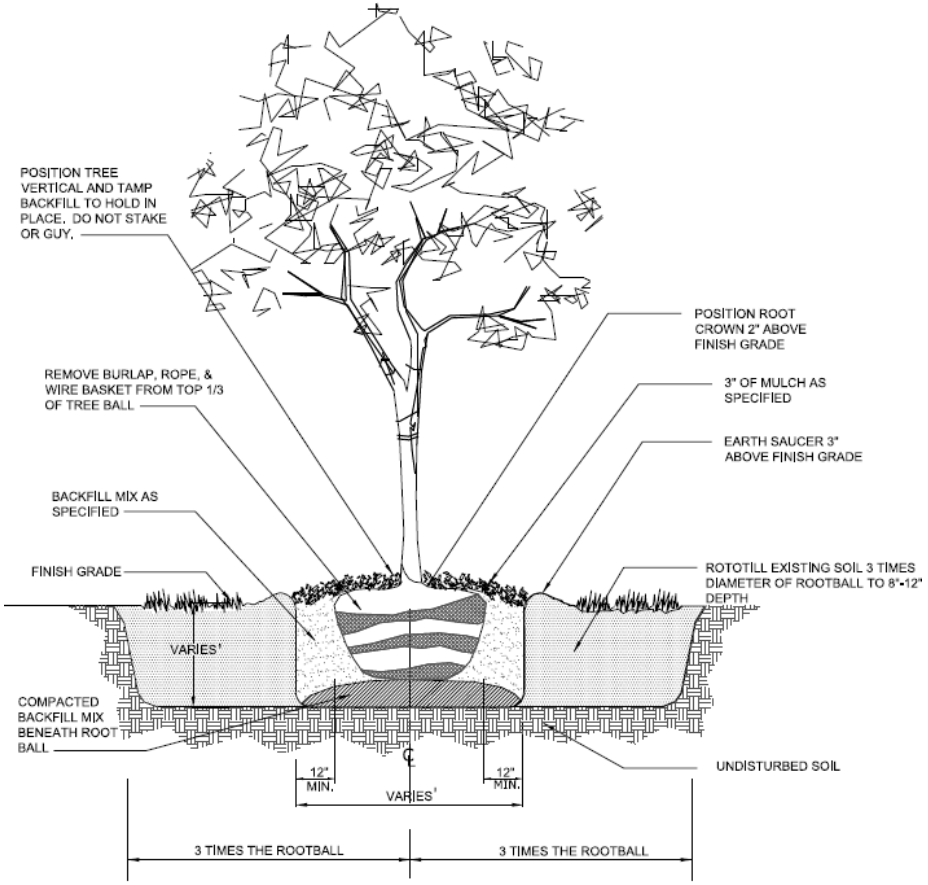
COMMON PRACTICES & APPLICATIONS

Stormwater trees are commonly planted adjacent to roadways or sidewalks in urban areas. They can also be found in conjunction with other stormwater-managing landscapes and practices,

including bioswales, native landscaping, and soil amendments.

STORMWATER TREE TYPICAL SECTION AND COMPONENTS

(taken from MMSD's Stormwater Trees GSI Strategy Typical Details which can be found in MMSD's GSI Calculator download Check the tool for the most up-to-date sections: https://www.freshcoastguardians.com/static/GI_calc.zip)



STORMWATER TREE DETAIL
NTS

STORMWATER TREE INSPECTION AND MAINTENANCE

This section provides guidance on maintenance activities that are typically required for these systems, along with suggested frequency for each activity. Individual systems may have more- or less- frequent maintenance needs depending on a variety of factors including the occurrence of large storm events, regional hydrologic conditions, and upstream land use. Site-specific maintenance plans should always be consulted, as the successful functionality of the trees may have specific maintenance requirements that were considered during design.

Inspection Focus: Stormwater trees require specific maintenance measures during establishment, (i.e. 1– 3 years after planting) that generally are not required once the tree is well-established. Stormwater tree maintenance should be performed in the fall after leaf-off and any time that the following conditions are observed:

- Tree roots are exposed.
- Trash, debris, litter and leaves are present.
- Evidence of standing water on or around the tree 48 hours after rainfall.
- Evidence of animal burrows, other holes, or erosion.
- Drought conditions.
- Dead, dying or damaged branches or leaves are present.

Manual Weed Control: Depending on establishment and condition of planting bed, as many as 12 weeding visits could occur during the typical six-month growing season of mid-April through mid-October. The weeds are growing most aggressively from early May through mid-July (before native warm season grasses have filled out). During this period, visits may need to be weekly. Ornamental landscapes will typically require more visits than naturalized ones, but to begin with, naturalized landscapes will require more visits. As naturalized landscapes are established, the frequency of manual weed control will taper off.

STORMWATER TREE MAINTENANCE TASKS, INDICATORS, AND FREQUENCY

Task	Description	Maintenance Indicator	Minimum Frequency
General			
Signage Care	Wipe down signage.	If dust or grime is present.	Annually
Graffiti Removal	Remove graffiti from site structures, signage, or surrounding surfaces.	If graffiti is present on GSI signage, or adjacent to GSI area.	As needed
Structural Components			
Tree Grate	Monitor trunk growth and repair or replace damaged tree grates.	Trunk growing too close to the grate opening or damage to tree grate.	As needed
Vegetation Components			
Manual Weed Control	Remove weeds by hand weeding.	If weeds are present around tree area.	Monthly (Spring through fall)
Pest Management*	Inspect plants for signs of disease or predation.	Presence of pests or diseased plants.	Biannually
Pruning (Structural)	Pruning trees or tree branches.	If tree is becoming too large for designated space, or if low branches are growing outside the space over streets or sidewalks.	Annually
Watering	Water plants as necessary to ensure survival during extended dry periods.	Yellow or brown tips of leaves, dying plants, or wilted/dehydrated leaves or stalks. Note, yellow leaves can also be an indicator that plants are receiving too much water.	As needed, depending on weather

Growing Medium/Planting Bed Components			
Organic Debris Removal	Remove excess organic debris (e.g., leaves, plant decay, etc.) from tree areas.	If present in or around tree area.	Biannually
Mulch Amendment/Replacement	Amending or replacing mulch in tree area.	If mulch is observed to have bare spots, depth is less than 2 inches or appears compacted or disarrayed in or around tree area.	Annually or as needed
Trash Removal	Remove trash from tree planting beds and surrounding areas. Report large dumping.	If present in or around the tree area.	Monthly (Spring through Fall)
* Integrated Pest Management (IPM) routines are encouraged. This involves inspecting the plants for signs of disease or predation. The IPM approach encourages non-chemical methods for treated diseases or pests as a first resort.			

STORMWATER TREE EXPECTED ANNUAL FREQUENCY

It is recommended to complete eight (8) site visits annually for stormwater tree maintenance. The timing and the tasks related to each of these site visits is detailed in the below table.

Task	**Spring**	**Summer**	**Fall**	**Winter**	**After 2-inch Rainfall [1]**
Site Inspection	1				2
Pest Management		1	1		
Manual Weed Control	2	2	2		
Pruning			1		
Trash Removal	2	2	2		2
Organic Debris Removal	1		1		2
Mulch Amendment/Replacement	1				2
Total Minimum Annual Expected Maintenance	**2**	**2**	**2**		**2**

[1] A summary of rainfall data at General Mitchell Airport revealed that there has been at least one 2-inch rainfall from 2014-2019. This table assumes two 2-inch, 24-hour rainfalls per year for planning purposes.

5 Maintenance Tasks

5.1 Concrete Repair

DESCRIPTION

This section describes the procedure for repairing hairline or larger cracks in the concrete within a GSI area. This task should be performed for any cracks found during inspections of the GSI area.

EQUIPMENT & MATERIALS

- Chisel
- Hammer
- Masonry Trowel
- Scrub Brush
- Concrete Crack Patching Compound
- Concrete Mixing Tray
- Water
- Tarp
- Personal Protective Equipment (PPE): gloves

INSTRUCTIONS

1) Protect surrounding plants and GSI components by covering them with a tarp.
2) Undercut the crack using a chisel and small hammer to widen the base of the crack.
3) Remove all debris and small particles.
4) Mix the concrete crack patching compound per the manufacturer's recommendations.
5) Tamp the mixture to remove air pockets.
6) Smooth the mixture with a trowel and wait for the patch to set.

SPECIAL CONSIDERATIONS

- Schedule concrete work early in the day for final setting to occur during the workday. Protect the patch from pedestrian and vehicular traffic using safety cones or other barricades and ensure that personnel are present during the final setting period to prevent vandalism and damage.
- Maintain protective measures during the five to seven day curing period.
- Concrete repairs should be limited to days with temperature ranges between 40- and
- 80-degrees Fahrenheit.
- Concrete repair shall be avoided within a 48-hour period of forecasted rain.

5.2 Deicing

DESCRIPTION

This section describes the procedures for the deicing of permeable, pervious, and porous pavement. This task should be performed before and after snow events, sleet events, freezing rain events, and as needed during the winter season. Accumulated snow should be removed by shoveling, sweeping or plowing before it bonds with the pavement. If ice or snowpack accumulates, road salt or other deicers can be used in moderation to clear the pavement. Magnesium chloride should not be used, nor should deicers that contain ammonium nitrate or ammonium sulfate.

EQUIPMENT & MATERIALS

- Deicer
- Bucket
- Shovel
- Broom
- Snowplow
- Personal Protective Equipment (PPE): boots and gloves

INSTRUCTIONS

1) Shovel/sweep/plow snow in pavement area. (See Plowing Section.)
2) Apply deicer to pavement area if shoveling/sweeping/plowing is not sufficient.
3) Repeat as necessary.

SPECIAL CONSIDERATIONS

- Deicers should be used in moderation.
- Sand or cinders should not be applied onto or adjacent to any porous pavement.

5.3 Erosion Repair

DESCRIPTION

This section describes the procedure for the repair of eroded areas. This task should be performed when water has eroded soils, causing bare spots or depositions of eroded soils in the bottom of the strategy. If erosion caused plants to wash away or die off, additional plantings may be necessary.

EQUIPMENT & MATERIALS

- Soils
- Shovel
- Wheelbarrow
- Seed
- Mulch or Matting
- Plants
- Personal Protective Equipment (PPE): gloves

INSTRUCTIONS

1) Remove debris and loose soils.
2) Apply replacement soils to fill in cracks, low spots.
3) Cover with seed and mulch/matting.
4) Replace plants that were affected in the repaired area.

SPECIAL CONSIDERATIONS

- Consult with facilities manager prior to repairing eroded area. GSI strategy may have specialty soils or plants.
- Note that constant erosion is an indicator that there is an issue with run-on, either too much run-on, or it is entering the strategy too quickly. If erosion of same location in practice persists after the first erosion repair, steps may need to be taken to address the run-on problem.

5.4 Graffiti Removal

DESCRIPTION

This section describes the procedure for the removal of graffiti from GSI elements. This task should be performed as necessary when graffiti is present on any GI, signage, or areas adjacent to the GSI strategy area.

EQUIPMENT & MATERIALS

- Tarp
- Pressure Washer
- Chemical Graffiti Removal Solvent
- Metal/Plastic Brush
- Utility Knife
- Paint
- Rags
- Trash Bags
- Personal Protective Equipment (PPE): gloves

INSTRUCTIONS

1) Cover surrounding areas with a tarp to protect plants and GSI strategy components.
2) If graffiti is sticker based, remove sticker from surface by holding the utility knife at a low angle relative to surface to prevent scratching.
3) Use a pressure washer to wash the surface.
4) Apply chemical graffiti removal solvent per the manufacturer's instructions.
5) Scrub surface with metal or plastic brush.
6) Wipe away graffiti solvent with rags.
7) Pressure wash or rinse surface clean.
8) If necessary, re-paint the affected area.

SPECIAL CONSIDERATIONS

- Remove to the greatest extent possible and report any graffiti that could not be removed.

5.5 Gravel Joint Filling

DESCRIPTION

This section describes the procedure for filling the joints in permeable interlocking concrete pavements with gravel. This task should be performed when approximately 20% of the gravel is missing between the joints, typically after 5 years, or after a sweeping event occurs where joint material is incidentally removed.

EQUIPMENT & MATERIALS

- Disposal Bin
- Skid Steer with Mechanical Brush Attachment or Broom
- (Clear-washed) Gravel Material

INSTRUCTIONS

1) Obtain clear-washed joint material and check the manufacturer specifications for the type of gravel joint material needed for specific product.
2) Dump gravel joint material onto pavement.
3) If using skid steer, use mechanical brush attachment with the brush turned to 30-degree angle to push piles of gravel in passes over the permeable interlocking concrete pavement to fill joints.
4) If using broom, brush gravel over permeable interlocking concrete pavement to fill joints.
5) Brush using either of the two methods until joints are full or to “lip” of pavers. Joints are full when excess material is left at the end of a pass with broom or brush.
6) Store or dispose of excess material and trash at an approved facility or location.

SPECIAL CONSIDERATIONS

- Obtain clear-washed joint material from a reputable vendor.
- Review facility plans, manufacturer specifications, and manufacturer recommendations for joint material sizes, and product recommendations.

5.6 Manual Weed Control

DESCRIPTION

This section describes the procedure for controlling weeds by hand. This task should be performed routinely, when undesirable plant growth is observed in between the desired plants.

EQUIPMENT & MATERIALS

- Rake
- Shovel
- Trowel/Soil knife
- Wheelbarrow/Bucket
- Personal Protective Equipment (PPE): gloves

INSTRUCTIONS

1) Identify unwanted weeds.
2) Pull weeds to remove entire plant and as much of the root system as possible. Note: Placing a foot next to the base of the weed that is going to be pulled will help keep the soil in place as the roots slide out of the ground.
3) Do not impact remaining plant growth.

SPECIAL CONSIDERATIONS

- If available, use planting plan to identify the plants that were initially intended, and be sure not to remove plants that are not weeds.
- Hand pulling of weeds is easiest when the soil is moist, immediately after a rain.
- The use of chemical herbicides or algaecides in waters of the state, including storm water treatment facilities, is regulated by the Wisconsin Department of Natural Resources-Aquatic Plant Management Program under NR 107, Wisconsin Administrative Code. Contact the WDNR to apply for applicable permits prior to using herbicides and/or algaecides in pre-treatment forebays or in constructed wetlands. In addition to contacting the WDNR, consider “hand-wicking” then weeding rather than spray application to reduce the amount of herbicide needed and to be more deliberate in the application.
- Certain plants may cause skin irritation, such as poison ivy (Toxicodendron radicans), poison sumac (Toxicodendron vernix), poison oak (Toxicodendron deversilobum), stinging nettle (Urtica dioica), wild parsnip (Pastinaca sativa) and more. In addition, some plants have thorns or can prick skin when in contact with the plant, such as raspberries (Rubus, sp.), thistle (Cirsium arvense), and more. Be sure to wear gloves and long sleeves to cover arms when working with invasive plants or weeds.
- Invasive plants that should be pulled in early spring before it goes to seed. Refer to Appendix of Invasive Species for list of the most common invasive species in

northeastern Wisconsin. Removed plants should be placed in a bag and disposed of in the trash, not included in a compost pile to avoid spreading the invasive plant further.

5.7 Mowing

DESCRIPTION

This section describes the procedure for mowing vegetation in GSI strategies. This task should be performed once during the year, in spring or fall, in areas planted with native species, to reduce weed growth and to prevent the release of excess nutrients from decaying plants in fall. Bioswales planted with low-growing, manicured grasses should be mowed more frequently, depending on rainfall and plant growth.

EQUIPMENT & MATERIALS

- Flail Mower
- Lawn Mower
- Weed Wacker
- Oil/Gas
- Rake
- Wheelbarrow
- Tarp
- Personal Protective Equipment (PPE): safety glasses

INSTRUCTIONS

1) Walk site to observe and remove any debris or unsafe materials that may be in the work zone.
2) Mow grasses to approximately 3-4 inches in height.
3) Mow native flowering plants to 6-8 inches in height.
4) Rake/remove cuttings and dispose of properly. Grass clipping should not be allowed to accumulate on the street, near the storm inlet, or in the GSI strategies (as not to clog the area for infiltration).

SPECIAL CONSIDERATIONS

- Once established, native plantings should be burned. If burning is not possible, mowing may occur once per season in late spring or early fall and the cuttings removed and disposed of. Note burn permits or approvals from the local fire department may be required
- Take precautions to stay away from ground-nesting birds, wildlife, and nesting areas. You can find more information on nesting birds and their nesting times on the Wisconsin Department of Natural Resources Website: https://dnr.wi.gov/files/PDF/pubs/ER/ER0633.pdf

5.8 Invasive Species Control

DESCRIPTION

This section describes the procedure for controlling invasive species in GSI strategies. This task should be performed when invasive species are observed in the GSI strategy, before they can flower and set seed, and begin impacting the desired plant species and performance of the practice.

EQUIPMENT & MATERIALS

- Rake
- Shovel
- Trowel/Soil knife
- Clipper/Loppers
- Saw
- Wheelbarrow/Bucket/Bags
- Native seed/soil mix or mulch
- Personal Protection Equipment (PPE) & Proper Clothing: closed-toed shoes, long pants, long sleeve shirts, and gloves

INSTRUCTIONS

1) Identify invasive species.
2) Pull invasive plants to remove the entire plant and as much of the root system as possible. Note: Placing a foot next to the base of the plants that is going to be pulled will help keep the soil in place as the roots slide out of the ground.
3) Do not impact remaining plant growth.
4) Cover exposed earth with native seed/soil mix or mulch.
5) Clean equipment when done working on a site with invasive species to prevent the spread of invasives to other sites.

SPECIAL CONSIDERATIONS

- Invasive plants that should be pulled before they go to seed. Refer to Appendix of Invasive Species (WDNR Invasives Species recommendations.
- Garlic mustard (Alliaria petiolata) should be placed in a bag and disposed of in the trash, not included in a compost pile to avoid spreading the invasive plant further.
- Hand pulling of plants is easiest when the soil is moist, immediately after a rain.
- The use of chemical herbicides or algaecides in waters of the state, including GSI strategies, is regulated by the Wisconsin Department of Natural Resources- Aquatic Plant Management Program under NR 107, Wisconsin Administrative Code. Contact the WDNR

to apply for applicable permits prior to using herbicides and/or algaecides in pre-treatment forebays or in constructed wetlands. In addition to contacting the WDNR, consider “hand-wicking” the weeding rather than spray application to reduce the amount of herbicide needed and to be more deliberate in the application.

- Certain plants may cause skin irritation, such as poison ivy (Toxicodendron radicans), poison sumac (Toxicodendron vernix), poison oak (Toxicodendron deversilobum), stinging nettle (Urtica dioica), wild parsnip (Pastinaca sativa) and more. In addition, some plants have thorns or can prick skin when in contact with the plant, such as raspberries (Rubus, sp.), thistle (Cirsium arvense), and more. Be sure to wear gloves, long pants, closed-toed shoes, and long sleeve shirts when working with invasive plants or weeds.

5.9 Mulch Amendment & Replacement

DESCRIPTION

This section describes the procedure for a mulch amendment or replacement. This task should be performed when visible mulch is observed to have bare spots, if the depth of mulch is less than 2 inches, or if mulch appears to be compacted or disarrayed. When plants are established and lush, no additional mulch amendment is necessary, and can be counter-productive in disturbing soil beds, filling in storage capacity and adding more "floatable" matter to cause outlet blockages.

EQUIPMENT & MATERIALS

- Mulch: decomposed leaf mulch or shredded hardwood bark mulch
- Rake
- Shovel
- Wheelbarrow
- Tarp
- Personal Protective Equipment (PPE): gloves and eye protection

INSTRUCTIONS

1) Rake decomposed leaf mulch in areas with herbaceous plants and rake shredded hardwood bark mulch in areas with woody plantings to maintain a loose top layer. Rake away from vegetation, trees, or shrubs. If replacing, use rake and shovel to remove, making sure not to disturb vegetation.
2) Apply mulch as needed to maintain a three (3) inch layer. Do not apply mulch against the trunks of trees and shrubs in a volcano-like mound as this will damage the plants.

SPECIAL CONSIDERATIONS

- Consult with facilities manager prior to amendments or replacements. GSI strategy may have specialty mulch such as a fungi-enhanced mulch.
- When applying mulch, mulch dust may irritate eyes, nose, and lungs if exposed for extended periods of time.

5.10 Organic Debris Removal

DESCRIPTION

This section describes the procedure for removing accumulations of excess organic debris from GSI strategy. This task should be performed routinely in mid to late spring after snowmelt, or when accumulations of decaying material have been observed.

EQUIPMENT & MATERIALS

- Rake
- Shovel
- Clippers/Loppers
- Broom
- Wheelbarrow
- Tarp/Bags
- Personal Protective Equipment (PPE): gloves and eye protection

INSTRUCTIONS

1) Identify decaying organic material to be removed and note any damaged or dead plants nearby that should be replaced.
2) Rake or shovel decaying material and place in wheelbarrow or on tarps, in bags. Decaying material that does not consist of invasive plants can be disposed of in compost piles.
3) Inspect areas where decaying material accumulated for evidence that the regular plant growth needs to be replaced/re-seeded.
4) Replace/re-seed plants as necessary.

SPECIAL CONSIDERATIONS

- Consult with facilities manager to review planting plan to confirm recommended replacement plantings.
- Weeds or invasive plants should not be added to compost piles to avoid spreading the plant further.
- Note the type of excess debris may dictate when it should be removed. For example, drifted piles of leaves from large shade trees are best removed in November.
- In naturalized landscapes where biomass is particularly dense, burning should be considered. Note burn permits or approvals from the local fire department may be required.

5.11 Pipe Jetting

DESCRIPTION

This section describes the procedure for pipe jetting. Pipe jetting should be performed when 30% or more of the cross-sectional area of a pipe is blocked or when specified by the owner or operator.

EQUIPMENT & MATERIALS

- Crowbar
- Measuring Wheel
- Hand Tools
- Manhole Hooks
- Closed-Circuit Television (CCTV) Equipment
- Push Broom
- Jetter Hoses, Fittings, Clamps, Nozzles
- High Pressure Pumping System
- Shovel or Spade
- Ladder
- Flashlight
- Personal Protective Equipment (PPE)

INSTRUCTIONS

1) Sweep the area surrounding the structure.
2) Remove any trash, sediment, or debris that is restricting access or flow control.
3) Remove pre-treatment device if not permanently attached to the structure and clean if necessary.
4) Position jet system so that reel is adjacent to the selected access structure and utilize an inlet, manhole, or control structure as the primary maintenance access point.
5) Insert jetter hose into pipe through the flexible hose guard.
6) Insert hose guard into the pipe to guide the jetter hose and prevent wear from friction.
7) Ensure a vacuum tube is present within the structure to vacuum jetted waste material (see vacuum section).
8) Start high-pressure pump after ensuring the nozzle is fully secured. Jet-rod the conveyance pipe structure and perform as many passes as needed to clean the structure.
9) Pipe jetting is complete once the jetted water is clear.
10) Complete a post-maintenance inspection of pipes with CCTV camera.

SPECIAL CONSIDERATIONS

- Vacuuming should not be performed within 48 hours of a significant rainstorm (>1-inch) rainstorm.
- Confirm that the jetter equipment waste storage tank is free from debris from another project.
- When using hydraulically propelled cleaning tools, all access structures that are not used as entry points must be closed and secured.
- When using hydraulically propelled cleaning tools, take precaution to ensure that the water pressure does not damage or cause flooding to nearby property.

5.12 Plowing

DESCRIPTION

This section describes the procedure for snow plowing. Plowing should be performed to remove snow after and/or during every snowstorm. Special plow blades may be used to prevent scarring but are not necessary. Raised blades are not recommended.

EQUIPMENT & MATERIALS

- Shovel
- Gloves
- Snowplow
- Deicer (See Deicing Section)
- Personal Protective Equipment (PPE)

INSTRUCTIONS

1) Use snowplow or shovel to remove snow from permeable/pervious/porous pavement surface.
2) Apply deicing treatments during and after storms as necessary to control compact snow and ice not removed by the plow.

SPECIAL CONSIDERATIONS

- See manufacturer recommendations for special plow blades.

5.13 Pruning (Structural)

DESCRIPTION

This section describes the procedure for maintenance pruning, including woody plants, small trees, and shrubs. Maintenance pruning should be completed as necessary to remove damaged, diseased, or dead branches. Vegetation adjacent to walkways or street intersections should be maintained to keep safe lines of sight for pedestrians and vehicles.

EQUIPMENT & MATERIALS

- Chain Saw
- Hand Saw, Pruning Pole Saws, Pole Clips
- Pruning Shears and Loppers
- Push Broom
- Chipper trailer
- Lift with a dump box or Wheelbarrow
- Rake
- Personal Protective Equipment (PPE)

INSTRUCTIONS

1) Using clean and sterilized pruning tools, make clean and even cuts using proper tools for the size of each branch.
2) Remove low limbs as needed to maintain safe overhead and line of sight clearances for pedestrians and vehicles.
3) Remove all dead, damaged, diseased, or dying branches back to the nearest branching point taking care to avoid damage to the branch collar.
4) Carefully cut as close to the branch collar without cutting the branch collar itself. Preserve the branch collar for proper healing.
5) Cut branches into pieces that can easily be carried and remove any material to be disposed of at an approved off-site location.

SPECIAL CONSIDERATIONS

- Pruning efforts should be made to protect clear sight lines. Ensure that branches and limbs are not impeding street traffic, pedestrian traffic, or structures. Ideal clearances may not be practical in all cases, particularly for young trees.
- Owner or operator shall make arrangements with the utility company for the removal of any limbs or branches in conflict with electrical distribution lines. Tree pruning near electrical wires shall only be conducted by a qualified line clearance arborist. Electrical Utilities warn to keep 10 feet from all primary/distribution power lines.

- Avoid pruning the following during the growing season to reduce the likelihood of injury due to fungus and parasites: oaks (prune in winter or early spring), elms (prune in early spring), and fruit trees (prune in winter).

5.14 Sanitizing

DESCRIPTION

This section describes the procedure for sanitizing. Sanitizing should be completed for cisterns, tanks or rain barrels if trash, sediment, or organic debris is present within the rainwater harvesting system, the system has just been installed, or a bacterial test result is positive.

EQUIPMENT & MATERIALS

- Screwdrivers
- Wrenches
- Pliers
- Mallet
- Crowbar
- Unscented liquid household bleach
- Pressure washer
- Manhole hooks
- Metal/Plastic Brush
- Detergent
- Personal Protective Equipment (PPE): safety glasses and gloves

INSTRUCTIONS

1) Drain: Empty any water using approved vacuum cleaning and waste disposal protocols.
2) Clean:
    a. Clean and scrub all internal surfaces using a brush or high-pressure washer and a mixture of detergent and water.
    b. Wash all internal surfaces using a pressure washer or fill the tank with water and let stand for a few hours. Drain all water using approved waste disposal protocols.
3) Sanitize:
    a. Fill 25% of the tank with clean water.
    b. Add 3 cups of 5%-8.25% unscented liquid household bleach for every 100 gallons of water (a chlorine concentration of about 100 ppm or mg/L).
    c. Mix the solution in the tank and fill to full capacity with clean water.
    d. Let the solution stand for 24 hours with all covers and valves closed.
    e. Empty the tank using approved waste disposal protocols.
4) Check the tank for residual chlorine concentration.
    a. Refill the tank with clean water and let stand for 30 minutes.
    b. Test the chlorine levels. The tank is safe for use if the chlorine concentration is 0.5 mg/L or less.

c. If the concentration is higher, empty the tank using approved waste disposal protocols and repeat the above steps until the concentration is 0.5 mg/L or less.

5) Sanitize any associated piping or hoses using the same procedures as described above.

SPECIAL CONSIDERATIONS

- If the tank is required for use urgently, the bleach concentration can be doubled, and the standing time can be reduced from 24 hours to 8 hours.
- Contaminated water must be disposed of using approved waste disposal protocols.

5.15 Sediment Removal

DESCRIPTION

Removing sediment from GSI strategies and structures is crucial to their function. Sediment can damage vegetation by burying stems and coating leaves. Excess sediment also clogs soil beds and surfaces, leading to reduced infiltration and reduced storage capacity. This section describes procedures for removing sediment from the surfaces, inflow, and outflow points of GSI strategies, and from pre-treatment devices.

EQUIPMENT & MATERIALS

- Broom
- Digging fork
- Scoop shovel
- Flathead shovel
- Leaf blower
- Brush
- 5-gallon bucket
- Tarp
- Trash bags
- Personal Protective Equipment (PPE): safety vest, safety glasses, and gloves

INSTRUCTIONS

For All Areas:

1) Use a tarp to contain and collect sediment for bagging and removal.
2) Take care to note areas of erosion, clogging, and soil compaction when performing these tasks.

For GSI Strategy Surface Areas:

1) Observe the surface area for areas of sediment accumulation and flows.
2) Using a small rake, shovel or trowel, separate accumulated sediment from soil or soil media by gently scraping the top surface of the practice to a depth of 1 to 3 inches, depending upon the depth of the accumulated sediment. Sediment may be mixed in with mulch, which should be removed and replaced as necessary. Take care not to damage plants or remove filter media unless the media is compacted or clogged (see Surface Media Renovation).
3) Using a flat head shovel, carefully remove the excess sediment from the practice and place in a container for disposal.
4) Note any underlying areas with soil compaction, erosion, or flow paths; see procedures for “Soil Amendment”.

5) Any bare areas within a vegetated practice must be immediately repaired or stabilized; see procedures for “Soil Amendment,” “Mulch Amendment,” and “Surface Media Renovation.”

For Inflow and Outflow Areas:

1) Sweep and dispose of accumulated sediment in the area extending 4 to 5 feet on either side of curb cut openings, gutter lines, and areas up-gradient (uphill) of inflow areas.
2) For trench drains, use a leaf blower to blow out accumulated sediment. In some cases, grates or covers may need to be removed to fully access the inflow area.

For Pre-Treatment Devices such as forebays, filter strips, or inlet filters:

1) Evaluate the extent of sedimentation. Where any clogging has occurred, use a scrub brush or pressure washer to remove fine sediment from filters or pores, taking care not to tear or damage the material.
2) If tears of 3 inches or more are found in any filter fabric inlet devices, the device must be replaced; note to a field supervisor the location of any that need replacement.

SPECIAL CONSIDERATIONS

- While sediment tends to be heavier after winter snow melts, sediment removal should be done year-round.
- Some practices in areas with more sediment-generating land uses, or erodible soils, may require more frequent sediment removal. In these cases, field supervisors should note where pre-treatment or non-structural controls such as more frequent sweeping may be beneficial.
- Early spring is particularly important for sediment removal in order to remove any de-icing salts that may have accumulated over winter months.
- Removal of sediment from subsurface structures such as inlets, pipes and culverts are described in the “Pipe Jetting” and “Vacuum Cleaning” sections.
- If there is a significant volume of sediment, or it accumulates in permanently wet or hard-to-access locations, mechanized equipment such as a mini-excavator or portable vacuum excavator may be used at the discretion of the forewoman or field supervisor to provide more efficient and safe removal.

5.16 Seeding

DESCRIPTION

This section describes the procedure to re-seed areas of GSI strategies that have eroded, where vegetation has not survived, or where repairs have been completed. This task should be performed as needed in conjunction with other tasks to ensure vegetation cover and root systems will provide slope stability and promote infiltration allowing the practice to function as designed. Seeding to establish permanent plants should only be completed when ground temperatures are above 53 degrees Fahrenheit, during spring and early fall (typically mid-April through mid-September) to avoid hot temperatures and direct sunlight during summer when seed and sprouting vegetation tend to burn out. Temporary seeding can be done during fall, before the first frost, to establish a temporary growth of vegetation. This is typically done with quick growing plants to minimize erosion and soil loss over winter and in early spring.

EQUIPMENT & MATERIALS

- Seed
- Soil
- Mulch
- Rake
- Spreader / Seeder
- Trash bag (for removing invasives)
- Personal Protective Equipment (PPE)

INSTRUCTIONS

1) Remove weeds and other debris that will prevent seeds from getting established.
2) The use of herbicides to prepare the soil should follow safety protocols and manufacturers' directions.
3) Rake area to be seeded to establish a loose top layer. Fill and repair any gullies, low or eroded areas.
4) Spread seed uniformly in two directions. If mechanical seed driller or silt seeder is used in place of spreader or seeder, then omit Step 4.
5) Cover seeded area with no more than ¼-inch of soil.
6) Water seeded area.
7) Mulch seeded area to prevent area from drying out and to protect seed and sprouts from burning out in direct sunlight.
8) Repeat watering daily (if it does not rain) to establish vegetation.

SPECIAL CONSIDERATIONS

- Heavy rains that occur before seed gets established may require additional seeding if rains wash the seed away.

- Dormant seed can be planted after November 1st.

5.17 Settling Repair

DESCRIPTION

This section describes the procedure for repairing areas of a GSI strategy that have settled. This task should be performed when areas are observed to be lower than the surrounding areas or lower than the elevations as designed.

EQUIPMENT & MATERIALS

- Rake
- Shovel
- Wheelbarrow
- Tarp
- Soil or stone
- Personal Protective Equipment (PPE)

INSTRUCTIONS

1) Identify area that has settled which needs repair.
    a. If area is very large, or if the settling is greater than 2 feet, contact project manager/ review original designs, planting plans, etc.
2) Scrape/remove rock and stone from settled areas. If planted, remove plants carefully, taking care not to harm the plant or the root systems.
3) Fill area with stone or soil as directed by the project manager. Restore surface as directed.

SPECIAL CONSIDERATIONS

- If site is too deep (> 2 feet) or too large, contact project manager or site engineer to determine if the repair will maintain the performance of the GSI strategy as designed.

5.18 Soil Amendment

DESCRIPTION

Soil Amendment is the process of improving disturbed soils and soils with a low organic content by restoring soil porosity and adding a soil amendment, such as compost, for the purpose of re-establishing the soil's long-term capacity for infiltration, pollutant removal, and supporting healthy plant growth. Soil amendment media usually consists of compost but can also include the use of mulch, manures, sand, and manufactured microbial solutions.

The maintenance steps in this section must be adapted to site and soil conditions. In some cases, soil may simply be aerated to alleviate compaction. In other cases, soils may need to be excavated and a portion replaced with one of several types of soil amendment materials. In all cases, care must be taken to ensure that proper re-vegetation and erosion control are practiced for all disturbed areas.

EQUIPMENT & MATERIALS

Soil Amendment may be done mechanically or by hand. The following tools are required for amending soil by hand:

- Engineered soil, where specified for bio-swales
- Other soil amendment material as specified
- Topsoil (for back-fill where aeration/de-compaction is required)
- Shovel
- Hand rake
- Tamper
- Water tank and hose
- Bucket
- Trash bags
- Spading fork
- Pitchfork
- Wheelbarrow
- Personal Protective Equipment (PPE): safety glasses, safety vest, and gloves

INSTRUCTIONS

1) Where necessary, carefully remove any accumulated sediment or soil and transfer to disposal containers.
2) Observe the underlying surface area and conditions to note areas of erosion, flow paths, and soil compaction/ hardening.

3) In areas of soil compaction/hardening, check for the depth of compaction with a spading fork. Excavate to compacted depth with a shovel. Till/aerate the surrounding edges of the excavated area. Following specifications for the GSI strategy, backfill with engineered soil, or a combination of topsoil and amended soil at a ratio of 2:1.
4) In areas of evident flow paths, gently rake the surface soils to loosen to a depth of roughly 1-inch. Apply engineered soil or amended topsoil.
5) In areas of erosion, replace lost soil with engineered soil or amended topsoil.
6) Rake and shovel soil to conform to the slope specified by the design. Gently tamp into place – do not compact the soils.
7) Replant and water any vegetation disturbed by the soil amendment.
8) Clean up any excess soil that may have been blown or transported into surrounding non-vegetated areas.

SPECIAL CONSIDERATIONS

- Carefully observe sediment deposits, erosion areas, or compacted soil, and alert a field supervisor if necessary. Sedimentation and soil compaction can seriously affect a practice's function.
- Soil amendment is highly site-specific and will depend both on design and on the nature of the land uses in the area. Soil tests should be conducted during construction and periodically to predict both the type of soil amendment needed, and the frequency with which amendments may be required.
- Typically, where compost is used, compost should be added at a volume of 2 parts soil to 1-part compost (2:1). If a proprietary product is used, the manufacturer's instructions should be followed in terms of mixing and application rate.
- Soil compaction (i.e. hardening) can be treated by tilling and other physical loosening of the soil. Compaction must be addressed prior to adding a soil amendment.

5.19 Structural Clearing & Maintenance

DESCRIPTION

This section describes the procedure for clearing and maintaining inlets and catch basin structures. This includes sediment, trash, and debris removal.

EQUIPMENT & MATERIALS

- Shovel
- Rake
- Vacuum or Vacuum Truck
- Tarp
- Manhole Pick or Crowbar
- Sledgehammer
- Personal Protective Equipment (PPE): gloves

INSTRUCTIONS

1) Carefully use hands, or proper tools to remove the inlet, catch basin, or manhole cover. If a manhole cover is difficult to remove, use sledgehammer and crowbar to loosen cover from structure.
2) If structure is more than 2-inches full of sediment, and access allows, use shovel to remove sediment and debris.
3) If site allows for onsite disposal of organic debris, spread organic debris and sediment onsite. If not, or if sediment and debris contain non-organic materials, dispose at approved facility or location.
4) If sediment has caused pipes to clog, or access or depth of material does not allow, use vacuum truck to clear completely.

SPECIAL CONSIDERATIONS

- Removal of debris from inlets may require confined space entry.

5.20 Surface Media Renovation

DESCRIPTION

This section describes the procedure for renovating surface media. This task is different from mulch amendment/replacement as it applies to GSI strategies where conventional mulch is not used. This task should be performed when the surface layer of a practice is visibly compacted, or where mulch and soil have been removed due to sediment accumulation (see "Sediment Removal" and "Soil Amendment"). Surface media renovation must be done with the proper mix of engineered soil, topsoil, and/or soil amendment specified for the practice and requires coordination with the field supervisor or designer.

EQUIPMENT & MATERIALS

- Soil Amendment, engineered soil and/or topsoil as specified
- Mulch (if specified)
- Digging Fork
- Rake
- Shovel
- Tamper Bucket
- Trash Bags
- Personal Protective Equipment (PPE): safety vest, safety glasses, and gloves

INSTRUCTIONS

1) Observe the surface area to note any areas of compaction, erosion, or flow paths.
2) Where surface media is highly compacted or coated with sediment, gently rake the material and remove with a shovel into a container for disposal.
3) Gently rake the exposed surface to loosen the soil to a depth of approximately 1 to 3 inches, taking care to rake away from vegetation, trees, or shrubs.
4) Apply approximately 2 to 3 inches of engineered soil, amended soil or topsoil, as directed. Use the rake to mix gently into the loosened soil.
5) Contour the soil material to the specified grade of the practice's surface area. Tamp gently, but do not compact the soil.
6) Where mulch is to be used, apply mulch as needed to maintain a three (3) inch layer.

SPECIAL CONSIDERATIONS

- Ensure that mulch and all accumulated debris and sediment are removed before starting this task.
- Consult with the field supervisor or facilities manager before proceeding to ensure the correct surface amendment material is used.

5.21 Trash Removal

DESCRIPTION

This section describes the procedure for trash removal. This task should be performed when trash is present in or around the GSI strategy. Trash should be removed all year round, and as necessary. Certain locations, especially those with heavy pedestrian traffic, may require more frequent trash removal.

EQUIPMENT & MATERIALS

- Trash Bags or Disposal Bin
- Trash picker
- Gloves
- Rake
- Personal Protective Equipment (PPE): gloves

INSTRUCTIONS

1) Use hands, rake, or trash picker to collect and remove trash from strategy or surrounding site.
2) Dispose of trash at an approved disposal facility or location.

5.22 Watering

DESCRIPTION

Proper and timely watering are essential to the establishment, function, and longevity of all vegetated practices. This section provides guidance on the timing and approaches for maintenance-related watering.

EQUIPMENT & MATERIALS

For municipal staff or contractors utilizing public hydrants:

- Hydrant key/wrench
- Backflow preventer

For truck/trailer mounted water tanks:

- Watering tank(s)
- Truck/trailer
- Water pump
- ¾" hose

All cases:

- Rain gauge
- Watering wand/nozzles
- Gator bags
- Personal Protective Equipment (PPE): gloves, safety glasses, and safety vest

INSTRUCTIONS

If watering off a public hydrant:

1) Install hydrant backflow preventer.
2) Open hydrants permitted to be opened with appropriate hydrant key/wrench.
3) Attach hose and adapter to backflow preventer.

For watering from tanks mounted on trucks or trailers:

1) Attach hoses to appropriate gravity or mechanical pumps for water tank(s).

All cases:

1) Soak the top 6 to 8 inches of soil evenly by constantly spraying water across the surface, rather than concentrating spray in one place.
2) Water trees by placing and filling gator bags.
3) Remove gator bags at the end of the growing season and no later than October.

SPECIAL CONSIDERATIONS

- A simple rain gauge can be mounted near GSI strategies to monitor rainfall and more accurately predict when water will be necessary.
- Watering generally should be conducted from April through November.
- If possible, watering should occur at night or in the morning to minimize evaporation.

- Watering restrictions imposed due to drought must be observed; contact appropriate water agency to determine whether and when drought-related restrictions apply.
- Where not irrigated, watering of herbaceous plants should occur after 4 days without rainfall of 0.3-inch or greater, and herbaceous trees should be watered after 7 days without rain fall of 0.3-inch or greater.
- However, there are many times when judgment must be used to determine appropriate watering frequency. Maintenance staff must observe and consider weather forecasts, site conditions, and temperature to determine watering frequencies and needs. A log may be a useful tool to keep track of inches of water from watering and rain. Herbaceous plantings generally need 1-inch of water per week in cooler months and up to 2 inches of water per week during warmer months.
- Note that yellow leaves are also a common indicator of plants receiving too much water.

5.23 Woody Vegetation Removal

DESCRIPTION

This section describes the procedure to remove woody vegetation or saplings. This task should be performed annually to prevent unplanned small trees from growing in GSI strategies.

EQUIPMENT & MATERIALS

- Pruning shears
- Brush Cuter
- Rake
- Shovel
- Wheelbarrow
- Tarp/Bags/Bucket
- Soil
- Seed
- Personal Protective Equipment (PPE): safety glasses, safety vest, and gloves

INSTRUCTIONS

1) To hand pull woody vegetation:
    a. Pull woody plants from the base to completely remove the plant and roots disturbing as little soil as possible. It can be helpful to place a foot next to a sapling when removing it to prevent pulling up the adjacent soil.
    b. Use a hand shovel or spade to loosen the soil around larger plants to completely remove the root system.
2) To cut small woody vegetation:
    a. Use pruning shears or a brush cuter to cut small trees, woody vegetation to a height of 4-6 inches.
    b. Rake and collect removed plants for proper disposal.
3) Remaining holes from pulled plants should be filled with soil and re-seeded.

SPECIAL CONSIDERATIONS

- Consult with facilities manager prior to removing woody plants to ensure small trees were not previously placed to replace other vegetation.
- Pull plants when the soil is wet and loose (after a rainstorm) to reduce soil disturbance during removal. Disturbing the soil will bring weed seeds to the surface where they can germinate.
- Buckthorn (Rhmanus sp.) should be removed completely. If buckthorn will only be cut low, then it should be treated to prevent it from re-growing.

5.24 Vacuum Cleaning

DESCRIPTION

This section describes the procedure for vacuum cleaning permeable/pervious/porous pavement types. This task should be performed after the pavement is found to have standing water on the surface after a precipitation event.

EQUIPMENT & MATERIALS

- Vacuum Truck or Vacuum Attachment (wet and/or dry)
- Personal Protective Equipment (PPE)

INSTRUCTIONS

1) Safely block off area and surrounding area that needs to be cleaned.
2) Use vacuum truck or vacuum attachments to make slow passes over the pavement until the entire or target surface area has been cleaned.
3) Note, if vacuuming permeable interlocking concrete pavement systems with joint material, vacuuming will remove some joint aggregate material. Replenish removed joint aggregate material to “lip” over paver (see Gravel Joint Filling Section).
4) Clean machinery and dispose of collected trash, debris, etc. at approved disposal facility.

SPECIAL CONSIDERATIONS

- Refer to manufacturer specifications and recommendations for approved types of vacuum trucks or propriety vacuum attachments.

5.25 Vegetation Maintenance

DESCRIPTION

This section describes the procedures for annual herbaceous vegetation maintenance, trimming and transplanting. This task should be performed annually in spring and/or fall, depending on the plant species, to provide a healthy, appealing plant display and to thin aggressively growing plants.

EQUIPMENT & MATERIALS

- Rake
- Spade/Shovel
- Garden Knife
- String Trimmer
- Wheelbarrow
- Tarp/Bucket/Bags
- Personal Protective Equipment (PPE): gloves

INSTRUCTIONS

Vegetation Maintenance

1) Consult planting plan to determine varieties and location/extent of desired species in strategy.
2) Remove decayed material from previous season, including dried stalks, organic/leaf debris, and other loose/dislodged material.
3) Hand pull dried plant matter from previous season that is attached to existing plants without disturbing current plant growth.
4) Trim herbaceous plants to 4-6 inches in height with string trimmer in late spring and as needed to maintain safe sight lines in roadside facilities.
5) Rake removed/trimmed plant debris and place on tarp, in wheelbarrow/buckets/bags to dispose of properly off-site.

Transplanting

1) Consult planting plan to determine varieties and location/extent of desired species in strategy.
2) Use spade/shovel or garden knife to split or dig out plants to be thinned and/or transplanted through to the roots.
3) Dig a hole 1 ½ times the size of the root ball to be replanted. Cover root systems and base of plant with soil, so the top of the root ball/plant is even with the surrounding ground.
4) Fill remainder of hole with soil.
5) Water thoroughly to provide water to root systems.

6) Provide confirmation of transplanted species to facility manager for planting plan updates.

SPECIAL CONSIDERATIONS

- Note bare spots where last season's plant growth did not return and advise facility manager.
- Vegetation maintenance and transplanting should not be done in overly saturated soils.
- Remove all tags/labels/strings from new plants after planting.

6 Invasive Species

6.1 Invasive Species in Green Stormwater Infrastructure in Brown County and Northeast Wisconsin

Please see the Wisconsin Department of Natural Resources website for invasive species typically found in the City of Green Bay. https://dnr.wisconsin.gov/topic/Invasives

7 References & Resources

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Wisconsin DNR Stormwater Post-Construction Technical Standards can be found at: Storm water post-construction technical standards | STORM WATER TECHNICAL STANDARDS, MODELS AND BMPS | Wisconsin DNR https://dnr.wisconsin.gov/topic/Stormwater/standards/postconst_standards.html

MMSD RESOURCES		
RESOURCE	AVAILABLE FROM	WEB ADDRESS
PLANS		
Regional Green Infrastructure Plan	MMSD	https://www.mmsd.com/static/MMSDGIP_Final.pdf
GI Operations & Maintenance Implementation Framework, 2016	MMSD	https://www.freshcoastguardians.com/application/files/6115/0427/9939/GI_OM_2016_Final_Report.pdf
Milwaukee Green Streets Plan, 2013	City of Milwaukee	https://www.mmsd.com/application/files/7814/8779/8665/Green_Streets_Stormwater_Manag.pdf
Various Plans	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/our-plans
SIZING AND DESIGN OF GREEN INFRASTRUCTURE		
Green Infrastructure Desktop Sizing Tool	MMSD	http://www.freshcoastguardians.com/resources/sizing-your-project
Green Infrastructure Standard Specifications and Plan Templates, 2016	MMSD	https://www.mmsd.com/application/files/7514/8658/7515/MMSD_GI_Specs_and_Plan_Template_Report.FINAL.012717.pdf
Green Infrastructure Plant Selection Tool	MMSD	https://www.freshcoastguardians.com/resources/services/plant-selection
MAINTENANCE AND CARE OF GREEN INFRASTRUCTURE		
Fresh Coast Resource Center	MMSD	https://www.freshcoastguardians.com/contact
Operation & Maintenance Manual		
Green Infrastructure Care:	MMSD	
Rain Barrels	Fresh Coast Resource Center	https://www.freshcoastguardians.com/application/files/1915/5119/6195/13-056c2_DiverterRainBarrel02142019_Web.pdf
Rain Gardens	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/green-strategies/rain-gardens
Soil Amendments	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/green-strategies/soil-amendments
Native Landscape	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/green-strategies/native-landscaping
Stormwater Tree	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/green-strategies/stormwater-trees
Green Roofs	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/green-strategies/green-roofs
Porous Pavements	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/green-strategies/porous-pavement
Bioswales	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/green-strategies/bioswales
Wetlands	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/green-strategies/wetlands
VENDORS AND GREEN INFRASTRUCTURE TRAINING		
Green Vendor List	MMSD	https://www.freshcoastguardians.com/resources/vendors
Fresh Coast Resource Center Training Support	Fresh Coast Resource Center	https://www.freshcoastguardians.com/resources/services/workforce-development-training
FUNDING PROGRAMS		
Fund for Lake Michigan	FFLM	https://fundforlakemichigan.org/apply-for-funding/
Wisconsin Coastal Management Program	Wisconsin Office for Coastal Management	https://doa.wi.gov/Pages/LocalGovtsGrants/CoastalGrants.aspx

8 Acknowledgements

CITY OF GREEN BAY

Melissa Schmitz, Project Manager/Resiliency Coordinator
Emma Browne, Civil Engineer
Valerie Joosten, Utility Manager
Maria Otto, Green Bay Conservation Corps Coordinator
Christopher Pirlot, Operations Manager

CONSULTANT TEAM

AQUALIS Engineering Services
Carrie Bristoll Groll, Project Manager
James Zsebe
Fiona Nutbeam
Kevin Hopkins
Nicholas Macdonald
Eileen Putzier

Report to the
Improvement and Service Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # N.2

To approve the draft letter and resolution prepared by Department of Public Works seeking WisDOT reconsideration regarding need for sidewalks on Country Club Road reconstruction, and authorize the Director of Public Works to submit the items to WisDOT (held over from August 16, 2023 Improvement and Services meeting).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. Resolution Country Club Sidewalks_10-25-23_SGrenier
2. Letter - WISDOT Nelson - Country Club Road Sidewalk - SGrenier - 10-25-23

RESOLUTION REQUESTING RECONSIDERATION ON NEED FOR SIDEWALKS AS IDENTIFIED IN COUNTRY CLUB ROAD RECONSTRUCTION

November 2, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY:

WHEREAS, the City of Green Bay and Wisconsin Department of Transportation (WisDOT) have entered into a State/Municipal Agreement (SMA), dated May 14, 2020, for the reconstruction of Country Club Road; and

WHEREAS, the aforementioned SMA provides more than $4,000,000 in Surface Transportation Block Grant (STBG) federal funding to the project; and

WHEREAS, residents adjacent to the project area have identified the following concerns:

1. Sidewalks to be constructed along the project length do not connect to any sidewalks adjacent to the project limits; and
2. Residents report little to no current pedestrian activity in the project area; and
3. Residents believe that the narrow terraces resulting from installation of sidewalk will result in adverse impacts due to plowed snow from Country Club Road landing on the proposed sidewalk; and
4. Several residents have gardens, landscaping, and fences within the public right-of-way that would be adversely impacted by the construction of sidewalk;

NOW, THEREFORE BE IT RESOLVED, the City of Green Bay Common Council respectfully requests WisDOT reconsider the need for installation of sidewalk along the project length in the following priority order:

1. Consideration of no sidewalks on either the east or west sides of the project; or
2. If sidewalks are required, that the be limited to the east side of the project only; or
3. If sidewalks are required to installed on both sides of the project, that the sidewalks on the west side of the project be limited to three (3) feet in width.

Adopted _____

Approved _____

_____
Eric Genrich, Mayor

Attest:

_____
Celestine Jefferies, Clerk

Public Works Department
100 North Jefferson Street • Room 300
Green Bay, Wisconsin 54301-5026
www.greenbaywi.gov

Administration | Engineering | Traffic 920.448.3100
Operations 920.448.3535
Parking 920.448.3431
Fax 920.448.3102

October 25, 2023

Wisconsin Department of Transportation
Northeast Region Office
Attn: Mr. Scott Nelson, Maintenance Supervisor
944 Vanderperren Way
Green Bay, WI 54304

Dear Mr. Nelson:

As I am sure you are aware, the City and WisDOT have been working together on a STBG-funded project for the reconstruction of Country Club Road in the City of Green Bay, WisDOT Project ID 4987-02-74/75. The City of Green Bay is aware of the requirements identified in the State/Municipal Agreement related to compliance with Federal statutes that govern the STBG program, which include complete streets design.

Residents along the project length have approached the City with a request that WisDOT reconsider the need for sidewalk along the project length. The reasons stated for the request include:

1. Lack of connection for the sidewalks to facilities outside the project area;

2. Lack of observed pedestrian activity within the project area;

3. Narrow terraces resulting from the installation of proposed walk would result in adverse conditions for snow removal to the residents; and

4. Many residents have landscaping, gardens, and/or fences within the public right-of-way that have existed for many years that would be adversely impacted by the installation of the proposed walk.

The Common Council of the City of Green Bay has adopted a resolution, attached to this letter, respectfully requesting that WisDOT re-evaluate the need for sidewalks along the project length. The request has multiple options, identified below in priority order:

1. No sidewalks required along the project length; or

2. If sidewalks must be included in the project, sidewalks on the east side of Country Club Road only; or

3. If sidewalks must be included on both sides of Country Club Road, that the sidewalk width on the west side of Country Club be reduced to three feet (3') in width.

We appreciate the opportunity to seek this reconsideration and look forward to your response. We are available to discuss this matter further if you wish to do so.

Sincerely,

Steven Grenier
Director of Public Works

SMG:ejns

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.1

To deny an appeal by Michael and Pati Zawacki at 1509 Creekside Ln. and reduce the reinspection fees to $75 (from $300).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 1509 CREEKSIDE LN APPEAL

Jaime Fuge

From: Patti Zawacki <pattizawacki@gmail.com>
Sent: Tuesday, October 17, 2023 5:28 PM
To: Michael Zawacki; ClerksFrontDesk
Subject: Appeal of reinspection fees

Good afternoon,

My name is Patti Zawacki and my address is 1509 Creekside Ln., Green Bay, WI 54311. My husband is Michael Zawacki. We had stamped concrete installed in the back of our house in the summer of 2022.
We accidentally did not take out a permit. After the job was completed, we had some other patchwork done to our siding by someone on the side as well. We had an issue with that person and the price and the work itself. This person decided to report us to the city of Green Bay for neglecting to take out a permit. Someone from the city of Green Bay came out in October 2022 to verify that we indeed had a concrete patio installed. He looked at it and then he left and told us that we would be receiving a letter in the mail.

We received an invoice dated April 3, 2023. For the amount of $75 for a reinspection fee. When I received that in the mail, I called the inspection department and I was told to talk to Pete O'Connor at phone number 920-448-32 95. He told me to go online. He gave me the website how to get the permit. He instructed me how to take care of this. I will send you all the emails that I have showing that I went online and followed his instructions. He never once told me about anything about a reinspection fee balance out there for $75. I had to take pictures of the patio and email it to him. I worked with Pete O'Connor until everything was taken care of. Then I received an email on April 10 from Paul, which I will forward to you showing that the inspection was closed, and the permit was taken care of. From April 3, the date of the invoice up until April 10 the date that I thought everything was taken care of Pete or Connor or Paul or Eric. No one had told me about any $75 reinspection fee that was still pending. When a customer pays a balance and they receive an email showing that the case was closed , I assumed everything was taken care of on April 10, 2023. I will forward you an email from their inspection department showing that the inspection was closed. Why would they close the inspection case when there would be an outstanding balance for fees? When I called Pete O'Connor after I got the invoice from April 3, 2023 and he walked me through how to take care of this, why wasn't I informed of the reinspection fee of $75? If I would've known that there was a reinspection fee for $75, I would've taken care of it when I worked with Pete O'Connor in April 2023.

We have not heard anything since April 10, 2023. We now receive an invoice statement date October 10, 2023 showing that we owe $300. The statement shows for reinspection fees each for $75. One on April 3 one on April 4 one on April 5 and one on April 6. When I was talking with Pete O'Connor regarding the invoice that I received on April 3 he never informed me of a reinspection fee that was $75 for the dates of April 3, April 4, April 5 and April 6. Plus when I received an email from Paul Van Callister. He also never informed me of any outstanding ballast for any reinspection fees totaling $300. The person from the city of Green Bay was only at our residence in October 2022 I work from home and I am here every day. My office faces the driveway so I am aware of everyone that comes to our house. No one from the city of Green Bay has come to our residence since October 2022 so we are confused as to the reinspection fee dates of April 3, April 4, April 5, and April 6.

I will forward you every email that I have showing the work that I did when I received this invoice from April 3 of 2023.

Following this email, I will forward you all the emails that I have saved.

Thank you so much in advance for your help. My phone number is 920-619-1294.

Jaime Fuge

From: Patti Zawacki <pattizawacki@gmail.com>
Sent: Tuesday, October 17, 2023 10:34 PM
To: Michael Zawacki; Patti Zawacki; ClerksFrontDesk
Subject: Appealing the re-inspection fee

Follow Up Flag: Follow up
Flag Status: Flagged

Hi, I would like to add one more email.

A similar example of the situation would be if you had a credit card payment that you forgot to pay. When you call the credit card company to make the payment, they take your payment and tell you that your balance is zero. they then would send you a statement showing that your balance is zero at the time that they received your payment. Then six months later you get a bill in the mail showing that you had a late fee however, when you originally called the credit card company to set up the payment And take care of everything they didn't notify you of the late fee at that time. This is what has happened to us in this situation with the city of Green Bay inspection department when I called that department and they helped me through the process to pay everything off not anyone that I worked with notified me of any reinspection fee in April when I received an email on April 10 showing that everything was taken care of I assumed everything was good.

I would have paid the reinspection fee in April had I've been notified of that. I thought that when I called that department and they told me everything I had to do, I thought everything would've been taken care of. I never had to get a permit before and I do not know the process.

Thank you for your time,

Patti Zawacki

Jaime Fuge 4/5/2023 3:47PM

From: Patti Zawacki <pattizawacki@gmail.com>
Sent: Tuesday, October 17, 2023 5:28 PM
To: ClerksFrontDesk
Subject: Fwd: Online Form Submittal: Building Permit Application Short Form

---------- Forwarded message ---------
From: <noreply@civicplus.com>
Date: Wed, Apr 5, 2023 at 3:47 PM
Subject: Online Form Submittal: Building Permit Application Short Form
To: <pattizawacki@gmail.com>

Building Permit Application Short Form

Project Address	1509 CREEKSIDE LN

Property Owner Contact Information

Name	Michael Zawacki
Address	1509 CREEKSIDE LN
City	GREEN BAY
State	WI
Zip Code	54311-7351
Phone Number	9206191295
Email Address	pattizawacki@gmail.com

Contractor Information

If the homeowner is completing the work, fill in homeowners information again or NA.

Company Name	Pete Ermis
Contact Person	Pete Ermis
Address	na
City	OCONTO FALLS
State	WI

Zip Code	54154
Phone Number	7158500370
Email Address	NA
	(Section Break)
Property Owner - Do you own and occupy the above listed property?	No
Current Land Use	1-Family
Project Scope	Patio
Driveway Permitting Guide	Driveway Permitting Guide
Shed Permitting Guide	Shed Permitting Guide
Patio Permitting Guide	Patio Permitting Guide
Fence Permitting Guide	Fence Permitting Guide
Fence Height	0
Fence Material	*Field not completed.*
Total Length of Fence Materials:	*Field not completed.*
Bonded Sidewalk Contractors	Sidewalk Builder PDF
Electrical Permit Application (if applicable)	Homeowner's Application for Electrical Permit
Electrical Permit Application (if applicable)	Licensed Contractor Electrical Permit Application
Estimated Cost of Construction	4800
Description of Project	PATIO SLAB

SITE PLAN SUBMITTAL IS REQUIRED FOR FENCES, DRIVEWAYS AND SHEDS

Please include a site plan of the project. Use the upload button to attach the file. Submittals can be scanned documents or digital photos of plans as long as the photos are legible.

Site Plan Example	Site Plan Example

SHEDS

Sheds also require a building plan. The building plan can be from the manufacturer of the shed if it is pre-manufactured or drawn by the owner or contractor.

Site Plan Upload	patio.pdf
Shed Building Plan Upload	*Field not completed.*
Other Trade Permit Applications Upload	*Field not completed.*
Other Documentation Upload	patio_1.pdf

EROSION AND SEDIMENT CONTROL NON-PERMITTED CONDITIONS

Per 16-38 PERFORMANCE STANDARDS FOR CONSTRUCTION SITES NOT REQUIRED TO BE PERMITTED.

(a) Responsible party. The landowner of the construction site or other person contracted or obligated by other agreement with the landowner to implement and maintain construction site BMPs is the responsible party and shall comply with this section.

(b) Erosion and sediment control practices. Erosion and sediment control practices at each site where land disturbing construction activity is to occur shall be used to prevent or reduce all of the following:

(1) The deposition of soil from being tracked onto streets by vehicles.

(2) The discharge of sediment from disturbed areas into on-site stormwater inlets.

(3) The discharge of sediment from disturbed areas into adjacent waters of the state.

(4) The discharge of sediment from drainage ways that flow off the site.

(5) The discharge of sediment by dewatering activities.

(6) The discharge of sediment eroding from soil stockpiles existing for more than seven days.

(7) The transport by runoff into waters of the state of chemicals, cement, and other building compounds and materials on the construction site during the construction period. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this section.

(c) Location. The BMPs shall be located so that treatment occurs before runoff enters waters of the state.

(d) Implementation. The BMPs used to comply with this section shall be implemented as follows:

(1) Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin.

(2) Erosion and sediment control practices shall be maintained until final stabilization.

(3) Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.

(4) Temporary stabilization activity shall commence when land disturbing activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.

(5) BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

The applicant certifies that the information submitted herein is accurate, agrees to comply with the WI Admin. Code, Municipal Ordinance, and with the conditions of this permit, and understands that permit issuance creates no legal liability, expressed or implied, on the Department or Municipality.

Electronic Signature Agreement	I agree.
Electronic Signature	Michael Zawacki

FINAL INSPECTIONS ARE REQUIRED FOR ALL PROJECTS.

April 6 at 1:40 P.M.

Jaime Fuge

From: Patti Zawacki <pattizawacki@gmail.com>
Sent: Tuesday, October 17, 2023 5:29 PM
To: ClerksFrontDesk
Subject: Fwd: PROJECT PATIO 112136
Attachments: patio.pdf

---------- Forwarded message ---------
From: **Patti Zawacki** <pattizawacki@gmail.com>
Date: Thu, Apr 6, 2023 at 1:40 PM
Subject: Fwd: PROJECT PATIO 112136
To: Pete O'Connor <Pete.OConnor@greenbaywi.gov>

Here is what we submitted online yesterday

---------- Forwarded message ---------
From: **Zawacki, Patricia** <ZawackiP@schneider.com>
Date: Thu, Apr 6, 2023 at 1:39 PM
Subject: PROJECT PATIO 112136
To: Patti Zawacki <pattizawacki@gmail.com>

patio.pdf

File Message Help Tell me what you want to do

Ignore Junk Delete Archive — Delete

Reply Reply All Forward — Respond

Share to Teams — Teams

EDMS Team Email Reply & Delete To Manager Done Create New — Quick Steps

M

(no subject)

MM Michael Zawacki <zawacki73@gmail.com>

To Zawacki, Patricia

April 6, 2023 2:36 PM

Jaime Fuge

From: Patti Zawacki <pattizawacki@gmail.com>
Sent: Tuesday, October 17, 2023 5:29 PM
To: ClerksFrontDesk
Subject: Fwd: 1509 CREEKSIDE LN - PATIO - PROJ # 112136 Pay req

---------- Forwarded message ---------
From: **Patti Zawacki** <pattizawacki@gmail.com>
Date: Thu, Apr 6, 2023 at 2:36 PM
Subject: Re: 1509 CREEKSIDE LN - PATIO - PROJ # 112136 Pay req
To: Pete O'Connor <Pete.OConnor@greenbaywi.gov>

Hi Pete, thank you for your help today. I just paid the payment. Attached is a copy of proof of the payment going through. Eric also called me and told me that I need to schedule another inspection. Do I do that through you?

2:35

allpaid

7820 Innovation Boulevard, Suite 250, Indianapolis, IN 46278 |
Customer Service: 1-888-604-7888

Payment Confirmation

AllPaid! Your transaction was successful. An autom
notice of payment has been sent to **City of Green B
Dept of Community and Economic Development
Agency Payments, Building Permits and Fees**. You
next statement will show the total amount of your
payment plus any processing fee(s).

On Thu, Apr 6, 2023 at 1:16 PM Pete O'Connor <Pete.OConnor@greenbaywi.gov> wrote:

Michael,

Thank you for the submittal, The payment is $100.00 for project #112136. Please follow the online payment instructions that I have attached. Once you pay, please let us know. Please use attached overview or like method to submit a drawing showing the location and size of the patio. Thank you,

Pete O'Connor

Site Plan Administrator/Building Inspector

City of Green Bay

Community & Economic Development Department

920.448.3295

greenbaywi.gov

From: Erik Wasilewski <Erik.Wasilewski@greenbaywi.gov>
Sent: Thursday, April 06, 2023 9:23 AM
To: Pete O'Connor <Pete.OConnor@greenbaywi.gov>
Subject: Fwd: 1509 CREEKSIDE LN - PATIO - PROJ # 112136

Sent from my iPhone

Begin forwarded message:

> **From:** Ali Hearley <Ali.Hearley@greenbaywi.gov>
> **Date:** April 5, 2023 at 4:12:23 PM CDT
> **To:** Erik Wasilewski <Erik.Wasilewski@greenbaywi.gov>
> **Subject:** **1509 CREEKSIDE LN - PATIO - PROJ # 112136**

Ali Hearley

Administrative Clerk

City of Green Bay

Department of Community and Economic Development

(p) 920.448.3300

(f) 920.448.3426

Ali.Hearley@greenbaywi.gov

www.greenbaywi.gov

From: noreply@civicplus.com <noreply@civicplus.com>
Sent: Wednesday, April 5, 2023 3:48 PM
To: Inspection Website Mail <InspectionWebsiteMail@greenbaywi.gov>
Subject: Online Form Submittal: Building Permit Application Short Form

Building Permit Application Short Form

Project Address	1509 CREEKSIDE LN
Property Owner Contact Information	
Name	Michael Zawacki
Address	1509 CREEKSIDE LN
City	GREEN BAY
State	WI
Zip Code	54311-7351
Phone Number	9206191295
Email Address	pattizawacki@gmail.com

Contractor Information
If the homeowner is completing the work, fill in homeowners information again or NA.

Company Name	Pete Ermis
Contact Person	Pete Ermis
Address	na
City	OCONTO FALLS
State	WI
Zip Code	54154
Phone Number	7158500370
Email Address	NA
	(Section Break)
Property Owner - Do you own and occupy the above listed property?	No
Current Land Use	1-Family
Project Scope	Patio
Driveway Permitting Guide	Driveway Permitting Guide
Shed Permitting Guide	Shed Permitting Guide
Patio Permitting Guide	Patio Permitting Guide
Fence Permitting Guide	Fence Permitting Guide
Fence Height	0
Fence Material	*Field not completed.*
Total Length of Fence Materials:	*Field not completed.*
Bonded Sidewalk Contractors	Sidewalk Builder PDF
Electrical Permit Application (if applicable)	Homeowner's Application for Electrical Permit
Electrical Permit Application (if applicable)	Licensed Contractor Electrical Permit Application
Estimated Cost of Construction	4800

Description of Project	PATIO SLAB

SITE PLAN SUBMITTAL IS REQUIRED FOR FENCES, DRIVEWAYS AND SHEDS

Please include a site plan of the project. Use the upload button to attach the file. Submittals can be scanned documents or digital photos of plans as long as the photos are legible.

Site Plan Example	Site Plan Example

SHEDS

Sheds also require a building plan. The building plan can be from the manufacturer of the shed if it is pre-manufactured or drawn by the owner or contractor.

Site Plan Upload	patio.pdf
Shed Building Plan Upload	*Field not completed.*
Other Trade Permit Applications Upload	*Field not completed.*
Other Documentation Upload	patio_1.pdf

EROSION AND SEDIMENT CONTROL NON-PERMITTED CONDITIONS

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(2) The discharge of sediment from disturbed areas into on-site stormwater inlets.

(3) The discharge of sediment from disturbed areas into adjacent waters of the state.

(4) The discharge of sediment from drainage ways that flow off the site.

(5) The discharge of sediment by dewatering activities.

(6) The discharge of sediment eroding from soil stockpiles existing for more than seven days.

(7) The transport by runoff into waters of the state of chemicals, cement, and other building compounds and materials on the construction site during the construction period. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this section.

(c) Location. The BMPs shall be located so that treatment occurs before runoff enters waters of the state.

(d) Implementation. The BMPs used to comply with this section shall be implemented as follows:

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(2) Erosion and sediment control practices shall be maintained until final stabilization.

(3) Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.

(4) Temporary stabilization activity shall commence when land disturbing activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.

(5) BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

The applicant certifies that the information submitted herein is accurate, agrees to comply with the WI Admin. Code, Municipal Ordinance, and with the conditions of this permit, and understands that permit issuance creates no legal liability, expressed or implied, on the Department or Municipality.

Electronic Signature Agreement	I agree.
Electronic Signature	Michael Zawacki

FINAL INSPECTIONS ARE REQUIRED FOR ALL PROJECTS.

Email not displaying correctly? View it in your browser.

Jaime Fuge 4-10-2023 5PM

From: Patti Zawacki <pattizawacki@gmail.com>
Sent: Tuesday, October 17, 2023 5:30 PM
To: ClerksFrontDesk
Subject: Fwd: Permit (112136- 1509 CREEKSIDE LN) - COMPLETED AND CLOSED - NOT SPAM, PLEASE DO NOT DELETE

---------- Forwarded message ---------
From: <inspmail@greenbaywi.gov>
Date: Mon, Apr 10, 2023 at 5:00 PM
Subject: Permit (112136- 1509 CREEKSIDE LN) - COMPLETED AND CLOSED - NOT SPAM, PLEASE DO NOT DELETE
To: <PATTIZAWACKI@gmail.com>

This email is to confirm that your permit referenced above has been closed. Required inspections have been performed and signed off by City of Green Bay Inspectors.

On behalf of the Inspection Division, thank you for taking out the permit and requesting required inspections. We look forward to working with you again in the future.

Paul Van Calster, P.E.
Chief Building Official
paulvc@greenbaywi.gov

Department of Community and Economic Development
100 North Jefferson Street Green Bay, WI 54301
Green Bay, Wisconsin 54301
Office 920-448-3299
Fax 920-448-3426
www.greenbaywi.gov

4/10/2023 5pm

Jaime Fuge

From: Patti Zawacki <pattizawacki@gmail.com>
Sent: Tuesday, October 17, 2023 5:32 PM
To: ClerksFrontDesk
Subject: Fwd: Permit (112136- 1509 CREEKSIDE LN) - COMPLETED AND CLOSED - NOT SPAM, PLEASE DO NOT DELETE

This email shows the inspections have been performed, and everything has been closed. I was never notified that there was any outstanding balance for any reinspection fees.

---------- Forwarded message ---------
From: **Patti Zawacki** <pattizawacki@gmail.com>
Date: Tue, Oct 17, 2023 at 5:30 PM
Subject: Fwd: Permit (112136- 1509 CREEKSIDE LN) - COMPLETED AND CLOSED - NOT SPAM, PLEASE DO NOT DELETE
To: <clerk@greenbaywi.gov>

---------- Forwarded message ---------
From: <inspmail@greenbaywi.gov>
Date: Mon, Apr 10, 2023 at 5:00 PM
Subject: Permit (112136- 1509 CREEKSIDE LN) - COMPLETED AND CLOSED - NOT SPAM, PLEASE DO NOT DELETE
To: <PATTIZAWACKI@gmail.com>

This email is to confirm that your permit referenced above has been closed. Required inspections have been performed and signed off by City of Green Bay Inspectors.

On behalf of the Inspection Division, thank you for taking out the permit and requesting required inspections. We look forward to working with you again in the future.

Paul Van Calster, P.E.
Chief Building Official
paulvc@greenbaywi.gov

Department of Community and Economic Development
100 North Jefferson Street Green Bay, WI 54301
Green Bay, Wisconsin 54301
Office 920-448-3299
Fax 920-448-3426
www.greenbaywi.gov

4/7/2023 10:01 AM

Jaime Fuge

From:	Patti Zawacki <pattizawacki@gmail.com>
Sent:	Tuesday, October 17, 2023 5:30 PM
To:	ClerksFrontDesk
Subject:	Fwd: 1509 CREEKSIDE LN - PATIO - PROJ # 112136 Pay req
Attachments:	BuildingPermit2023040601073500.pdf
Follow Up Flag:	Follow up
Flag Status:	Flagged

---------- Forwarded message ---------
From: **Ali Hearley** <Ali.Hearley@greenbaywi.gov>
Date: Fri, Apr 7, 2023 at 10:01 AM
Subject: RE: 1509 CREEKSIDE LN - PATIO - PROJ # 112136 Pay req
To: pattizawacki@gmail.com <pattizawacki@gmail.com>

Thank you for obtaining a building permit for your **PATIO** project at **1509 CREEKSIDE LANE** with a project number of **112136** in the City of Green Bay. Please review below some general information we would like to share with you regarding your permit:

INSPECTIONS ARE REQUIRED FOR ALL PERMITS.

- To schedule an inspection:
  - Https://greenbaywi.gov/ScheduleInspection
  - Call the Department of Community and Economic Development at (920) 448-3300 between 8:00 am and 4:30 pm Monday through Friday.

- The above-referenced project number is required when scheduling inspections or corresponding with our office.

- The permit is valid for one year to complete your project; however, work must start within six months of the issuance date. If work does not start within six months, you must notify our office.

You will periodically receive automated emails from us as a reminder that your project is still open and inspections need to be scheduled. These emails will continue until final inspections are completed and the project is closed.

Please do not hesitate to contact our office with any questions you may have.

Thank you!

Ali Hearley

Administrative Clerk

City of Green Bay

Department of Community and Economic Development

(p) 920.448.3300

(f) 920.448.3426

Ali.Hearley@greenbaywi.gov

www.greenbaywi.gov

From: Pete O'Connor <Pete.OConnor@greenbaywi.gov>
Sent: Thursday, April 6, 2023 1:16 PM
To: pattizawacki@gmail.com
Cc: Erik Wasilewski <Erik.Wasilewski@greenbaywi.gov>; Ali Hearley <Ali.Hearley@greenbaywi.gov>; Edith Vazquez <Edith.Vazquez@greenbaywi.gov>; Pete O'Connor <Pete.OConnor@greenbaywi.gov>
Subject: 1509 CREEKSIDE LN - PATIO - PROJ # 112136 Pay req

Michael,

Thank you for the submittal, The payment is $100.00 for project #112136. Please follow the online payment instructions that I have attached. Once you pay, please let us know. Please use attached overview or like method to submit a drawing showing the location and size of the patio. Thank you,

Pete O'Connor

Site Plan Administrator/Building Inspector

City of Green Bay

Community & Economic Development Department

920.448.3295

greenbaywi.gov

From: Erik Wasilewski <Erik.Wasilewski@greenbaywi.gov>
Sent: Thursday, April 06, 2023 9:23 AM
To: Pete O'Connor <Pete.OConnor@greenbaywi.gov>
Subject: Fwd: 1509 CREEKSIDE LN - PATIO - PROJ # 112136

Sent from my iPhone

Begin forwarded message:

From: Ali Hearley <Ali.Hearley@greenbaywi.gov>
Date: April 5, 2023 at 4:12:23 PM CDT
To: Erik Wasilewski <Erik.Wasilewski@greenbaywi.gov>
Subject: **1509 CREEKSIDE LN - PATIO - PROJ # 112136**

Ali Hearley

Administrative Clerk

City of Green Bay

Department of Community and Economic Development

(p) 920.448.3300

(f) 920.448.3426

Ali.Hearley@greenbaywi.gov

www.greenbaywi.gov

From: noreply@civicplus.com <noreply@civicplus.com>
Sent: Wednesday, April 5, 2023 3:48 PM
To: Inspection Website Mail <InspectionWebsiteMail@greenbaywi.gov>
Subject: Online Form Submittal: Building Permit Application Short Form

Building Permit Application Short Form

Project Address	1509 CREEKSIDE LN

Property Owner Contact Information

Name	Michael Zawacki
Address	1509 CREEKSIDE LN
City	GREEN BAY
State	WI
Zip Code	54311-7351
Phone Number	9206191295
Email Address	pattizawacki@gmail.com

Contractor Information

If the homeowner is completing the work, fill in homeowners information again or NA.

Company Name	Pete Ermis
Contact Person	Pete Ermis
Address	na
City	OCONTO FALLS
State	WI
Zip Code	54154
Phone Number	7158500370
Email Address	NA

(Section Break)

Property Owner - Do you own and occupy the above listed property?	No
Current Land Use	1-Family
Project Scope	Patio
Driveway Permitting Guide	Driveway Permitting Guide

Shed Permitting Guide	Shed Permitting Guide
Patio Permitting Guide	Patio Permitting Guide
Fence Permitting Guide	Fence Permitting Guide
Fence Height	0
Fence Material	*Field not completed.*
Total Length of Fence Materials:	*Field not completed.*
Bonded Sidewalk Contractors	Sidewalk Builder PDF
Electrical Permit Application (if applicable)	Homeowner's Application for Electrical Permit
Electrical Permit Application (if applicable)	Licensed Contractor Electrical Permit Application
Estimated Cost of Construction	4800
Description of Project	PATIO SLAB

SITE PLAN SUBMITTAL IS REQUIRED FOR FENCES, DRIVEWAYS AND SHEDS

Please include a site plan of the project. Use the upload button to attach the file. Submittals can be scanned documents or digital photos of plans as long as the photos are legible.

Site Plan Example	Site Plan Example

SHEDS

Sheds also require a building plan. The building plan can be from the manufacturer of the shed if it is pre-manufactured or drawn by the owner or contractor.

Site Plan Upload	patio.pdf
Shed Building Plan Upload	*Field not completed.*
Other Trade Permit Applications Upload	*Field not completed.*
Other Documentation Upload	patio_1.pdf

EROSION AND SEDIMENT CONTROL NON-PERMITTED CONDITIONS

Per 16-38 PERFORMANCE STANDARDS FOR CONSTRUCTION SITES NOT REQUIRED TO BE PERMITTED.

(a) Responsible party. The landowner of the construction site or other person contracted or obligated by other agreement with the landowner to implement and maintain construction site BMPs is the responsible party and shall comply with this section.

(b) Erosion and sediment control practices. Erosion and sediment control practices at each site where land disturbing construction activity is to occur shall be used to prevent or reduce all of the following:

(1) The deposition of soil from being tracked onto streets by vehicles.

(2) The discharge of sediment from disturbed areas into on-site stormwater inlets.

(3) The discharge of sediment from disturbed areas into adjacent waters of the state.

(4) The discharge of sediment from drainage ways that flow off the site.

(5) The discharge of sediment by dewatering activities.

(6) The discharge of sediment eroding from soil stockpiles existing for more than seven days.

(7) The transport by runoff into waters of the state of chemicals, cement, and other building compounds and materials on the construction site during the construction period. However, projects that require the placement of these materials in waters of the state, such as constructing bridge footings or BMP installations, are not prohibited by this section.

(c) Location. The BMPs shall be located so that treatment occurs before runoff enters waters of the state.

(d) Implementation. The BMPs used to comply with this section shall be implemented as follows:

(1) Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin.

(2) Erosion and sediment control practices shall be maintained until final stabilization.

(3) Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.

(4) Temporary stabilization activity shall commence when land disturbing activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.

(5) BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

The applicant certifies that the information submitted herein is accurate, agrees to comply with the WI Admin. Code, Municipal Ordinance, and with the conditions of this permit, and understands that permit issuance creates no legal liability, expressed or implied, on the Department or Municipality.

Electronic Signature Agreement	I agree.
Electronic Signature	Michael Zawacki

FINAL INSPECTIONS ARE REQUIRED FOR ALL PROJECTS.

Email not displaying correctly? View it in your browser.

Building Permit 20230406010735000.pdf

TO SCHEDULE INSPECTIONS CALL (920) 448-3300 BETWEEN 8:00 AM AND 4:00 PM AT LEAST ONE BUSINESS DAY PRIOR TO INSPECTION DATE NEEDED.

DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

It shall be unlawful to conceal or proceed with any part of the work on this building until official approval has been given.

THE FOLLOWING INSPECTIONS ARE REQUIRED:

Bldg: ☐ Footing ☐ Rough In/Framing
☐ Foundation/Wall ☐ Insulation
☐ Tar/Tile/Stone ☒ Final
Hvac: ☐ Rough In ☐ Final
Elec: ☐ Service ☐ Rough In ☐ Final
Plbg: ☐ Sewer ☐ Groundwork
☐ Rough In ☐ Final

THIS BUILDING PERMIT COVERS:

REAR YARD PATIO

PERMIT EXPIRES: 04/06/2024

Please be advised that any work within or around the right-of-way that would affect a public tree may be subject to fees as outlined by the City of Green Bay Tree and Stump Removal Policy.

IT IS UNLAWFUL TO COMMENCE WORK BEFORE THIS CERTIFICATE IS PLACED IN A CONSPICUOUS PLACE ON THE PREMISES

THIS CERTIFIES THAT A

BUILDING PERMIT

HAS BEEN ISSUED TO
MICHAEL H ZAWACKI

Authorizing such building, repairing, or remodeling as shown in the application, plans, and specifications on file in the office of the Building Inspector, City Hall, Green Bay, Wisconsin

Address: 1509 CREEKSIDE LN

Parcel # 21-5557 Project # 112136

Dated: 4/6/2023

PeteOc
BUILDING INSPECTOR

NOTICE: No wiring shall start until an electrical permit is obtained. An electrical permit signed by the owner or licensed electrical contractor is required before wiring can begin.

NOTICE: It is the general contractor's responsibility to schedule all applicable inspections.

Please post this permit in a window visible from the street when work commences and remove after final inspection has been approved.

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.2

To approve a request by Rocky'z Taqueria LLC at 1679 Main St. for an extension to the issuance of the "Class B" Liquor & Class "B" Beer license to December 20, 2023, due to new hood installation for the kitchen (License granted on 8/22/2023).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 1679 MAIN ST EXTENSION REQUEST
2. extension request form notice to attend-1679 main st

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.3

To approve a request by Family Dollar Stores of Wisconsin, LLC at 1285 Main St. for an extension to the issuance of a "Class A" Liquor and Class "A" Beer license to November 3, 2023, to allow more time to work on orders to get the store back in compliance. (License granted for the 2023-2024 license year at the June 6, 2023 Common Council Meeting).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 1285 MAIN ST. AND 550 N MILITARY NOTICE
2. 1285 MAIN ST EXTENSION REQUEST
3. LETTER TO SUBMIT REQUEST-24158
4. 550 N MILITARY & 1285 MAIN ST. NOTICE TO ATTEND

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.4

To approve a request by Family Dollar Stores of Wisconsin, LLC at 550 N Military Ave. for an extension to the issuance of a "Class A" Liquor and Class "A" Beer license to November 3, 2023, to allow more time to work on orders to get the store back in compliance. (License granted for the 2023-2024 license year at the June 6, 2023 Common Council Meeting).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 1285 MAIN ST. AND 550 N MILITARY NOTICE
2. 550 N MILITARY EXTENSION REQUEST 10.13.2023
3. LETTER TO SUBMIT REQUEST

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.5

To approve a request by Madrid Tapas, LLC at 225 E Walnut St. for an extension to the issuance of a "Class B" Liquor & Class "B" Beer license to December 2023 (License granted for the 2023-2024 license year at the June 27, 2023 for the 2023-2024 license year).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 225 E WALNUT CLASS B LIQUOR & BEER
2. LIQ LICENSE APPLICATION EXTENSION REQUEST

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.6

To approve a request by Legacy Green Bay, LLC at 1004 Brett Favre Pass for an extension to the issuance of a reserve "Class B" Liquor & Class "B" Beer license to November 22, 2023, due to delays in construction (previously anticipated opening was October 2023).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 1004 BRETT FAVRE PASS EXTENSION REQUEST

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.7

To approve a request by VIC Theatre Green Bay LLC at 217 E. Walnut for an extension to the issuance of a "Class B" Liquor and Class "B" Beer license to January 31, 2024 (Granted by Council at the August 22, 2023 Council meeting).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 217 E WALNUT EXTENSION REQUEST

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.8

To hold a "Class B" Liquor & Class "B" Beer license for Taste of the South on Wheels LLC at 114 S. Broadway with a license premises description as "behind bar, in kitchen, in basement," subject to the approval of the proper authorities (Filed June 30 and previously licensed as Green Dragon during the 22-23 license year).

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 114 S BROADWAY ORG APP
2. stipulation agreement .ROBINSONDA.558 114 S BROADWAY
3. BROADWAY MORATORIUM
4. Broadway Moratoruim 9-16-97
5. 114 S BROADWAY NOTICE TO ATTEND

Find a Parcel
Current Parcel: 3-105

112 S BROADWAY

(112-114 S BROADWAY, 114 S BROADWAY)
BOSLEY PROPERTIES LLC
3323 LARGO RIDGE RD GREEN BAY WI 54311

Zoning and Districts

Alt Boundary Electrical Inspector: **W**	Industrial: **N/A**	Community Development Block Grant Area: **CDBG**
SB621 Wards: **34**	Business Improvement District: **On Broadway, Inc**	Archeological: **N/A**
Opportunity Zone: **YES**	Wellhead Zoning: **N/A**	Historic District: **Broadway-Walnut**
Zoning: **D1 (Downtown One)**	Central Business District: **CBD**	Liquor Moratorium Area: **BROADWAY**
Conditional Use Zoning: **N/A**	Development Districts: **N/A**	Neighborhood Association: **Seymour Park**
Planned Unit Development Zoning: **PUD**	Tax Increment Finance District: **5**	

Flood

RESOLUTION LIMITING THE NUMBER OF
LICENSED ESTABLISHMENTS IN THE BROADWAY AREA

Green Bay, Wisconsin
September 16, 1997

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY:

WHEREAS, the Common Council of the City of Green Bay is concerned with the redevelopment of the Broadway area and the present high concentration of licensed establishments in the Broadway area. The high concentration of these establishments in this area has impaired the public peace, safety, welfare, and order; and

WHEREAS, there are currently 34 establishments which hold a Class "B" Fermented Malt Beverage or Class "B" Combination Liquor License. The names and addresses of said establishments are:

Lenny's Tap	431 North Broadway
333 Bar	333 North Broadway
Blazing Saddles	331 North Broadway
The Cannery	319 North Broadway
King's X	313 North Broadway
Titletown Brewing	200 Dousman Street
Carol's Ritz Lounge	119 Dousman Street
Nom's Thai Orchid	240 North Broadway
Central Bar	231 North Broadway
Broadway Cafe	128 North Broadway
Rev's Brass Rail	109 North Broadway
West Pitcher Show	100 South Broadway
Maria's Mexican Family Restaurant	106 South Broadway
Ginny's Heart of Broadway	112 South Broadway
Connie's	128 South Broadway
Country Club Bar & Grill	201 South Broadway
Kar's Place	226 South Broadway
Alamo	301 South Broadway
Nepalese Lounge	515 South Broadway
Blue Side	709 South Broadway
Shnicker's	813 South Broadway
Bourbon Street	821 South Broadway
Sass	840 South Broadway
The Lion's Den	1100 South Broadway
Carol's 9th Street Tap	316 Ninth Street
The Camelot	1301 South Broadway
Manci's Tuxedo Lounge	1313 South Broadway
Good Times	1332 South Broadway
The Packer Stadium Lounge	1342 South Broadway
Terminal Bar	1423 South Broadway

Hammer Inn	1208 State Street
Thirsty's	1234 State Street
Loch's Bar	1238 State Street
Cropsey's Bar	1336 State Street

WHEREAS, pursuant to the powers reserved under Ch. 125, Wis. Stats., the Common Council wishes to decrease the number of Class "B" Fermented Malt Beverage and Class "B" Combination Liquor Licenses issued to establishments in the Broadway area; and

WHEREAS, it is the intent of this resolution to allow the present Class "B" Fermented Malt Beverage and Class "B" Combination Liquor Licenses to maintain and renew their establishments in accordance with Ch. 125, Wis. Stats.; and

WHEREAS, it is the intent of this Resolution to effectuate a decrease in the number of Class "B" Fermented Malt Beverage and Class "B" Combination Liquor licensed establishments in the limitation area whenever an establishment goes out of business and does not renew its license;

NOW, THEREFORE, BE IT RESOLVED as follows:

1. Limitation Area. The area to which the terms and conditions of this section apply is that area on Broadway or business fronting either side of Broadway and those areas east of Broadway to the Fox River, within the city of Green Bay, Brown County, Wisconsin.

2. Prohibition. The Common Council shall not authorize the issuance of any new or transfer of any existing Class "B" Fermented Malt Beverage or Class "B" Combination Liquor Licenses within the limitation area, except restaurants as defined in paragraph 4 hereof.

3. Exceptions.

   a. This subsection shall not prohibit the renewal of a Class "B" Fermented Malt Beverage or Class "B" Combination Liquor License for an existing premises in the limitation area.

b. This subsection shall not prohibit the issuance of a Class "B" Fermented Malt Beverage or Class "B" Combination Liquor License for a previously licensed premises provided that such application is made within 60 days of any of the following:

i. Surrender by the prior licensee of the license issued for that premises; or

ii. Sale of the premises by the prior licensee; or

iii. Termination of the prior licensee's lease for the premises; or

iv. Revocation of the prior license, for cause.

If application under this subsection is sought after 60 days, the owner of the previously licensed premises may apply to the Protection and Welfare Committee for an extension of the application time on the basis that application of the moratorium would have a substantial adverse effect on the owner's ability to use or enjoy the property. The party requesting the extension must demonstrate this effect by clear, satisfactory and convincing evidence.

c. All applications and renewals shall be subject to review as provided by Ch. 125, Wis. Stats.

4. Prohibition Not to Apply to Restaurants.

a. This resolution shall not prohibit the issuance of a Class "B" Fermented Malt Beverage or Class "B" Combination Liquor License to the operator of a restaurant, where the principal business conducted is that of a restaurant, as defined in Ch. 125, Wis. Stats. If the premises are operated under a Class "B" Fermented Malt Beverage or Class "B" Combination Liquor License, the principal business conducted is presumed to be the sale of alcohol beverages, but the presumption may be rebutted by competent evidence.

b. A restaurant licensee operating within the limitation area which fails to maintain a principal business of operating a restaurant at any time later than 60 days after the granting of a Class "B" Fermented Malt Beverage or Class "B" Combination Liquor License shall be in violation of this subsection and its Class "B" Fermented Malt Beverage or Class "B" Combination Liquor License shall be subject to revocation.

c. "Principal business" means the primary activity as determined by analyzing the amount of capital, labor, time, attention and floor space devoted to each business activity, and by analyzing the sources of net income and gross income. The name, appearance and advertisement of the entity may also be taken into consideration in determining "principal business."

Adopted 9/16/97

Approved 9/17/97

/s/ [signature]
Mayor

/s/ [signature]
Clerk

LMS:bc

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.9

Informational Only: Liquor Violation Report

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 23LiqVio
2. Report October 23 2023

2023 LIQUOR VIOLATIONS

Subject's Name	Tavern Name And Address	Date/Type Violation	Status of Case
Sukhjit (NMI) Singh 23-211395 2321139553401	Dousman Express 606 Dousman Street	Bartending without an Operator's License	Court Date: 5/4/23; Dismissed without Prejudice
Upinderjit (NMI) Singh 23-211395 W2023-534-012	Dousman Express 606 Dousman Street	No Licensed Operator on the Premises (Owner)	Issued Written Warning
Marco A. Vargas 23-211037 2321103772801	Dino Shell 1828 S Ashland Avenue	Bartending without an Operator's License	Court Date: 5/2/23; 5/3/23 Guilty by Default, $187
Marco A. Vargas 23-211037 2321103772802	Dino Shell 1828 S Ashland Avenue	Sale of Alcohol to Underage Person(s)	Court Date: 5/2/23; Guilty by Default, $502
Juan Perez Maldonado 23-210493 W2023-557-023	Taqueria Maldonado's 1706 Main Street	Violation of Stipulation/Agreement	Issued Written Warning
Fatehajeet (NMI) Singh 23-214991 2321499153401	Marathon Gas Station 610 E. Walnut St.	No Licensed Operator on the Premises (Owner)	Court Date: 05/24/23; Guilty by Default, $187
Fatehajeet (NMI) Singh 23-214991 2321499153402	Marathon Gas Station 610 E. Walnut St.	Violation of Stipulation/Agreement	Court Date: 05/24/23; Guilty by Default, $691
Shanta P. Jackson 23-214991 W2023-534-014	Marathon Gas Station 610 E. Walnut St.	Bartending without an Operator's License	Issued Written Warning
Keishia K. King 23-214991 W2023-534-013	Marathon Gas Station 610 E. Walnut St.	Bartending without an Operator's License	Issued Written Warning
Maxwell C. Barnowsky 23-246542 W2023-374-144	Black Saddle 201 N. Washington St.	No Licensed Operator on the Premises (Owner)	Issued Written Warning
Dylan J. Weires 23-246542 W2023-792-006	Black Saddle 201 N. Washington St.	Loitering in a Licensed Premises after Hours	Issued Written Warning
Dylan J. Weires 23-247371 2324737181401	Black Saddle 201 N. Washington St.	Disorderly Conduct	Court Date: 10/30/23
Nathaniel D. Maas 23-248994 2324899480801	Cock and Bull 1237 Main Street	Bartending without an Operator's License	Court Date: 11/6/23
Scott M. Opolka 23-248994 2324899480802	Cock and Bull 1237 Main Street	Bartending without an Operator's License	Court Date: 11/6/23

Kendra C. Willis **23-248994** **2324899480803**	**Cock and Bull** **1237 Main St.**	**Bartending without an Operator's License**	**Court Date: 11/6/23**

CITY OF GREEN BAY
POLICE DEPARTMENT

TO: **PROTECTION AND POLICY COMMITTEE**

FROM: **COMMUNITY POLICING**

DATE: **October 23, 2023**

From October 9, 2023, to October 23, 2023, there has been one written warning/ordinance violation, no liquor violations, no DA referrals and no property referrals.

On September 27, 2023, a written warning was issued to the bar owner, Jason E. Charles, of The Getaway Bar, at 631 Bellevue Street, for ordinance violation, Disorderly House/Failure to Maintain Order. Officers were notified of a possible disturbance earlier that morning when a hit and run crash was being investigated. Officers learned of a physical altercation that had occurred at bar close and the witness was told by the bar owner not to call the police.

Sincerely,

LT. STEVE MAHONEY & LT. ERIN BLOCH
DISTRICT POLICING

sp

Report to the
Protection and Policy Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # O.10

Informational Only: Clerk's Licensing Report.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 10.23.2023 CLERK'S OFFICE LIQUOR LICENSING REPORT

Clerk & Treasurer's Office
100 North Jefferson Street • Room 106
Green Bay, Wisconsin 54301-5026
clerk@greenbaywi.gov
www.greenbaywi.gov

Phone 920.448.3010
Fax 920.448.3016

Licenses granted by Council, not yet issued as of (10/19/2023):

License Type	Company Name	Trade Name	Address	Type	Approver
Class A Beer & Class A Liquor	FAMILY DOLLAR STORES OF WI	FAMILY DOLLAR	550 N MILITARY AV	Liquor License	Inspections, New License approved 6.6.23. Extension Filed 10.13.2023
Class A Beer & Class A Liquor	FAMILY DOLLAR STORES OF WI LLC	FAMILY DOLLAR	1285 MAIN ST	Liquor License	Inspections, New License approved 6.6.2023. Extension Filed 10.13.2023
Class B Liquor-Reserve & Class B Beer	LEGACY GREEN BAY, LLC	THE LEGACY HOTEL	1004 BRETT FAVRE PASS	Liquor License	Inspections, granted a waiver to open Oct. 2023. Extension Filed 10.17.2023.
Class B Beer & Class B Liquor	MADRID TAPAS AND WINE BAR LLC	MADRID TAPAS	225 E WALNUT ST	Liquor License	Inspections, Renewal EXTENSION FILED OCTOBER 13, 2023
Class B Beer& Class B Liquor	Rockyz Taqueria LLC	ROCKY'S TAQUERIA	1679 MAIN ST	Liquor License	Inspections, Payment Granted 8/22/23. Extension filed October 9, 2023.
Class "B" Beer & "Class B" Liquor	Vic Theatre Green Bay, LLC	Vic Theatre	217 E Walnut	Liquor License	Inspections, Payment Granted 8/22/23. Extension filed 10.18.23
Class "A" Beer & "Class A" Liquor	Sai Krupa LLC	Main Street Mobil	1792 Main St.	Liquor License	Inspections, Payment Granted 9/19/2023
Class "B" Beer & "Class B" Liquor	RBI Acquisitions, LLC	Riverside	1560 Main St.	Liquor License	Payment, Official Closing of 10/25/23. Granted 10.17.23
Class "B" Beer & "Class B" Liquor-Reserve	The Spices of Green Bay, LLC	Spices Restaurant & Bar	1860 University	Liquor License	Payment, Inspections Granted 10.17.23

Opening Delays? All liquor licenses are granted by Council with the intention a liquor license will be issued within 60 days. Please communicate, in writing, any opening-day delays to the Clerk's Office and provide a new anticipated opening date. Please review our Extension Request Fact Sheet for instructions. Then, fill out the Extension Request Form to file an issuance extension with the Clerk's Office.

Summary of Licenses Granted and Issued for Class "B" Beer & "Class B" Liquor Licenses:

The City of Green Bay has a quota of 172 available "Class B" Liquor and Class "B" Beer licenses under state law.

The Clerk's Office cannot take any more applications for available liquor licenses at this time.

The City granted 4 licenses that have not yet been issued (see page 1).

The City of Green Bay may only take the number of applications to the number of licenses available. Applications are considered to those who apply with a fully completed application and first in time.

Watch our video tutorial online on how to file a new application. The new application paperwork can be found at: https://greenbaywi.gov/264/Liquor-Sales---New-Establishments

Summary of Licenses Granted and Issued for Reserve Liquor Licenses:

The City of Green Bay has a quota of 32 Class B Combination Liquor and Beer Reserve licenses under state law.

The City of Green Bay has 2 Class B Combination Liquor and Beer Reserve issued.

The City of Green Bay has 2 granted "Class B" Liquor and Class "B" Beer license-Reserve that have not yet been issued.

A Reserve liquor license in the City of Green Bay costs $10,000 (one-time non-refundable issuance fee) plus the license fee prorated. The license shall not be transferred or surrendered.

REPORT OF THE PROTECTION AND POLICY COMMITTEE
GRANTING OPERATOR LICENSES
November 7, 2023

The Protection and Policy Committee wishes to request that the following applications for Operator Licenses be granted.
Stipulations placed on licenses shall continue to be in effect.

OPERATOR LICENSES

Alloway, Anthony T
Avery, Demetrius A
Baity, Jermaine A
Basnet, Yogendra
Behnke, Tracy L
Bellisle, Eleanor K
Bray, Savanna J
Bristol, Haley M
Buchanan, Latrishia A
Burkholder, Christine A
Burmeister, Madison R
Can, Tuna
Casey, Olivia R
Couillard, Camie R
Cress, Kaitlynn F
Crier, Lori L
Croxford, Dixie L.
Daoust, McKenzie L
Delain, Carl R
Delzer, Brianna M
Dwyer, Kristi R
Flores, Amber N
Garcia, Christian f
Garcia, Yesenia
Gaston, Julie L
Gauthier, Morgan L
Gehring, Grace P
Gersek, Corrine E
Griffore, Benjamin W
Gumtow, Melissa L.
Haupt, Tonya E
Jadin, Loryn A
Jamison, Kiirsti A
Jansen, Alexie
Kendrick, Elena J
Kilps, Spencer J
Koch, Morgan T
Leiteritz, Taylor N
Lugardo, Kane X
Martens, Grace A
Martinez, Gabriela
McDonell, Hailie RM
Mornard, Jordan L
Murrell, Shamika K
Mustafa, Muhammed U
Olson, Lindsay R
Ortiz, Jasmin I
Peters, Samantha M
Pillsbury, Adriana G
Powers, Jennifer C
Prescott, Amy M
Schlimm, Jessica A
Schwobe, Katelyn R
Singh, Sarrjeet
Skupas, Brianna L
Svoboda, Emily G
Swadley, Ryan D
Torres, Thalia I
Vandervest, Nicole E
Watermolen, Jessie L
Wilde-Johnson, Alexander G
Wohlleber, Margaret L
Yang, Nouchee T

Report to the
Green Bay Plan Commission

MEETING DATE	PREPARED BY
November 7, 2023	Dena Mooney, Staff

AGENDA ITEM # Q.1

To approve a request for a Conditional Use Permit at 1184 Shadow Lane (Parcel 1-2509) to allow a detached structure with a metal exterior finish exceeding 120 square feet in the Low Density Residential (R1) District. (Public Hearing held 10.23.2023)

BACKGROUND

Primary Address: 1184 Shadow Lane
Alderperson/District: Ald. Wery, District 8
Reason for Request: The proposed CUP would allow for a detached accessory structure with a metal exterior finish exceeding 120 square feet.

Surrounding Zoning and Land Uses:
SUBJECT: Low Density Residential (R1) Single-Family Home
NORTH: Low Density Residential (R1) Single-Family Homes
SOUTH: Low Density Residential (R1) Single-Family Homes
EAST: Low Density Residential (R1) Single-Family Homes
WEST: Low Density Residential (R1) Single-Family Homes

Comprehensive Plan: The 2022 Smart Growth Green Bay Comprehensive Plan currently recommends Low Density Residential. The home is a single-family home and the request to place a metal-sided accessory garage building is not relevant to the use recommendations of the Comprehensive Plan.

Report: Dale and Sandra Siewert, property owners, request that a 140 square foot (10'x14'), detached, metal-sided, accessory structure be allowed in the rear yard of their property.

Accessory uses are regulated through Article VI Residential Districts, Division 2 Accessory Uses. Section 44-590(c)(3) notes that "structures with a metal exterior finish exceeding 120 square feet shall be permitted only by conditional use permit."

The property owner installed a 140 square foot, detached, metal-sided, accessory structure in the rear of the property. They received a building permit for a 140 square foot wood and/or vinyl shed. When doing the final inspection on the structure, the building inspector noticed it was constructed with a metal exterior. Since metal siding was used, a conditional use permit (CUP) is needed. While not all metal outbuildings are appropriate in residential districts, the building inspector has commented to staff that he sees no issues with the quality of the construction or the materials.

Conditional use approval may be recommended by the Plan Commission with reasonable consideration of the following:

1. The establishment, maintenance, or operation of the conditional use will not be detrimental to or endanger the public health, safety, or general welfare. *Metal is of a higher quality and design/color than a*

typical sheet or corrugated metal shed and is compatible with homes and adjacent neighborhoods.

2. The establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district. *As it is not visible from the street, only 3-6 neighbors adjacent will be impacted.*
3. The conditional use, its exterior architectural design, and functional plan of any proposed structure will not be injurious to the use of other property in the immediate vicinity nor substantially diminish or impair property values within the surrounding neighborhood. *Only internally used and temporary structure in nature, so unlikely to impact values.*
4. Adequate utilities, access roads, drainage, and/or necessary facilities have been or are being provided. *N/A*
5. Adequate measures have been or will be taken to provide ingress and egress and so designed as to minimize traffic congestion. *N/A*
6. Adequate parking facilities as specified in Article XVIII of Section 44-83 within the Municipal Code. *N/A*
7. The conditional use shall, in all other respects, conform to the applicable regulations of the district in which it is located and all other applicable City ordinances. *City inspectors will monitor the structure as they do all others and issue orders to correct if it becomes overly rusted, dented or another form of disrepair.*

Staff supports the request as it complies with the CUP requirements. Ald. Wery and neighbors within 200 feet have been notified of the meeting based on Plan Commission policy. Ald. Wery has responded with his approval of the project. No other inquiries have been made as of the drafting of this report.

RECOMMENDATION

Approval of the request.

FISCAL IMPACT

ATTACHMENTS

1. ZP 23-40 Application
2. ZP 23-40 Map
3. ZP 23-40 Photos
4. APPROVED PLAN

REQUEST FOR CITY ACTION
PLAN COMMISSION

Community and Economic
Development Department
100 N. Jefferson Street, Rm 608
Green Bay, WI 54301-5026
(920) 448-3400 - phone
(920) 448-3426 - fax
www.greenbaywi.gov

Location of Property: 1184 Shadow Lane Green Bay, WI 54304

Parcel Number(s): Gaveras-Kapitz Subd, Lot 12 Parcel SD 1-2509

Petitioner(s): Dale P. & Sandra L. Siewert Date: 9/29/2023

Email: litecrazy@aol.com Phone Number: 920-362-4071

Address: 1184 Shadow Lane City: Green Bay State: WI Zip: 54304

Property Owner: Dale P & Sandra L Siewert Trust Phone Number: 920-362-4071

Submit this Request Form and all required attachments to the Community and Economic Development Department, Room 608, City Hall

To: Honorable Mayor and Common Council, c/o City Clerk

I, Dale P Siewert, respectfully request that the City of Green Bay take the following action:

- ☐ Rezone Property ($375.00 Review Fee)
- ☑ Conditional Use and CUP Amendment, including Single Lot Duplexes ($375.00 Review Fee)
- ☐ PUD and PUD Amendments ($425.00 Review Fee)
- ☐ Approve Preliminary City/Extraterritorial Subdivision Plat ($150.00 + $35.00 per Lot/Outlot Review Fee)
- ☐ Approve Preliminary Condominium Plat ($250.00 + $35.00 per Lot/Outlot/Lot Equivalent Review Fee)
- ☐ Approve Preliminary City/Extraterritorial Certified Survey Map ($250.00 Review Fee)
- ☐ Approve Final City/Extraterritorial Subdivision Plat ($150.00 Review Fee)
- ☐ Approve Final Condominium Plat ($150.00 Review Fee)
- ☐ Grant a City/Extraterritorial Subdivision/CSM Variance ($150.00 Review Fee)
- ☐ Development District Map Amendment ($200.00 Administration Fee)
- ☐ Official Map Amendment ($200.00 Administration Fee)
- ☐ Plat of Right-of-Way ($200.00 Administration Fee)
- ☐ Discontinue a Public Utility Easement ($200.00 Administration Fee)
- ☐ Street Name Change ($200.00 Administration Fee)
- ☐ Declare City Property "City Surplus" ($200.00 Administration Fee)
- ☐ Vacate a Street/Alley/Pedestrian Way ($300.00 Administration Fee) PLEASE FILL OUT PAGE 2 OF APPLICATION
- ☐ Closure of Street/Alley/Pedestrian Way ($300.00 Administration Fee) PLEASE FILL OUT PAGE 2 OF APPLICATION
- ☐ Comprehensive Plan Amendments ($275.00 Review Fee)
- ☐ Other ($200.00 Administration Fee): _____

Owner Signature: Dale P Siewert Date: 9/29/2023

Petitioner Signature(s): Sandra L Siewert Dale P Siewert

Checklist of required attachments:

- **Map**
- **Legal Description**
- **Applicant Narrative Describing Project**
- **All Other Pertinent Information**

For office use only:
Review Fee: $375.00 Receipt No.: 27642266-11 Zoning Petition No.: _____

Proposed CUP

200' Property Owner Notice

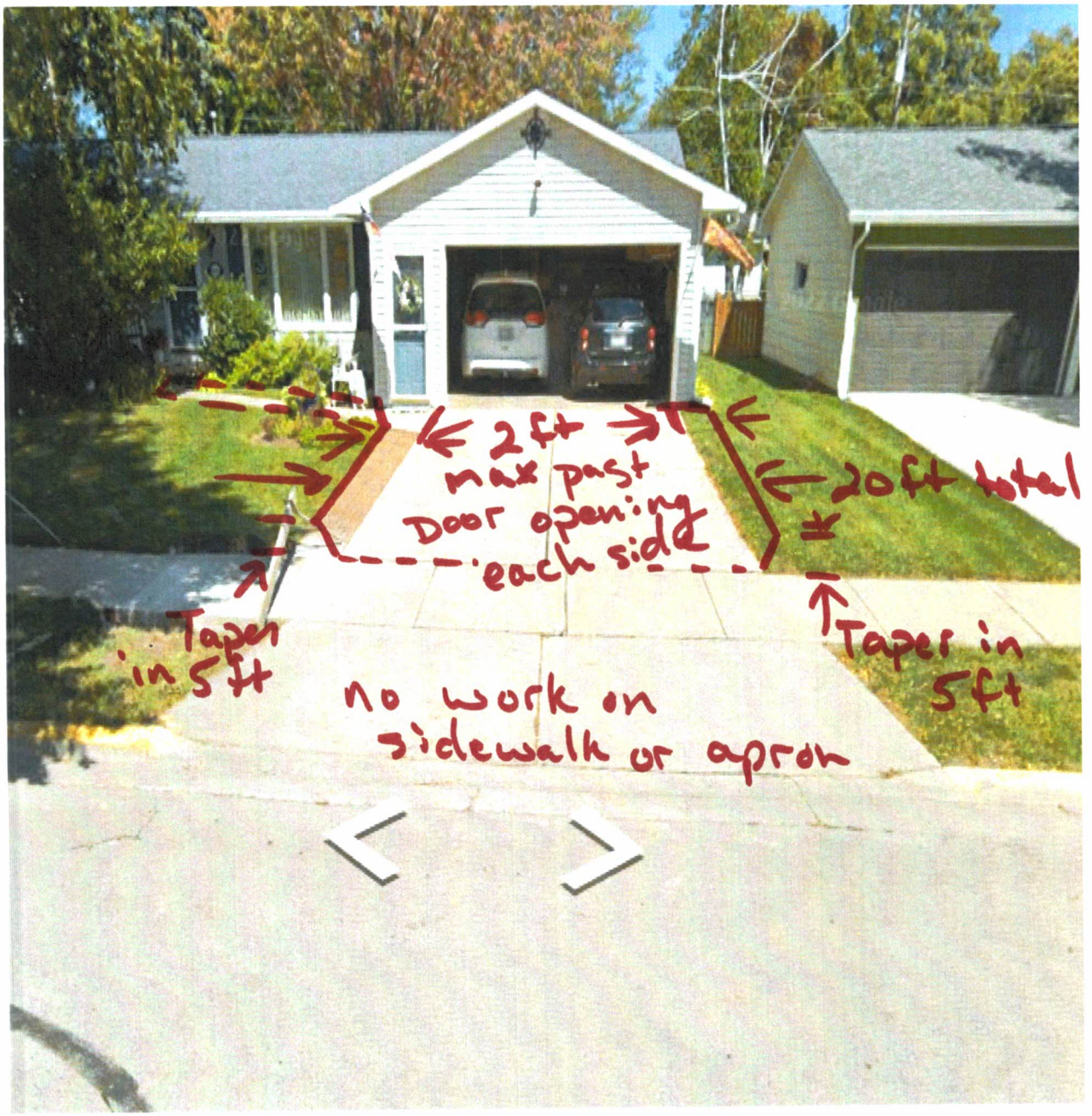
This is a compilation of records and data located in various City of Green Bay offices and is to be used for reference purposes only. The City of Green Bay is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied. Map prepared by DM.

Zoning Petition (ZP 23-40) Proposed Conditional Use Permit (CUP) at 1184 Shadow Lane

CITY OF GREEN BAY 1854 Titletown, USA

Accessory Structure at 1184 Shadow Lane

1184 Shadow ln P#113868



*call 811 to dig

Conditionally
APPROVED
BUILDING INSPECTION DIVISION
GREEN BAY, WISCONSIN
SEE CORRESPONDENCE
9/6/23

litecraz y@aol.com

10 x 14 lofted Garden Shed

* Shall be built in workman like manner
* Will stand 30 psf snow load
* 20 psf windload

GARAGE STRUCTURE LAYOUT

Department of Community and Economic Development
100 N. Jefferson Street, Rm. 608
Green Bay, WI 54301
(920) 448-3300 - phone
(920) 448-3426 - fax
inspmail@greenbaywi.gov

Date: 8/17/23

Contractor Name: Curb'n Decor LLC

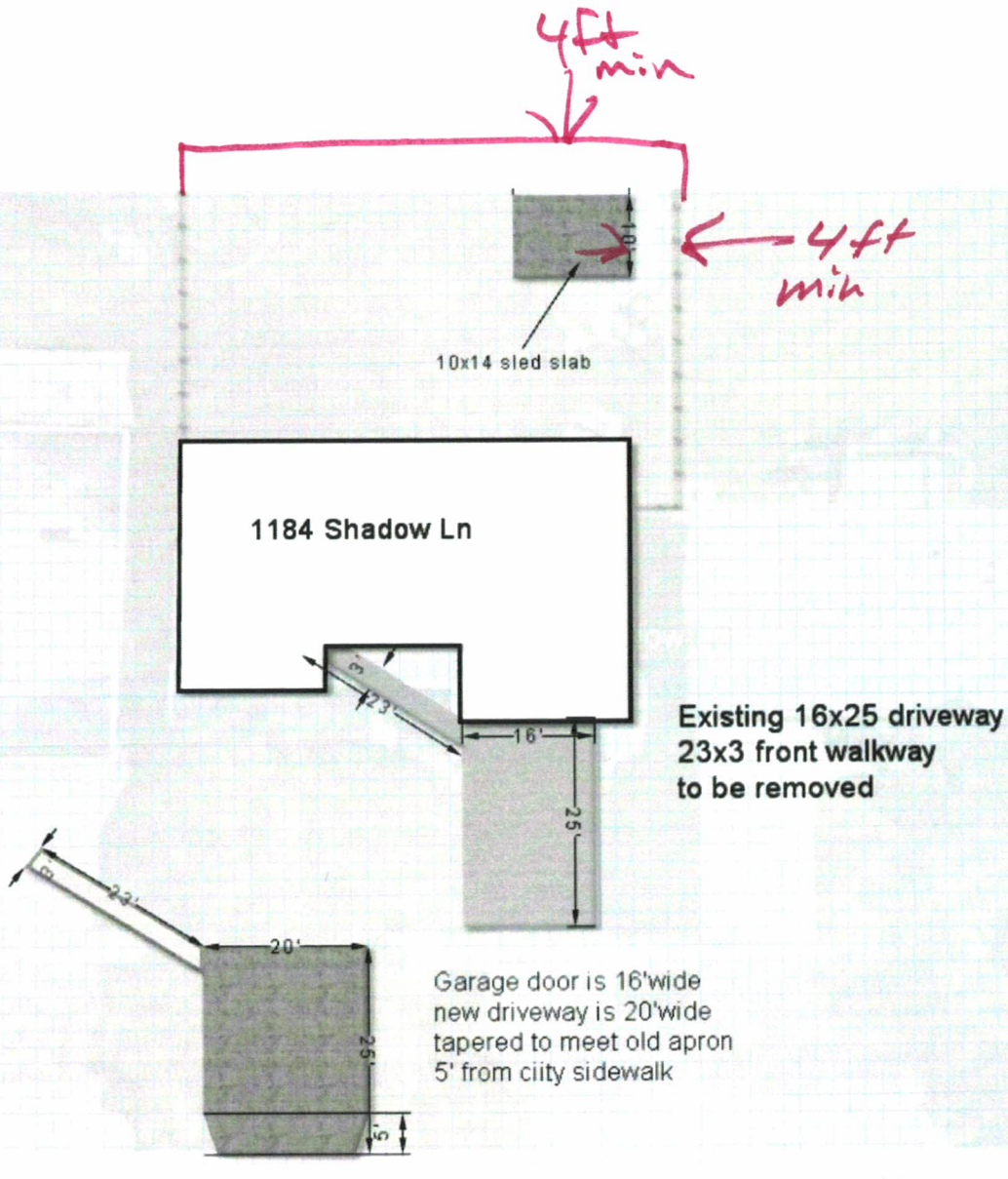
Contractor Email: team@permits.com Phone #

Project Address: 1184 Shadow Lane

SHED

~~GARAGE~~ DIMENSIONS - 10 FT X 14 FT	SQUARE FOOTAGE - 140
SETBACK DISTANCE FROM: REAR - 4FT	FRONT - N/A SIDE - 4FT
WALL HEIGHT -	6'4½" ✓
GARAGE ROOF MIDPOINT HEIGHT -	11'2" ✓
STUD SIZE 2x4 @ 24" O.C.	
WALL SHEATHING -	2x4 @ 2'onc. horizontal
TRUSS OR RAFTER? Wood size **PROVIDE TRUSS PLANS / RAFTER INFO -	2x4 Top chord ~~2x6~~ 2x8" Bottom chord
ROOF PITCH -	Top 5/12 Bottom leg 2⅓12
ROOF SHEATHING -	2x4 @ 2'onc. spaceing
EAVE OVERHANG -	4"
OVERHEAD DOOR SIZE INFO -	N/A
OVERHEAD DOOR HEADER INFO -	N/A
SERVICE DOOR SIZE INFO -	N/A double doors 3/0x6/8
SERVICE DOOR HEADER INFO -	~~2x6~~ 2x8 and 2x4
WINDOWS SIZE INFO -	N/A
WINDOW HEADER INFO -	N/A
GUTTER INFO -	N/A
CONCRETE SLAB INFO - **REINFORCEMENT - **THICKNESS -	4 inch
ELECTRICAL - Y / (N) ✓	
PLUMBING - Y / (N)	
DISTANCE FROM OTHER BUILDINGS -	see site plan
DOES EXTERIOR OF GARAGE MATCH PRINCIPLE STRUCTURE - Y / N	

* to be wood or vinyl exterior


4ft min
4ft min
10x14 sled slab
1184 Shadow Ln
3'
23'
16'
25'
Existing 16x25 driveway
23x3 front walkway
to be removed
3'
23'
20'
25'
5'
Garage door is 16'wide
new driveway is 20'wide
tapered to meet old apron
5' from ciity sidewalk

Report to the
Green Bay Plan Commission

MEETING DATE	PREPARED BY
November 7, 2023	Jon LeRoy, Zoning Administrator

AGENDA ITEM # Q.2

To approve a request to amend a Planned Unit Development for property located at 3757 Vital Place, 641 South Grandview Road, 3751 East Mason Street, 3760 East Mason Street and 3855 Finger Road regarding amendments to Section 2.C.(7), Signage. (Public Hearing held 10.23.2023)

BACKGROUND

Primary Address: 3757 Vital Place, 641 South Grandview Road, 3751 East Mason Street, 3760 East Mason Street and 3855 Finger Road
Alderperson/District: Ald. J. Grant, District 1 and Ald. J. Hutchison, District 2
Reason for Request: To provide an expanded and enlarged signage area for industrial businesses within the Grandview Industrial Park
Subject Parcel Zoning and Land Use: Subject properties are fully located within the Grandview Industrial Park Planned Unit Development (ZO 08-22). Currently, these parcels are the location of a Green Bay Water Utility Plant, Carnivore Industrial complex and undeveloped green space.

Surrounding Zoning and Land Uses:
NORTH: Planned Unit Development (PUD)/High Density Residential Undeveloped
SOUTH: Low Density & Rural Residential (R-1 & RR) Undeveloped &Single -Family homes
EAST: Town of Humboldt- Undeveloped & /Single -Family homes
WEST: Planned Unit Development (PUD) Undeveloped &Single -Family homes

Comprehensive Plan: The 2022 Smart Growth Plan designates this area as a business/industrial park along with a considerable area to the south and southwest. Traditional Neighborhood Development is recommended for property to the west and low/medium density to the north. A planned unit development has been approved for the Traditional Neighborhood Development to the north and west of the subject properties. The proposed Planned Unit Development overlay district is consistent with the recommendation of the 2022 Smart Growth Comprehensive Plan.

Analysis: Except for the large-scale water supply facility (Green Bay Water Utility) and the industrial user under construction, the subject properties are undeveloped land that was formerly farmed. Adjacent lands are primarily agricultural with extremely low-density residential development.

The original planned unit development for the site was approved as the Grandview Industrial Park in 2022. The first major user of the park is Carnivore Pet Supplies. Their factory at 3757 Vital Place is under construction and gearing up for operations on site. Carnivore has approached the city with signage plans that exceed code allowances.

Carnivore has requested an amendment to the signage language of the PUD to allow for larger signs which exceed typical Business Park (BP) or other industrial district requirements on the site. The existing PUD primarily follows signage standards for the BP district with the exception of signage for the overall Grandview Industrial Park identity signs that simply identify and locate boundaries for the Industrial Park.

Grandview identity signage is allowed to have an identity sign which is located near the arterial entrances to the park itself and allowed to be a sign no greater than 10 feet in height and 300 square feet in area per side (ZO 08-22, Section 2, C. Site Related Regulations 7. Signage throughout the PUD area)

Carnivore has requested monument signage for individual businesses on its property that exceeds current maximum heights. The limitations within BP limit monument signs to 6 feet in height. This request would amend the PUD to allow for monument signage to be no greater than 10 feet in height, the same as the maximum height as a future identity sign for Grandview Park.

Additionally, Carnivore is requesting a change to the PUD to allow directional/wayfinding signage on walls to be up to 64 square feet. Directional signage is considered an exempt sign so long as signage does not exceed 6 square feet. However, this request far exceeds exempt standards. As noted in the narrative from Carnivore, signage size is requested to exceed typical exempt requirements because of the large nature of the overall size of the nearly 225,000 square foot facility. The ability for truck operators to read a sign which has lettering to fit the size of a sign, which is 6 square feet in nature, requires truck drivers to be at a much closer distance to the sign compared to larger sizes. The staff feels a larger size is appropriate given the larger nature of the Carnivore site and the size of the parcels within the PUD, it is appropriate to grant allowances for larger signage. Carnivore is seeking to place two larger directional wayfinding signs on their campus.

Staff recommends adding wayfinding enlargement standards both on walls and with freestanding signs. Staff have separated wall and freestanding signs because of the different relationship a wall sign and a freestanding sign has to an overall development.

Noted in the exhibits attached; two separate documents estimate vision distances to distinguish letters from a distance. Staff believe 500 feet is the maximum distance a truck driver may use to try to distinguish wayfinding signs on a large industrial campus. Staff also believe the cluttering of these signs can be overwhelming and detrimental to neighboring parcels. Staff utilized the two documents below to set a standard of 64 square feet maximum for a wayfinding sign as a wall sign and 32 square feet for a freestanding sign maximum for wayfinding purposes. Individual human eyesight and external conditions play large factors into reading a particular sign at an individual moment. The staff believes having a sign with 22 inch letters along 3-4 lines of text is appropriate for a large wayfinding sign read from a long distance. An 8' x 8' sign (or 64 square feet) is recommended. This type of signage exceeding typical BP exempt directional signage would also count towards the overall square footage of wall signage on a building.

Staff believes larger signs can clutter a site and recommends placing lower maximum signage for any freestanding wayfinding directional sign to no more than one sign for every 500 linear feet on an individual parcel. Additionally, for freestanding signs, staff believe a sign should be limited to no more than 32 square feet per sign. These signs can be placed throughout the property along travel routes, specifically between a building and the property line.

Staff have received several requests and conversations with larger industrial and campus facilities looking to upsize directional signage within an industrial or campus setting in other parcels in the city. Staff believe an examination of the size of signage needs to be on going to update signs in general throughout the city code for industrial and business park zoned properties. Signs which are 6 square feet or less used for the purpose of directional signage remain exempt signs within the PUD.

These changes would be applicable to all parcels with industrial uses within the PUD area. The amended PUD is attached. Text which has been added or amended is bold. Info on Page 1 has some bold text to reflect updated street names and present tense of language of text. Page 9 is the text amendment language additions relating to signs. Section 2. C. 7. **c.-e**. has been added. The following language has been added to the PUD to address the sign expansion:

c. Monument Signage for Individual Parcels
(1) The maximum height of a monument sign is limited to no greater than 10 feet in height.

d. Campus way of finding signage (internal operations for wall signs at industrial use sites)
(1) Directional signage is limited to no greater than 64 total square feet per sign.
(2) Any directional signage exceeding standards for the Business Park District (BP) shall be counted towards the overall maximum attached sign area for signs attached to buildings.
(3) No greater than 10 percent of a directional sign may be used for branding purposes.

e. Campus way of finding signage (internal operations for freestanding signs at industrial use sites)
(1) Directional signage is limited to no greater than 32 total square feet per sign.
(2) A directional sign is permitted along a travel route within the campus. Multiple freestanding directional signs are permitted if an individual freestanding directional sign is separated by a minimum of 500 feet from another freestanding directional sign.
(3) Sign height is limited to 8 feet.
(4) No greater than 10 percent of a directional sign may be used for branding purposes.

Ald. J. Grant, Ald. Hutchison, and adjacent property owners within 400 feet have been notified of the request. The staff received an inquiry regarding this request as of the drafting of this report. A neighbor was not in support of the original PUD.

RECOMMENDATION

Approval of the Planned Unit Development (PUD) amendment request, subject to the draft PUD.

FISCAL IMPACT

ATTACHMENTS

1. 23-39 Application
2. Carnivore - Narrative
3. Draft Z.O. 19-23 Grandview Industrial Park PUD
4. 23-39 Letter Visiblity Charts
5. Carnivore_Signage_Proposal_10.13.23_With_Staff_Note
6. ZP 23-39 PropMap_Color

REQUEST FOR CITY ACTION
PLAN COMMISSION

Community and Economic
Development Department
100 N. Jefferson Street, Rm 608
Green Bay, WI 54301-5026
(920) 448-3400 - phone
(920) 448-3426 - fax
www.greenbaywi.gov

Location of Property: 3757 Vital Place, Green Bay, Wisconsin 54301

Parcel Number(s): 21-22

Petitioner(s): Carnivore Meat Company, LLC Date: September 29, 2023

Email: rhamrin@gklaw.com Phone Number: 920-831-6344

Address: c/o Godfrey & Kahn, S.C., 100 W. Lawrence Street City: Appleton State: WI Zip: 54911

Property Owner: CAR Green Bay (WI) LLC Phone Number: 212-201-4076

Submit this Request Form and all required attachments to the Community and Economic Development Department, Room 608, City Hall

To: Honorable Mayor and Common Council, c/o City Clerk

I, Carnivore Meat Company, LLC, respectfully request that the City of Green Bay take the following action:

- ☐ Rezone Property ($375.00 Review Fee)
- ☐ Conditional Use and CUP Amendment, including Single Lot Duplexes ($375.00 Review Fee)
- ☑ PUD and PUD Amendments ($425.00 Review Fee)
- ☐ Approve Preliminary City/Extraterritorial Subdivision Plat ($150.00 + $35.00 per Lot/Outlot Review Fee)
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- ☐ Vacate a Street/Alley/Pedestrian Way ($300.00 AdministrationFee) PLEASE FILL OUT PAGE 2 OF APPLICATION
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- ☐ Comprehensive Plan Amendments ($275.00 Review Fee)
- ☐ Other ($200.00 Administration Fee): _____

Owner Signature: Joshua Leventhal Date: 9/29/23

Petitioner Signature(s): _____

President of Carnivore Meat Company, LLC

Checklist of required attachments:

- **Map**
- **Legal Description**
- **Applicant Narrative Describing Project**
- **All Other Pertinent Information**

For office use only:
Review Fee:_____ Receipt No.:_____ Zoning Petition No.:_____

PUD AMENDMENT NARRATIVE

TO: City of Green Bay Community and Economic Development Department

FROM: Carnivore Meat Company, LLC ("Carnivore")

DATE: September 29, 2023

PROPERTY: 3757 Vital Place, Green Bay, Wisconsin

Carnivore is in the process of developing a brand-new facility which will total approximately 224,288 square feet at 3757 Vital Place in Green Bay (Parcel No. 21-22). The construction has been ongoing for over a year and progressing on schedule. Carnivore has now reached the stage in the development where it has to add appropriate signage to the site.

Due to the size of the facility, the project manager and architect of the development have recommended larger signs, for safety reasons, than those permitted under the PUD. The larger signs will provide greater visibility at intersections for truck drivers and delivery drivers. Given the volume of trucks which will be coming to and from the building, visible signage is important for traffic flow and the safety of all drivers. Additionally, having larger scale signs also compliments the scale of the facility.

The attached signage packet shows (1) the location of all signage from a bird's eye view of the new development, (2) the size and scale of the signage, and (3) the location of the monument signs (labeled as A1 and A2) in relation to a 25-foot visibility triangle.

ZONING ORDINANCE NO. 19-23

AN ORDINANCE ZONING CERTAIN PROPERTY LOCATED AT 641 SOUTH GRANDVIEW ROAD, 3757 VITAL PLACE, 3751 EAST MASON STREET, 3760 EAST MASON STREET, AND 3855 FINGER ROAD AS A PLANNED UNIT DEVELOPMENT DISTRICT FOR PURPOSES OF DEVELOPING THE GRANDVIEW INDUSTRIAL PARK (ZP 23-39)

THE COMMON COUNCIL OF THE CITY OF GREEN BAY DOES ORDAIN AS FOLLOWS:

SECTION 1. Section **44-30**, Green Bay Municipal Code, together with the zoning map referred to therein, is hereby amended by establishing a Planned Unit Development District on the properties listed below and as depicted as Phase 1 on Exhibit A - Location Map and described below:

Parcel ID	Address	Legal description
21-189	3751 E Mason St	LOT 4 OF 53 CSM 232 BNG PRT OF NW1/4 NE1/4 SEC 12 T23N R21E
21-189-1	**3760 E Mason St**	LOT 3 OF 53 CSM 232 BNG PRT OF NW1/4 NE1/4 SEC 12 T23N R21E
21-22	**3757 Vital Place**	LOT 1 OF 53 CSM 232 BNG PRT OF SW/14 SE1/4 SEC 1 T23N R21E
21-22-1	641 **S** Grandview Rd	W 310 FT OF S 399 FT OF SW1/4 SE1/4 SEC 1 T23N R21E EX RDS
21-24	**3855 Finger Rd**	LOT 2 OF CSM 9499 BNG PRT OF SE1/4 SE1/4 SEC 1 T23N R21E

Planned Unit Development Phase 1 area contains 2,187,669 sq ft/50.22 acres, more or less.

SECTION 2. Pursuant to Chapter 44, Article XX, Green Bay Municipal Code, as they apply, the following conditions are imposed:

A. INDUSTRIAL PARK OVERVIEW. The Grandview Industrial Park (GIP) is a planned development designed to provide a high-quality location **for industrial businesses** and promote the efficient and effective growth of light-medium industrial businesses within the greater Green Bay market, while also integrating land area suitable for supportive commercial retail and service uses.

GIP will initially consist of five parcels **totaling** approximately 50 acres of **land** area. This is the first phase of a larger industrial park that will ultimately include approximately 30 parcels, comprising approximately 375 acres of land. It is located on the east side of the city on both sides of the 3700-3800 Blocks of East Mason Street approximately one and a half miles east of Interstate 43, nine and a half miles from Interstate 41 and about 11 miles from the Green Bay Austin Straubel International Airport.

Through appropriate land use regulation, supportive infrastructure, proximity to the

interstate highway system and nearness of work force, the City has set the stage for a regional industrial "campus" that has been identified as a necessity in the Green Bay Smart Growth Comprehensive Plan and 2021 Commercial Market Study.

GIP is intended to be primarily a light to medium intensity industrial park supporting production, processing, storage, distribution, and transportation uses. Select commercial and workforce-oriented support uses such as restaurants, business and personal services, and vehicle-oriented businesses are also permitted along arterial roadways. It is important to note that regulation within this PUD may be differentiated based on the industrial or commercial nature of the use

B. LAND-USE REGULATIONS. The only permitted or conditional uses that may be established and/or maintained within the PUD area shall be those uses listed below. All other uses shall be specifically prohibited within the PUD area.

Table 1-1. Principal Uses in the PUD

Use	GIP	Development Standards	Location limited
Production, Processing, and Storage			
Agricultural Uses	P		
Limited production and processing	P	X	
Light industrial uses	P		
General industrial uses	C		
Heavy industrial uses	C		
Contractor yard	C		
Dry cleaning establishment, commercial laundry	P		
Research and development facility	P		
Warehousing (not including self-service)	P		
Wholesale and distribution facility	P		
Transportation Uses			
Ground transportation service	C		
Motor freight terminal	C	X	
Package delivery service	P		
Public Service and Utility Uses			
Public safety/service facility	P		
Telecommunication tower, wireless communication facility	C	X	
Substation/distribution equipment	C		
Solar or Wind Energy Systems	C		
Office and Mixed Uses			
General office	P		
Government office	P		
Bank or other financial institution	P		Arterial Road
Clinic, healthcare facility	P		Arterial Road
Commercial Uses			
Accommodation and Food Service Uses			

Restaurant,* not including drive-through	P		Arterial Road
Restaurant* with drive-through	P		Arterial Road
Service Businesses			
Business service**	P		
Building maintenance, janitorial service	P		
Catering service	P		
Printing and publishing establishment	P		
Small appliance repair service	P		
Tool/equipment rental facility	P		
Animal hospital, veterinary clinic	C	X	Arterial Road
Animal grooming establishment	C		
Animal boarding facility, kennel	C	X	Arterial Road
Retail Sales			
General retail sales **	C		Arterial Road
Building material sales	P	X	
Contractor showroom	P		
Greenhouse, garden supply store	C		
Commercial Recreation and Entertainment			
Health clubs, fitness centers	C	X	Arterial Road
Vehicle Services			
Automobile rental	C	X	Arterial Road
Convenience store	P		Arterial Road
Fuel/gas/service station	P	X	Arterial Road
Motor vehicle repair, major	C		
Motor vehicle repair, minor	P		Arterial Road
Drive-through facility	C	X	Arterial Road
Educational Uses (Amd. GO 10-18)			
School, specialty or personal instruction, etc.	C	X	
Group daycare center, preschool (9 or more children)	C	X	Arterial Road

Note: P = Permitted Use; C = Conditional Use

* Any establishment at which primarily alcoholic beverages are served must also meet the requirements of Green Bay Municipal Code, Chapter 4 – Alcohol Beverages.

** See Land Use Definitions section of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code for complete list of uses.

Table 1-2. Accessory Uses in the PUD:

Use	GIP	Development Standards	Location Limited
Antennas, satellite dishes, and similar equipment	P	X	
Carwash	C	X	
Music (outdoor live or amplified music)	C		Arterial Road
Off-street loading docks	P		
Outdoor display of vehicles	C	X	
Outdoor commercial recreation	C	X	Arterial Road
Outdoor sales, display, and storage	P	X	
Parking (surface)	P		
Parking (structured)	P		

Parking and storage of vehicles licensed to a business	P	X	
Signs, as regulated by Chapter 30	P		
Small wind energy systems	P	X	
Solar energy systems	P	X	
Telecommunication facilities	C	X	
Warehousing, incidental repair, or processing necessary to conduct a permitted principal use, conducted within the principal building	P	X	Arterial Road
Waste and recycling storage	P	X	

Note: P = Permitted Use; C = Conditional Use

1. Table 1-1 and 1-2 above lists all permitted and conditional uses allowed in the PUD.
   a. Permitted uses. Uses specified with a "P" are permitted in the PUD or districts where designated, provided that the use complies with all other applicable provisions of this PUD.
   b. Conditional uses. Uses specified with a "C" are allowed as a conditional use in the PUD where designated, provided that the use complies with all other applicable provisions of this PUD.
   c. Prohibited uses. Any use not listed as either "P" (permitted) or "C" (conditional) or any use not determined by the Zoning Administrator to be substantially similar to a use listed as permitted or conditional shall be prohibited in the PUD.
   d. Specific development standards. Permitted and conditional uses specified with an "x" under the development standards column shall be subject to the standards identified in Article XVI of the Green Bay Zoning Code, Chapter 44, the City of Green Bay Municipal Code and below.
   e. Specific uses are only permitted on parcels with arterial roadway frontage as listed in the use tables and depicted on Exhibit B.

2. Accessory Structures: An accessory structure shall be considered attached and an integral part of the principal structure when it is connected by an enclosed passageway. Such structures shall be subject to the following requirements:
   a. The structure shall meet the required yard setbacks for a principal structure, as established for the PUD.
   b. For Commercial uses, the total floor area of an accessory structure shall not exceed the ground floor area of the principal building located on the same lot.
   c. The structure shall not exceed the height of the principal building to which it is attached.

3. Outdoor storage and Display:
   a. Outdoor storage areas shall not exceed 35 percent of the lot area and shall be contiguous to the principal use on the site.
   b. Solid or a minimum of a 90 percent screen is required for outdoor storage and loading/service bays unless the loading/service bay doors are an integral

and necessary component of the principal building and operation of the use, as determined by the Zoning Administrator. The fence shall be at least six feet in overall height and shall consist of wood, vinyl, or masonry material.

c. All outdoor storage, outdoor display, employee and customer parking, drives and other facilities are required to be surfaced as regulated in Section 44-1694 of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code.
d. No material/product may be stored higher than the screening.
e. No outdoor storage shall encroach within a required setback.
f. Outdoor storage shall be completely screened in compliance with Section 44-1964 of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code and the Landscape Section of this PUD.
g. Outdoor sales and display areas shall be separated from any adjacent street, sidewalk, or public walkway by a low landscaped screen, in compliance with Section 44-1918 of the City of Green Bay Zoning Code Chapter 44, Green Bay Municipal Code.

C. SITE RELATED REGULATIONS. The purpose of this section is to regulate the development of land in an integrated and innovative fashion; allow for flexibility in site design; and to encourage development that is sensitive to environmental, cultural, and economic considerations.

1. Dimensional and area requirements. Dimensional and area requirements shall meet the standards in the commercial and industrial districts as enumerated within Articles VIII and IX of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code, with the following modifications:
   a. Lot(s). Minimum lot width and lot area shall be regulated as follows:
      (1) Minimum lot area: 10,000 sq. ft. for commercially used lots and 40,000 sq. ft. for industrially used lots.
      (2) Minimum frontage: 75 feet for commercially used lots and 200 feet for industrially used lots.
   b. Floor area ratio (FAR): Minimum is 0.25 for both commercially used lots and industrially used lots.
   c. Setbacks:
      (1) Front yard setback, principal structures. Minimum 25 feet.
      (2) Front yard setback, accessory and/or ancillary structures. Minimum 100 feet. Additionally, no accessory and/or ancillary structures shall be closer to the right-of-way than the principal structure(s) on the site.
      (3) Side yard Setback. 10 feet.
      (4) Rear yard setback. 15 feet.
      (5) The side façade of a corner building adjoining a public street shall maintain the minimum front yard setback for both the front and side facades.
      (6) When a side or rear yard adjoins a residential use, the side yard or rear yard setback is 25 feet with screening as regulated by the landscaping standards of this PUD (see Section 2.C.3.d.).
      (7) Special setbacks. No detached accessory structure shall be located closer

than three (3) feet from the principal structure. Distance between structures shall be measured from wall to wall.

d. Impervious Surface. Impervious surfaces shall meet the standards in the commercial and industrial districts as enumerated within Articles VIII and IX of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code, with the following modifications:
   (1) Maximum impervious surface. 70% in both the commercially used lots and industrially used lots.
   (2) Special Considerations. The maximum impervious surface requirement may be increased to 80% if green infrastructure elements such as bioretention areas/ rain gardens, bioswales, green roofs, etc. are installed at a 1.5 to 1 (impervious to green infrastructure) ratio.

2. Access, Circulation and Parking. Access, circulation, parking and outdoor storage or display areas on lots throughout the PUD area shall meet the standards as set forth within the Green Bay Zoning Code, Article XVIII of the Green Bay Municipal Code, and as modified as follows:
   a. Industrial use drives. If possible, separate individual drives shall be established for customer/employee parking lot access and commercial truck traffic access.
   b. Areas used for permanent screened outdoor storage:
      (1) Interior Landscaping. Permanent screened outdoor storage areas are exempt from the interior landscaping and island requirements of Section 2.C.3.e.
      (2) Pedestrian and Bicycle access and Parking. Permanent screened outdoor storage areas are exempt from the pedestrian and bicycle access and parking regulations of the Green Bay Zoning Code, Article XVIII of the Green Bay Municipal Code.

3. Landscaping. Landscaping for any development site within the PUD area shall meet the standards as set forth below:
   a. All undeveloped areas of a development site shall at a minimum be covered in vegetative ground cover as well as:
      (1) One (1) tree and three (3) shrubs per 7,500 square feet of total lot area for a commercial use and one (1) tree and two (3) shrubs per 10,000 square feet of total lot area for Industrial uses.
      (2) Required trees and shrubs are encouraged to be organized in an attractive and ecologically beneficial configuration that may include grouping and variations of plan species. The use of native plants is ideal.
      (3) All landscape material shall be installed to current industry standards.
      (4) All ground cover, landscaping and screening features shall be kept free of refuse and debris.
      (5) Maintenance and replacement of landscape materials on the site shall be the responsibility of the occupant/landowner. Replacement of dead or dying plants shall be required to take place within no more than one planting season.

(6) Landscaping required within subsection b-f below may count towards satisfying this tree/shrub requirement.

b. Frontage Landscaping. In addition to the requirements of Section 2.C.3.a, all land area located along a public right-of-way shall contain:
   (1) A minimum of one (1) deciduous, ornamental, or evergreen tree for every 30 linear feet of right-of-way/street frontage.
   (2) Required frontage trees are encouraged to be organized in an attractive and ecologically beneficial configuration that may include grouping and variations of plan species.

c. Buffering Outdoor Storage. All permanent outdoor storage areas shall be screened from view and include:
   (1) A solid fence or wall that is impervious to sight.
   (2) Fence or wall shall be a minimum of eight (8) feet of in height.

d. Buffer from Residential. Property lines adjacent to lands currently zoned residential or that have future residential land use designation in the City's Comprehensive Plan shall include:
   (1) A screening element such as a fence, berm or evergreen trees/shrubs that is 80% impervious to sight year-round running the length of the property line adjacency.
   (2) Screening shall be a minimum of 8 feet high at installation if a fence/berm or at plant maturity.

e. Interior Parking Facility Landscaping. Interior parking lot landscaping regulations apply to all parking facilities containing 25 or more parking stalls designed/intended to be used by visitors, customers, and employees. The goal is to minimize the expansive appearance of hard surface areas and provide shade trees that reduce the "heat island" affect associated with such development. Internal parking facility landscaping shall consist of:
   (1) Landscaped islands shall be provided at the end of all parking rows and within the rows of parking spaces so that there are no more than 15 consecutive parking spaces without an island.
   (2) Landscape islands shall have a minimum interior dimension of at least 10 feet in width and 15 feet in length.
   (3) Landscape islands shall be planted with vegetative ground cover and a minimum of 1 shade or deciduous tree that is hardy and salt resistant.

f. Building Foundation Landscaping. Landscaping required around customer and office areas shall be regulated as follows:
   (1) A minimum of 5 feet of landscaped area shall be provided around a minimum of 60% of a structure's foundation, excluding areas utilized for loading/service.
   (2) Plant material shall be decorative such as ornamental trees, flowering shrubs and perennials.

4. Stormwater Management and Grading. A storm water management and grading plan meeting the standards established by the Department of Public Works, Brown County, and the State of Wisconsin shall be submitted to and approved by the

City prior to the issuance of building permits. The purpose of these standards to promote the use of green infrastructure or vegetated stormwater management measures, where suitable, to manage stormwater runoff volumes and quality.

a. Scope. Storm water management and grading shall be comprehensive and take into account expected build-out of the entire PUD area as depicted on Exhibit A.
   (1) A regional stormwater management approach may be utilized for any and all new developments; if so, the site may be required to buy in and be a part of the regional plan. This will be required upon approval of the Department of Public Works.
b. Additional Function.
   (1) Human-scale interest and native planting should be included.
   (2) Stormwater management facilities shall function not only as a utility but also as site amenity. This applies to both regional and site specific.
      a) Site amenities include but not limited to walking paths, sitting areas, art, educational/interpretive signage, etc.
   (3) It is encouraged to include suitable green infrastructure practices in streetscapes (tree boxes, sidewalk bioretention areas, curb bump-outs).
   (4) In areas where infiltration is needed to manage stormwater or where soils are highly erodible, these areas shall be identified on erosion control plans and specifically protected from disturbance during and after development.
   (5) Stormwater management areas such as bioretention areas, rain gardens, stormwater trees, or other plantings may count toward required landscape minimums.

5. Refuse and Mechanical Equipment. Screening of refuse material containers and mechanical equipment throughout the PUD area shall meet the standards as set forth within the Green Bay Zoning Code, Article XIX-Division 3 of the Green Bay Municipal Code, and as modified as follows:
   a. Refuse storage and ground mechanical equipment shall not be located closer to the right-of-way than the front façade of the principal structure located on the same lot, regardless of minimum setbacks.
   b. Wall or roof mounted mechanical equipment is regulated by Architectural Standards Section 2.D.2.h.

6. Lighting. Lighting throughout the PUD area shall meet the standards as set forth within the Green Bay Zoning Code, Article V-Division 8 of the Green Bay Municipal Code and further regulated as follows:
   a. Pedestrian oriented lighting is required for all walkways/trails and building entrances.
   b. Wall or roof-mounted lighting shall be integrated into overall building design/architecture. Fixtures shall be consistent for either the entire building or alternatively for each of the building's individual units.

7. Signage throughout the PUD area shall be regulated as follows:
   a. Signage shall meet the standards for the Business Park District (BP) as set forth in Chapter 30, Article II of the Green Bay Municipal Code with the following additions.
   b. Industrial Park Identity Signage.
      Signs identifying the industrial park itself as well as identifying uses located within the PUD boundaries, though they may not be on the parcel for which the use is located.
      (1) Must be located as depicted on Exhibit B. These are highly visible locations on arterial roads near entrances to the industrial park boundaries.
      (2) Industrial Park identity signage shall be limited to the monument style of signage no greater than 300 square feet in area (per side) and no greater than 10 feet in height.
   c. Monument Signage for Individual Parcels
      (1) Maximum height of a monument sign is limited to no greater than 10 feet in height.
   d. Campus way finding signage (internal operations for wall signs for industrial use sites)
      (1) Directional signage is limited to no greater than 64 total square feet per sign.
      (2) Any directional signage exceeding standards for the Business Park District (BP) shall be counted towards the overall maximum attached sign area for signs attached to buildings.
      (3) No greater than 10 percent of a directional sign may be used for branding purposes.
   e. Campus way finding signage (internal operations for freestanding signs for industrial use sites)
      (1) Directional signage is limited to no greater than 32 total square feet per sign.
      (2) A directional sign is permitted along a travel route within the campus. Multiple freestanding directional signs are permitted if an individual freestanding directional sign is separated by a minimum of 500 feet from another freestanding directional sign.
      (3) Sign height is limited to 8 feet.
      (4) No greater than 10 percent of a directional sign may be used for branding purposes.

D. STRUCTURAL DESIGN REGULATIONS. The purpose of this section is to regulate the design and materials used for buildings within the PUD area to maintain and enhance the aesthetic, function, and values of property within the greater area.

1. Applicability. Architectural design of new construction, additions to existing

buildings, and alterations to existing buildings within the PUD area shall meet the standards as set forth below:

a. New Construction. The requirements of this Section shall apply to all structures and buildings within the PUD area constructed after the effective date of its adoption. Future expansions of structures shall be compatible with the existing structures.
b. Exceptions and Appeals. Exceptions to the Architectural Design Standards may be granted by the Director of Community and Economic Development. Exceptions can include: 1. permission to substitute building materials; 2. construction of comparable quality or design; or 3. to enable unique and inventive architectural concepts within the PUD.
   (1) Denial by the Director of Community and Economic Development of the requested exception may be appealed to the Plan Commission. Appeals shall be made within thirty (30) days of the date of the denial.

2. Architectural Design Standards.
   a. Orientation.
      (1) Front façades shall face the street right-of-way, land area dedicated to pedestrian ways or internal drive aisle (if building does not front the right-of-way).
      (2) Service or loading areas shall not be permitted between the building and the street right-of-way.
   b. Height. The maximum height on commercially used lots shall be thirty-five (35) feet, including screening for rooftop mechanicals. The maximum height in industrially used lots shall be fifty (50) feet, including screening for rooftop mechanicals.
      (1) Smokestacks, water towers, and similar structures associated with industrial uses may exceed the maximum height limit as specified by conditional use in Chapter 44, Article IX and Article II, Section 44-83 of the Municipal Code.
      (2) Heights of structures may be increased with a conditional use permit as specified by conditional use in Chapter 44, Article II, Section 44-83 of the Municipal Code.
   c. Exterior Materials. Building materials should be durable and appropriate for the district.
      (1) Commercial structures.
         a) Exterior building façades shall be predominately:
            i. Brick or brick veneer.
            ii. Stone or stone veneer.
            iii. Glass (curtain/storefront).
            iv. Windows and doors.
         b) The following materials may be used as <u>secondary building façade materials</u>. Secondary materials shall not cumulatively exceed 40% of the front and side façades or 75% of the rear façade.
            i. Concrete panels.

ii. Decorative or split-face block.
iii. Architectural/decorative metals.
iv. Wood or wood composite.
v. Cementitious panels/siding.
vi. Stucco or exterior insulation and finish system (EIFS).

c) The following materials may be used as accent building façade materials. Accent materials shall not cumulatively exceed 10% of the front and side façades or 10% of the rear façade.
i. Vertical vinyl or corrugated metal siding.
ii. Concealed fastener metal panels.

d) The following materials are prohibited exterior building façade materials.
i. Smooth face or non-decorative block.
ii. Asphaltic or fiberglass siding.
iii. Non-decorative metal panels or corrugated metal.
iv. Plywood, chipboard, rough texture wood siding, or other non-decorative wood.
v. Imitation/"fake" brick or stone and gravel aggregates.

(2) Industrial structures.

a) Exterior building façades shall be predominately:
i. Brick or brick veneer.
ii. Stone or stone veneer.
iii. Concrete panels.
iv. Cementitious panels/siding.
v. Concealed fastener metal panels.
vi. Windows and doors.

b) The following materials may be used as accent building façade materials. Accent materials shall not cumulatively exceed 10% of the front and side façades or 10% of the rear façade.
i. Vinyl or corrugated metal siding.
ii. Decorative or split-face block.
iii. Architectural/decorative metals.
iv. Wood or wood composite.
v. Stucco or exterior insulation and finish system (EIFS).

c) The following materials are prohibited exterior building façade materials:
i. Smooth face or non-decorative block.
ii. Asphaltic or fiberglass siding.
iii. Non-decorative metal panels or corrugated metal.
iv. Plywood, chipboard, rough texture wood siding, or other non-decorative wood.
v. Imitation/"fake" brick or stone and gravel aggregates.

(3) Material substitutions may be permitted as an exception per Section 2.D.1.a. of this PUD.

d. Façade Articulation. Buildings shall be designed to provide interest and

variety. Flat, unadorned walls should be avoided.

(1) Façade lengths for industrially used structures shall not be greater than one hundred (100) feet without articulation, and façade lengths for commercially used structures shall not be greater than fifty (50) feet without articulation. Articulation includes, but is not limited to:
   a) Division of façade into individual components (i.e. storefronts, distinct uses) through the use of architectural elements such as entrances, arcades, windows, balconies, awnings, marquees, etc.
   b) Recesses or projections of the main façade plane.
   c) Recesses or projections of upper floors from the ground floor façade plane.
   d) Vertical division using different materials and textures.
   e) Roof form variation such as the change in roof lines or roof types.

(2) Minimum fenestration. Facades facing the right-of-way or pedestrian way/internal drive aisle for which the building fronts (if building does not front the right-of-way) shall consist of a minimum percentage of windows and doors to promote a visual connection. The principal structure on a corner property that faces two public rights-of-way shall be treated as two front facades. Mirrored, smoked, or heavily tinted glass is discouraged. Windows should be proportional with doors in height and design. The minimum percentage of windows and doors are based on floor and use as follows:
   a) Ground floor, industrial use. Total area of windows and doors shall comprise no less than ten (10) percent of the ground floor customer and office areas.
   b) Ground floor, commercial use. Total area of windows and doors shall comprise no less than ten (20) percent of the ground floor façade area.
   c) Upper floors, all uses. Total area of windows and doors shall comprise no less than ten (10) percent of the total façade area above the ground floor.

e. Building Entrances. Main entrances shall be clearly identified and articulated using detailing, distinctive materials and/or colors, projections, recesses, or another comparable element.
   (1) Main entrances are defined as those regularly used by employees, customers, and/or the public.
   (2) Main entrances shall be visible from the right-of-way or pedestrian way/internal drive aisle for which the building fronts (if building does not front the right-of-way).

f. Patios, Decks and Balconies.
   (1) Ground level patios and decks facing the right-of-way or pedestrian way/internal drive aisle for which the building fronts (if building does not front the right-of-way) should be bordered with treatment such as landscaping.
   (2) Exterior stairs leading to a deck or balcony shall not be permitted on

the front or right-of-way side of buildings

g. Accessory structures. Accessory structures shall match the character of the principal structure, reflected in colors, materials, windows, and architectural features.
h. Mechanical and Exterior Building Systems. Mechanical and exterior building systems should be integrated into the overall building design.
   (1) Roof-mounted equipment shall be screened, preferably by parapet walls. Screening shall be architecturally compatible with the structure which it is attached, be of identical or substantially similar materials used on the nearest building façade and designed as an integral part of the building.
   (2) Wall mounted equipment are not permitted on the front or any right-of-way facing side of the building.
   (3) Refer to Section 2.C.5 of the PUD.

SECTION 3. The provisions of this ordinance, including, without limitation, the granting of a conditional-use permit and all obligations, conditions, restrictions, and limitations related thereto shall run with and be jointly and severally binding upon the fee simple owner and the beneficial owner of all or any portion of the subject property. All obligations, requirements, and rights of the owner shall run with the land and shall automatically be assigned to be binding upon and inure to the benefit of its successors and assigns, including, but not limited to, any entity acquiring any financial interest in the subject property and/or any subsequent owner and/or beneficial owner of all or any portion of the subject property.

SECTION 4. Each exhibit which is attached to this ordinance is deemed to be and is expressly made a part of and incorporated into this ordinance to the same extent as if each such exhibit, and the plans identified therein, had been set forth in its entirety in the body of this ordinance.

SECTION 5. All ordinances or parts of ordinances, in conflict herewith are hereby repealed.

SECTION 6. In addition to all other remedies available to the City of Green Bay, the City may decline to issue any building or other permits otherwise required by any ordinance of this City while any violation of this ordinance remains uncured.

SECTION 7. If any provision in this ordinance is held invalid or unconstitutional by any court of competent jurisdiction, such a decision shall not affect the validity of any other provision of this ordinance. It is hereby declared to be the intention of the City of Green Bay that all provisions of this ordinance are separable.

SECTION 8. This ordinance shall not take effect until a public hearing is held thereon as provided by Chapter 44, Article II, Division 2, Section 44-82 Zoning Amendments, Green Bay Municipal Code, and the adoption and publication of this ordinance.

Dated at Green Bay, Wisconsin, this _____ day of _____, 2023.

APPROVED:

_____
Eric Genrich, Mayor

ATTEST:

_____
Celestine Jeffreys, City Clerk

jl:
10.13.23

Attachments:
Exhibit A - Location Map
Exhibit B – Land-Use Map

EXHIBIT A: LOCATION MAP

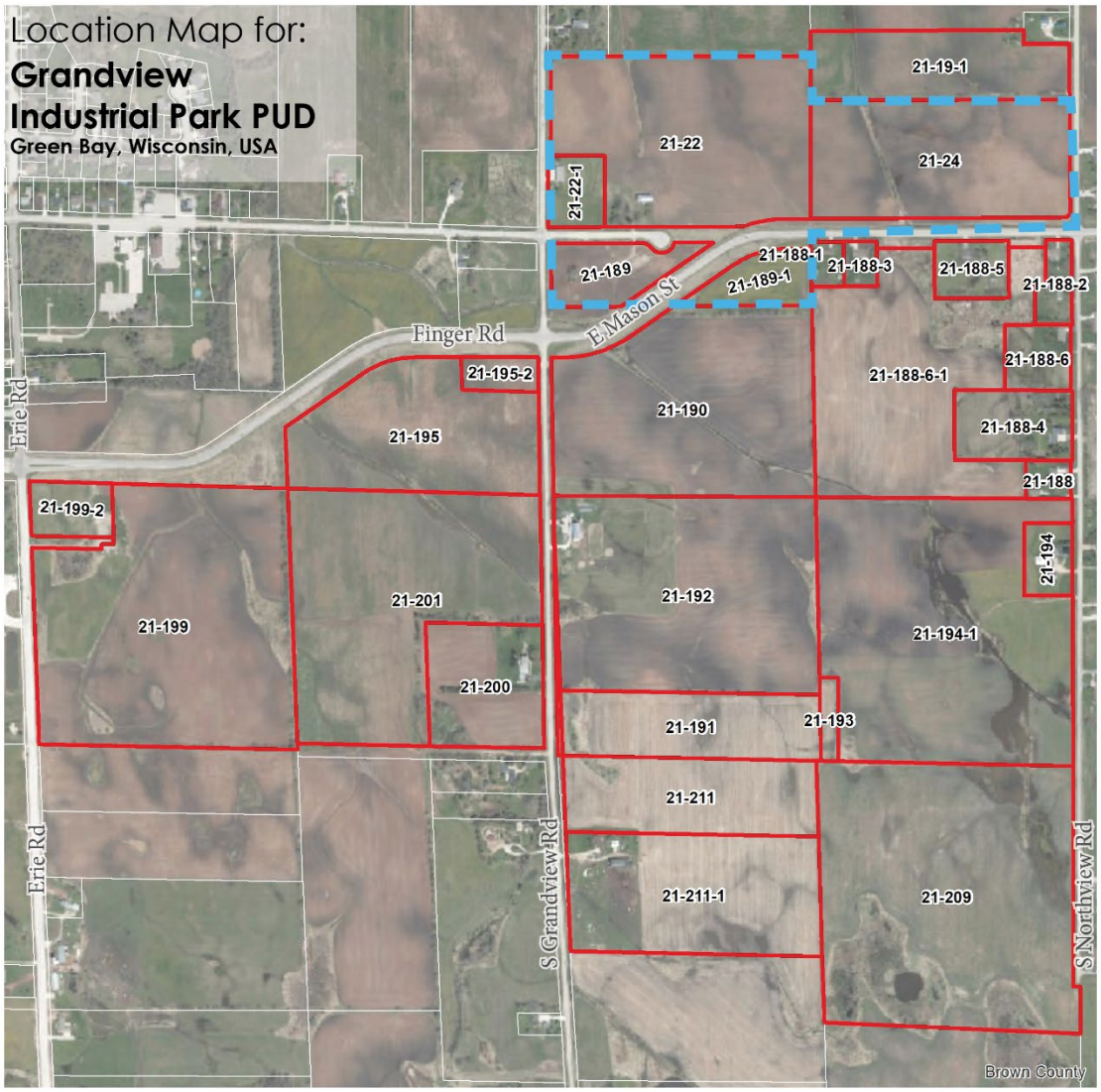
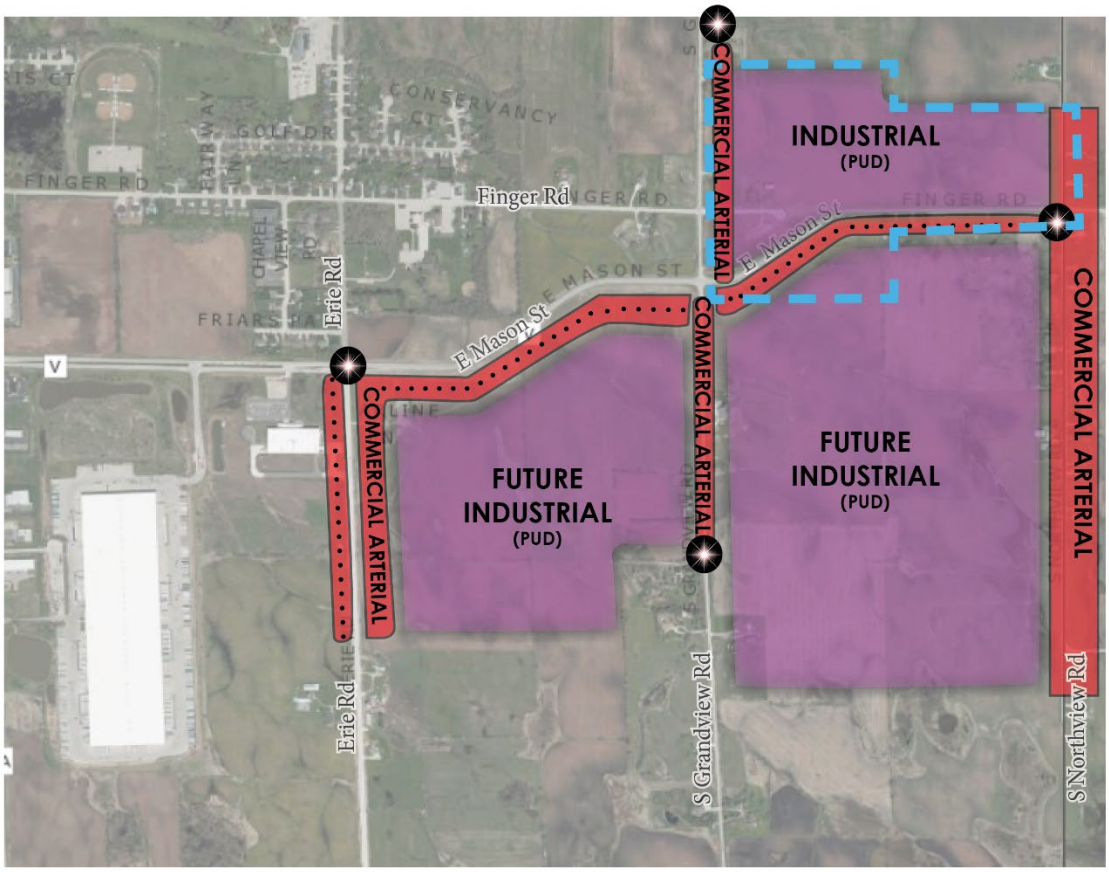
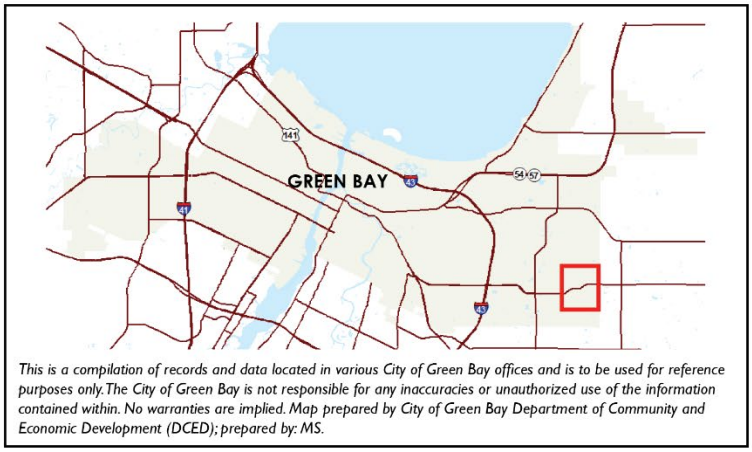


EXHIBIT B: LAND-USE MAP

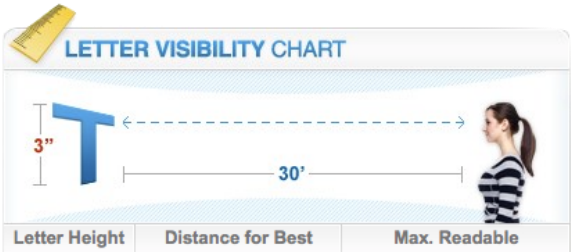
Land-Use Composition for:
Grandview
Industrial Park PUD
Green Bay, Wisconsin, USA



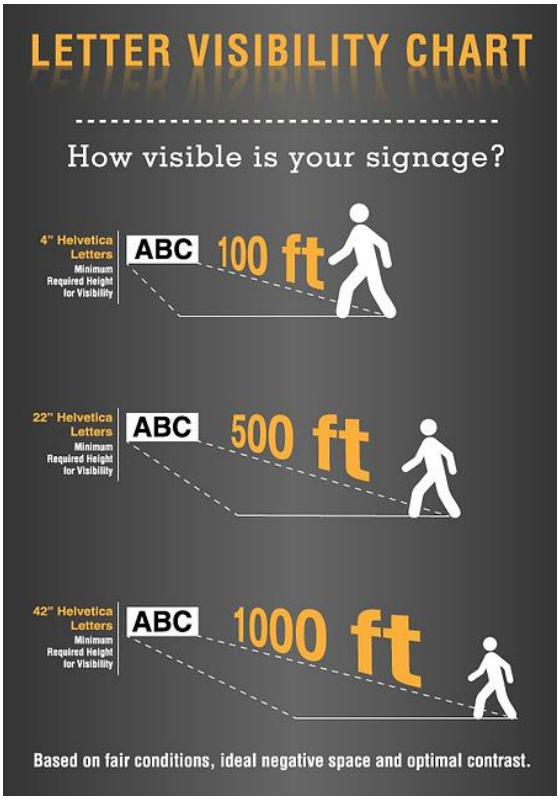


This is a compilation of records and data located in various City of Green Bay offices and is to be used for reference purposes only. The City of Green Bay is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied. Map prepared by City of Green Bay Department of Community and Economic Development (DCED); prepared by: MS.

Letter Visibility Chart Examples



Letter Height (inches)	Distance for Best Impact (feet)	Max. Readable Distance (feet)
3"	30'	100'
4"	40'	150'
6"	60'	200'
8"	80'	350'
9"	90'	400'
10"	100'	450'
12"	120'	525'
15"	150'	630'
18"	180'	750'
24"	240'	1000'
30"	300'	1250'
36"	360'	1500'
42"	420'	1750'
48"	480'	2000'
54"	540'	2250'
60"	600'	2500'



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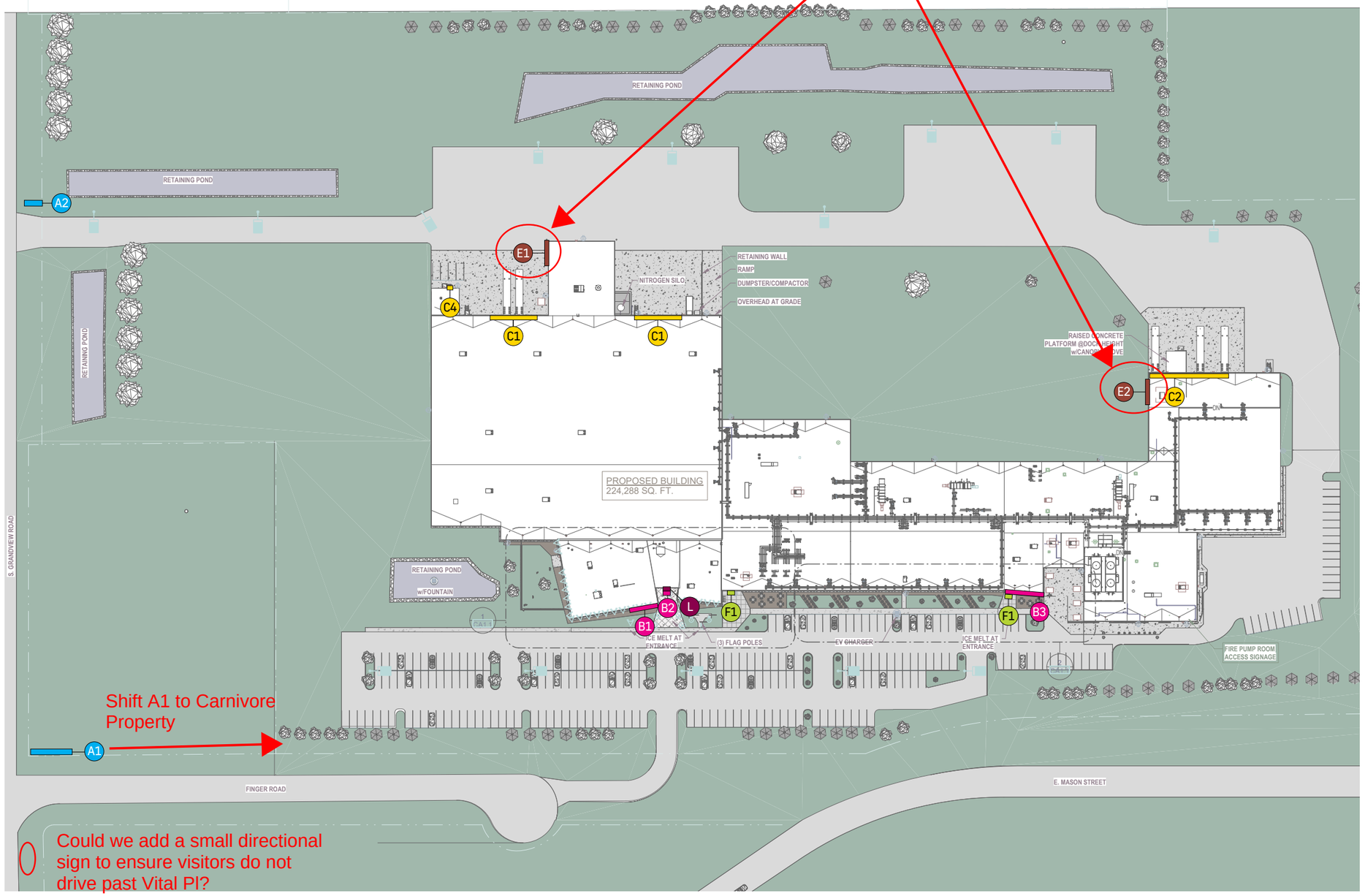
Previously named A3



Shift A1 to Carnivore Property

Could we add a small directional sign to ensure visitors do not drive past Vital Pl?

Exterior Location Overview (1 of 2)

SIGN CODE	SIGN TYPE
A	Exterior Pylon
B	Building ID
C	Shipping/Recieving ID
D	Door ID
E	Vehicular Directional
F	Employees Only
G	Dog Waste Disposal
H	Parking Signs
J	No Trucks
K	Evacuation Location
L	Address Number

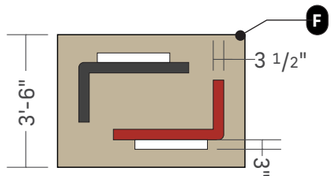
Carnivore Meat Company
P.O. Box 9227
Green Bay, WI 54308
920.367.4211

Arbor Investments
676 N. Michigan Ave | 34th Floor
Chicago, IL 60611
312.981.3770

Younts Design Inc.
3600 Clipper Mill Rd | 410
Baltimore, MD 21211
443.825.4100

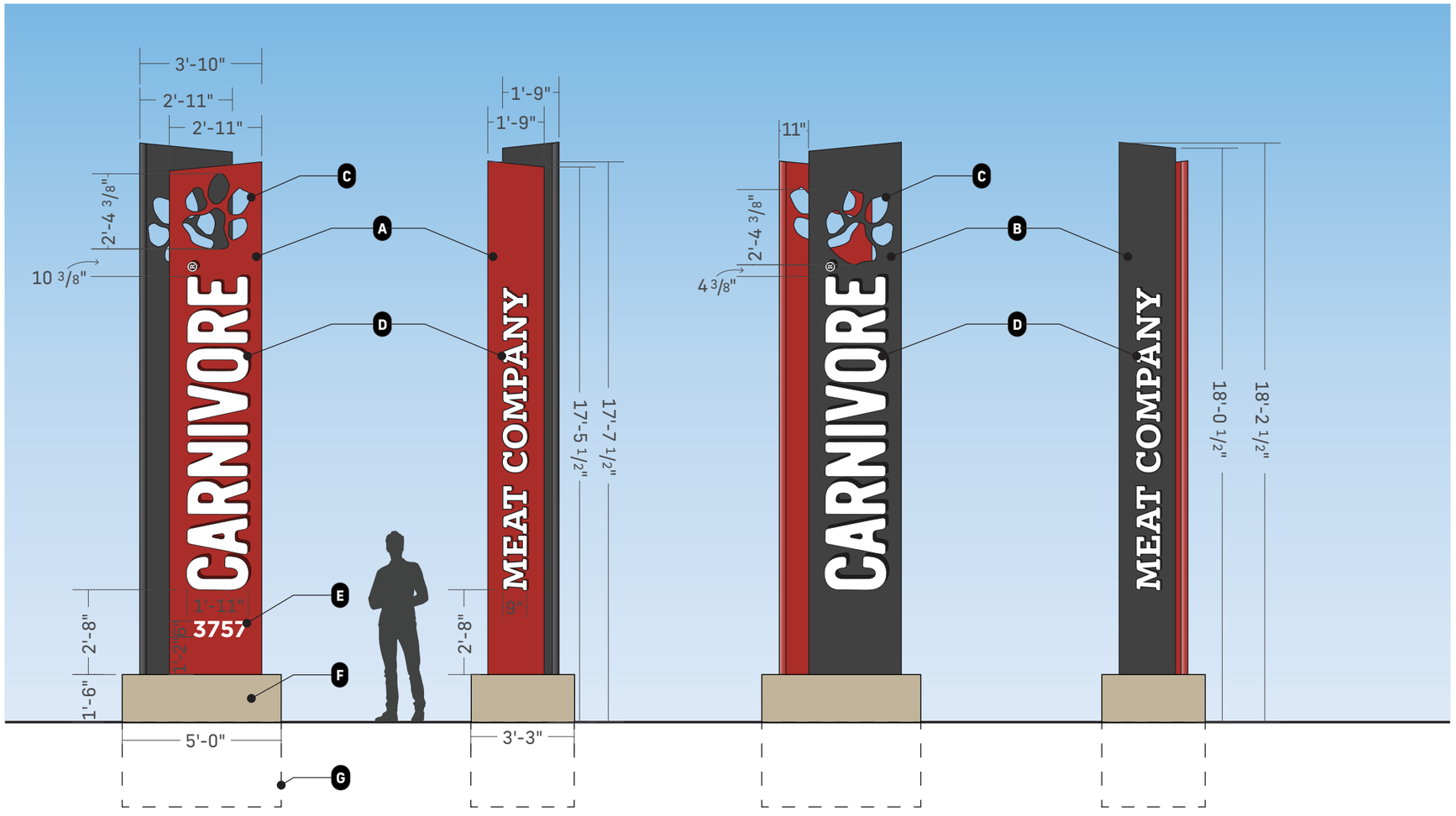
Drawn By
Nicole Hovermale
nicole@yountsdesign.com
443.825.4109

A1 – Primary Exterior Pylon



5 Top View
Scale: 3" = 1'-0"

PLANNING STAFF NOTE SHEETS 2 AND 3: HEIGHTS OF SIGNS SHOWN ON PDF EXCEEDS 10 FEET IN MAXIMUM HEIGHT. PUD DRAFT LANGUAGE LIMITS HEIGHT TO 10 FEET FOR MONUMENT SIGNS. IF PUD AMENDMENT IS APPROVED AT MAXIMUM HEIGHT OF 10 FEET, FINAL SIGNAGE MUST BE UPDATED FOR APPROVALS.



1 Front View
Scale: 3" = 1'-0"

2 Side View
Scale: 3" = 1'-0"

3 Back View
Scale: 3" = 1'-0"

4 Side View
Scale: 3" = 1'-0"

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CARNIVORE MEAT COMPANY

Carnivore Meat Company
P.O. Box 9227
Green Bay, WI 54308
920.367.4211

Arbor Investments
676 N. Michigan Ave | 34th Floor
Chicago, IL 60611
312.981.3770

Younts Design Inc.
3600 Clipper Mill Rd | 410
Baltimore, MD 21211
443.825.4100

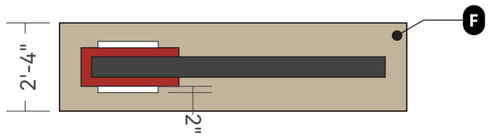
Drawn By
Nicole Hovermale
nicole@yountsdesign.com
443.825.4109

Phase
Design Development

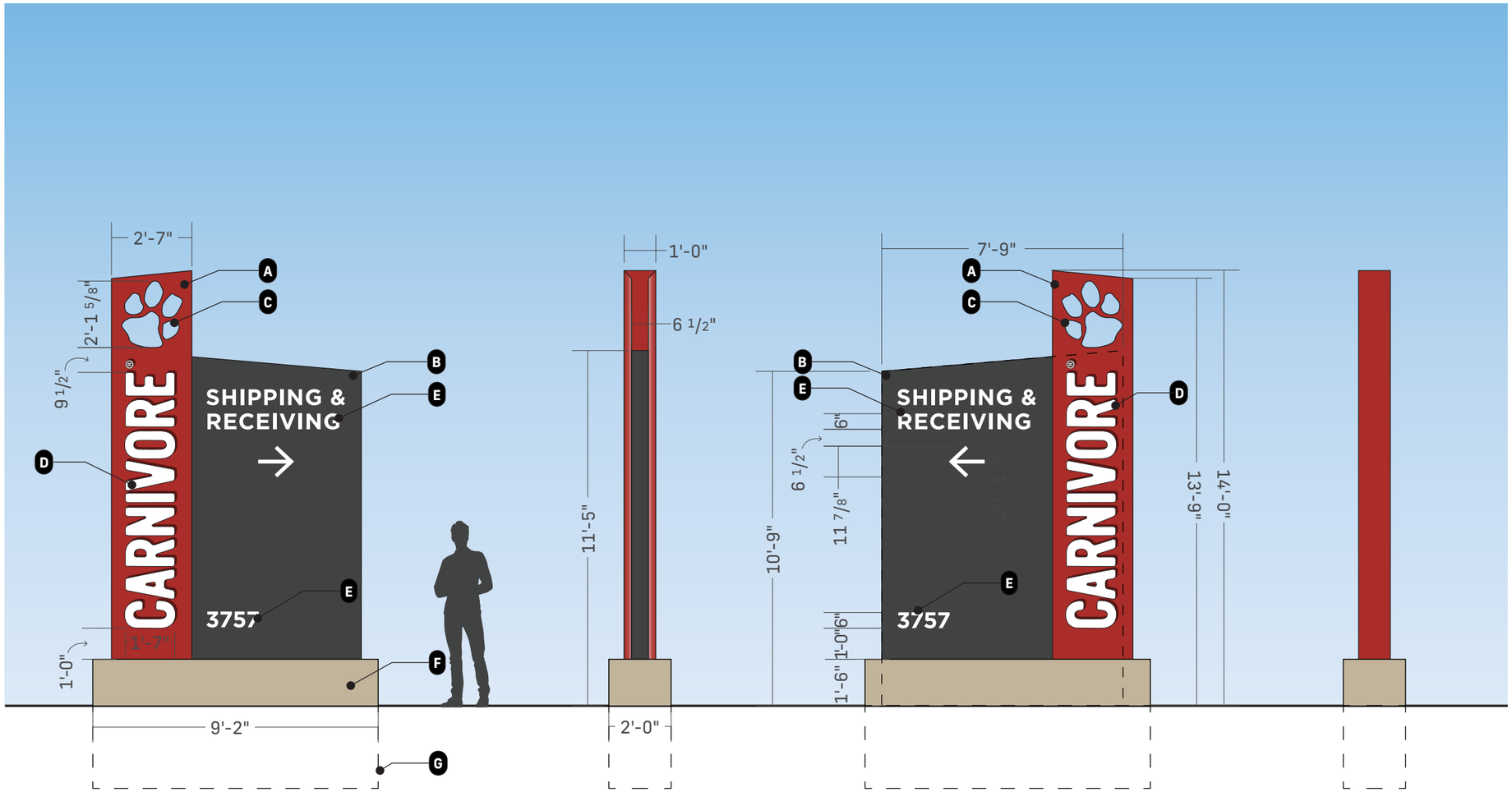
Document Name
Carnivore_Signage_DD

9/26/2023

A2 – Secondary Exterior Pylon



5 Top View
Scale: 3" = 1'-0"



1 Front View
Scale: 3" = 1'-0"

2 Side View
Scale: 3" = 1'-0"

3 Back View
Scale: 3" = 1'-0"

4 Side View
Scale: 3" = 1'-0"

Not For Construction | For Design Intent Only | Field Varification Required | Sign Fabircator is responsible for:
© Younts Design Inc.

CARNIVORE MEAT COMPANY

Carnivore Meat Company
P.O. Box 9227
Green Bay, WI 54308
920.367.4211

Arbor Investments
676 N. Michigan Ave | 34th Floor
Chicago, IL 60611
312.981.3770

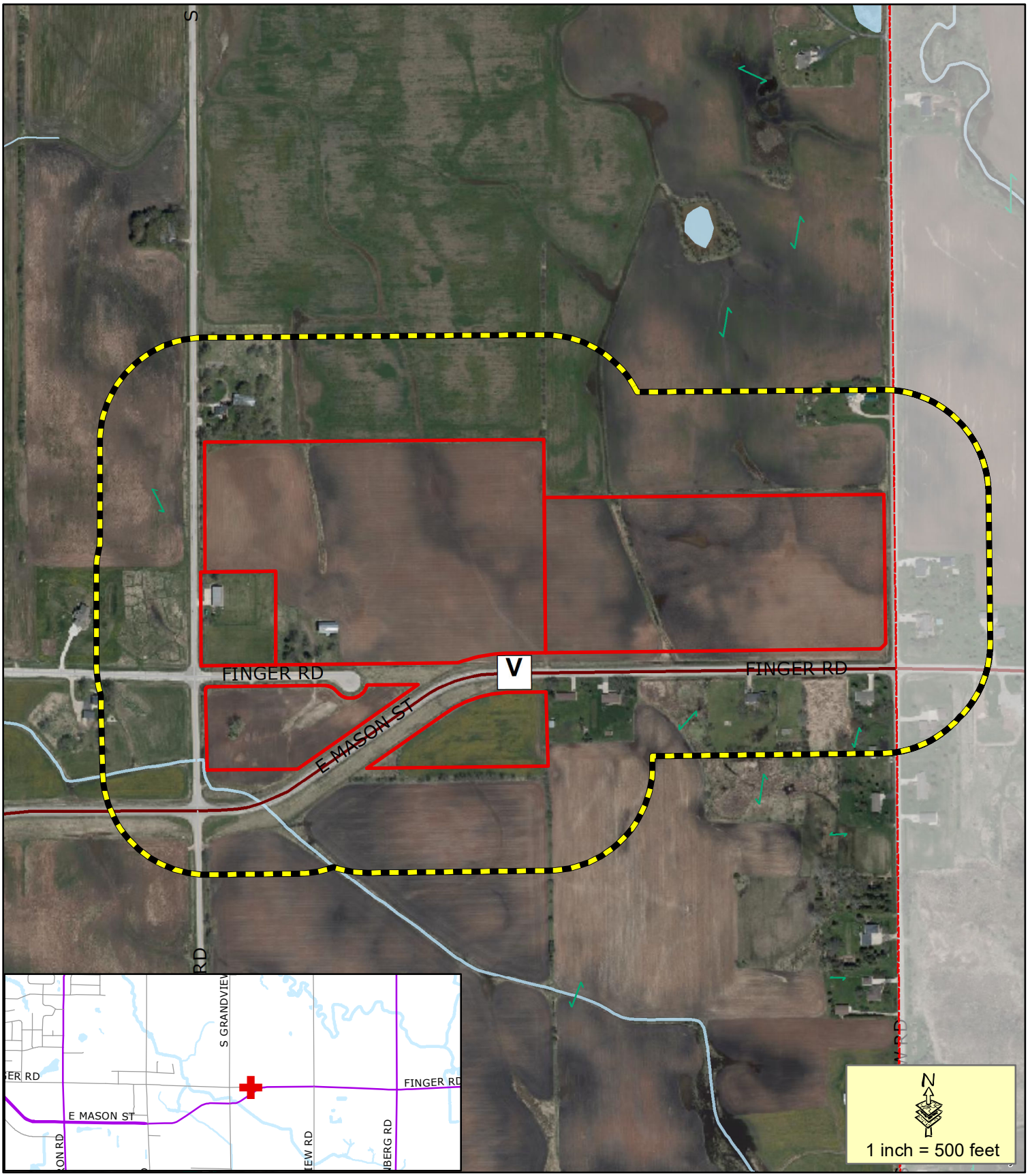
Younts Design Inc.
3600 Clipper Mill Rd | 410
Baltimore, MD 21211
443.825.4100

Drawn By
Nicole Hovermale
nicole@yountsdesign.com
443.825.4109

Phase
Design Development

Document Name
Carnivore_Signage_DD

9/26/2023



Proposed PUD Amendment

400' Property Owner Notice

This is a compilation of records and data located in various City of Green Bay offices and is to be used for reference purposes only. The City of Green Bay is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.
Map prepared by JL

Zoning Petition (ZP 23-39)
Proposed Planned Unit Development Amendment at 3757 Vital Pl, 641 S Grandview Rd, 3751 E Mason St, 3760 E Mason St, and 3855 Finger Rd

CITY OF GREEN BAY 1854 Titletown, USA

Report to the
Finance Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	Diana Ellenbecker, Finance Director

AGENDA ITEM # R.1

To purchase from Baycom a certified 700 MHz Emergency Responder Radio Coverage System in the amount of $51,092 to be funded using ARPA Funds.

BACKGROUND

RECOMMENDATION

Approval of the request.

FISCAL IMPACT

ATTACHMENTS

1. Finance Request Radio Repeater Package 10-24

Purchasing Department
100 North Jefferson Street • Room 101
Green Bay, Wisconsin 54301-5026
www.greenbaywi.gov

Phone 920.448.3047
Fax 920.448.3050

10/19/2023

Finance Committee 10/24/2023

Consideration of possible action of approval: Baycom will provide a certified 700 MHz Emergency Responder Radio Coverage System design, material, equipment, labor, AHJ reports and AHJ compliance testing for the Green Bay Police Department Head Quarters located at 307 S Adams St. Green Bay WI 54301.

Description: Budgetary 700 MHz Emergency Responder
Radio Coverage System
Price: Public Safety Distributed Antenna System $51,092.00
Total Investment: $51,092.00

Pricing: Graybar- Omnia Partners Public Sector Contract EV2370

This Purchase will be funded out of the ARPA Funding.

Respectfully Submitted,
Thomas J. Walenski
Thomas J. Walenski
Procurement Manager
City of Green Bay

Green Bay Police Department

Approved Funds: ARPA

Requisition #229

Department Contact for this Requisition: Jason Bamman @ 3037

Purchase request: Radio Repeater

Cost: $51,092.00 ($60,000 approved funding)

Account Number: See Below

Created and Approved by Rick Jurkanis 9/28/23

Please see attached quote for specifications and work with department contact to finalize specifications. Vendor is Baycom/Motorola. Approved State Contract Price. Please confirm quote before issuing purchase order.

Please use the following funding sources:

1. $51,092.00: ARPA 218300-55140-83098

Public Safety - BAYCOM Green Bay Police Department HQ

Prepared for: Eric Schroeder

Date: 09/27/2023
Proposal #:
2022-01037 Ver. 2

Designed by: Gary Wood
Director of RF Technology
262-812-3291
gwood@cc-n.com

COMPANY OVERVIEW:

Baycom has been in business for over 35 years with consistent growth year over year. As an employee-owned company, Baycom is dedicated to superior quality, safe working practices and absolute integrity in all our business relationships. Baycom provides a wide variety of products and services to meet any customer needs and requirements:

- Cable Infrastructure
- Wi-Fi Network Solutions
- In-Building Cellular Repeater Systems
- In-Building Public Safety Repeater Systems

EXECUTIVE SUMMARY:

Baycom will provide a certified 700 MHz Emergency Responder Radio Coverage System design, material, equipment, labor, AHJ reports and AHJ compliance testing for the Green Bay Police Department Head Quarters located at 307 S Adams St. Green Bay WI 54301. This proposal is budgetary in nature and should not be regarded as a contractual quote. Baycom recommends a site signal survey and design be completed before official quotes can be provided.

PROPOSAL CONSIDERATIONS:

Baycom's budgetary proposal is based on the requirements as described in:

- Structured cabling installation per National Electrical Code and building standard.
- International Fire Code (IFC) Section 510
- NFPA 72
- Baycom certified iBwave system design and propagation
- Assumption of existing roof top signal level of -80 dB or better
- Floor plans and construction detail provided by Baycom.
    - Estimated coverage areas is 40,000 sqft, including the basement/ gun range, and 1st floor.

PROPOSAL INCLUSIONS:

We have **included** the following implementation items within our proposal:

- Public Safety design and system installation
- Installation of Omni antenna locations and necessary ½" air dialect cabling.
- A Yagi directional donor and non-penetrating roof mount mast.
- Installation of ERRCS BDA repeater(s).
- Installation of ERRCS Battery Backup Unit(s).
- Post installation site signal survey confirming -90 dB throughout 95% of the existing structure including critical areas (stairwells, elevators, command centers and pump rooms).
- Live TX testing will confirm non oscillation issue.

- BDA is System Monitoring compliant (donor, amplifier, power, battery backup and oscillation alarming)
- Detailed system design, propagation heat maps, equipment documentation and local permit

PROPOSAL NOTES & EXCLUSIONS:

The following items are **not included** in the proposal pricing and should be considered:

- Overtime & expedited installation premium.
- Pre-existing code violations.
- Concrete coring will be supplied by others.
- BDA electrical requirements will be supplied by others.
  - Estimated one dedicated 120V 20AMP circuit required.
- Roof penetration and seal will be supplied by others.
  - Estimated one 2" EMT conduit sleeve required at the location of the donor antenna.
  - Recommended donor antenna location be on the NSEW Side of the facility.
- BDA connection to central station monitored fire alarm panel will be supplied by others.
  - Estimated 5-8 monitoring points connected to the FA panel required.
- Necessary conduit shall be provided by others.
  - At the time of this proposal, no conduit for cable infrastructure will be required.
- Union labor costs outside of Baycom Communications Workers of America
- 2HR survivable room, riser, horizontal requirements excluded.

WARRANTY:

- Cabling and Connectors:
  - Baycom covers all physical coax and fiber cabling installations, including connections for a period of one (1) year. This begins at the completion of the installation. Baycom shall be a point of contact for all warranty issues. Warranty service will be performed between 7:30 a.m. and 4:00 p.m., Monday through Friday. Damage to, or failure of the cabling system due to an unpredictable event or occurrence outside the control of the contracting parties, and which is not attributable to any act or failure to take preventive action by the party concerned including, but not limited to, acts of nature, fire, theft, vandalism, water, abuse, misuse, accidents, or work performed by others are not covered.

- PS Electronics and Equipment:
    - The manufacturer's warranty shall apply to all system components. Baycom will assist MSO in obtaining warranty repairs, such as removing, boxing, and sending in any failed device. Any charges not covered by the manufacturer's factory warranty shall be the responsibility of Green Bay Police Department.

SOLUTION INVESTMENT SUMMARY:

Description: Budgetary 700 MHz Emergency Responder Radio Coverage System	**Price:**
Public Safety Distributed Antenna System	$51,092.00
Total Investment:	**$51,092.00**

SALES TAX NOT INCLUDED, if applicable.

Pricing: Graybar- Omnia Partners Public Sector Contract EV2370

TERMS & CONDITIONS:

- Due to global volatility of material cost and material availability, the pricing in this proposal is valid for at most 15 days from the date this proposal was provided. Any known material availability issues related to this scope of work will be communicated at the time of providing proposal.
  Changes in material availability after proposal has been provided to customer may impact project completion timelines and project schedules.
- Please allow a minimum of 10 business days from receipt of a signed Proposal or Customer PO to allow for material and resource coordination. A shorter timeline may be possible to accommodate and may involve an expedite fee of up to 5% of the overall project cost.
- During the Term of this engagement and for one year thereafter, CLIENT agrees not to directly or indirectly hire or attempt to hire any Baycom or Baycom's resource, i.e., contract or employee who is directly involved in the performance of services under the engagement.
- A change order will be issued by Baycom for work that falls outside the agreed-upon scope of this proposal. Baycom will refrain from initiating such work prior to your signed approval.
- Payment Terms are as follows:
    - Down payment upon agreement signature: Customer will be invoiced for 50 % of contract value.
    - Monthly progress billing thereafter with payment is due prior to 30 days from date of invoice.
    - Interest of 1.5% per month (equivalent to 18% per annum computed monthly) is charged for invoice balances beyond 30 days past due.

Headquarters: 2040 Radisson Street, Green Bay, WI 54302 www.baycom.com
A 100% Employee-Owned Company

Baycom Master Services Agreement available at https://www.cc-n.com/master-services-agreement/

NOTICE OF RIGHT TO LIEN:

As required by the Wisconsin construction lien law, COMPANY hereby notifies CLIENT that persons or companies performing, furnishing, or procuring labor, services, materials, plans or specifications for the construction on client's land may have lien rights on client's land and buildings if not paid. Those entitled to lien rights, in addition to the undersigned COMPANY/CONTRACTOR, are those who contract directly with the client or those who give the client notice within sixty (60) days after they first perform, furnish, or procure labor, services, materials, plans or specifications for the construction. Accordingly, CLIENT probably will receive notices from those who perform, furnish or procure labor, services, materials, plans or specifications for the construction, and should give a copy of each notice received to the mortgage lender, if any, contractor agrees to cooperate with the client and the client's lender, if any, to see that all potential lien claimants are duly paid.

CONFIDENTIALITY STATEMENT

This proposal contains confidential and proprietary information intended solely for the recipient(s) named herein. By accessing or reviewing this proposal you acknowledge and agree to maintain the strictest confidentiality of its contents. The recipient shall not disclose, distribute, reproduce, or use any part of this proposal without the express written consent of the originating party, except for the purposes of evaluating the proposal and engaging in further discussions related to its subject matter.

Headquarters: 2040 Radisson Street, Green Bay, WI 54302 www.baycom.com
A 100% Employee-Owned Company

SIGNATURE PAGE:

Customer Approval:

_____
Company Name

_____
Signature

_____
Print Name

_____
Title

Approval Date: _____

Baycom Approval:

_____
Signature

_____
Print Name

_____
Title

Approval Date: _____

Project Total: $_____
Plus tax & shipping
(Please write in total cost of project to be purchased) _____

Customer Site Address:

_____

Company Name (if different from above)

_____
Contact Name

_____
Contact Ph. Number/E-mail Address

_____
Street Address

_____
City, State, Zip

Billing Information:

❒ Please check box if the same as site.

_____
Contact Name

_____
Contact Ph. Number/E-mail Address

_____
Street Address

_____
City, State, Zip

Headquarters: 2040 Radisson Street, Green Bay, WI 54302 www.baycom.com
A 100% Employee-Owned Company

Report to the
Finance Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	Diana Ellenbecker, Finance Director

AGENDA ITEM # R.2

To approve the ARPA reallocation request from the Green Bay Police Department.

BACKGROUND

This is a request from the Police Department to reallocate American Rescue Plan Act (ARPA) funds.

RECOMMENDATION

To approve the Police Department's request to allocate $175,642 from the balance of 2 projects to 10-1-301 Mobile Response Team supplies.

FISCAL IMPACT

ATTACHMENTS

1. ARPA police reallocation

Finance Department
100 North Jefferson Street • Room 105
Green Bay, Wisconsin 54301-5026
www.greenbaywi.gov

Phone 920.448.3020
Fax 920.448.3050

Memo

To: Finance Committee
Diana Ellenbecker, Finance Director

From: Susan House, Grant Administrator

Date: October 17, 2023

Re: ARPA Requests- Police Department Reallocation Request

The Green Bay Police Department is requesting to reallocate some of the remaining balance of two (2) of their ARPA projects for supplies for the Mobile Response Team (MRT). One project is complete (NIBIN), one project was allocated funding for 1 year for police Over hire, Recruitment and Retention.

Project	Allocated	Obligated	Balance (not expected to spend)	Request
Overhire	$ 353,400.00	$ 50,000	$ 303,400.00	$50,000 for MRT
NIBIN	$ 314,000.00	$ 188,358.00	$ 125,642.00	$125,642 for MRT
Total Allocation	$ 667,400.00	Unobligated Total: $ 431,542.00		**Total request $175,642**

10-1-301 Mobile Response Team Supplies $175,642

Project Summary: The mobile response team supplies
Project Outcomes: Police Department will have appropriate supplies.
Recurring cost: Not Applicable

Recommendation: Approve Police Department request to allocate $175,642 from the balance of 2 projects to 10-1-301 Mobile Response Team Supplies.

Report to the
Finance Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	Diana Ellenbecker, Finance Director

AGENDA ITEM # R.3

To approve a budget amendment resolution for unbudgeted overtime for special events.

BACKGROUND

RECOMMENDATION

Approval of the Resolution.

FISCAL IMPACT

ATTACHMENTS

1. Combined Resolution for 10.24.23 Finance Meeting

RESOLUTION AUTHORIZING
BUDGET AMENDMENT

November 7, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY, RESOLVED:

Pursuant to the recommendation of the Finance Committee at its meeting of October 24, 2023, the following 2023 amendment of funds is hereby authorized:

	ACCOUNT		AMOUNT
Increase:	101300 50501	Police-Overtime	$14,303.40
Increase:	101300 46223	Police Overtime Reimbursement	$14,303.40

***This budget amendment is for 2023 unbudgeted overtime for staffing at various task forces-FBI, US Marshalls and Internet Crimes Against Children.*

Increase:	101400 50501	Fire-Overtime	$19,482.74
Increase:	101400 46223	Fire Overtime Reimbursement	$19,482.74

***This budget amendment is for 2023 unbudgeted overtime for staffing at the UWGB Cross Country and Festival events, Packers Flo Rida Concert, Cellcom Marathon, Packer Training Camp and the Packer 5K.*

Increase:	101400 50501	Fire-Overtime	$3,520.00
Increase:	101400 43611	Fire-State Overtime Reimbursement	$3,520.00

***This budget amendment is for 2023 unbudgeted state reimbursements of costs incurred for employees to attend USAR (Urban Search & Rescue) trainings.*

Adopted _____

Approved _____

_____
Mayor

_____
Clerk

Report to the
Finance Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	Diana Ellenbecker, Finance Director

AGENDA ITEM # R.4

To receive and place on file the 2024-2028 Capital Improvement Plan (CIP).

BACKGROUND

Please note that this is the 2024-2028 Capital Improvement Plan as of October 20, 2023. This document is always evolving. Items in the 2024 column that are bolded, are changes that have been made since the information that was shared at the September 12, 2023, Finance Committee meeting.

RECOMMENDATION

Receive and Place on File.

FISCAL IMPACT

ATTACHMENTS

1. 2024-2028 CIP as of 10-20-23 highlighted changes from 9-12-23

Total Capital Projects Summary By Year updated 10-20-2023

Department	Finance Description	2024	2025	2026	2027	2028	Total
	GENERAL LEVY:						
Clerk / Treasurers	DS200 Tabulator Replacement	$15,000	$84,000	$84,000	$84,000	$84,000	$351,000
	Department Total	**$15,000**	**$84,000**	**$84,000**	**$84,000**	**$84,000**	**$351,000**
IT	ArcServe Backup	$32,000	$32,000	$32,000			$96,000
	DataCenter	$500,000					$500,000
	Door Access System Replacement	$78,000					$78,000
	DR Site - Air Conditioner	$6,000					$6,000
	FortiNAC Control and Application Server	$133,279	$28,050	$28,050	$28,050	$28,050	$245,479
	FortiSIEM Hardware Appliance	$101,772	$20,149	$20,149	$20,149	$20,149	$182,368
	Department Total	**$851,051**	**$80,199**	**$80,199**	**$48,199**	**$48,199**	**$1,107,847**
Municipal Court	Courtroom sound and security system	$50,000					$50,000
	Department Total	**$50,000**					**$50,000**
Police	AED's (Defibrillators) 2024	$85,000					$85,000
	Building Backup Power Generator	$125,000					$125,000
	Building Maintenance Tractor		$35,000				$35,000
	Command Vehicle - COUNCIL APPROVED		$750,000				$750,000
	Department Carpet Replacement	**$110,000**					$110,000
	GBPD 2nd Floor HVAC Liebert Unit	$30,000					$30,000
	Hand Held Radios	$80,000	$82,000	$82,000	$83,000	$84,000	$411,000
	Humane Truck with Insert		$50,000				$50,000
	Mobile Radios	$25,000	$27,000	$27,000	$28,000	$29,000	$136,000
	Patrol Rifles	$122,000	$122,000	$122,000			$366,000
	PIckup Truck 123 (2005)			$41,000			$41,000
	Pickup Truck 124 (2007)		$40,000				$40,000
	Pickup Truck 126 (2004)		$40,000				$40,000
	Police Department garage door renovations/replacment	$30,000					$30,000
	Radio Encryption	$925,000					$925,000
	Replacement Squad 40	$58,500			$61,500		$120,000
	Replacement Squad 41		$59,500			$62,500	$122,000
	Replacement Squad 42			$60,500			$60,500
	Replacement Squad 43	$58,500			$61,500		$120,000
	Replacement Squad 44	$58,500			$61,500		$120,000
	Replacement Squad 45	$58,500			$61,500		$120,000
	Replacement Squad 46			$60,500			$60,500
	Replacement Squad 47		$59,500			$62,500	$122,000
	Replacement Squad 48		$59,500			$62,500	$122,000
	Replacement Squad 49	$58,500			$61,500		$120,000
	Replacement Squad 50		$59,500			$62,500	$122,000
	Replacement Squad 51		$59,500			$62,500	$122,000
	Replacement Squad 52		$59,500			$62,500	$122,000
	Replacement Squad 53			$60,500			$60,500
	Replacement Squad 54		$59,500			$62,500	$122,000
	Replacement Squad 55		$59,500			$62,500	$122,000
	Replacement Squad 56			$60,500			$60,500
	Replacement Squad 57	$58,500			$61,500		$120,000
	Replacement Squad 58			$60,500			$60,500
	Replacement Squad 59			$60,500			$60,500
	Replacement Squad 60		$59,500			$62,500	$122,000
	Replacement Squad 61			$60,500			$60,500
	Replacement Squad 62			$60,500			$60,500
	Replacement Squad 63		$59,500			$62,500	$122,000
	Replacement Squad 64		$59,500			$62,500	$122,000
	Replacement Squad 65			$60,500			$60,500
	Replacement Squad 66			$60,500			$60,500
	Replacement Squad 67		$59,500			$62,500	$122,000
	Replacement Squad 68		$59,500			$62,500	$122,000

	Replacement Squad 69			$60,500			$60,500
	Replacement Squad 70			$60,500			$60,500
	Replacement Squad 71			$60,500			$60,500
	Replacement Squad 72	$58,500			$61,500		$120,000
	Replacement Squad 73	$58,500			$61,500		$120,000
	Replacement Squad 74	$58,500			$61,500		$120,000
	Replacement Squad 75	$58,500			$61,500		$120,000
	Replacement Squad 76	$58,500			$61,500		$120,000
	Replacement Squad 77	$58,500			$61,500		$120,000
	Replacement Squad 80	$58,500			$61,500		$120,000
	Replacement Squad 81	$58,500			$61,500		$120,000
	Replacement Squad 82	$58,500			$61,500		$120,000
	Replacement Squad 84		$59,500			$62,500	$122,000
	Replacement Squad 85		$59,500			$62,500	$122,000
	Security Camera Replacement	$12,000	$14,000	$14,000	$15,000	$16,000	$71,000
	Tire Balancer		$10,000				$10,000
	Zodiac Boat Replacement		$15,000				$15,000
	Department Total	**$2,421,500**	**$2,077,500**	**$1,072,500**	**$1,048,500**	**$1,066,500**	**$7,686,500**
Fire	Ambulance MED 421		$343,950				$343,950
	Ambulance MED 431				$372,000		$372,000
	Ambulance MED 451				$372,000		$372,000
	Ambulance MED 461			$357,700			$357,700
	Ambulance MED 471	**$437,875**					$437,875
	Ambulance MED 481			$357,700			$357,700
	Ambulance MED 491	**$437,875**					$437,875
	Ballistic Gear					$201,500	$201,500
	Battalion Vehicle BC 411	**$150,000**					$150,000
	Battalion Vehicle BC 431		$156,000				$156,000
	Command Vehicle CMD 411-COUNCIL APPVD		$750,000				$750,000
	Dishwasher Station 4			$17,000			$17,000
	Dishwasher Station 5	$25,500					$25,500
	Dishwasher Station 7		$17,700				$17,700
	Engine EN 421					$1,035,000	$1,035,000
	Engine EN 491			$956,500			$956,500
	Engine EN442			$450,000			$450,000
	Engine EN461				$994,500		$994,500
	Extrication Equipment		$191,100				$191,100
	Fire Marshal FM495			$58,493			$58,493
	Fire Marshal FM496		$56,243				$56,243
	Fire Marshal FM497			$58,493			$58,493
	FIRE STATION (NEW)		**$15,000,000**				$15,000,000
	Fleet Modems		$150,480				$150,480
	Flooring - Station 2	$87,300					$87,300
	Flooring Station 3		$24,035				$24,035
	Flooring/Carpet - Station 4	$13,725					$13,725
	Garage Doors/Openers - Shop	$25,800					$25,800
	Garage Doors/Openers - Station 4		$40,785				$40,785
	Garage Doors/Openers Station 1		$14,630				$14,630
	Garage Doors/Openers Station 3		$14,630				$14,630
	HVAC Station 1		$108,900				$108,900
	HVAC Station 3		$102,100				$102,100
	HVAC Station 4			$118,800			$118,800
	Kitchen St 4			$19,000			$19,000
	Ladder Truck LA421-COUNCIL APPROVED	**$2,034,000**					$2,034,000
	Ladder Truck LA461-COUNCIL APPROVED	**$2,034,000**					$2,034,000
	Lot Station 1		$34,485				$34,485
	Lot Station 3		$13,585				$13,585
	Lot Station 7	$29,325					$29,325
	Marine 1 Fire Boat		$485,985				$485,985
	Mobile Data Computer Replacement				$237,362		$237,362
	OUTDOOR WARNING SIREN SITE 1			$33,075			$33,075

	OUTDOOR WARNING SIREN SITE 11				$34,729		$34,729
	OUTDOOR WARNING SIREN SITE 12		$31,500				$31,500
	OUTDOOR WARNING SIREN SITE 13			$33,075			$33,075
	OUTDOOR WARNING SIREN SITE 14				$34,729		$34,729
	OUTDOOR WARNING SIREN SITE 2	$30,000					$30,000
	OUTDOOR WARNING SIREN SITE 3	$30,000					$30,000
	OUTDOOR WARNING SIREN SITE 4		$31,500				$31,500
	OUTDOOR WARNING SIREN SITE 7					$36,465	$36,465
	OUTDOOR WARNING SIREN SITE 8					$36,465	$36,465
	Radio Firmware/Tune	$16,250		$17,745		$19,378	$53,373
	Roof Fire Shop			$78,000			$78,000
	Roof Fire Station 3		$30,000				$30,000
	Siding - Fire Shop			$62,300			$62,300
	Specialty Vehicle Ambulance EMS 1		$216,320				$216,320
	Staff Vehicle CH401		$56,250				$56,250
	Staff Vehicle CH402		$56,250				$56,250
	Staff Vehicle CH403		$56,250				$56,250
	Support Vehicle Shop PU 10		$56,250				$56,250
	Thermal Imaging Cameras	$136,710					$136,710
	Urban Search and Rescue Vehicle		$2,163,200				$2,163,200
	Utility Vehicle 412			$73,100			$73,100
	Utility Vehicle 413	$67,600					$67,600
	Video Conference		$196,500				$196,500
	Water Heater Fire Shop			$6,200			$6,200
	Water Heater Station 1		$19,600				$19,600
	Water Heater Station 3		$19,600				$19,600
	Water Heater Station 4	$19,600					$19,600
	Water Heater Station 6 (North)	$19,600					$19,600
	Water Rescue Suits			$20,000			$20,000
	Windows - Station 1		$104,500				$104,500
	Windows - Station 3		$104,500				$104,500
	Windows - Station 4			$109,000			$109,000
	Windows - Station 5		$104,500				$104,500
	Windows - Station 6		$104,500				$104,500
	Department Total	**$5,595,160**	**$20,855,828**	**$2,826,181**	**$2,045,320**	**$1,328,808**	**$32,651,297**
DPW	1,800 GALLON ANTI-ICING UNITS (x2)	$90,000					$90,000
	13th - W. Mason to Howard Reconstruction			$890,000			$890,000
	13th Street - W Mason to 9th St				$1,395,000		$1,395,000
	4th Street - Broadway to S Maple Reconstruction	$315,000					$315,000
	4X4 Chassis/Dump/Plow/Spreader		$95,000				$95,000
	Automated refuse truck		$730,000	$760,000	$770,000		$2,260,000
	Baird Street over East River - Expansion Joints					$200,000	$200,000
	Bridge - Pearl to E Termini	**$67,500**					$67,500
	Bridges - Annual Preventative Maintenance	**$365,000**	$365,000	$365,000	$365,000	$365,000	$1,825,000
	Bridges - Approach Repairs	**$230,000**	$200,000				$430,000
	Bridges - Epoxy Overlays				$500,000		$500,000
	Bridges - Structural Steel Painting	**$1,600,000**	$385,000				$1,985,000
	Cass Street - Madison to Monroe Reconstruction	$185,000					$185,000
	Chicago - S Madison to S Monroe			$160,000			$160,000
	Chicago - S Webster to S Roosevelt					$560,000	$560,000
	Christina - S Oakland to Hazel Ave					$475,000	$475,000
	Clay St - E Mason to Main					$1,675,000	$1,675,000
	Congress Street - Madison to Monroe				$185,000		$185,000
	Country Club Road Reconstruction - Construction		$4,000,000				$4,000,000
	County Road EB	**$700,000**					$700,000
	Danz Avenue over Baird Creek - Bridge Rehabilitation Construction		$200,000				$200,000
	Danz Avenue over Baird Creek - Bridge Rehabilitation Design	$100,000					$100,000
	Division - Norwood to Northern Reconstruction			$860,000			$860,000
	East Mason - Lime Kiln to Main	**$756,750**					$756,750
	East Shop - ADA Restrooms				$55,000		$55,000

East Shop - Electrical Shop ADA Bathroom				$30,000		$30,000
East Shop - Electrical Shop Roof Drains					$200,000	$200,000
East Shop - Garage Door Closers					$15,000	$15,000
East Shop - Gas Cylinder Storage Room				$26,000		$26,000
East Shop - HVAC		$200,000	$2,300,000			$2,500,000
East Shop - Occupancy Sensors				$19,500		$19,500
East Shop - Plumbing Code Issues				$65,000		$65,000
East Shop - Security Upgrades					$250,000	$250,000
East Shop-Electrical Shop - HVAC/Plumbing/Code				$180,000		$180,000
East Shop-Main Building - Electrical				$30,000		$30,000
Elmore Street - N. Chestnut to Gray Reconstruction		$2,025,000				$2,025,000
Emilie Street - S Webster to Roosevelt				$565,000		$565,000
ENCLOSED TRAILER	$7,500					$7,500
Finger Road - Superior to Challenger	**$636,120**					$636,120
FLAIL MOWER	$23,000					$23,000
Front End Loader/Wing/Plow/Grapple	$180,000					$180,000
General Annual Projects (Pavement Repairs and Mudjacking)	$650,000	$650,000	$650,000	$650,000	$650,000	$3,250,000
General Bridge Maintenance	$200,000	$200,000	$200,000	$200,000	$200,000	$1,000,000
Grandview Bridge Replacement	$105,000	$350,000				$455,000
Henry Street Bridge Replacement		$50,000		$200,000		$250,000
Hinkle Street - Frontage Road to Hutson			$825,000			$825,000
Hinkle Street - N. Frontage Road to W. Mason Reconstruction		$435,000				$435,000
Howard - Ashland to Oakland	$159,300					$159,300
Larsen Road Bridge - Construction	$1,000,000					$1,000,000
Main Street over Fox River - Dolphin Repair			$300,000	$1,000,000		$1,300,000
Main Street over Fox River - East Hydraulics	**$242,000**	$730,000				$972,000
Main Street over Fox River - Full Evaluation		$125,000				$125,000
Main Street over Fox River - Structural Repairs	**$2,665,000**					$2,665,000
Main Street over Fox River - West Hydraulics	**$791,000**		$680,000			$1,471,000
Mather Street - Gray to Locust				$2,160,000		$2,160,000
MOBILE COLUMN VEHILCE LIFT UNITS (x6)	$85,000					$85,000
N Irwin - St Clair to N Termini		$105,000				$105,000
N Maple Ave - Mather to Phoebe			$360,000			$360,000
Oakland Howard/Seymour Ct	**$369,000**					$369,000
Oxford - Dousman to Reed Reconstruction	$290,000					$290,000
PLUMBING PRESS FITTING TOOL KIT	$8,500					$8,500
Quincy - Chicago to Bodart					$1,435,000	$1,435,000
Reed - Oxford to Allard Reconstruction	$175,000					$175,000
Refuse collection truck-COUNCIL APPROVED	$710,000					$710,000
Resurfacing Program	$3,350,000	$3,350,000	$3,350,000	$3,350,000	$3,350,000	$16,750,000
Richmond - Ricky to 100' E/o	**$45,000**					$45,000
Ricky - Vine to Richmond	**$135,000**					$135,000
Robotic Total Staton with Data Collector	**$85,000**					$85,000
RUGGEDIZED LAPTOP COMPUTER	$5,500					$5,500
S Chestnut - 7th to 8th					$305,000	$305,000
S Maple - 9th to N Termini	**$462,000**					$462,000
S Maple Avenue - Kellog to Mather		$585,000				$585,000
S Maple Avenue - Walnut to Kellogg	$840,000					$840,000
S Van Buren - Crooks to Chicago		$245,000				$245,000
S Van Buren - Eliza to Grignon		$490,000				$490,000
S. Roosevelt St - Eliza to Grignon				$495,000		$495,000
School Pl - Ashland to c-d-s	**$430,000**					$430,000
Seventh Street over Beaver Dam Creek - Rehabilitation	$100,000	$200,000				$300,000
Sidewalk Tractor	$85,000					$85,000
Sidewalk tractor with attachments	$81,000	$119,000				$200,000
Sidewalks Citywide Program	$720,000	$720,000	$720,000	$720,000	$720,000	$3,600,000
Sidewalks Compliant Program	**$360,000**	$360,000	$360,000	$360,000	$360,000	$1,800,000
Sign Installation Truck		$56,000				$56,000
Sitka Sidewalk	**$275,000**					$275,000
Spring Street - Madison to Monroe Reconstruction		$185,000				$185,000
St Clair - Baird to Roosevelt		$775,000				$775,000

	STEEP SLOPE ZERO TURN MOWER	$30,000					$30,000
	TANDEM AXLE DUMP TRUCK	$285,000					$285,000
	Tandem Axle Dump Truck/Wing/Plow	$287,000	$290,000	$300,000	$310,000		$1,187,000
	Taylor Street Bridge Replacement		$50,000	$200,000			$250,000
	Traffic Signal Repair	$500,000	$500,000	$500,000	$500,000	$500,000	$2,500,000
	Van Beek Stormwater Facility - Construction		$500,000				$500,000
	Webster Avenue Bridge Rehabilitation		$100,000	$420,000			$520,000
	West Shop - Building D Stairwell Repairs			$9,000			$9,000
	West Shop - Building D Trench Drains			$55,000			$55,000
	West Shop - Building G Ventilation					$50,000	$50,000
	West Shop - Garage Doors					$500,000	$500,000
	West Shop - Main Building Ceiling			$30,000			$30,000
	West Shop - Main Building HVAC	**$300,000**	$3,500,000				$3,800,000
	West Shop - Receptacle Replacement			$5,500			$5,500
	West Shop - Salt Storage Shed Repairs	$65,000					$65,000
	West Shop - Sanitary Lateral	**$500,000**					$500,000
	West Shop-Lore Lane - HVAC				$385,000		$385,000
	West Shop-Main Building - Coda/ADA			$135,000			$135,000
	West Shop-Main Building - Electrical			$32,000			$32,000
	Woodlawn - Shawano to Dousman Reconstruction	$480,000					$480,000
	ZERO TURN MOWER WITH BAGGER	$18,500					$18,500
	Department Total	**$22,144,670**	**$22,870,000**	**$14,466,500**	**$14,515,500**	**$11,810,000**	**$85,806,670**
Parks	1 TON BOX TRUCK - UNIT 35			$82,000			$82,000
	1 Ton Box Truck - Unit 5		$86,000				$86,000
	1/2 Ton 4x2 Regular Cab Pickup - Unit 55		$58,500				$58,500
	1/2 Ton 4x4 Regular Cab Short Box P/U - Unit 93		$58,500				$58,500
	1/2 Ton Extended Cab Truck - Unit 15					$65,000	$65,000
	1/2 TON REGULAR CAB SHORT BOX P/U - 93			$38,500			$38,500
	10,000 GVW Bobcat Trailer - Unit 112		$14,500				$14,500
	10,000 GVW Bobcat Trailer - Unit 288	$14,500					$14,500
	16' Gangmower w/cab - Unit 102					$229,000	$229,000
	16' Gangmower with cab - Unit 138			$205,000			$205,000
	17500 GVW Flatbed and hoist with 10 Ft Snow Plow - Unit 62				$176,600		$176,600
	180 HP 18" Capapcity towable brush chipper - Unit 210		$135,500				$135,500
	180 hp 18" towable brush chipper - 212	$125,500					$125,500
	19500 GVW Cab and Chasis with body and boom lift - Unit 34	**$235,000**					$235,000
	19500 GVW Cab and Chasis with body and boom lift - Addition		$195,000				$195,000
	19500 GVW Cab and Chasis with body and boom lift - Unit 41					$265,400	$265,400
	26,000 GVW Truck with Chipper Box/Hoist - Unit 63		$182,700				$182,700
	26000 GVW FlatBed with Hoist - Unit 61			$192,500			$192,500
	3/4 4x4 Regular Cab with Plow - Unit 49		$67,700				$67,700
	3/4 F250 4X4 W/PLOW - Unit 51			$79,000			$79,000
	3/4 Ton 4x4 Pickup - Unit 39	$66,500					$66,500
	3/4 Ton 4x4 Pickup with Plow - Unit 58					$74,000	$74,000
	3/4 TON 4X4 REGULAR CAB W/PLOW - 32			$79,000			$79,000
	3/4 Ton Full Size Van - Unit 74					$86,300	$86,300
	3/4 Ton Regular Cab 4x4 - Unit 89				$72,800		$72,800
	410600-49110-98422					$300,000	$300,000
	70' Aerial Truck - Unit 77				$512,500		$512,500
	70' Aerial Truck - Unit 87		$350,000				$350,000
	72" DECK MOWER - 137			$28,500			$28,500
	72" Deck Mower - Unit 125		$27,000				$27,000
	72" Deck Mower - Unit 132	$26,000					$26,000
	72" DECK MOWER W/ CAB AND BROOM - 139					$33,000	$33,000
	72" DECK MOWER W/ CAB AND BROOM - 180				$42,500		$42,500
	Baird Creek Greenway - Trail Improvements					$200,000	$200,000
	Beaver Dam Culvert Installation		$250,000				$250,000
	Bobcat/Toolcat - Unit 237			$123,400			$123,400
	Brisk - Playground Replacement				$150,000		$150,000
	Brush Chipper - Unit 202					$170,800	$170,800

Colburn - Phase II Ballfield Renovations			$500,000			$500,000
Danz - Century Grove Playground Walk			$25,000			$25,000
Danz Park - Playground Replacement			$150,000			$150,000
Dog Park - Location Unknown		$100,000				$100,000
East River Trail - Repave West Bank Grignon to Goodell				$200,000		$200,000
Edison - renovate Tennis Courts into Pickleball Courts					$75,000	$75,000
Edison Concession Stand/Restrooms					$200,000	$200,000
F450 Plumber Truck - Unit 99					$110,500	$110,500
Farlin Park Redevelopment	$230,000					$230,000
Forestry Tree Nursery	**$100,000**					$100,000
Fox River Trail - Replace Bricks and Widen Path			$400,000			$400,000
Joannes - Pool Basin Plaster		$400,000				$400,000
Joannes - Pool Filter/Mechanical Replacements		$100,000				$100,000
Joannes - Skate Park Modifications			$200,000			$200,000
Joanne's Aquatic Center Roof Replacement	**$200,000**					$200,000
Joannes Gutter/Slide Tower Replacement		$500,000				$500,000
Joannes Pool Restroom Hot Water Heater	**$16,000**					$16,000
Joliet - Parking Lot Paving and Shoreline Improvements				$125,000		$125,000
Lakeside Place - Playground Replacement			$150,000			$150,000
Leicht Park Redevelopment	**$7,000,000**					$7,000,000
Marquette Wading Pool Filter	**$35,000**					$35,000
Mather Heights - Playground Replacement		$150,000				$150,000
Misc. Park Paving		$50,000	$50,000	$50,000		$150,000
Muir - Parking Lot Replacement					$250,000	$250,000
New Bay Highlands Neighborhood Park				$300,000		$300,000
New Mahon Park					$300,000	$300,000
Nicolet - 1/2 Playground Replacement					$75,000	$75,000
Olde Preble - New Playground Walk	$150,000					$150,000
Olde Preble - Storm Water Management Construction	$60,000					$60,000
Park Shop – Replace Paving			$175,000			$175,000
Park Shop - Replace Underground Gas Tanks	$350,000					$350,000
Perkins - East Parking Lot Replacement		$400,000				$400,000
Pool Funbrella Replacement	**$18,000**					$18,000
Porlier Pier - Reconstruction		$410,000				$410,000
Preble - Parking Lot Replacement				$200,000		$200,000
Resch Aquatic Center - Pool Heater Replacement	$100,000					$100,000
Resch Aquatic Center Freezer and Refrigerator Replacement	**$33,000**					$33,000
Roofing - Various Parks		$50,000	$50,000	$50,000	$50,000	$200,000
Scoreboards - Colburn/Perkins/Edison	$50,000					$50,000
Self Propelled Line Striper - Unit 396				$53,200		$53,200
Seymour - East Playground Replacement		$100,000				$100,000
Skidsteer - Unit 225	$72,500					$72,500
St. Johns - Playground Replacement			$150,000			$150,000
Stump Grinder - Unit 116					$132,500	$132,500
Tank - 1/2 Playground Replacement		$75,000				$75,000
Telescopic Forklift - Unit 358	$225,000					$225,000
Toolcat with Snowblower and Broom - Unit 234		$106,500				$106,500
Triangle Hill - Expand Parking				$275,000		$275,000
UTV - New Addition	$43,000					$43,000
UTV - Unit 145	$21,500					$21,500
West Side Trail Construction – Bond Street to City Limits				$220,000		$220,000
WIDE TRACK SNOWMOBILE - UNIT 117			$21,900			$21,900
Wildlife Sanctuary - 4K Exploratory Area				$150,000		$150,000
Wildlife Sanctuary - Convert Propane to Natural Gas			$55,000			$55,000
Wildlife Sanctuary - Fencing Replacement		$100,000				$100,000
Wildlife Sanctuary - Replace Walk In Freezers				$60,000		$60,000
Wildlife Sanctuary - Residence Parking Lot Replacement		$250,000				$250,000
Department Total	**$9,171,500**	**$4,216,900**	**$2,754,800**	**$2,637,600**	**$2,616,500**	**$21,397,300**
City Hall	City Hall - 3rd Floor Fiber Optics	$400,000				$400,000

	City Hall - Fifth Floor Renovations					$1,000,000	$1,000,000
	City Hall - Hire Architect for Fifth Floor Renovations				$100,000		$100,000
	City Hall - Hire Architect for Fourth Floor Renovations					$100,000	$100,000
	City Hall - Hire Architect for Second Floor Upgrades			$100,000			$100,000
	City Hall - Hire Architect for Third Floor Renovations		$100,000				$100,000
	City Hall - Mechanical Engineering		$500,000				$500,000
	City Hall - Phase 1 Mechanical Replacement		$1,100,000				$1,100,000
	City Hall - Phase II Mechanical Replacement			$1,320,000			$1,320,000
	City Hall - Phase III Mechanical Replacement				$756,000		$756,000
	City Hall - Phase IV Mechanical Replacement					$1,350,000	$1,350,000
	City Hall - Replace Main Electrical Service	**$1,500,000**					$1,500,000
	City Hall - Second Floor Renovations				$1,000,000		$1,000,000
	City Hall - Third Floor Renovation			$1,000,000			$1,000,000
	City hall - Update/Replace Fire Alarm Devises			$500,000			$500,000
	City hall Electrical - Branch Panel Mixed Loards			$18,000			$18,000
	Department Total	**$1,900,000**	**$1,700,000**	**$2,938,000**	**$1,856,000**	**$2,450,000**	**$10,844,000**
	GENERAL LEVY TOTALS	**$42,148,881**	**$51,884,427**	**$24,222,180**	**$22,235,119**	**$19,404,007**	**$159,894,614**
	OTHER FUNDING SOURCES:						
TIF	TIF 22 - Shipyard Phase II		$5,000,000	$5,000,000			$10,000,000
	Department Total		**$5,000,000**	**$5,000,000**			**$10,000,000**
Sanitary Sewer	13th - W. Mason to Howard Reconstruction			$530,000			$530,000
	13th Street - W Mason to 9th St				$840,000		$840,000
	1-ton truck chassis			$47,100			$47,100
	1-ton van				$49,700		$49,700
	1-ton van with CCTV sewer inspection system				$455,000		$455,000
	4th Street - Broadway to S Maple Reconstruction	$190,000					$190,000
	Bridge - Pearl to E Termini	**$40,000**					$40,000
	Cass Street - Madison to Monroe Reconstruction	**$111,000**					$111,000
	Chicago - S Madison to S Monroe			$95,000			$95,000
	Chicago - S Webster to S Roosevelt					$335,000	$335,000
	Christina - S Oakland to Hazel Ave					$285,000	$285,000
	Chronic Sewer Repairs - Citywide	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$5,000,000
	Clay St - E Mason to Main					$1,005,000	$1,005,000
	CleverScan manhole structure scanning device			$107,000			$107,000
	Combination jet/vac sewer cleaning truck		$547,000	$547,000			$1,094,000
	Congress Street - Madison to Monroe				$115,000		$115,000
	Country Club Road Reconstruction - Sanitary Sewer Replacement	$1,055,000					$1,055,000
	Division - Norwood to Northern Reconstruction			$515,000			$515,000
	East Mason - Lime Kiln to Main	**$454,000**					$454,000
	Elmore Street - N. Chestnut to Gray Reconstruction		$1,215,000				$1,215,000
	Emilie Street - S Webster to Roosevelt				$340,000		$340,000
	Finger Road - Superior to Challenger	**$382,000**					$382,000
	Hinkle Street - Frontage Road to Hutson			$495,000			$495,000
	Hinkle Street - N. Frontage Road to W. Mason Reconstruction		$260,000				$260,000
	Howard - Ashland to Oakland	**$95,580**					$95,580
	Inflow & Infiltration		$750,000				$750,000
	Mather Street - Gray to Locust			$1,300,000			$1,300,000
	N Irwin - St Clair to N Termini		$65,000				$65,000
	N Maple Ave - Mather to Pheobe			$215,000			$215,000
	Oakland Howard/Seymour Ct	**$205,000**					$205,000
	Oxford - Dousman to Reed Reconstruction	$175,000					$175,000
	Quincy - Chicago to Bodart					$860,000	$860,000
	Reed - Oxford to Allard Reconstruction	$105,000					$105,000
	Resurfacing Program	$600,000	$600,000	$600,000	$600,000	$600,000	$3,000,000
	Richmond - Ricky to 100' E/o	**$27,000**					$27,000
	Ricky - Vine to Richmond	**$81,000**					$81,000
	S Chestnut - 7th to 8th					$185,000	$185,000
	S Maple - 9th to N Termini	**$280,000**					$280,000

	S Maple Avenue - Kellog to Mather		$350,000				$350,000
	S Maple Avenue - Walnut to Kellogg	$505,000					$505,000
	S Van Buren - Crooks to Chicago		$150,000				$150,000
	S Van Buren - Eliza to Grignon		$295,000				$295,000
	S. Roosevelt St - Eliza to Grignon				$300,000		$300,000
	Sanitary Lift Station Upgrade or Replacement	**$150,000**	$400,000				$550,000
	Sanitary Sewer - Alley Between Broadway and Chestnut	**$260,000**					$260,000
	School Pl - Ashland to c-d-s	**$278,300**					$278,300
	Sewer inspection CCTV system			$118,000			$118,000
	Sewer Repairs - Citywide	**$400,000**	$400,000	$400,000	$400,000	$400,000	$2,000,000
	SLRAT sewer evaluation system			$39,000			$39,000
	SLRAT sewer inspection device			$32,500			$32,500
	Spring Street - Madison to Monroe Reconstruction		$110,000				$110,000
	St Clair - Baird to Roosevelt		$465,000				$465,000
	Van Beek Stormwater Facility - Construction		$500,000				$500,000
	Woodlawn - Shawano to Dousman Reconstruction	$290,000					$290,000
	Department Total	**$6,683,880**	**$7,107,000**	**$6,040,600**	**$4,099,700**	**$4,670,000**	**$28,601,180**
Parking Utility	1-ton SRW pick-up with plow				$41,000		$41,000
	3/4-ton pick-up with plow		$43,000				$43,000
	BOX PLOW	$4,600					$4,600
	ELEVATOR DOORS (PINE	$18,000					$18,000
	Elevator-Cherry Street Ramp	**$400,000**					$400,000
	Enforcement vehicle		$34,500		$36,000		$70,500
	PARCS equipment				$846,000		$846,000
	Parking Ramp Emergency Repairs	$50,000	$50,000	$50,000	$50,000		$200,000
	Parking Ramp Repairs	$600,000	$600,000	$600,000	$600,000		$2,400,000
	Ticket writer equipment	$56,000					$56,000
	Utility tractor			$33,000			$33,000
	Department Total	**$1,128,600**	**$727,500**	**$683,000**	**$1,573,000**		**$4,112,100**
Storm Sewer	13th - W. Mason to Howard Reconstruction			$795,000			$795,000
	13th Street - W Mason to 9th St				$1,260,000		$1,260,000
	4th Street - Broadway to S Maple Reconstruction	$285,000					$285,000
	Barina Creek Dredging	**$400,000**					$400,000
	Bridge - Pearl to E Termini	**$60,000**					$60,000
	Cass Street - Madison to Monroe Reconstruction	$170,000					$170,000
	Chicago - S Madison to S Monroe			$145,000			$145,000
	Chicago - S Webster to S Roosevelt					$505,000	$505,000
	Christina - S Oakland to Hazel Ave					$425,000	$425,000
	Chronic Sewer Repairs	**$100,000**	$100,000	$100,000	$100,000	$100,000	$500,000
	Clay St - E Mason to Main					$1,505,000	$1,505,000
	Combination jet/vac sewer cleaning truck				$547,000		$547,000
	Congress Street - Madison to Monroe				$170,000		$170,000
	Control Structure Rehab	**$100,000**	$100,000				$200,000
	Country Club Road Reconstruction - Construction		$2,000,000				$2,000,000
	County Road EB	**$500,000**					$500,000
	Division - Norwood to Northern Reconstruction			$770,000			$770,000
	East Mason - Lime Kiln to Main	**$682,000**					$682,000
	East River Flood Project	**$75,000**					$75,000
	Elmore Street - N. Chestnut to Gray Reconstruction		$1,825,000				$1,825,000
	Emilie Street - S Webster to Roosevelt				$510,000		$510,000
	Finger Road - Superior to Challenger	**$440,000**					$440,000
	Hinkle Street - Frontage Road to Hutson			$745,000			$745,000
	Hinkle Street - N. Frontage Road to W. Mason Reconstruction		$390,000				$390,000
	Howard - Ashland to Oakland	**$1,110,000**					$1,110,000
	Klee Street Storm Sewer	**$250,000**					$250,000
	Lift Station Upgrade or Replacement	**$400,000**	$615,000				$1,015,000
	Mather Street - Gray to Locust				$1,945,000		$1,945,000
	Mini Storm Sewers - Citywide	$650,000	$650,000	$650,000	$650,000	$650,000	$3,250,000
	N Irwin - St Clair to N Termini		$95,000				$95,000

N Maple Ave - Mather to Phoebe			$320,000			$320,000
Oakland Howard/Seymour Ct	**$540,000**					$540,000
Oxford - Dousman to Reed Reconstruction	$260,000					$260,000
Pressure washer trailer			$34,700			$34,700
Quincy - Chicago to Bodart					$1,290,000	$1,290,000
Reed - Oxford to Allard Reconstruction	$155,000					$155,000
Resurfacing Program	$900,000	$900,000	$900,000	$900,000	$900,000	$4,500,000
Richmond - Ricky to 100' E/o	**$40,000**					$40,000
Ricky - Vine to Richmond	**$125,000**					$125,000
S Chestnut - 7th to 8th					$275,000	$275,000
S Maple - 9th to N Termini	**$416,000**					$416,000
S Maple Avenue - Kellog to Mather		$525,000				$525,000
S Maple Avenue - Walnut to Kellogg	$755,000					$755,000
S Van Buren - Crooks to Chicago		$220,000				$220,000
S Van Buren - Eliza to Grignon		$440,000				$440,000
S. Roosevelt St - Eliza to Grignon				$450,000		$450,000
School Pl - Ashland to c-d-s	**$550,000**					$550,000
Sewer jet cleaning truck	$395,000					$395,000
Sewer Repairs - Citywide	$400,000	$400,000	$400,000	$400,000	$400,000	$2,000,000
Seymour Pond West	**$3,000,000**					$3,000,000
Spring Street - Madison to Monroe Reconstruction		$166,000				$166,000
St Clair - Baird to Roosevelt		$700,000				$700,000
Storm Sewer - Alley between Broadway & Chestnut	**$145,800**					$145,800
Storm Water Lift Station Repairs	**$400,000**					$400,000
Storm Water Structure Repairs	**$160,000**	$150,000				$310,000
Street Sweeping Dewatering Basins	**$100,000**	$75,000				$175,000
Van Beek Stormwater Facility - Construction		$1,100,000				$1,100,000
Westway Drive - Hillcrest Drive to Pleasant Lane	$40,000					$40,000
Woodlawn - Shawano to Dousman Reconstruction	$435,000					$435,000
Department Total	**$14,038,800**	**$10,451,000**	**$4,859,700**	**$6,932,000**	**$6,050,000**	**$42,331,500**
OTHER FUNDING SOURCES TOTALS	**$21,851,280**	**$23,285,500**	**$16,583,300**	**$12,604,700**	**$10,720,000**	**$85,044,780**
TOTAL PROJECTS BY YEAR	**$64,000,161**	**$75,169,927**	**$40,805,480**	**$34,839,819**	**$30,124,007**	**$244,939,394**

Report to the
Finance Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	Diana Ellenbecker, Finance Director

AGENDA ITEM # R.5

To refer to staff the 2024 capital needs and draft borrowing request.

BACKGROUND

Attached are the 2024 capital needs from the 2024-2028 Capital Improvement Plan.

Items that are bolded were changed since the September 12, 2023 report that was presented at the Finance Committee meeting.

This report shows funding sources identified to date for the 2024 proposed capital needs. However, this does not take into consideration the December 31, 2023, available fund balance, operating budget, ARPA interest, or other funding sources.

The Financial Management Plan (FMP), from Ehlers Financial Advisors, projected $17,350,000 General Levy borrowing for future years.

RECOMMENDATION

Refer to staff.

FISCAL IMPACT

ATTACHMENTS

1. 2024 requests by funding source 10-20-23

Total Capital Projects Summary By Year updated 10-20-2023

Department	Finance Description	2024	2024 PROPOSED BORROWING	OTHER FUNDING	OTHER FUNDING DESCRIPTION
GENERAL LEVY:					
Clerk / Treasurers	DS200 Tabulator Replacement	$15,000	$15,000		
	Department Total	**$15,000**	**$15,000**	**$0**	
IT	ArcServe Backup	$32,000	$0	$32,000	Operating budget
	DataCenter	$500,000	$0	$500,000	ARPA allocation
	Door Access System Replacement	$78,000	$78,000		
	DR Site - Air Conditioner	$6,000	$0	$6,000	Operating budget
	FortiNAC Control and Application Server	$133,279	$133,279		
	FortiSIEM Hardware Appliance	$101,772	$101,772		
	Department Total	**$851,051**	**$313,051**	**$538,000**	
Municipal Court	Courtroom sound and security system	$50,000	$50,000		
	Department Total	**$50,000**	**$50,000**	**$0**	
Police	AED's (Defibrillators) 2024	$85,000	$85,000		
	Building Backup Power Generator	$125,000	$125,000		
	Department Carpet Replacement	**$110,000**	$110,000		
	GBPD 2nd Floor HVAC Liebert Unit	$30,000	$30,000		
	Hand Held Radios	$80,000	$80,000		
	Mobile Radios	$25,000	$25,000		
	Patrol Rifles	$122,000	$122,000		
	Police Department garage door renovations/replacment	$30,000	$30,000		
	Radio Encryption	$925,000	$925,000		
	Replacement Squad 40	$58,500	$58,500		
	Replacement Squad 43	$58,500	$58,500		
	Replacement Squad 44	$58,500	$58,500		
	Replacement Squad 45	$58,500	$58,500		
	Replacement Squad 49	$58,500	$58,500		
	Replacement Squad 57	$58,500	$58,500		
	Replacement Squad 72	$58,500	$58,500		
	Replacement Squad 73	$58,500	$58,500		
	Replacement Squad 74	$58,500	$58,500		
	Replacement Squad 75	$58,500	$58,500		
	Replacement Squad 76	$58,500	$58,500		
	Replacement Squad 77	$58,500	$58,500		
	Replacement Squad 80	$58,500	$58,500		
	Replacement Squad 81	$58,500	$58,500		
	Replacement Squad 82	$58,500	$58,500		
	Security Camera Replacement	$12,000	$0	$12,000	Operating budget
	Department Total	**$2,421,500**	**$2,409,500**	**$12,000**	
Fire	Ambulance MED 471	**$437,875**	$437,875		
	Ambulance MED 491	**$437,875**	$437,875		
	Battalion Vehicle BC 411	**$150,000**	$150,000		

Department	Finance Description	2024	2024 PROPOSED BORROWING	OTHER FUNDING	OTHER FUNDING DESCRIPTION
	Dishwasher Station 5	$25,500	$25,500		
	Flooring - Station 2	$87,300	$87,300		
	Flooring/Carpet - Station 4	$13,725	$13,725		
	Garage Doors/Openers - Shop	$25,800	$25,800		
	Ladder Truck LA421-COUNCIL APPROVED	**$2,034,000**	$2,034,000		
	Ladder Truck LA461-COUNCIL APPROVED	**$2,034,000**	$2,034,000		
	Lot Station 7	$29,325	$29,325		
	OUTDOOR WARNING SIREN SITE 2	$30,000	$30,000		
	OUTDOOR WARNING SIREN SITE 3	$30,000	$30,000		
	Radio Firmware/Tune	$16,250	$16,250		
	Thermal Imaging Cameras	$136,710	$136,710		
	Utility Vehicle 413	$67,600	$67,600		
	Water Heater Station 4	$19,600	$19,600		
	Water Heater Station 6 (North)	$19,600	$19,600		
	Department Total	**$5,595,160**	**$5,595,160**	**$0**	
DPW	1,800 GALLON ANTI-ICING UNITS (x2)	$90,000	$90,000		
	4th Street - Broadway to S Maple Reconstruction	$315,000	$315,000		
	Bridge - Pearl to E Termini	**$67,500**	$67,500		
	Bridges - Annual Preventative Maintenance	**$365,000**	$365,000		
	Bridges - Approach Repairs	**$230,000**	$230,000		
	Bridges - Structural Steel Painting	**$1,600,000**	$1,600,000		
	Cass Street - Madison to Monroe Reconstruction	$185,000	$185,000		
	County Road EB	**$700,000**	$700,000		
	Danz Avenue over Baird Creek - Bridge Rehabilitation Design	$100,000	$100,000		
	East Mason - Lime Kiln to Main	**$756,750**	$0	$756,750	TID #10
	ENCLOSED TRAILER	$7,500	$7,500		
	Finger Road - Superior to Challenger	**$636,120**	$146,120	$490,000	Prior year fund balance
	FLAIL MOWER	$23,000	$23,000		
	Front End Loader/Wing/Plow/Grapple	$180,000	$180,000		
	General Annual Projects (Pavement Repairs and Mudjacking)	$650,000	$650,000		
	General Bridge Maintenance	$200,000	$200,000		
	Grandview Bridge Replacement	$105,000	$105,000		
	Howard - Ashland to Oakland	$159,300	$159,300		
	Larsen Road Bridge - Construction	$1,000,000	$200,000	$800,000	State Aid
	Main Street over Fox River - East Hydraulics	**$242,000**	$242,000		Pending $1.2M state contribution
	Main Street over Fox River - Structural Repairs	**$2,665,000**	$2,665,000		Pending $1.2M state contribution
	Main Street over Fox River - West Hydraulics	**$791,000**	$791,000		Pending $1.2M state contribution
	MOBILE COLUMN VEHILCE LIFT UNITS (x6)	$85,000	$85,000		
	Oakland Howard/Seymour Ct	**$369,000**	$369,000		
	Oxford - Dousman to Reed Reconstruction	$290,000	$290,000		
	PLUMBING PRESS FITTING TOOL KIT	$8,500	$8,500		
	Reed - Oxford to Allard Reconstruction	$175,000	$175,000		
	Refuse collection truck-COUNCIL APPROVED	$710,000	$710,000		
	Resurfacing Program	$3,350,000	$3,350,000		
	Richmond - Ricky to 100' E/o	**$45,000**	$0	$45,000	TID #10

Department	Finance Description	2024	2024 PROPOSED BORROWING	OTHER FUNDING	OTHER FUNDING DESCRIPTION
	Ricky - Vine to Richmond	**$135,000**	$0	$135,000	TID #10
	Robotic Total Staton with Data Collector	**$85,000**	$85,000		
	RUGGEDIZED LAPTOP COMPUTER	$5,500	$0	$5,500	Operating budget
	S Maple - 9th to N Termini	**$462,000**	$462,000		
	S Maple Avenue - Walnut to Kellogg	$840,000	$840,000		
	School Pl - Ashland to c-d-s	**$430,000**	$430,000		
	Seventh Street over Beaver Dam Creek - Rehabilitation	$100,000	$100,000		
	Sidewalk Tractor	$85,000	$85,000		
	Sidewalk tractor with attachments	$81,000	$81,000		
	Sidewalks Citywide Program	$720,000	$320,000	$400,000	Assessments
	Sidewalks Compliant Program	**$360,000**	$150,000	$210,000	Assessments
	Sitka Sidewalk	**$275,000**	$275,000		
	STEEP SLOPE ZERO TURN MOWER	$30,000	$30,000		
	TANDEM AXLE DUMP TRUCK	$285,000	$285,000		
	Tandem Axle Dump Truck/Wing/Plow	$287,000	$287,000		
	Traffic Signal Repair	$500,000	$500,000		
	West Shop - Main Building HVAC	**$300,000**	$300,000		
	West Shop - Salt Storage Shed Repairs	$65,000	$65,000		
	West Shop - Sanitary Lateral	**$500,000**	$500,000		
	Woodlawn - Shawano to Dousman Reconstruction	$480,000	$480,000		
	ZERO TURN MOWER WITH BAGGER	$18,500	$18,500		
	Department Total	**$22,144,670**	**$19,302,420**	**$2,842,250**	
Parks	10,000 GVW Bobcat Trailer - Unit 288	$14,500	$14,500		
	180 hp 18" towable brush chipper - 212	$125,500	$125,500		
	19500 GVW Cab and Chasis with body and boom lift - Unit 34	**$235,000**	$235,000		
	3/4 Ton 4x4 Pickup - Unit 39	$66,500	$66,500		
	72" Deck Mower - Unit 132	$26,000	$26,000		
	Farlin Park Redevelopment	$230,000	$230,000		
	Forestry Tree Nursery	**$100,000**	$100,000		
	Joanne's Aquatic Center Roof Replacement	**$200,000**	$200,000		
	Joannes Pool Restroom Hot Water Heater	**$16,000**	$16,000		
	Leicht Park Redevelopment	**$7,000,000**	$0	$7,000,000	Donations $4M, TID $2M, DNR Stewardship Grant $250K, TBD $750,000
	Marquette Wading Pool Filter	**$35,000**	$35,000		
	Olde Preble - New Playground Walk	$150,000	$150,000		
	Olde Preble - Storm Water Management Construction	$60,000	$60,000		
	Park Shop - Replace Underground Gas Tanks	$350,000	$350,000		
	Pool Funbrella Replacement	**$18,000**	$18,000		
	Resch Aquatic Center - Pool Heater Replacement	$100,000	$100,000		
	Resch Aquatic Center Freezer and Refrigerator Replacement	**$33,000**	$33,000		
	Scoreboards - Colburn/Perkins/Edison	$50,000	$50,000		
	Skidsteer - Unit 225	$72,500	$72,500		
	Telescopic Forklift - Unit 358	$225,000	$225,000		
	UTV - New Addition	$43,000	$43,000		
	UTV - Unit 145	$21,500	$21,500		
	Department Total	**$9,171,500**	**$2,171,500**	**$7,000,000**	

Department	Finance Description	2024	2024 PROPOSED BORROWING	OTHER FUNDING	OTHER FUNDING DESCRIPTION
City Hall	City Hall - 3rd Floor Fiber Optics	$400,000	$400,000		
	City Hall - Replace Main Electrical Service	**$1,500,000**	$1,500,000		
	Department Total	**$1,900,000**	**$1,900,000**	**$0**	
	GENERAL LEVY TOTALS	**$42,148,881**	**$31,756,631**	**$10,392,250**	
Sanitary Sewer	4th Street - Broadway to S Maple Reconstruction	$190,000	$190,000		
	Bridge - Pearl to E Termini	**$40,000**	$40,000		
	Cass Street - Madison to Monroe Reconstruction	**$111,000**	$111,000		
	Chronic Sewer Repairs - Citywide	$1,000,000	$1,000,000		
	Country Club Road Reconstruction - Sanitary Sewer Replacement	$1,055,000	$1,055,000		
	East Mason - Lime Kiln to Main	**$454,000**	$0	$454,000	TID #10
	Finger Road - Superior to Challenger	**$382,000**	$87,000	$295,000	Prior year fund balance
	Howard - Ashland to Oakland	**$95,580**	$95,580		
	Oakland Howard/Seymour Ct	**$205,000**	$205,000		
	Oxford - Dousman to Reed Reconstruction	$175,000	$175,000		
	Reed - Oxford to Allard Reconstruction	$105,000	$105,000		
	Resurfacing Program	$600,000	$600,000		
	Richmond - Ricky to 100' E/o	**$27,000**	$0	$27,000	TID #10
	Ricky - Vine to Richmond	**$81,000**	$0	$81,000	TID #10
	S Maple - 9th to N Termini	**$280,000**	$280,000		
	S Maple Avenue - Walnut to Kellogg	$505,000	$505,000		
	Sanitary Lift Station Upgrade or Replacement	**$150,000**	$150,000		
	Sanitary Sewer - Alley Between Broadway and Chestnut	**$260,000**	$260,000		
	School Pl - Ashland to c-d-s	**$278,300**	$278,300		
	Sewer Repairs - Citywide	**$400,000**	$400,000		
	Woodlawn - Shawano to Dousman Reconstruction	$290,000	$290,000		
	Department Total	**$6,683,880**	**$5,826,880**	**$857,000**	
Parking Utility	BOX PLOW	$4,600	$4,600		
	ELEVATOR DOORS (PINE	$18,000	$18,000		
	Elevator-Cherry Street Ramp	**$400,000**	$400,000		
	Parking Ramp Emergency Repairs	$50,000	$50,000		
	Parking Ramp Repairs	$600,000	$600,000		
	Ticket writer equipment	$56,000	$56,000		
	Department Total	**$1,128,600**	**$1,128,600**	**$0**	
Storm Sewer	4th Street - Broadway to S Maple Reconstruction	$285,000	$285,000		
	Barina Creek Dredging	**$400,000**	$400,000		
	Bridge - Pearl to E Termini	**$60,000**	$60,000		
	Cass Street - Madison to Monroe Reconstruction	$170,000	$170,000		
	Chronic Sewer Repairs	**$100,000**	$100,000		
	Control Structure Rehab	**$100,000**	$100,000		
	County Road EB	**$500,000**	$500,000		
	East Mason - Lime Kiln to Main	**$682,000**	$0	$682,000	TID #10

Department	Finance Description	2024	2024 PROPOSED BORROWING	OTHER FUNDING	OTHER FUNDING DESCRIPTION
	East River Flood Project	**$75,000**	$75,000		
	Finger Road - Superior to Challenger	**$440,000**	$0	$440,000	Prior year fund balance
	Howard - Ashland to Oakland	**$1,110,000**	$1,110,000		
	Klee Street Storm Sewer	**$250,000**	$250,000		
	Lift Station Upgrade or Replacement	**$400,000**	$400,000		
	Mini Storm Sewers - Citywide	$650,000	$650,000		
	Oakland Howard/Seymour Ct	**$540,000**	$540,000		
	Oxford - Dousman to Reed Reconstruction	$260,000	$260,000		
	Reed - Oxford to Allard Reconstruction	$155,000	$155,000		
	Resurfacing Program	$900,000	$900,000		
	Richmond - Ricky to 100' E/o	**$40,000**	$0	$40,000	TID #10
	Ricky - Vine to Richmond	**$125,000**	$0	$125,000	TID #10
	S Maple - 9th to N Termini	**$416,000**	$416,000		
	S Maple Avenue - Walnut to Kellogg	$755,000	$755,000		
	School Pl - Ashland to c-d-s	**$550,000**	$550,000		
	Sewer jet cleaning truck	$395,000	$395,000		
	Sewer Repairs - Citywide	$400,000	$400,000		
	Seymour Pond West	**$3,000,000**	$3,000,000		
	Storm Sewer - Alley between Broadway & Chestnut	**$145,800**	$145,800		
	Storm Water Lift Station Repairs	**$400,000**	$400,000		
	Storm Water Structure Repairs	**$160,000**	$160,000		
	Street Sweeping Dewatering Basins	**$100,000**	$100,000		
	Westway Drive - Hillcrest Drive to Pleasant Lane	$40,000	$40,000		
	Woodlawn - Shawano to Dousman Reconstruction	$435,000	$435,000		
	Department Total	**$14,038,800**	**$12,751,800**	**$1,287,000**	
	GENERAL LEVY TOTALS	**$42,148,881**	**$31,756,631**	**$10,392,250**	
	OTHER FUNDING SOURCES TOTALS	**$21,851,280**	**$19,707,280**	**$2,144,000**	
	TOTAL PROJECTS BY YEAR	**$64,000,161**	**$51,463,911**	**$12,536,250**	

Report to the
Finance Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	Diana Ellenbecker, Finance Director

AGENDA ITEM # R.6

To approve the Claims Committee Report.

The Common Council may convene in closed session pursuant to Sections 19.85(1)(e), Wis. Stats., for purposes of deliberating or negotiating the sale of public properties, investing of public funds or conducting other specified public business as necessary for competitive or bargaining reasons. The Common Council will thereafter reconvene in open session pursuant to Section 19.85(2), Wis. Stats., to take action on items discussed in closed session, if appropriate, and to consider the remainder of the agenda.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. Claims Committee Rpt September

Report to the
Parks Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # S.1

To approve a Change Order for $12,500 for additional engineering work associated with the stormwater management and trail design for Olde Preble Park..

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. AG09292023A_Amendment 1_Olde Preble Site Engineering_JSL

Robert E. Lee & Associates, Inc.
Engineering | Environmental | Surveying | Ecological

1250 Centennial Centre Blvd
Hobart, WI 54155
920-662-9641
releeinc.com

September 29, 2023

Ms. Emma Browne, P.E., Civil Engineer
emma.browne@greenbaywi.gov
CITY OF GREEN BAY
100 North Jefferson Street, Room 510
Green Bay, WI 54301

RE: Olde Preble Park Storm Water Management – Amendment 1 for Site Engineering of Phase I of City of Green Bay's Master Plan

Dear Ms. Browne:

At the request of the City of Green Bay, REL is pleased to present this contract amendment to expand the initially requested scope of storm water management engineering services to now include the Phase I site design of the trail system and accommodate future items, including the concrete pad for the pavilion at Olde Preble Park.

The expanded scope of work will encompass the design of Phase I of the City of Green Bay's Master Plan, as outlined in the attached document. This expanded scope includes the following key elements:

1. Design of a Paved Trail: We will design a paved trail that connects the existing parking lot located north of the ball diamonds to the proposed open shelter area.
2. Design of a Crushed Stone Trail: In addition, we will design a crushed stone trail that connects the sidewalk on Oakdale Avenue to the proposed paved trail.
3. Future Considerations: The trail design will take into consideration the future connections of Phase II, which involves relocating the existing parking spaces to Hillside Lane, converting the existing lot to a cul-de-sac, and providing connectivity through the park with a paved trail.

To accomplish these tasks effectively, we propose the following additional scope of work.

Additional Scope of Work, by Existing Task

- Task III:
  - Prepare concept site plan and grading plan.
  - Prepare concept estimate.
  - Submit and review concept with City.
- Task IV:
  - Prepare preliminary plans, specifications, and estimate (PSE) taking feedback from the Task III meeting.
  - Plans will include site plan, grading plan, utility plan, erosion control plan, construction details.
  - Submit preliminary PSE to City of review and comment.

- Task V:
  - Prepare final PSE, taking feedback from Task IV review.
  - Plans will include site plan, grading plan, utility plan, erosion control plan, construction details.
  - Prepare special provisions.
  - Prepare bid schedule.
  - Submit final PSE to City's use.

Schedule

REL proposed to complete the work outlined in this Amendment 1 in accordance with the timeline specified in the original Olde Preble Park Storm Water Management agreement.

Compensation

Robert E. Lee & Associates, Inc. will complete the additional scope of work (Amendment 1) on a time-and-expense basis.

Additional Scope of Work (Amendment 1) *time-and-expense basis*	$ 12,500
Original Contract Price	$ 19,800
Total Revised Contract	$ 32,300

All other terms and conditions of the original agreement shall remain in full force and effect.

If this Amendment 1 is acceptable, please sign below and return a copy to our office. We are committed to providing high-quality engineering services and look forward to assisting you with this expanded scope of work.

Sincerely,

ROBERT E. LEE & ASSOCIATES, INC.

Jennifer S. Liimatta, P.E.
Project Manager

Jared G. Schmidt, P.E., V.P.
Civil / Municipal Engineering Manager

JSL/JGS/NJM

ACCEPTED BY CITY OF GREEN BAY

Signature _____ Date _____ Print Name _____

PHOTO 1

PHOTO 2

PHOTO 3

OAKDALE AVENUE

HILLVIEW DRIVE

HUTH STREET

HILLSIDE LANE

SCHOEN STREET

ART SCULPTURE & VIEWING AREA

ART & MEDITATION GARDEN

PHASE I

OPEN SHELTER (PHOTO 2)

PLAYGROUND W/ LIGHTING

EUROFLEX BALL (PHOTO 1)

CRUSHED AGGREGATE PATH

ENTRANCE ARCH (PHOTO 3)

CUL-DE-SAC

EXTEND SIDEWALK FROM HUTH STREET

CONCESSION STAND

ADA ACCESSIBLE WALK

EXTEND SIDEWALK FROM HUTH ST

PARK SIGN

ADA ACCESSIBLE WALK

STORM WATER MANAGEMENT FEATURE

PARKING LOT -23 STALLS

PHASE II

ON-STREET PARKING 8 STALLS

GREEN BAY PARKS, RECREATION, AND FORESTRY DEPARTMENT

OLDE PREBLE PARK

MASTER PLAN

NORTH

NTS

DATE DRAWN: DECEMBER 1992

LAST REVISION: JUNE 2021

PAGE 1 OF 1

GAG

Report to the
Parks Committee
of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # S.2

To approve the request by the Astor Neighborhood Association and Astor East River Neighborhood Association to apply for a mini-grant for the purchase and installation of a furnace for the Astor Park shelter.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None

Report to the
Parks Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # S.3

To deny the request by the Astor and Astor East River Neighborhood Associations to allow unlimited free use of the Astor Park shelter for meetings and instead allow 3 free shelter rentals per year for each Neighborhood Association, per the existing policy.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None

Report to the
Personnel Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # T.1

To approve the request to fill the following replacement postions and all subsequent vacancies resulting from internal transfers.
a. Truck Driver

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. Personnel Committee Request to Fill Memo - 10.24.23
2. Truck Driver - R. Thomas 10.20.23

MEMORANDUM

Human Resources Department

To: Personnel Committee

From: Emma Baierl
Human Resources Generalist

Re: Request to Fill Vacant Positions

Date: October 24, 2023

The Human Resources Department is requesting authorization to fill the following replacement positions approved as part of the 2023 budget and all subsequent vacancies resulting from internal transfers. The justification reports are attached.

- Truck Driver - Replacement position due to the retirement of Robert Thomas effective on October 20, 2023. This position is budgeted at $21.60 - $25.42 per hour. (Pay Grade F)

Position Fill Request
Justification Report
October 11, 2023

Position Title: Truck Driver – DPW Operations Division/Street Section

1. **If this position is a replacement position, please indicate the reasons for the vacancy. If this is not a replacement position, please indicate the reasons for requesting the position.**

   __X____ Replacement Position _____ Not a Replacement Position

   This vacancy results from the retirement of Robert Thomas effective at the end of the regular workday on Friday, October 20, 2023.

2. **Is this position included in the current budget? If not, please list how this position will be funded (grant, internship, etc.). Please list the salary range of the position.**

   Yes, this position is currently funded in the DPW operating budget. The current salary range for a Truck Driver is $21.60 - $25.42/hour (Pay Grade F).

3. **Please list the functions and any special information regarding this position.**

   Truck Drivers perform a full range of duties including, but not limited to, hauling material with dump trucks, operating equipment, plowing snow, spreading ice control material, pothole patching, beam guard rail repair, asphalt patching, daily equipment maintenance, and general labor assignments necessary for DPW to perform core functions.

4. **Does the position generate revenue or reduce expenses? If so, provide an estimated amount.**

   This position does not generate revenue for the City. But the use of in-house labor and equipment reduces the need to contract City services to outside sources.

5. **Please explain why current staff is unable to absorb duties of this position.**

   Loss of a Truck Driver position represents a reduction in DPW's ability to provide Street Section services in a timely manner, including snow plowing, curbside yard and garden waste collection, pavement repair, etc.

6. **If duties of position are presently being done, how are they done?**

   Duties associated with any vacant position are assigned to other Street Section employees. When there is a lack of personnel, assignments are prioritized, incomplete assignments are postponed or not completed.

7. **What service would be reduced or eliminated if this position is not filled?**

   DPW cannot reduce or eliminate its core services. However, a reduction in staff will result in a lower level of service to residents and will increase the amount of time required to complete those services.

8. What are the alternative methods and costs of accomplishing the work?

Reducing the level of services provided to City residents, working overtime to maintain the expected level of service, or outsourcing of services.

9. Are there union issues?

No

10. Other supporting comments.

None

Report to the
Personnel Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # T.2

To refer to the Joint Finance/Personnel Committee without recommendation the implementation of the updated City Pay Plan as recommended by the Carlson Dettmann market analysis.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. Personnel Committee - 2024 Proposed Pay Plan Update 10-24-23

Human Resources Department
100 North Jefferson Street • Room 500
Green Bay, Wisconsin 54301-5026
www.greenbaywi.gov

Phone 920.448.3147
Fax 920.448.3128

MEMORANDUM

To: Personnel Committee

From: Joseph Faulds, Chief of Operations

Re: Amended City of Green Bay Employee Compensation Recommendation

Date: October 24, 2023

RECOMMENDATION

A recommendation was presented at the previous Personnel Committee meeting based on the recent market assessment conducted by Carlson and Dettman. The following was the recommendation for employees on the City Pay Plan for the 2024 budget and a historical review of the current pay plan:

- To implement the 50th/75th percentile plan starting January 1, 2024.
- Provide a 2% COLA on April 1, 2024.
- Employees will receive his or her annual step increase or increase in the performance range based on City policies.

2017 CLASSIFICATION AND COMPENSATION STUDY

The City implemented a new classification and compensation plan in 2017. Since the prior classification study was conducted in the 1980's, the 2017 study involved extensive internal review of positions as well as market comparisons with public sector entities. The purpose of the 2017 classification and compensation study was to:

- Establish a pay structure that created pay grades and classifications to ensure internal alignment and internal equity.
- Develop a pay structure that allows the City to recruit and retain talent.
- Increase the City of Green Bay salary plan to the 50th percentile of the market.
    - Hybrid plan (7 steps and a performance range).
    - Movement through the plan/pay grade steps is based on satisfactory performance.
    - Step 7 is the control point or midpoint of the pay grade (100% of the market).
- Create consistent guidelines for hiring and employee movement through the plan.
    - Employees generally hired between Steps 1 – 4.
    - Employees hired at Step 1 are eligible for a step increase after 6 months of employment.
    - Employees hired at Step 2 or higher are eligible for a step increase after 1 year of employment.

2023 EMPLOYEE MARKET ASSESSMENT

On May 2, 2023 the Common Council approved the contract for Carlson Dettman Consulting to conduct a market assessment for all City positions under the City's Pay Plan.

Market Assessment Objectives:

- The purpose of the study is to create a pay structure that either maintains the 50th percentile or exceeds the 50th percentile to help the City recruit and retain employees.
- The focus is strictly on the external wage and market comparability of each position.
- The market assessment did not include the review of each job classification and the respective job duties of the positions to determine placement of each position in the pay plan.
    - There were limited positions that were reviewed for placement in the pay plan and the list of positions is attached.

Market Comparisons:

- The study used a variety of public sector comparables and survey data including private and public sector wage data to evaluate our benchmark positions.
    - See Attached List of Comparables in the attached Carlson Dettman Presentation.
- Nonexempt positions tend to be compared to more localized comparables and exempt positions tend to be compared on a more regional/statewide basis.

Findings:

- Carlson and Dettmann presented (2) plan options for consideration:
    - 50th percentile or "Meet-the-Market" plan, or
    - 50th/75th percentile blend that places wages for City positions in a more competitive position than the 50th percentile plan.
- Compared to the 50th/75th market target our employees are:
    - Top one third of jobs are 11% behind the market
    - Lower two-thirds are 6% behind the market
- The 50th/75th market plan provides the City with the same hybrid plan structure but different minimums for Pay Grades A through F.
- Control point to increase approximately 11% for each pay grade

Implementation:

- Each employee will be placed on a step of the appropriate pay grade that provides an increase based on the employee's rate of pay on December 31, 2023.
- If the employee's rate of pay on December 31, 2023 is higher than the control point in the appropriate grade, then that employee will be placed at that current rate of pay.
    - See Attached Distribution Breakdown.
- Employees will maintain their annual performance evaluation and eligibility for an increase in 2024 based on City policies.
- Employees will receive a 2% COLA on April 1, 2024.
- All employees will have an overall minimum wage increase of 3% in 2024.
- Cost: Carlson Dettman estimated that the cost of implementation would be about 3% of payroll or about $900,000.

2023 MARKET ASSESSMENT POSITION REVIEW

The following positions were reviewed as part of the 2023 Market Assessment:

Positions reviewed due to supervisor-to-subordinate compression concerns:

- Police Commander
- Police Captain
- Assistant Fire Chief
- Battalion Chief

The Police Commander and Assistant Fire Chief positions maintained the same paygrade (Pay Grade P) but were advanced through the proposed plan to avoid compression with the Police Captain and Battalion Chief. The Police Captain and Battalion Chief positions were moved from Pay Grade M to Pay Grade O.

Positions reviewed due to reclassifications:

- Assistant IT Director – Pay Grade N
- Deputy City Attorney – Pay Grade O
- Deputy City Clerk – Pay Grade I
- Financial Analyst – Pay Grade H
- Streets Foreperson – Pay Grade H
- Sr. GIS Analyst – Pay Grade K

New positions reviewed:

- Deputy Treasurer – Pay Grade M
- AmeriCorps Field Assistant – Pay Grade F
- Transit Operations Director – Pay Grade M

EMPLOYEE FEEDBACK

During the Personnel Committee meeting and since October 10th, Human Resources has received feedback as noted below:

- Generally, employee feedback has been positive.
    - Increase in wages from January 1, 2024 implementation.
    - Placed on a lower step to provide higher earning potential.
    - Thankful for the City taking action to provide more competitive wages.
- Concerns from employees
    - Retention Concerns
        - Employees moving from the performance range in the current pay plan to the performance range in the proposed plan do not see an increase during the implementation of the plan.
        - Employees do not feel valued receiving a small increase moving into a step on the new pay plan (less than 1% increase).
    - Moving down in steps places employees closer to new hires.
        - Why can't employees move to their current step in the proposed pay plan?
    - Seniority and Leapfrogging concerns
        - Involves employees moving to step 1 or minimum step.
        - Employees hired within 2-3 year time frame will move to the same step.
        - Maintaining the same performance evaluation date may create leapfrogging.

Carlson Dettman Implementation Options:

1. Increase to the minimum:
    a. Approximately 158 employees impacted and move to lowest step.
    b. Remaining employees stay at same wage/salary and then eligible to move to the next step during his/her performance review.
        i. Approximate implementation cost is $590,000.
2. Increase to Step: City Staff Proposal
    a. Each employee will be placed on a step of the appropriate pay grade that provides an increase based on the employee's rate of pay on December 31, 2023.
    b. If the employee's rate of pay on December 31, 2023 is higher than the control point in the appropriate grade, then that employee will be placed at that current rate of pay.
        i. Approximate implementation cost is $900,000.
        ii. This is the current proposal outlined above.
3. Guaranteed ATB 1% Increase; then Increase to Step:
    a. Each employee's base wage (12/31 wage) is increased 1% and then placed on a step that provides an increase.
    b. Approximate implementation cost is $1,120,000.
4. Compression Relief Model or Guaranteed ATB 2%:
    a. Each employee is placed on a step based on years of service and employees in the performance range receive a 2% increase.
    b. Approximate implementation cost is $2,400,000.

Alternative Proposals

Alternative Proposal #1

- Implement the new pay plan where there is a guaranteed 1% increase to an employee's base wage (12/31 wage) and then an increase to step.
- Provide a 2% COLA on April 1, 2024.
- Maintain employee annual increase and change the increase in the performance range to 2%
- Approximate additional cost: $200,000.
    i. Ensures employees in the performance range receive an increase at implementation.
    ii. Provides an increase of at least 1% for all of the employees moving to a step in the new pay plan.
    iii. Provides those in the performance range a performance evaluation increase closer to a step increase.
    iv. Everyone will receive at least an annual wage increase of at least 5%.

Alternative Proposal #1A

i. Move the 2% COLA up to second pay period of 2024.
ii. Approximate additional cost: $335,000.

Alternative Proposal #2

- Each employee will be placed on a step of the appropriate pay grade that provides an increase based on the employee's rate of pay on December 31, 2023.
- If the employee's rate of pay on December 31, 2023 is higher than the control point in the appropriate grade, then that employee will be placed at that current rate of pay.
- Provide a 3% COLA in the second pay period of 2024.
- Maintain step increases and change the increase in the performance range to 2%
- Approximate additional cost: $590,000.
    i. Provides a larger COLA for all employees and earlier in the year.
    ii. Addresses concerns from those in the performance range having a minimum annual wage increase of 3% to a minimum annual wage increase of 5%.
    iii. Does not address concern from employees placed on a step of the pay structure resulting in less than a 1% implementation increase.

Alternative Proposal #3

- Implement the new pay plan to ensure each employee receives at least a 1% increase.
- Provide a 3% COLA in the second pay period of 2024.
- Maintain step increases and change the increase in the performance range to 2%
- Approximate additional cost: $790,000.
    i. This addresses the concerns from employees who are in the performance range and not receiving an increase and those employees who are receiving less than 1% of an increase moving to a step.
    ii. Provides those in the performance range an increase closer to a step increase.
    iii. Minimum increase to annual wage is 6%.

Distribution of Increases for Placement on the Schedule

1. Increase to Step:

Distribution of Increases for Placement on Schedule	
Category	
Increase of 10% or higher	13
Increase of 5% - 9.9%	41
Increase of 2% - 4.9%	202
Increase of 1% - 1.9%	84
Increase of 0.9% or less	71
No Increase	25
Currently Paid Over Range Maximum	0

2. Guaranteed ATB 1%; then Increase to Step:

Distribution of Increases for Placement on Schedule	
Category	
Increase of 10% or higher	13
Increase of 5% - 9.9%	41
Increase of 2% - 4.9%	247
Increase of 1% - 1.9%	126
Increase of 0.9% or less	0
No Increase	0
Currently Paid Over Range Maximum	0

Implementation Examples

1. Increase to Step:
    a. Employee A: Below the Minimum in the new pay plan
        i. Current Pay Plan Pay Grade F: Step 5 $24.16 on 12/31/23
        ii. Placed on Pay Grade F: Step 1: $24.68
            - About a 2% increase to go onto the plan
    b) Employee B: In-between steps in the new pay plan
        i. Current Pay Plan Pay Grade F: Step 6 $24.79 on 12/31/23
        ii. Placed on Pay Grade F: Step 2 $25.39
            - Approximately a 2.5% increase to go onto the plan
    c) Employee C: In-between Steps in the new pay plan
        i. Current Pay Plan Pay Grade F: Step 3 $25.33 on 12/31/23
        ii. Placed on Pay Grade F: Step 2 $25.39
            - Approximately a .3% increase to go onto the plan
    d) Employee D: Performance Range
        i. Current Pay Plan Pay Grade F: Performance Range: $29.00 on 12/31/23
        ii. No increase based on pay is above the control point.
        iii. Placed on Pay Grade F: Performance Range: $29.00

2. Guaranteed ATB 1%; then Increase to Step:
    a. Employee A: Below the Minimum in the new pay plan
        i. Current Pay Plan Pay Grade F: Step 5 $24.16 on 12/31/23
        ii. 1% increase= $24.40
        iii. Placed on Pay Grade F: Step 1: $24.68
            - Approximately a 2% increase to go onto the plan
    b. Employee B: In-between steps in the new pay plan
        i. Current Pay Plan Pay Grade F: Step 6 $24.79 on 12/31/23
        ii. 1% increase to current wage = $25.04
        iii. Placed on Pay Grade F: Step 2 $25.39
            - Approximately a 2.5% increase to go onto the plan
    c. Employee C: In-between steps in the new pay plan.
        i. Current Pay Plan Pay Grade F: Step 3: $25.33 on 12/31/23
        ii. 1% increase to current wage = $25.83
        iii. Placed on Pay Grade F: Step 3 $26.09
            - Approximately a 3% increase to go onto the plan
    d. Employee D: Performance Range
        i. Current Pay Plan Pay Grade F: Performance Range: $29.00 on 12/31/23
        ii. 1% increase to current wage= $29.29
        iii. Placed on Pay Grade F: Performance Range: $29.29
            - 1% increase to go onto the plan.

Recruitment Examples:

Current Open Positions	Current Posting	New Pay Plan Posting
DPW Laborer	$21.60-$22.89	$24.68-26.09
Mechanic	$26.25-$27.00	$29.13-29.99
Park Maintenance Worker	$21.60-$22.89	$24.68-$26.09
Parking Enforcement Officer	$17.33-$18.36	$20.62-$21.19

City Pay Plan
Recommended 2024 Wage Structure: Hybrid Plan
Exempt (Salaried)

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Performance Range		Max.
	85%	87.5%	90%	92.5%	95%	97.5%	100%			115%
S	$132,891	$136,802	$140,691	$144,602	$148,512	$152,422	$156,333	$156,354	→	$179,774
	Chief of Operations				Public Works Director					
	Finance Director									
R	$122,179	$125,757	$129,355	$132,954	$136,552	$140,130	$143,728	$143,749	→	$165,298
	City Attorney				Municipal Judge					
	Development Director				Parks, Recreation and Forestry Director					
	Fire Chief				Police Chief					
	IT Director				Transit Director					
P	$103,438	$106,475	$109,512	$112,549	$115,606	$118,643	$121,680	$121,701	→	$139,942
	Assistant Fire Chief				Police Commander					
	Assistant Public Works Director									
O	$98,072	$100,963	$103,834	$106,725	$109,616	$112,486	$115,378	$115,398	→	$132,683
	Battalion Chief				Deputy Parks Director					
	Chief Building Official				Operations Director					
	Deputy City Attorney				Police Captain					
	Deputy Development Director				Utility Manager					
N	$92,706	$95,451	$98,176	$100,901	$103,626	$106,350	$109,075	$109,096	→	$125,445
	Assistant City Engineer				Deputy IT Director					
	Assistant Finance Director				Human Resources Manager					
	City Assessor									
M	$87,360	$89,918	$92,498	$95,056	$97,635	$100,194	$102,773	$102,794	→	$118,186
	Park Superintendent				Deputy Treasurer					
L	$81,994	$84,406	$86,819	$89,232	$91,645	$94,058	$96,470	$96,491	→	$110,947
	Assistant City Attorney				Park Planner					
	Business Manager				Principal Planner					
	City Clerk				Procurement Manager					
	Civil Engineer III				Public Works Superintendent					
	Fleet Manager				Risk Manager					
	Housing Administrator				Sr. Programmer Analyst					
	Office of Violence Prevention Director									
K	$76,648	$78,894	$81,162	$83,408	$85,654	$87,922	$90,168	$90,189	→	$103,688
	Administrative Manager				Payroll Manager					
	Appraiser III				Programmer Analyst					
	Chief of Staff				Recreation Manager					
	City Forester				Sr. Economic Development Specialist					
	Civil Engineer II				Sr. GIS Analyst					
	Housing & Zoning Enforcement Supervisor				Wildlife Sanctuary Superintendent					
	Maintenance Manager				Zoning Administrator					
	Park Facilities Superintendent									

City Pay Plan
Recommended 2024 Wage Structure: Hybrid Plan
Exempt (Salaried)

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Performance Range		Max.
	85%	87.5%	90%	92.5%	95%	97.5%	100%			115%
J	$71,302	$73,403	$75,504	$77,605	$79,685	$81,786	$83,886	$83,907	→	$96,470
	Administrative Supervisor				Park Facilities Supervisor					
	Civil Engineer I				Park Supervisor					
	Communications Coordinator				Planner II					
	Construction Inspection Manager				Public Works Supervisor					
	Financial Supervisor				Recreation Supervisor					
	Forestry Supervisor				Resiliency Coordinator					
	Grant Administrator - Limited Term				Sr. Accountant					
	Municipal Court Administrator				Transit Operations Supervisor					
	Office Manager				Wellness Administrator					
I	$65,957	$67,891	$69,826	$71,760	$73,715	$75,650	$77,584	$77,605	→	$89,232
	Accountant				GIS Analyst					
	Chief Naturalist				Human Resources Generalist II					
	Community Development Specialist				Project and Program Manager					
	Curator of Animals				Software Support Specialist					
	Deputy City Clerk				Safety Coordinator					
	Economic Development Specialis				Workplace Culture Specialist					
	Erosion Control Specialist									
H	$60,590	$62,379	$64,147	$65,936	$67,725	$69,493	$71,282	$71,302	→	$81,973
	Building Services Supervisor				Neighborhood Development Specialist					
	Financial Analyst				Planner I					
	Human Resources Generalist I				Real Estate Specialist					
	Naturalist				Sr. Animal Keeper					
G	$55,224	$56,867	$58,490	$60,112	$61,734	$63,357	$64,979	$65,000	→	$74,734
	Design Specialist				Mobility Coordinator					

City Pay Plan
Recommended 2024 Wage Structure: Hybrid Plan
Non-Exempt (Hourly)

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Performance Range		Max.
	85%	87.5%	90%	92.5%	95%	97.5%	100%			115%
K	$36.85	$37.93	$39.02	$40.10	$41.18	$42.27	$43.35	$43.36	→	$49.85
	Commercial Building Inspector				Electrician Foreperson					
J	$34.28	$35.29	$36.30	$37.31	$38.31	$39.32	$40.33	$40.34	→	$46.38
	Administrative Operations Supervisor				Electrician					
	Building Inspector				Plumbing/Heating Inspector					
	Crime Analyst				Systems Analyst					
	Criminalistic Specialist				Financial Services Administrator					
	Electrical Inspector									
I	$31.71	$32.64	$33.57	$34.50	$35.44	$36.37	$37.30	$37.31	→	$42.90
	Communications Technician				Mechanic Foreperson					
	Engineering Technician				Network Specialist					
	FOG Inspector				Right-of-Way Specialist					
	IT Specialist				Sewer Worker Foreperson					
	Master Plumber									
H	$29.13	$29.99	$30.84	$31.70	$32.56	$33.41	$34.27	$34.28	→	$39.41
	Accounting Assistant				HVAC Specialist					
	Appraiser II				Housing Inspector					
	Benefits Specialist				Mechanic					
	Building Services Coordinator				Paralegal					
	Buyer				Park Ranger II					
	City Sealer				Sewer Technical Worker					
	Conservation Corps Coordinator				Signs Worker Foreperson					
	Engineering Aide III				Sr. Carpenter					
G	$26.55	$27.34	$28.12	$28.90	$29.68	$30.46	$31.24	$31.25	→	$35.93
	Account Clerk III				Painter					
	Appraiser I				Paratransit Coordinator					
	Arborist II				Park Maintenance Foreperson					
	Carpenter				Park Ranger I					
	Community Liaison				Parts Clerk					
	Compliance Coordinator				Payroll Specialist					
	Crime Prevention Coordinator				Pool Maintenance Specialist					
	Executive Assistant Executive				Public Arts Coordinator					
	Secretary Financial Analyst				Purchasing Assistant					
	HVAC Technician				Resident Services Coordinator					
	Marketing Coordinator				Sewer Maintenance Worker					
	Operator II				Signs Operator					

City Pay Plan
Recommended 2024 Wage Structure: Hybrid Plan
Non-Exempt (Hourly)

Grade	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Performance Range		Max.
	85%	87.5%	90%	92.5%	95%	97.5%	100%			115%
F		$24.68	$25.39	$26.09	$26.80	$27.50	$28.21	$28.22	→	$32.44
	Account Clerk II				Legal Assistant					
	Administrative Clerk II				Maintenance Technician					
	Arborist I				Neighborhood Compliance Inspector					
	Building Maintenance Technician				Operator I					
	Conservation Corps Field Assistant				Park Maintenance Worker					
	Dispatcher				Parking Maintenance Technician					
	Document Center Lead				Signs Laborer					
	Engineering Aide II				Time Clerk					
	Evidence Technician				Truck Driver					
	Laborer									
E			$23.35	$23.99	$24.64	$25.29	$25.94	$25.95	→	$29.83
	Custodian II				Locate Technician LTE					
	Development Support Specialist				Maintenance Clerk					
	Engineering Aide I				Public Records Specialist					
	Human Resources Assistant				Support Assistant					
	Inspections Support Specialist									
D			$21.98	$22.59	$23.20	$23.81	$24.42	$24.43	→	$28.08
	Administrative Clerk				Records Clerk					
	Transit Service Technician									
C			$20.62	$21.19	$21.76	$22.34	$22.91	$22.92	→	$26.35
	Custodian I				Parking Enforcement Officer					
	Office Clerk				Word Processor					
B			$19.25	$19.79	$20.32	$20.86	$21.39	$21.40	→	$24.60
A			$17.89	$18.39	$18.89	$19.38	$19.88	$19.89	→	$22.86

City of Green Bay, WI

Compensation Project Summary

September 12, 2023

Presented By | Matt Shefchik, AVP Total Rewards Consulting
Ashley McCluskey, Analyst

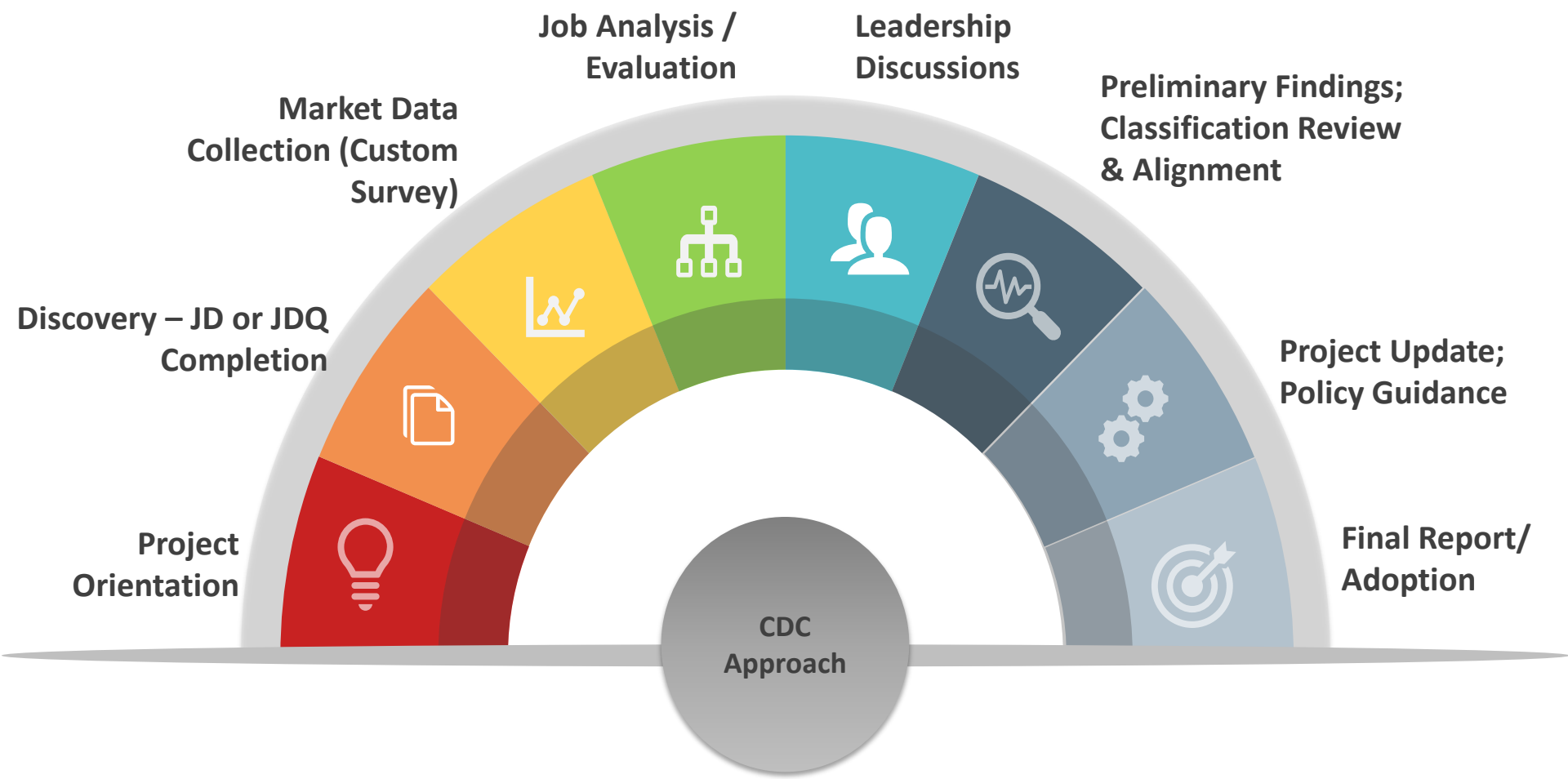
Carlson Dettmann Consulting,
a Division of Cottingham & Butler Insurance Services, Inc.

Cottingham & Butler

AGENDA

- Process Overview
- CDC Approach
- Internal Consistency Review
- Target Market & Market Comparison
- Recommended Wage Schedule

PROCESS OVERVIEW



CDC Approach

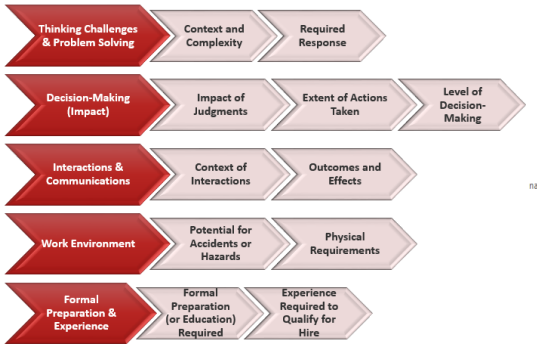
C&B TOTAL REWARDS FRAMEWORK

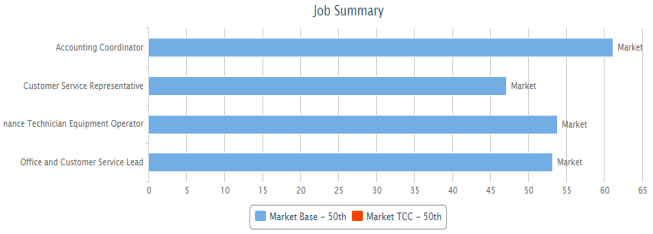
COMPENSATION SYSTEM DEVELOPMENT

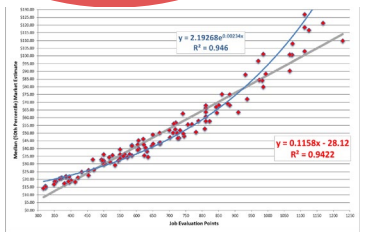
A:
Internally Consistent

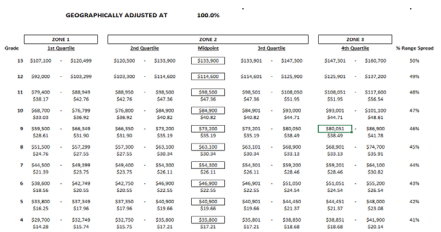
B:
Externally Competitive

C:
Formal Sustainable System









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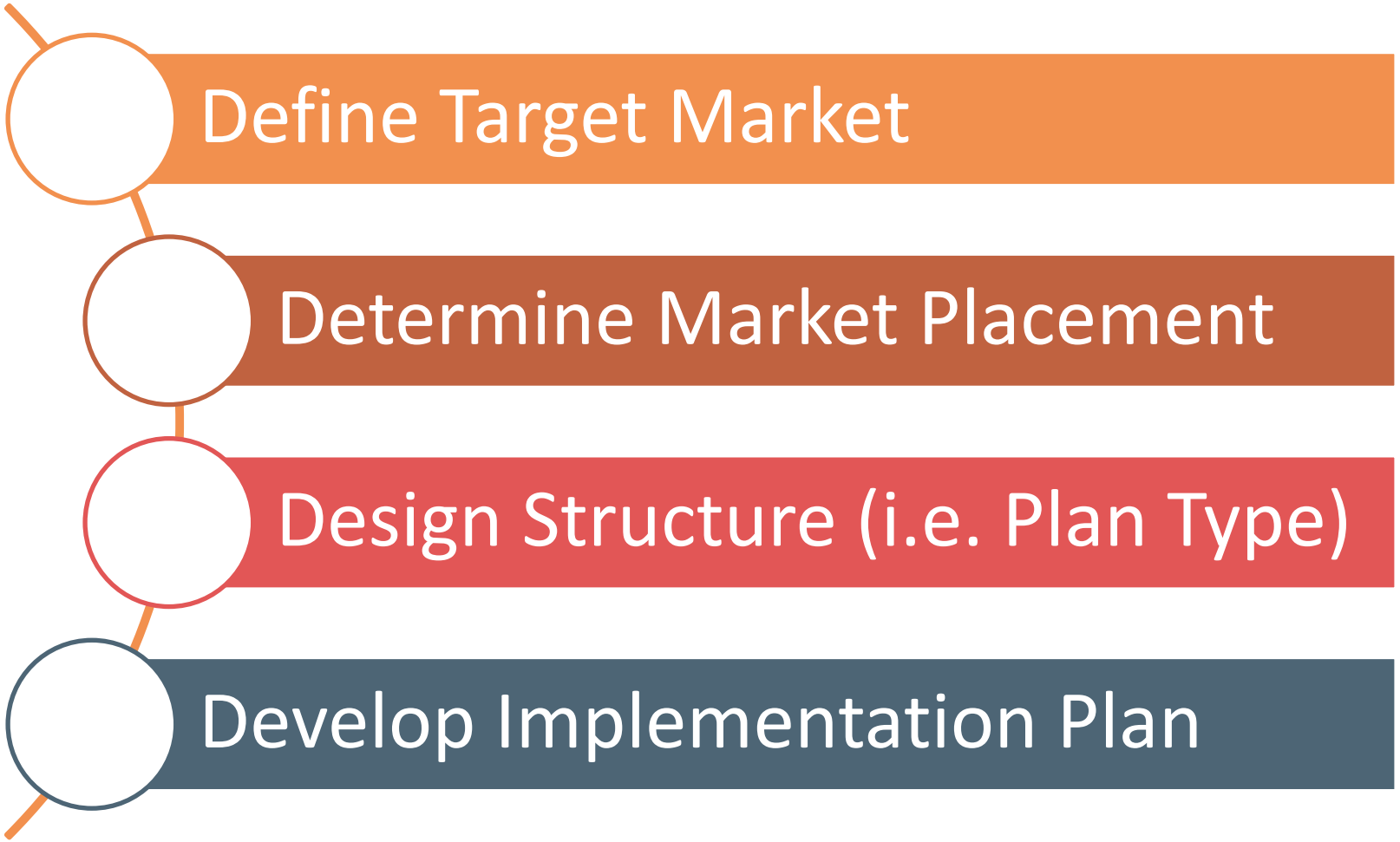
4 ESSENTIAL POLICY QUESTIONS



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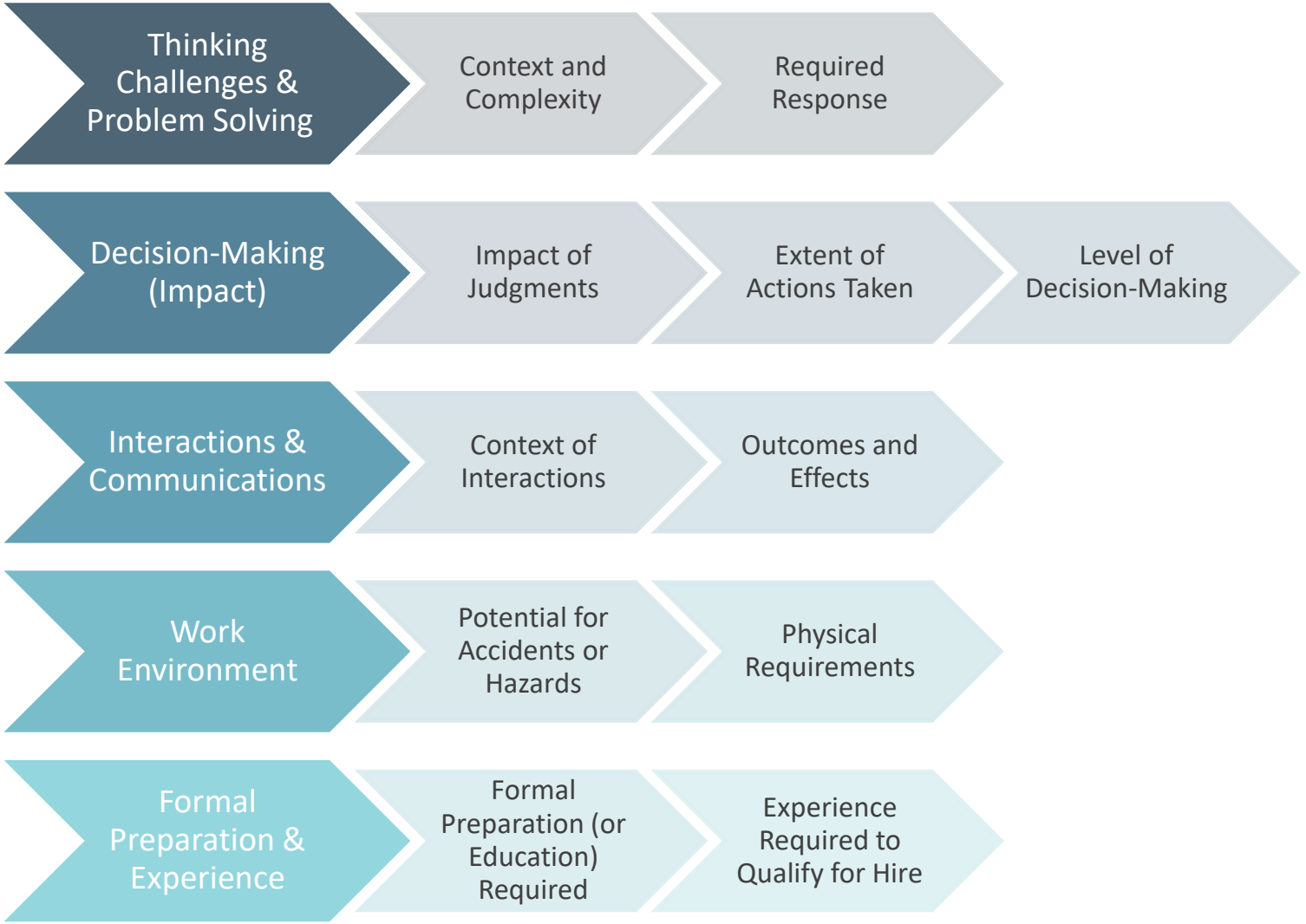
Internal Equity =
Job Evaluation & Classification

JOB EVALUATION → INTERNAL CONSISTENCY

Definition: formal, systematic process for ordering a set of an organization's jobs, **independent of individual performance**, into a hierarchy based on the value or worth of jobs in the organization. Said procedure is designed to aid in establishing pay differentials among the organization's jobs.

Goal: provide equity across the organization (similar and dissimilar positions) and within similar functional groups.

CDC JOB EVALUATION FACTORS



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External Competitiveness = Market Comparisons

TALENT STRATEGY: TWO MARKETPLACES

Comparable Marketplace

Who is like us?

- Traditional approach

More Data Driven

- Proximity, Population, Budget Size, Commuting Patterns, Property Valuation, Income, Organization or Department Structure, etc.

Self-Alignment

- Associations, Consortia, Bargaining Comps, Same Industry

Final Result is a Pool of Organizations Similar in Size/Scope

Competitive Marketplace

Who is trying to take our talent?

- Big vs small; public vs private; etc.

Employee Considerations

- Commute Time, Organizational Culture, Company Growth, Career Opportunities, Meaning, Hours of Work, Level of Job

There Will, Undoubtedly, Be Cross-Over with the Comparable Marketplace

Final Result is a More Diverse Pool of Organizations, More Likely to Truly Reflect the Options Facing Employees

Primary Comparables:

- Appleton
- Beloit
- De Pere
- Eau Claire
- Fon du Lac
- Greenfield
- Janesville
- Kaukauna
- Kenosha
- La Crosse
- Menasha
- Madison
- Manitowoc
- Neenah
- Oak Creek
- Oshkosh
- Racine
- Sheboygan
- Stevens Point
- Superior
- Waukesha
- Wausau
- West Allis
- West Bend
- Allouez (Village)
- Ashwaubenon (Village)
- Bellevue (Village)
- Hobart (Village)
- Howard (Village)
- Little Chute (Village)
- Brown Co.
- Calumet Co.
- Outagamie Co.
- Winnebago Co.

B: MARKET REVIEW (CONT.)

External Survey Sources:

- Bureau of Labor Statistics Occupational Employment and Wage Estimates Survey
- CompData Benchmark Survey
- Economic Research Institute Salary Assessor
- Payfactors Market Database & Peer Database
- Willis Towers Watson Managerial, Professional, & Support Compensation Survey

ADDITIONAL NOTES

- Sufficient Set of Benchmark Jobs
  - Jobs having likely matches in the market
  - Fairly stable in job content
  - Representative of different pay and responsibility levels
- Reflective of “Marketplace” & Data From Relevant Sources
  - Mix of data sources to provide reliable and stable data Not all comparables (or data sources) were used for every job.
  - Nonexempt (hourly) jobs tend to be much more localized, and Exempt (salaried) tend to be more regional/statewide.
  - Many public sector classifications do not have an analogue to the private sector
- There is not data from each organization for each job.
- Any outliers (high or low values) were removed from consideration.
- Supplemental data may be utilized from other communities when needed, and when it fits within our statistical parameters.

CITY OF GREEN BAY BENCHMARK JOBS

FINANCE DIRECTOR
PUBLIC WORKS DIRECTR
CITY ATTORNEY
FIRE CHIEF
POLICE CHIEF
CHIEF OF OPERATIONS
DEVELOPMENT DIRECTOR
IT DIRECTOR
ASST FIRE CHIEF
POLICE COMMANDER
CITY ASSESSOR
HR MANAGER
ASST CITY ATTORNEY
PROGRAMMER ANALYST
SR PROGRAMMER ANALYST
FLEET MANAGER
PUBLIC WORKS SUPT
CITY CLERK
PAYROLL MANAGER
APPRAISER III

SR GIS ANALYST
CIVIL ENGINEER II
PLUMBING/HVAC INSPECTOR II
HR GENERALIST II
SENIOR ACCOUNTANT
ELECTRICIAN
MECHANIC FOREPERSON
BUILDING INSPECTOR
NETWORK SPECIALIST
DEPUTY CITY CLERK
COMMUNICATIONS TECH
MASTER PLUMBER
APPRAISER II
ENGINEERING TECH
BUYER
PARALEGAL
CARPENTER
MECHANIC
BENEFITS SPECIALIST
CIVIL ENGINEER I

PAINTER
EQUIPMENT OPERATOR
PAYROLL SPECIALIST
BLDG MAINT TECH
DOCUMENT CENTER LEAD
LEGAL ASSISTANT
DISPATCHER
LABORER - STREET
PARK MAINT WORKER
TRUCK DRIVER-STREET
HR ASSISTANT
ADMIN CLERK II
ADMIN CLERK
CUSTODIAN I

Market Competitiveness: 50th Percentile

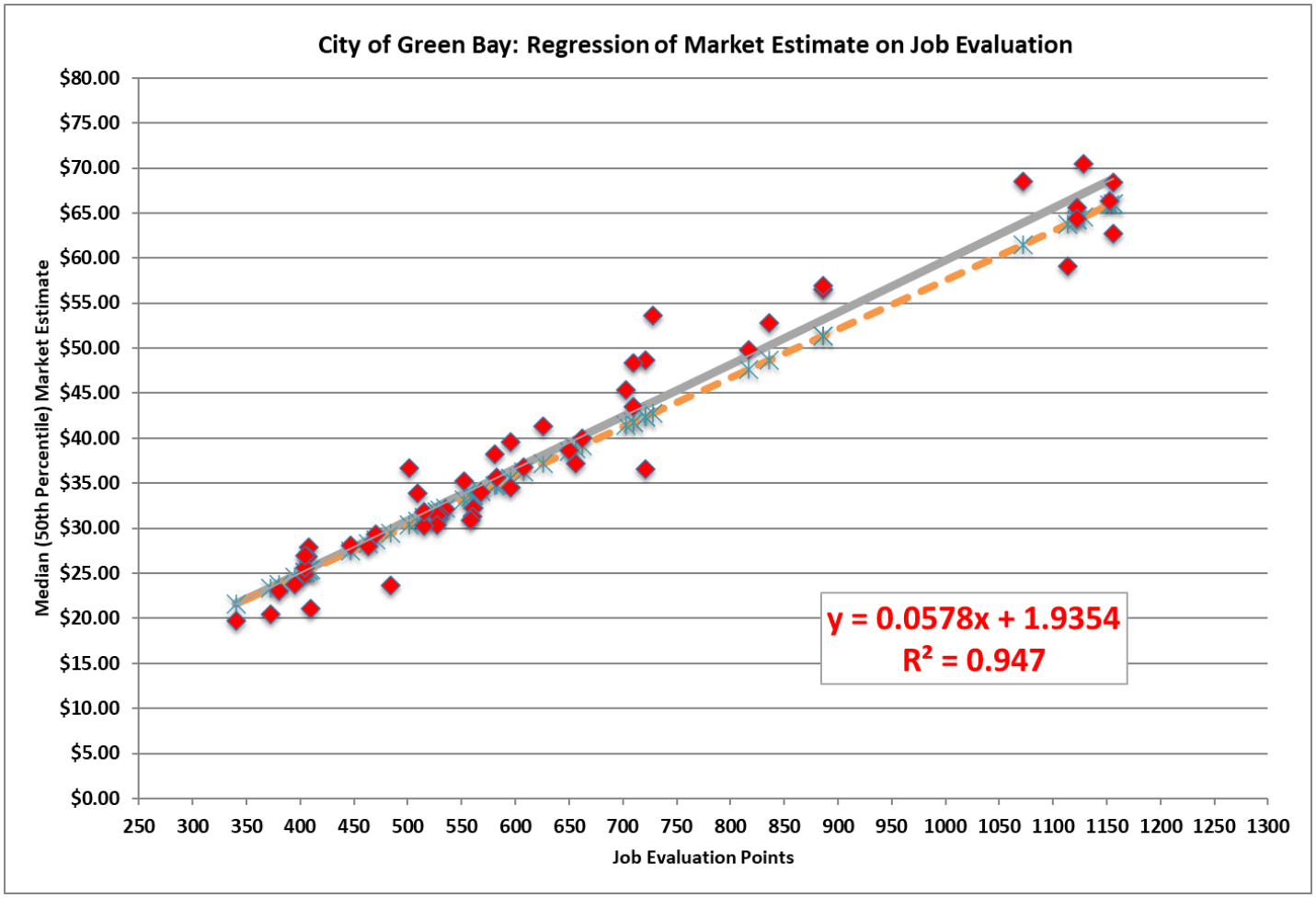
MARKET LINE & STRUCTURE DESIGN

Measured the correlation between job evaluation results vs. market analysis for benchmark positions.

Job evaluation results are an excellent predictor (R^2) of market value for the organization's positions.

Used the linear regression analysis, or line-of-best fit results, to set the "midpoint" or "control point" of the recommended pay ranges.

Represents the best approximation of the market for a given job in a given pay grade.



C: COMPENSATION SYSTEM - RECOMMENDED STRUCTURE

Structure Traits

- Meet-the-Market = 50th percentile
- 1 Pay Structure (Both Exempt and Non-Exempt)
- PG A – PG S
- Hybrid Structure (85% - 115%)
  - PG A - PG E (90% Min – New Recommendation)
  - PG F (87.5% Min – New Recommendation)

GRADE	85.00%	87.50%	90.00%	92.50%	95.00%	97.50%	100.0% C/P	Performance Range	115.0% Max.

See Structure Design in ClientFile

IMPLEMENTATION RECOMMENDATIONS

Current

- 45% Range Penetration and 98% Compa-Ratio
- Compared to market target, top one-third of jobs are ~6% below market, while lower two-thirds are at market

Recommended 50th Percentile Target Structure

- Midpoint Change: +4.9% Average from Current
- Increase to Step: $450,000 or 1.5% of payroll resulting in 95.6% compa-ratio
- 2% Guaranteed Increase or Compression Relief: $960,000 or 3.3% of payroll

COMPENSATION ANALYSIS - ALL EMPLOYEES

		Number of Employees at	
Step 1	85%	32	7%
Step 2	87.50%	50	11%
Step 3	90%	50	11%
Step 4	92.50%	46	10%
Step 5	95%	57	12%
Step 6	97.50%	69	15%
Step 7	100%	66	14%
Between CP and Max		94	20%
Above Max		0	0%
Total		464	

FLOOR METHOD, BASED ON: **Hire Date** **Cannot Result in Step Above C/P**

If Hire DateYrs. >	If Hire DateYrs. >	If Hire DateYrs. >	If Hire DateYrs. >	If Hire DateYrs. >	
7.0	5.0	3.0	2.0	1.0	**Guaranteed Minimum %:**
Then Must be at Least	Then Must be at Least	Then Must be at Least	Then Must be at Least	Then Must be at Least	2.0%
6	**4**	**3**	**2**	**1**	

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Market Competitiveness: 50th / 75th Percentile Blend

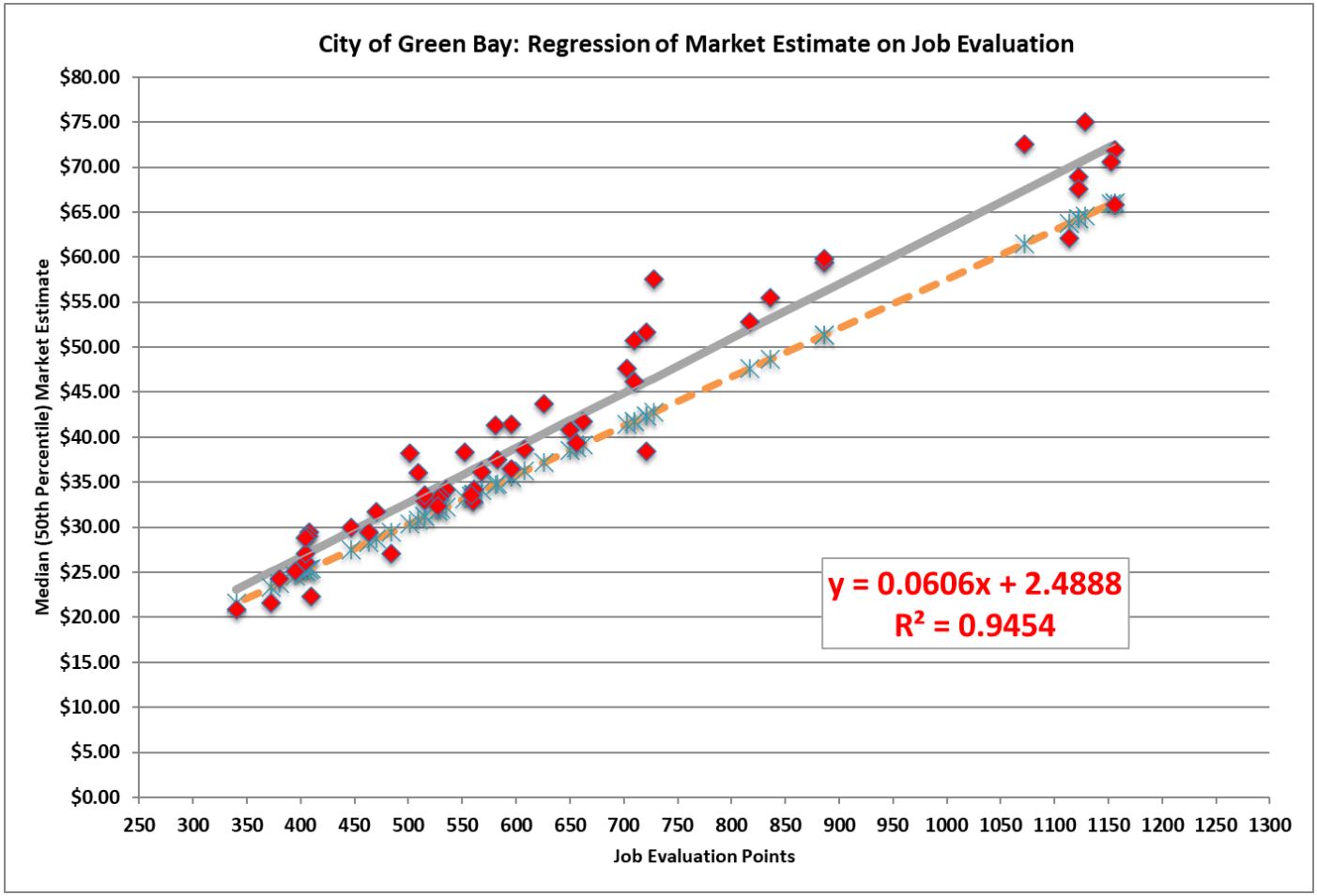
MARKET LINE & STRUCTURE DESIGN

Measured the correlation between job evaluation results vs. market analysis for benchmark positions.

Job evaluation results are an excellent predictor (R^2) of market value for the organization's positions.

Used the linear regression analysis, or line-of-best fit results, to set the "midpoint" or "control point" of the recommended pay ranges.

Represents the best approximation of the market for a given job in a given pay grade.



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C: COMPENSATION SYSTEM - RECOMMENDED STRUCTURE

Structure Traits

- Lead-the-Market = 50th/75th percentile blend
- 1 Pay Structure (Both Exempt and Non-Exempt)
- PG A – PG S
- Hybrid Structure (85% - 115%)
  - PG A - PG E (90% Min – New Recommendation)
  - PG F (87.5% Min – New Recommendation)

GRADE	85.00%	87.50%	90.00%	92.50%	95.00%	97.50%	100.0% C/P	Performance Range	115.0% Max.

See Structure Design in ClientFile

IMPLEMENTATION RECOMMENDATIONS

Current

- 45% Range Penetration and 98% Compa-Ratio
- Compared to market target, top one-third of jobs at ~11% behind the market, while lower two-thirds ~6% behind the market.

Recommended 50th / 75th Percentile Blend Target Structure

- Midpoint Change: +11% Average from Current
- Increase to Minimum: $574,000 or 1.9% of payroll
- Increase to Step: $892,000 or 3.0% of payroll resulting in 91.3% compa-ratio
- 2% Guaranteed Increase or Compression Relief: $2,350,000 or 8% of payroll

COMPENSATION ANALYSIS - ALL EMPLOYEES

		Number of Employees at	
Step 1	85%	79	17%
Step 2	87.50%	83	18%
Step 3	90%	80	17%
Step 4	92.50%	79	17%
Step 5	95%	66	14%
Step 6	97.50%	37	8%
Step 7	100%	31	7%
Between CP and Max		9	2%
Above Max		0	0%
Total		464	

FLOOR METHOD, BASED ON: **Hire Date** **Cannot Result in Step Above C/P**

If Hire DateYrs. >	If Hire DateYrs. >	If Hire DateYrs. >	If Hire DateYrs. >	If Hire DateYrs. >	
7.0	5.0	3.0	2.0	1.0	**Guaranteed Minimum %:**
Then Must be at Least	Then Must be at Least	Then Must be at Least	Then Must be at Least	Then Must be at Least	2.0%
6	**4**	**3**	**2**	**1**	

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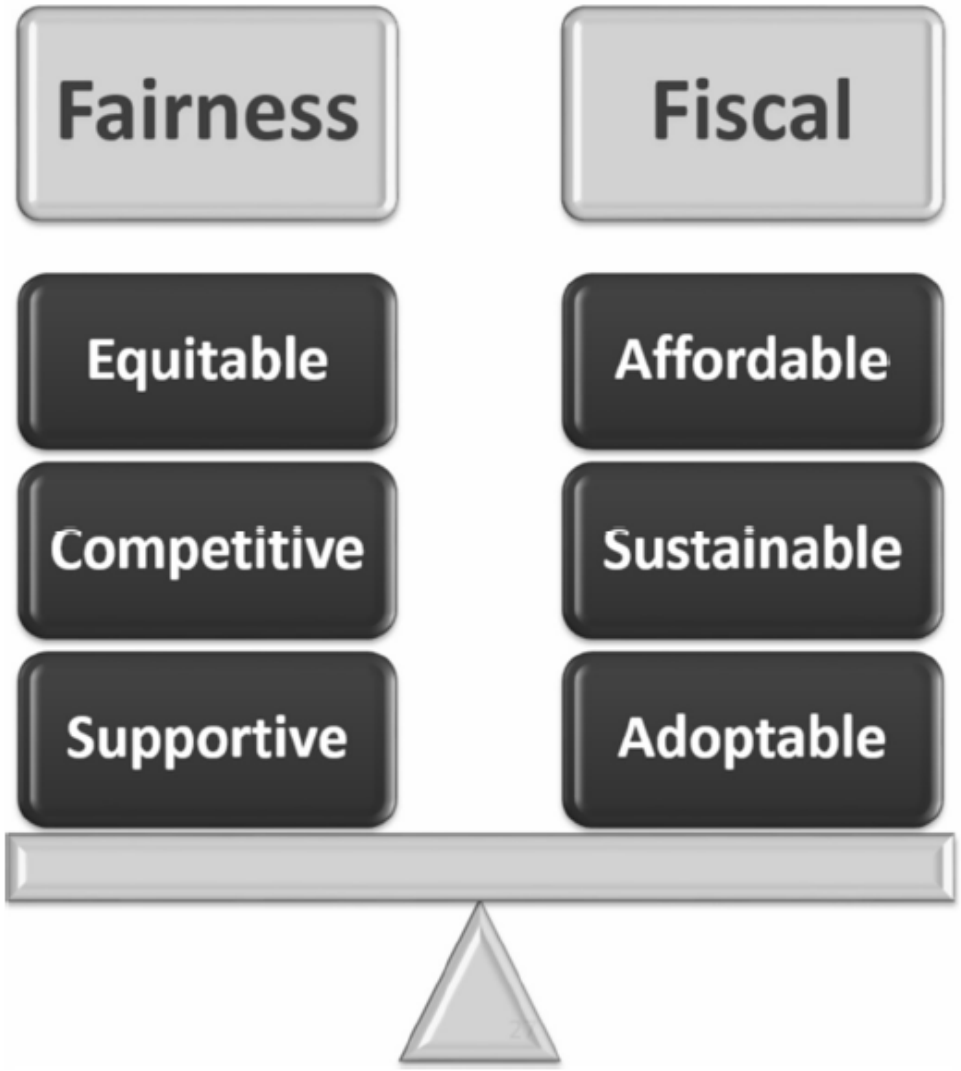
In Closing

CDC RECOGNIZES THE DELICATE BALANCING ACT



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Questions?

Report to the
Personnel Committee of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # T.3

For staff to proceed as discussed in closed session regarding the 2024 City of Green Bay and City of Green Bay Fire Fighters Local 141, International Associaiton of Fire Fighters AFL-CIO 158 labor agreement.

The Committee may convene in closed session pursuant to § 19.85(1)(e), Wis. Stats., for purposes of deliberating or negotiating public employee contracts for competitive or bargaining reasons. The Committee may thereafter reconvene in open session pursuant to § 19.85(2), Wis. Stats., to report the results of the closed session and consider the balance of the agenda.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None

Report to the
Public Arts Commission of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	Laura Schley, Staff

AGENDA ITEM # U.1

To approve the City of Green Bay Public Art Grant application - A Walk With Nature.

BACKGROUND

The Public Art Grant Program is funded by the American Rescue Plan Act (ARPA). Funds are dedicated to artists/artist teams, creatives, makers, performers, arts organizations, and other cultural drivers to support presentations, performances, workshops, research, and/or the creation of artwork within the City of Green Bay.

Applicants are eligible to receive a one-time no-match required grant between $2,500 - $10,000. This grant may be used to fully fund a project.

The applicant, John Muir Park Neighborhood Association (JMPNA), is proposing the project titled A Walk With Nature. The project is focused on the creation of a sculptural scavenger hunt to be installed throughout John Muir Park.

JMPNA has been discussing the project with Wisconsin-based chainsaw artist, Ben Buschke, to create between 15 and 25 wood carvings to be installed throughout the park. Sculptures would range in size from one to three feet in size, depicting local wildlife, along with a larger sculpture of a bear and cub located at the park entrance. Animals selected for the project have been chosen by the community through a Facebook poll hosted by JMPNA along with an in-person opportunity to vote at their Party in the Park event on September 23, 2023. Approximately 70 people participated in the poll.

JMPNA has been working with the Park's Department to determine artwork placement within the park. Site approval for the project was granted during the October 11, 2023 Parks Committee meeting. Artwork installation is expected to take place in Summer/Fall 2024.

The applicant is requesting $10,000 for this project.

RECOMMENDATION

FISCAL IMPACT

There is currently $9,577.00 of available funds remaining for the City of Green Bay Public Art Grant.

ATTACHMENTS

1. City of Green Bay Public Art Grant Guidelines
2. Public Art Grant Application - A Walk With Nature

CITY OF GREEN BAY
PUBLIC ART GRANTS PROGRAM

To enhance and contribute to Green Bay's unique arts and culture sector.

CITY OF GREEN BAY
www.greenbaywi.gov/pac
920-448-3400

ABOUT THE GREEN BAY PUBLIC ARTS COMMISSION (GBPAC)

The Green Bay Public Arts Commission (GBPAC) focuses on the creation and preservation of public art within Green Bay, and ensuring equal access for all to enjoy and engage with public art. The GBPAC exists to fund artistic activities and support cultural programs that integrate and advance arts and culture as an essential part of life in Green Bay. The GBPAC is a five-member commission appointed by the Mayor to advise the City on matters of arts and culture.

Public art is any art form that is readily available for the public and is unimpeded by barrier or entry. Public art includes work on both public and/or private property and can be permanent or temporary.

PUBLIC ART GRANT PROGRAM DESCRIPTION

The Public Art Grant Program provides funds to artists/artist teams, creatives, makers, performers, arts organizations and other cultural drivers, to enhance and increase arts and culture and public art opportunities within the city of Green Bay. Funded by the American Rescue Plan Act (ARPA), funds are dedicated to support presentations, performances, workshops, research, and/or creation of artwork within the City of Green Bay. The program strives to encourage artistic engagement, spur economic vibrancy, and revitalize Green Bay through the arts.

Applicants are eligible to receive a one-time grant between $2,500 - $10,000. This grant may be used to fully fund a project. No match is required. Funds cannot be used to retroactively fund completed projects or portions of projects, but can be used for ongoing projects.

Professional artists of all disciplines, arts organizations and other cultural drivers are encouraged to apply.

APPLICATION DEADLINE

Applications will be received on a rolling basis until all Art Grant funds have been expended. Applicants interested in applying for funds should anticipate applying for funds roughly two months prior to when funds are needed. Completed applications will be reviewed monthly during the Public Arts Commission meeting typically held on the fourth Wednesday of the month. Applicants interested in having their application reviewed must have all materials submitted at the latest by **5:00PM (CT) the second Friday of the month**. Applications received

after the second Friday of the month will be held for review until the next month. Applications must be submitted electronically via the City's online form.
For technical assistance, email laura.schley@greenbaywi.gov. Or call 920.448.3142.

REVIEW CRITERIA

Proposals will be evaluated based on three criteria: **1**) artistic excellence, **2**) artistic merit, and **3**) project feasibility. Evidence to support the criteria will come from the narrative responses and submitted supplemental materials.

1. The artistic excellence of the project includes the:
   - Professionalism of the artist/cultural organization/lead project creative, quality of the artwork or services that the project will involve, as appropriate to the project
   - Evidence includes digital work samples, arts resumes, artist/cultural organization websites, or social media

2. The artistic merit of the project includes the:
   - Connection of the project to the artistic practice of the applicant
   - Potential for the project to reach new audiences and expose them to new artistic opportunities
   - Evidence includes digital work samples, arts resumes, letters of support, artist/cultural organization websites, or social media

3. The measures of project feasibility include:
   - Ability to carry out the project based on the appropriateness of the budget, the proposed timeline, the quality and clarity of the project activities and goals, the resources and partners involved, and the qualifications of the project's personnel.
   - Evidence of project feasibility includes a budget, project timeline, letters of support or agreement with partner artists & organizations, or project plans.

REVIEW PROCESS

Submissions are first reviewed by staff. Staff confirms applicant eligibility, basic compliance with grant criteria, and completeness of applications before sending them to the Arts Commission for review. Ineligible or incomplete applications will not be reviewed by the Arts Commission.

AWARD AMOUNTS

Award amounts range from $2,500 to $10,000. Awards will be paid in two disbursements: half upon signing of grant agreement and half upon approval of final report. No match is required. A project can be fully-funded with the award.

ELIGIBLE APPLICANTS

- Wisconsin residents.
- At least 18 years of age
- Applicant must obtain a TIN/UEI number to receive funds
- Groups of artists, or artist collectives, represented by an individual meeting the residency criteria above. Group applicants are eligible for only one award. Each artist within the group must consent to be part of the application; however, only one person/organization must act as the lead applicant. Note: any tax implications for a group application will fall on the lead applicant.

CONTACTS AND ACCESSIBILITY

For questions or concerns about the application process or technical assistance, contact City staff: Laura Schley, laura.schley@greenbaywi.gov.

ELIGIBLE PROJECTS

Qualified artists/organizations across disciplines are eligible to apply for support to carry out specific projects and activities. Eligible projects must take place within eligible census tracts and/or benefit low-to moderate income individual(s). Eligible census tract map can be accessed here. Contact staff for details on low-to-moderate income qualifications. Grantees will demonstrate tangible results of work undertaken and be able to provide proof of area benefit and/or low-to-moderate income individual(s) benefit. Proof may include but is not limited to; map of project location, artist tax return, audience data, survey results, etc.

For questions or concerns about providing proof of eligibility, contact City staff: Laura Schley, laura.schley@greenbaywi.gov.

Examples of the types of projects applicants of varying discipline might pursue with the support of this grant include, but are not limited to:

- *Teaching artists/organizations*: curricula, digital learning modules, workshops, resource development
- *Visual artists/organizations:* sculptures, paintings, studies, installations
- *Literary artists/organizations:* manuscripts, proposals, drafts, research reports
- *Performance artists/organizations:* performances, tours, events, video or audio recordings
- *Folk and traditional artists/organizations:* textiles, instruments, beading, dolls, exhibitions, workshops
- *Media artists/organizations:* films, scripts, interviews

INELIGIBLE PROJECTS

- Previously completed projects (though clearly defined, and demonstrable portions of ongoing projects can be eligible)
- Projects taking place outside of the city of Green Bay
- Projects that do not take place within eligible locations and/or do not benefit low-to-moderate income individual(s)
- Rent or food assistance, or any type of artist relief to alleviate hardship without undertaking work
- Honorifics or recognition awards based on the past work without plan to undertake work during the award period

APPLICATION MATERIALS – to be made available on the City's online Form Center

PROJECT NAME*
Choose a project name that is descriptive and will allow reviewers to quickly identify the proposal.
Character Limit: 100

ELIGIBILITY*
Refer to the eligibility requirements listed above. For questions about eligibility, email laura.schley@greenbaywi.gov.
Choices:
I am eligible to apply and can provide the necessary eligibility documents if requested.

REQUEST AMOUNT*
The minimum amount to request is $2,500. Maximum request is $10,000. The amount requested should match the total expenses listed in the Project Budget below.
Character Limit: 20

PROJECT DESCRIPTION*
Describe the project and how it connects to your artistic practice. As applicable, include details about your artistic practice and vision, project location(s), intended audience, collaborators, partners, and contractors.
Character Limit: 3000

PROJECT TIMELINE*
Describe a timeline for completing the proposed project. Consider including major project milestones that will help you measure progress. Reminder: successful applicants must provide a status update to City staff by November 1, 2023 and projects must be completed by December 31, 2023.
Character Limit: 3000

PROJECT OUTCOMES*
Describe tangible outcomes of the project. Clearly define the deliverable end-product that will demonstrate completion of the project. For clarifications about eligible projects and project outcomes, contact City staff.

In the final report, grantees will be required to provide documentation of work completed during the award period from August 1, 2023 to December 31,2023. Consider this timeframe when planning a project.
Character Limit: 3000

PROJECT BUDGET*
Click **HERE** to download the Project Budget Worksheet. Fill out, save, and upload the budget. Please use file types: .xls, .xlsx, or PDF.

A detailed Project Budget is an important piece of evidence for the feasibility of the project..
File Size Limit: 5MB

PROJECT BUDGET EXPLANATION*
If the project budget exceeds $10,000 please describe the plan for paying for the expenses beyond the maximum award amount. If there are aspects of the project budget that require explanation, describe them below. Additional budget documents can be uploaded in the Work Samples boxes in the "Supplemental Materials" section below if necessary. *Character Limit: 750*

SUPPLEMENTAL MATERIALS

IMPORTANT:

In order to be considered for funding, an application needs to include evidence to support the grant criteria. The arts resume and area/income benefit field is required; the other fields are *strongly recommended* but may not be applicable to your submission. An application *does not need* to use every field below in order to be considered complete. For assistance with supplemental materials please contact City staff.

ARTS RESUME OR CV*

Include information that reflects career advancements, professional accomplishments, and training, up to 4 pages.
File Size Limit: 5MB

AREA BENEFIT AND/OR INCOME BENEFIT*

Include information relating to the projects eligible area benefit and/or benefit to low-to moderate-income individual(s).
File Size: 10MB

LETTER(S) OF SUPPORT

If applicable, upload letter(s) of support from partners, collaborators, mentors, etc.
File Size Limit: 10MB

WORK SAMPLE #1

Depending on artistic discipline, work samples might include images, PDFs, video or audio clips, curricula, learning modules, press articles, or marketing materials. Additional work sample upload boxes are available below. For technical support or assistance on work samples please contact City staff.
File Size Limit: 25MB

WORK SAMPLE #2

File Size Limit: 25MB

WORK SAMPLE #3

File Size Limit: 25MB

ARTIST WEBSITE

Character Limit: 2000

ARTIST SOCIAL MEDIA

Character Limit: 2000

ARTIST SOCIAL MEDIA

Character Limit: 2000

ONLINE PORTFOLIO

Character Limit: 2000

ADDITIONAL URL

Character Limit: 2000

Print

Public Art Grants Program - Submission #61626

Date Submitted: 10/12/2023

Artist Name*

Ben Buschke on behalf of John Muir Park Neighborhood Association

Artist Email*

[redacted]

Project Name*

A Walk With Nature

Choose a project name that is descriptive and will allow reviewers to quickly identify the proposal.

Request Amount*

$10,000

The minimum amount to request is $2,500. Maximum request is $10,000. The amount requested should match the total expenses listed in the Project Budget below.

Project Description*

John Muir Park Neighborhood Association would like to bring a unique element to the City with a "Walk With Nature" Scavenger Hunt at John Muir Park.

JMPNA has found artist Ben Buschke that is willing to work with our association to create 15-25 pieces wood carvings that will be displayed within the park. Mr. Buschke is a chainsaw artist in Manawa Wisconsin who has work displayed throughout Wisconsin including at Road America and the Botanical Gardens.

The pieces will mainly be 1 to 3 feet in size. There will be a larger statue at the entrance of the park of a bear and her cub. The pieces will be painted and sealed. The pieces can be maintained with sealant for long lasting pieces within the park.

Due to the size, the pieces will be displayed within the trees of John Muir Park to deter theft. JMPNA has worked with the Park's Department and the forester regarding placement of the pieces. The artist has agreed to work with the forester to determine the appropriate trees to place the art. In addition, the Park's Committee recommended approval of the project at the October 11, 2023, meeting. Final approval of Council will take place at the October 23 meeting.

Describe the project and how it connects to your artistic practice. As applicable, include details about your artistic practice and vision, project location(s), intended audience, collaborators, partners, and contractors.

Project Timeline*

The pieces are projected to be installed at John Muir Park Summer/Fall 2024.

Describe a timeline for completing the proposed project. Consider including major project milestones that will help you measure progress.

Project Outcomes*

The vision of this project is to create a way for community members to connect with nature as was the vision of John Muir. John Muir was a naturalist and is the Father of National Parks.

The goal of the scavenger hunt is to create a unique piece of art would that all community members could connect with and appreciate year-round.

Describe tangible outcomes of the project. Clearly define the deliverable end-product that will demonstrate completion of the project. For clarifications about eligible projects and project outcomes, contact City staff.

Project Budget*

Public Art Grants		
(Fill in only the lines that apply to your request and round to the nearest dollar. You may add additional lines in the budget if needed.)		
Applicant: John Muir Park Neighborhood Association		**Date:**
Expenses may include artist or consultant fees, facility or equipment rental, materials, supplies, services, software, etc. required to complete the project. Total expenses should match the request amount.		
Project Expenses		**Cash Amount**
Detail:	Initial Artist visit to park regarding placement	$0
Detail:	Bear and Cub sculpture (3 1/2 feet to 4 feet)	$1,200
Detail:	Badger sculpture up to 3 feet (with tail)	$350
Detail:	American Robin sculpture	$275
Detail:	Bald Eagle sculpture (up to 3 feet)	$350
Detail:	Mourning Dove sculpture	$250
Detail:	Raccoon sculpture (2 to 3 feet)	$350
Detail:	Cardinal sculpture	$275
Detail:	Chipmunk sculpture	$320
Detail:	Blue Jay sculpture	$275
Detail:	Goldfinch sculpture	$250
Detail:	Great Horned Owl (up to 3 feet)	$350
Detail:	American Marten (up to 2 1/2 feet)	$325
Detail:	Red-headed Woodpecker	$325
Detail:	Ruby-Throated Hummingbird with flower	$350
Detail:	Red-Tailed Hawk (up to 3 feet)	$350
Detail:	Baltimore Oriole (Male & Female) sculpture	$250
Detail:	Ruby-Crowned Kinglet sculpture	$250
Detail:	Red-Winged Blackbird sculpture	$250
Detail:	Grackle sculpture	$250
Detail:	Belted Kingfisher sculpture	$250
Detail:	Turkey sculpture (up to 3 feet)	$350
Detail:	Porcupine sculpture (up to 3 feet)	$350
Detail:	Bat sculpture	$300
Detail:	Rabbit sculpture	$325
Detail:	Installation/ Delivery	$1,000
Detail:	Scavenger Hunt Sign (from Signarama)	$769
Detail:	Lag bolts	$100
Total expenses should match your request amount		**$10,039**

A detailed Project Budget is an important piece of evidence for the feasibility of the project.

Project Budget Explanation*

JMPNA is requesting funds to cover the creation and installation of 15 – 25 pieces as well as scavenger hunt signage for the park. JMPNA is seeking additional grant funding to cover the overage as well as fund additional add-ons offered by the artist listed in a prior proposed budget (attached.)

If the project budget exceeds $10,000 please describe the plan for paying for the expenses beyond the maximum award amount.

If there are aspects of the project budget that require explanation, describe them above. Additional budget documents can be uploaded in the Work Samples boxes in the "Supplemental Materials" section below if necessary.

Supplemental Materials

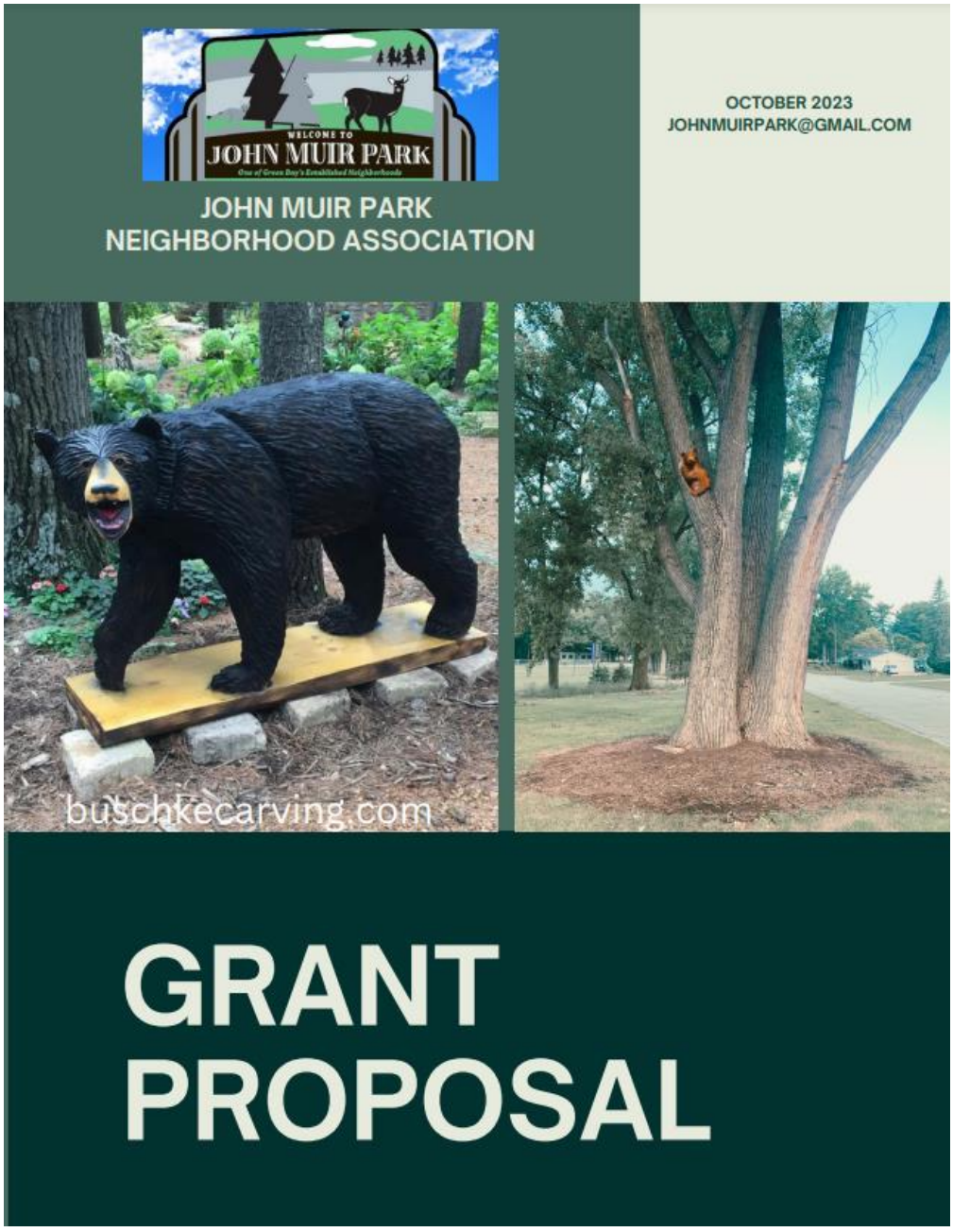
IMPORTANT:

In order to be considered for funding, an application needs to include evidence to support the grant criteria. The Arts Resume field and Area/Income Benefit field are required; the other fields are strongly recommended but may not be applicable to your submission. An application does not need to use every field below in order to be considered complete. For assistance with supplemental materials please contact City staff.

Arts Resume or Curriculum Vitae*

JMPNA GRANT PROPOSAL.pdf

Include information that reflects career advancements, professional accomplishments, and training, up to 4 pages.



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ABOUT JMPNA AND "A WALK WITH NATURE"

The mission of the John Muir Park Neighborhood Association is to come together as neighbors and friends to build a stronger, safer community and to bridge the generation gap.

In July 2023, the Association sought to find an art piece that would honor the nature theme at John Muir Park. Inspired by the John Muir quote "In every walk with nature one receives far more than he seeks," the idea of a scavenger hunt through nature came to fruition.

The Association researched local artists and different mediums and found the work by artist Ben Buschke to best reflect the vision. The wood carvings are to be treated with multiple coats of stain/paint and sealer, allowing minimal maintenance and timeless pieces to be enjoyed in the park for years to come.

The Association is requesting approval from the Public Arts Commission and Council to place the pieces at John Muir Park.

ABOUT JOHN MUIR PARK

John Muir Park is a 21.93 wooded park with a nature landscape on the West Side of Green Bay. John Muir Park has 1 basketball court, horseshoes, nature walking trail, picnic area, sledding area, playground, tennis courts and a shelter that holds 50 people.

JMPNA reached out to the Park's Department regarding the project. The artist has agreed to work with the Forester to determine appropriate placement to ensure the animals will be mounted with the health of the tree in mind. The Parks Committee discussed the item and recommended approval of the project at the October 11, 2023 Parks Committee meeting.

Ben Buschke, Buschke Carvings

Ben Buschke of Buschke Carving is a chainsaw artist from Manawa, Wi. He began in 2017 when on a whim, wanted to try to make a bear with a chainsaw.

Mr. Buschke has since professionally created one-of-a-kind pieces.

His work is throughout Wisconsin for private and local viewing, including Road America and the Botanical Gardens.

His Facebook and Youtube page @buschkecarving features videos of his work being carved.

Follow on Facebook @ buschkecarving

The Artwork

Ben Buschke of Bushke Carvings
Photos from buschkecarving.com

Caring for the Pieces

As written on buschkecarving.com

IF YOU PLACE YOUR CARVING OUTSIDE:

#1-The sun is the enemy! To minimize cracking keep your carving out of direct contact with the sun. Some type of shade or covered porch is ideal.

#2- Keep your carvings feet dry: Use stones, pavers, etc. to keep the carving from direct contact with the ground.
#3- Since the carving is outside in the elements it will need to be resealed- I always say once a year is a good idea. You will be the best judge to determine when to re-coat the carving. A couple of signs that it needs to be resealed are when the carving no longer repels water or it starts to discolor and turns grey.

Remember you have purchased a piece of wooden art- not clay, plastic, or concrete. Similar to a log home your carving will dry over time and may develop drying checks or cracks. This is normal and can add character to your carving!

Agreement between JMPNA & Artist

Items

Jaime Fuge <
To: Ben Busch[illegible] ~

Tue, Oct 3 at 8:24 P

Good Evening,
I am excited to announce we have selected 14 animals to be displayed within the trees of the park. Now that we have a better idea of the pieces, would you mind reviewing and adjusting your price quote if need be?

Attached is a line item of the pieces. If you would like to fill out the excel sheet and return you may or if it would be easier to just reply back with the information that would be acceptable as well.

I have also included the bigger bear and cub piece, initial charge to meet with the Parks Department at the Park, Delivery of pieces and installation and an "other" category if I missed anything that you normally charge for.

In addition, I added more animals and a price quote for the live event that we may be able to add to our funding request depending on where the price quote comes in at.

I know we have had multiple conversations, but to recap, John Muir Park Neighborhood Association would like to hire you to create wood pieces of animals for a scavenger hunt at our park John Muir Park located at 1761 Biemeret St. Green Bay, WI.

The pieces should be similar to the pieces created and displayed on your website buschkecarving.com. There are a variety of animals. We give the artist Mr. Buschke artistic freedom (adding flowers, placing bird in a nest, etc) with the pieces so long as it keeps with the naturalistic theme and is not vulgar or offensive. Mr. Bushcke may request for more direction from JMPNA if this would be helpful to the process.

We are looking for the smaller animals like birds and chipmunks to be approximately 1 to 2 feet in size (bigger than the actual animal). The items are to be displayed within the trees and we hope for them to be seen from the ground at 10 to 15 feet. There are other animals listed (badger, eagle, raccoon, american marten) that should be bigger to match the size of the animal.

We request the pieces to be painted and sealed as they will be displayed outside. We understand there will be maintenance JMPNA is responsible for, which includes adding sealant on an annual basis.

In addition to the pieces, we will need a initial meeting with Mr. Buschke at the park to discuss placement, delivery and installation.

I will find out likely in November if I have been approved for the grant.

One question I don't believe was ever discussed is if we secure the funds what is your preference on payment and deposits requests?

I appreciate all of your help on this!

Thank you,
[Quoted text hidden]
Price Quote.xlsx

Gmail

Items

Ben Buschke <I
To: Jaime Fuge ·

Wed, Oct 4 at 8:29

That's great!

I'll get the price list filled out and sent back over to you.

Everything you laid out sounds good to me. I'll look forward to coming out to the park so we can discuss the placement and installation.

The main issue would be having some kind of lift so we are able to reach the carvings up at the desired height. I don't have any kind of lift but I'll be more than happy to deliver the carvings and help install them.

If the funds come through and we get to move forward, I typically request a 50% down payment and the remaining balance due after the carvings are finished and installed. As far as payment, a check would be good.

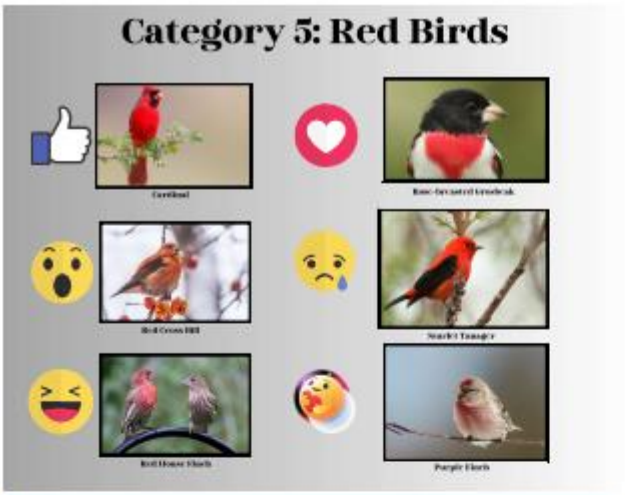
If you have anymore questions just let me know, and I'll get the price list filled out as soon as I can.

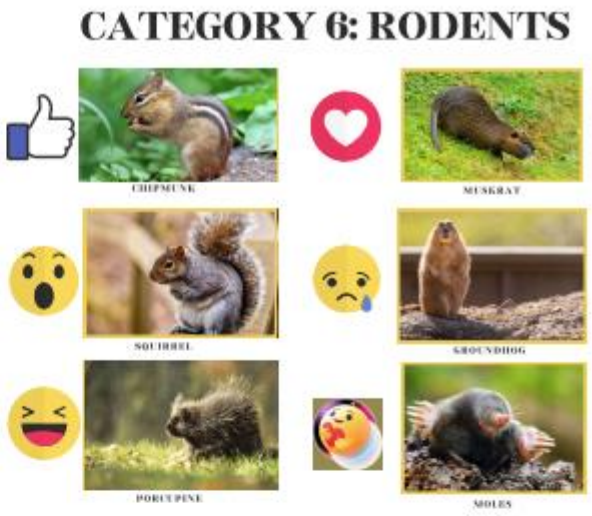
Thanks!

Sent from my iPhone

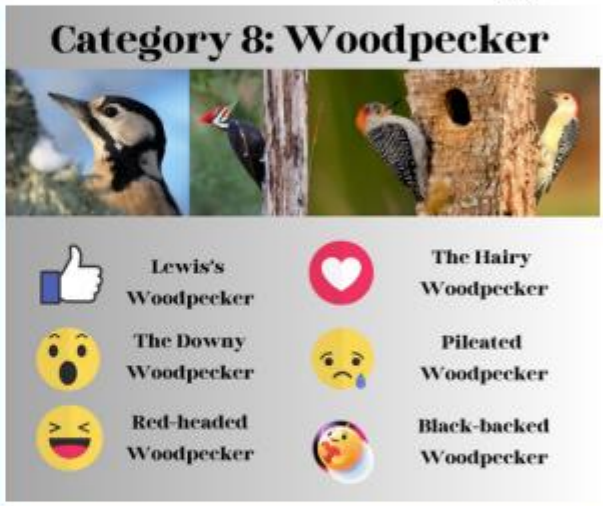
Facebook Campaign

From September 19-September 30, JMPNA hosted a Facebook election to choose the top animal in 10 categories. There was also an in-person election at the Party in the Park September 23. Approximately 70 people participated.


Category 5: Red Birds


CATEGORY 6: RODENTS
CHIPMUNK
MUSKRAT
SQUIRREL
GROUNDHOG
PORCUPINE
MOLES

Category 7: Blue Birds


Category 8: Woodpecker
Lewis's Woodpecker
The Hairy Woodpecker
The Downy Woodpecker
Pileated Woodpecker
Red-headed Woodpecker
Black-backed Woodpecker

Category 9: Yellow Birds

Category 10: Hummingbird

The Selected Animals

The community chose the raccoon, red-tailed hawk, American marten, great horned owl, cardinal, chipmunk, blue jay, red-headed woodpecker, goldfinch, and the ruby throated hummingbird to be displayed. JMPNA also decided to display the American robin, badger, bald eagle and mourning dove displayed based on their significance to the state/nation.

Proposed budget

The Artist Ben Buschke provided a price quote for the selected animals. Other animals were chosen and may be displayed based on monies awarded. JMPNA is applying for a grant in the amount of $9500.

	Community Selected	Other Options
Initial Parks Visit	no charge	NO-LIVE CHAIN SAW EVENT: $2,000
Bear and Cub Piece	$1200	NO ONSITE CARVING OF DEER ($2200)
BADGER	$350	RUBY-CROWNED KINGLET ($250)
AMERICAN ROBIN	$275	NO- FEMALE CARDINAL ($275)
BALD EAGLE	$350	RED-WINGED BLACKBIRD ($250)
MOURNING DOVE	250	NO-RING-BILLED GULL ($300)
RACCOON	$350	GRACKLE ($250)
CARDINAL	$275	BELTED KINGFISCHER ($250)
CHIPMUNK	$320	TURKEY UP TO 3 FEET ($350)
BLUE JAY	$275	PORCUPINE UP TO 3 FEET ($350)
GOLDFINCH	$250	NO- BAT ($300)
GREAT HORNED OWL	$350	RABBIT ($325)
AMERICAN MARTEN	$320	Scavenger Hunt Sign: $768.90 (from Signarama)
RED-HEADED WOODPECKER	$325	
RUBY-THROATED HUMMINGBIRD	$350	
RED-TAILED HAWK	$350	
Installation/Delievery	$1000	
OTHER	$100 (LOG BOLTS)	
TOTAL	**6695**	**$2800**

Project Timeline

November 2023

Decision of Public Arts Funding

Spring 2024

Initial Meeting with Parks Department regarding placement.

Summer 2024

Production Begins

Fall 2024

Animals Completed and Installed

Letter of Support

Gmail

Melinda Eck <johnmuirpark@gmail.com>

Letter of support for woodland animals in park

Lori Dobry-desotelle [redacted]
To: <johnmuirpark@gmail.com>

Sun, Oct 1 at 9:54 PM

To who it may concern:

It has recently been announced that there is an idea to commission an artist to carve woodland creatures and scatter throughout our John Muir Park. Our park gets used for many varieties of gatherings and continues to successfully encourage a sense of community in our neighborhood.
So many big parks are popping up all over. They are beautiful and offer much entertainment to children . But, when it comes to a wholesome, accepting, park.....we have come to realize that BIG isn't always the case.
John Muir park is smaller, but it is mighty. It also carry's the name of man who made it his life purpose to support, care, and educate the public on the value of Parks.
Adding these creatures throughout the park will not only add a fun adventure for the visitors and children to partake in, but it will be considered a great learning tool on the nature found in a city park.
It will be something NEW. Something to add to their time while visiting the park.
I, personally, am a grandparent who loves to bring my grandchildren to this park. The smaller crowds are nice when you have little ones, and the size is perfect for young and old. This possible addition would give us a reason to spend another hour in the park, an opportunity to have teaching moments, and also be a unique feature to our park. We would be proud and happy to have these animals in our park.
For all those reasons, I would like to ask for the consideration of grant dollars to be permitted for this commission to move forward and give our park the feature of creatures.

Thank you for your consideration in this manner.
Respectfully
Lori Dobry Desotelle

Member of the John Muir Park Neighborhood

Sent from my iPad

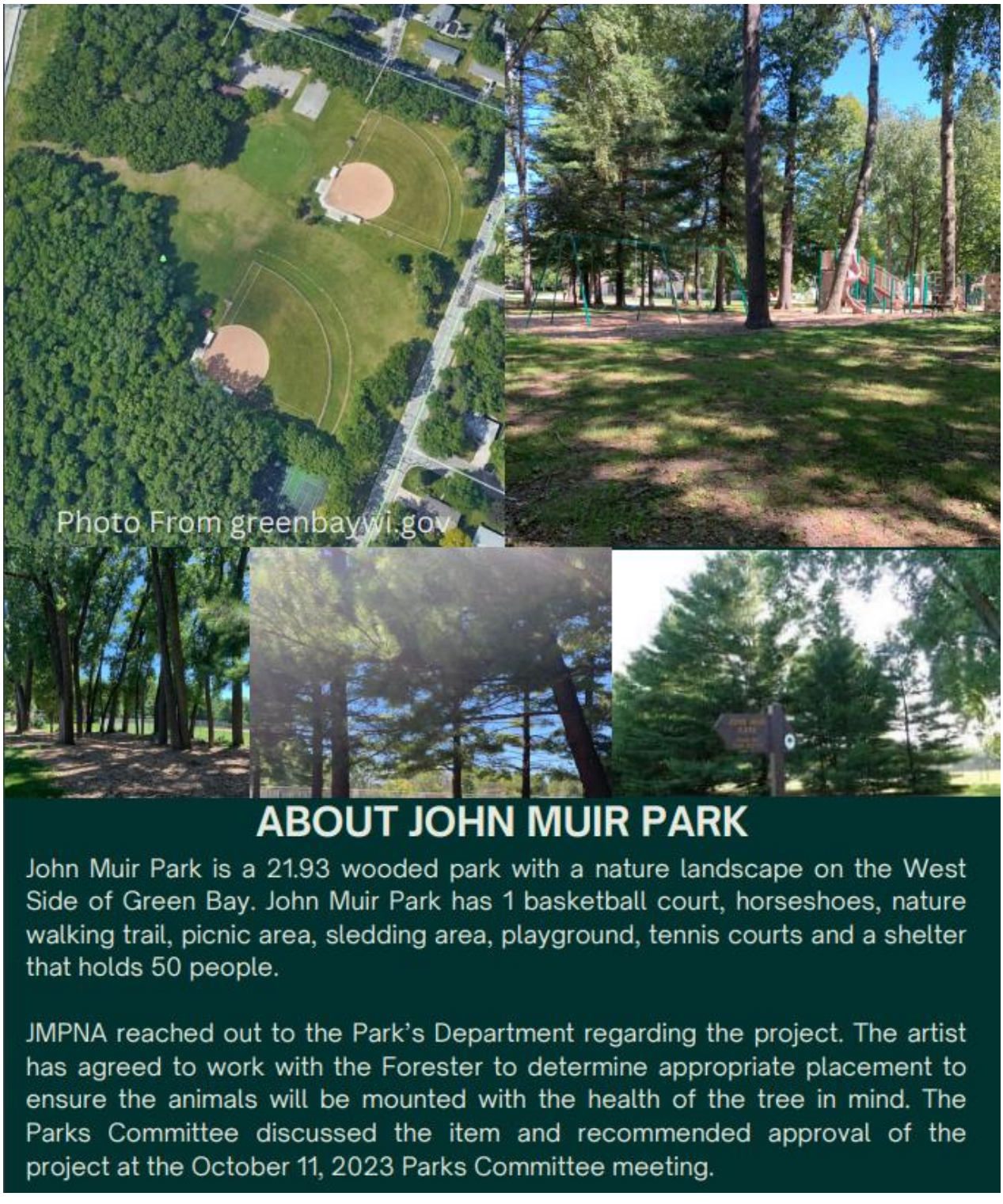
Contact us for further inquiries

John Muir Park Neighborhood Association
johnmuirpark@gmail.com

Area Benefit and/or Income Benefit*

Area Benefit.pdf

Include information relating to the project's eligible area benefit and/or benefit to low-to-moderate-income individual(s).



Artist Website

buschkecarving.com

Artist Social Media

Buschke Carving

Report to the
Public Arts Commission of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	Laura Schley, Staff

AGENDA ITEM # U.2

To table the City of Green Bay Public Art Grant application - Creative Public Seating.

BACKGROUND

The Public Art Grant Program is funded by the American Rescue Plan Act (ARPA). Funds are dedicated to artists/artist teams, creatives, makers, performers, arts organizations, and other cultural drivers to support presentations, performances, workshops, research, and/or the creation of artwork within the City of Green Bay.

Applicants are eligible to receive a one-time no-match required grant between $2,500 - $10,000. This grant may be used to fully fund a project.

The applicant, On Broadway, Inc., is proposing the project titled Creative Public Seating. The project is focused on the creation of artistic and interactive seating to be installed within the district. The goal of the seating is to improve the public space, create pedestrian-friendly amenities, and encourage the public to sit, mingle, relax, and extend their stay within the downtown area.

On Broadway, Inc. intends to release a request for proposal (RFP) for the project to select local artists. Requested grant funds along with additional funds from the organization would be put towards the creation of five (5) unique artistic seating options.

The applicant is requesting $10,000 for this project.

RECOMMENDATION

FISCAL IMPACT

There is currently $9,577.00 of available funds remaining for the City of Green Bay Public Art Grant.

ATTACHMENTS

1. City of Green Bay Public Art Grant Guidelines
2. Public Art Grant Application - Creative Public Seating

CITY OF GREEN BAY
PUBLIC ART GRANTS PROGRAM

To enhance and contribute to Green Bay's unique arts and culture sector.

CITY OF GREEN BAY
www.greenbaywi.gov/pac
920-448-3400

ABOUT THE GREEN BAY PUBLIC ARTS COMMISSION (GBPAC)

The Green Bay Public Arts Commission (GBPAC) focuses on the creation and preservation of public art within Green Bay, and ensuring equal access for all to enjoy and engage with public art. The GBPAC exists to fund artistic activities and support cultural programs that integrate and advance arts and culture as an essential part of life in Green Bay. The GBPAC is a five-member commission appointed by the Mayor to advise the City on matters of arts and culture.

Public art is any art form that is readily available for the public and is unimpeded by barrier or entry. Public art includes work on both public and/or private property and can be permanent or temporary.

PUBLIC ART GRANT PROGRAM DESCRIPTION

The Public Art Grant Program provides funds to artists/artist teams, creatives, makers, performers, arts organizations and other cultural drivers, to enhance and increase arts and culture and public art opportunities within the city of Green Bay. Funded by the American Rescue Plan Act (ARPA), funds are dedicated to support presentations, performances, workshops, research, and/or creation of artwork within the City of Green Bay. The program strives to encourage artistic engagement, spur economic vibrancy, and revitalize Green Bay through the arts.

Applicants are eligible to receive a one-time grant between $2,500 - $10,000. This grant may be used to fully fund a project. No match is required. Funds cannot be used to retroactively fund completed projects or portions of projects, but can be used for ongoing projects.

Professional artists of all disciplines, arts organizations and other cultural drivers are encouraged to apply.

APPLICATION DEADLINE

Applications will be received on a rolling basis until all Art Grant funds have been expended. Applicants interested in applying for funds should anticipate applying for funds roughly two months prior to when funds are needed. Completed applications will be reviewed monthly during the Public Arts Commission meeting typically held on the fourth Wednesday of the month. Applicants interested in having their application reviewed must have all materials submitted at the latest by **5:00PM (CT) the second Friday of the month**. Applications received

after the second Friday of the month will be held for review until the next month. Applications must be submitted electronically via the City's online form.
For technical assistance, email laura.schley@greenbaywi.gov. Or call 920.448.3142.

REVIEW CRITERIA

Proposals will be evaluated based on three criteria: **1**) artistic excellence, **2**) artistic merit, and **3**) project feasibility. Evidence to support the criteria will come from the narrative responses and submitted supplemental materials.

1. The artistic excellence of the project includes the:
   - Professionalism of the artist/cultural organization/lead project creative, quality of the artwork or services that the project will involve, as appropriate to the project
   - Evidence includes digital work samples, arts resumes, artist/cultural organization websites, or social media

2. The artistic merit of the project includes the:
   - Connection of the project to the artistic practice of the applicant
   - Potential for the project to reach new audiences and expose them to new artistic opportunities
   - Evidence includes digital work samples, arts resumes, letters of support, artist/cultural organization websites, or social media

3. The measures of project feasibility include:
   - Ability to carry out the project based on the appropriateness of the budget, the proposed timeline, the quality and clarity of the project activities and goals, the resources and partners involved, and the qualifications of the project's personnel.
   - Evidence of project feasibility includes a budget, project timeline, letters of support or agreement with partner artists & organizations, or project plans.

REVIEW PROCESS

Submissions are first reviewed by staff. Staff confirms applicant eligibility, basic compliance with grant criteria, and completeness of applications before sending them to the Arts Commission for review. Ineligible or incomplete applications will not be reviewed by the Arts Commission.

AWARD AMOUNTS

Award amounts range from $2,500 to $10,000. Awards will be paid in two disbursements: half upon signing of grant agreement and half upon approval of final report. No match is required. A project can be fully-funded with the award.

ELIGIBLE APPLICANTS

- Wisconsin residents.
- At least 18 years of age
- Applicant must obtain a TIN/UEI number to receive funds
- Groups of artists, or artist collectives, represented by an individual meeting the residency criteria above. Group applicants are eligible for only one award. Each artist within the group must consent to be part of the application; however, only one person/organization must act as the lead applicant. Note: any tax implications for a group application will fall on the lead applicant.

CONTACTS AND ACCESSIBILITY

For questions or concerns about the application process or technical assistance, contact City staff: Laura Schley, laura.schley@greenbaywi.gov.

ELIGIBLE PROJECTS

Qualified artists/organizations across disciplines are eligible to apply for support to carry out specific projects and activities. Eligible projects must take place within eligible census tracts and/or benefit low-to moderate income individual(s). Eligible census tract map can be accessed here. Contact staff for details on low-to-moderate income qualifications. Grantees will demonstrate tangible results of work undertaken and be able to provide proof of area benefit and/or low-to-moderate income individual(s) benefit. Proof may include but is not limited to; map of project location, artist tax return, audience data, survey results, etc.

For questions or concerns about providing proof of eligibility, contact City staff: Laura Schley, laura.schley@greenbaywi.gov.

Examples of the types of projects applicants of varying discipline might pursue with the support of this grant include, but are not limited to:

- *Teaching artists/organizations*: curricula, digital learning modules, workshops, resource development
- *Visual artists/organizations:* sculptures, paintings, studies, installations
- *Literary artists/organizations:* manuscripts, proposals, drafts, research reports
- *Performance artists/organizations:* performances, tours, events, video or audio recordings
- *Folk and traditional artists/organizations:* textiles, instruments, beading, dolls, exhibitions, workshops
- *Media artists/organizations:* films, scripts, interviews

INELIGIBLE PROJECTS

- Previously completed projects (though clearly defined, and demonstrable portions of ongoing projects can be eligible)
- Projects taking place outside of the city of Green Bay
- Projects that do not take place within eligible locations and/or do not benefit low-to-moderate income individual(s)
- Rent or food assistance, or any type of artist relief to alleviate hardship without undertaking work
- Honorifics or recognition awards based on the past work without plan to undertake work during the award period

APPLICATION MATERIALS – to be made available on the City's online Form Center

PROJECT NAME*
Choose a project name that is descriptive and will allow reviewers to quickly identify the proposal.
Character Limit: 100

ELIGIBILITY*
Refer to the eligibility requirements listed above. For questions about eligibility, email laura.schley@greenbaywi.gov.
Choices:
I am eligible to apply and can provide the necessary eligibility documents if requested.

REQUEST AMOUNT*
The minimum amount to request is $2,500. Maximum request is $10,000. The amount requested should match the total expenses listed in the Project Budget below.
Character Limit: 20

PROJECT DESCRIPTION*
Describe the project and how it connects to your artistic practice. As applicable, include details about your artistic practice and vision, project location(s), intended audience, collaborators, partners, and contractors.
Character Limit: 3000

PROJECT TIMELINE*
Describe a timeline for completing the proposed project. Consider including major project milestones that will help you measure progress. Reminder: successful applicants must provide a status update to City staff by November 1, 2023 and projects must be completed by December 31, 2023.
Character Limit: 3000

PROJECT OUTCOMES*
Describe tangible outcomes of the project. Clearly define the deliverable end-product that will demonstrate completion of the project. For clarifications about eligible projects and project outcomes, contact City staff.

In the final report, grantees will be required to provide documentation of work completed during the award period from August 1, 2023 to December 31,2023. Consider this timeframe when planning a project.
Character Limit: 3000

PROJECT BUDGET*
Click **HERE** to download the Project Budget Worksheet. Fill out, save, and upload the budget. Please use file types: .xls, .xlsx, or PDF.

A detailed Project Budget is an important piece of evidence for the feasibility of the project..
File Size Limit: 5MB

PROJECT BUDGET EXPLANATION*
If the project budget exceeds $10,000 please describe the plan for paying for the expenses beyond the maximum award amount. If there are aspects of the project budget that require explanation, describe them below. Additional budget documents can be uploaded in the Work Samples boxes in the "Supplemental Materials" section below if necessary. *Character Limit: 750*

SUPPLEMENTAL MATERIALS

IMPORTANT:

In order to be considered for funding, an application needs to include evidence to support the grant criteria. The arts resume and area/income benefit field is required; the other fields are *strongly recommended* but may not be applicable to your submission. An application *does not need* to use every field below in order to be considered complete. For assistance with supplemental materials please contact City staff.

ARTS RESUME OR CV*

Include information that reflects career advancements, professional accomplishments, and training, up to 4 pages.
File Size Limit: 5MB

AREA BENEFIT AND/OR INCOME BENEFIT*

Include information relating to the projects eligible area benefit and/or benefit to low-to moderate-income individual(s).
File Size: 10MB

LETTER(S) OF SUPPORT

If applicable, upload letter(s) of support from partners, collaborators, mentors, etc.
File Size Limit: 10MB

WORK SAMPLE #1

Depending on artistic discipline, work samples might include images, PDFs, video or audio clips, curricula, learning modules, press articles, or marketing materials. Additional work sample upload boxes are available below. For technical support or assistance on work samples please contact City staff.
File Size Limit: 25MB

WORK SAMPLE #2

File Size Limit: 25MB

WORK SAMPLE #3

File Size Limit: 25MB

ARTIST WEBSITE

Character Limit: 2000

ARTIST SOCIAL MEDIA

Character Limit: 2000

ARTIST SOCIAL MEDIA

Character Limit: 2000

ONLINE PORTFOLIO

Character Limit: 2000

ADDITIONAL URL

Character Limit: 2000

Print

Public Art Grants Program - Submission #61650

Date Submitted: 10/13/2023

Artist Name*

On Broadway, Inc.

Artist Email*

[redacted]

Project Name*

Creative Public Seating

Choose a project name that is descriptive and will allow reviewers to quickly identify the proposal.

Request Amount*

$10,000

The minimum amount to request is $2,500. Maximum request is $10,000. The amount requested should match the total expenses listed in the Project Budget below.

Project Description*

On Broadway, Inc. would like to introduce unique, artistic and interactive seating options throughout the district. It is our hope to not only introduce more seating, but to make this seating interesting, playful and artsy.

OBI plans to host more than 50 events in 2024 and it has been a goal to create more seating for attendees. It is also important to make our public spaces more pedestrian friendly and walkable. Creating opportunities for people to sit, mingle, relax, eat and converse is a way to get people to extend their stay in this portion of downtown Green Bay.

There is an opportunity to engage with local artists or business owners to create this seating. We would reach out to our network of vendors, small business owners and artists to see who can help create seating options that are unique and fun to interact with.

Describe the project and how it connects to your artistic practice. As applicable, include details about your artistic practice and vision, project location(s), intended audience, collaborators, partners, and contractors.

Project Timeline*

This project could easily be started in 2024 and completed within 6-12 months. An RFP could be put out yet this year to get the process started. Early conversations have been had with city staff to collaborate on the best location for seating and any permissions that would need to be granted.

Describe a timeline for completing the proposed project. Consider including major project milestones that will help you measure progress.

Project Outcomes*

The end product will result in free, accessible, artistic, interactive seating in the Broadway District. This money would also go to support local artists in our community, contributing to a livable wage.

Describe tangible outcomes of the project. Clearly define the deliverable end-product that will demonstrate completion of the project. For clarifications about eligible projects and project outcomes, contact City staff.

Project Budget*

Public Art Grants

(Fill in only the lines that apply to your request and round to the nearest dollar.
You may add additonal lines in the budget if needed.)

Applicant: On Broadway	**Date: 10/12/2023**
Expenses may include artist or consultant fees, facility or equipment rental, materials, supplies, services, software, etc. required to complete the project. Total expenses should match the request amount.	
Project Expenses	**Cash Amount**
Detail: *Labor & Supplies*	$10,000
Detail:	
Detail:	
Detail:	
Detail:	
Detail:	
Detail:	
Detail:	
Detail:	
Detail:	
Detail:	
Detail:	
Detail:	
Total expenses should match your request amount **Total Expenses**	**$10,000**

A detailed Project Budget is an important piece of evidence for the feasibility of the project.

Project Budget Explanation*

The requested amount would cover all supplies and labor for the artist to create their seating sculpture. We will be taking proposals from local artists with the granted amount of funds as a guideline. We have an additional $2500 from the city to put towards this project. If we allocate roughly $2500 for each seat, that would result in 5 seats total.

This project is part of our tactical plan, so OBI would absorb any administrative or overhead costs associated with this project.

If the project budget exceeds $10,000 please describe the plan for paying for the expenses beyond the maximum award amount.

If there are aspects of the project budget that require explanation, describe them above. Additional budget documents can be uploaded in the Work Samples boxes in the "Supplemental Materials" section below if necessary.

Supplemental Materials

IMPORTANT:

In order to be considered for funding, an application needs to include evidence to support the grant criteria. The Arts Resume field and Area/Income Benefit field are required; the other fields are strongly recommended but may not be applicable to your submission. An application does not need to use every field below in order to be considered complete. For assistance with supplemental materials please contact City staff.

Arts Resume or Curriculum Vitae*

OnBroadway-Resume-PublicArtGrantsProgram.pdf

Include information that reflects career advancements, professional accomplishments, and training, up to 4 pages.

On Broadway, Inc.
Public Art Resume

Mural & Busker Festival

- 30+ murals painted within the Broadway District over the course of 3 years
- In 2023, engaged the community by invited them to paint construction barricades at the Railyard
- Showcased buskers and other artists and musicians

igNight Market

- Total of 12 events put on in the last 3 years
- Focus on local makers and artisans
- Features original musicians from around the country
- Work with artists to create interactive, semi-permanent and permanent public art
    - Fab Collab – Pelican sculpture, Mosaic sculpture
    - ArtHop – Painted cars

WinterFest

- Moveable stag sculpture was made by Casey Early-Krueger out of recycled Christmas trees
- Post-event, the sculpture was placed near the Main St. Bridge and Neville Museum

City Benches & Trash Cans

- On Broadway engaged a local artist to design a painting pattern for the benches and garbage cans in the district. We then recruited volunteers throughout the summer to help paint them all.

Levitt AMP Green Bay Music Series

- 10-week concert series for 3 years
- Features original musicians in different genres from around the country
- Mission is to create a space with free live music of varying genres and art for people of all backgrounds in the Green Bay / Fox Cities community
- OBI partners with non-profit organizations and performance artists to enhance the experience of these concerts

Area Benefit and/or Income Benefit*

OnBroadway-AreaBenefit-PublicArtGrantsProgram.pdf
Include information relating to the project's eligible area benefit and/or benefit to low-to-moderate-income individual(s).

On Broadway, Inc.
Area Benefit

The Creative Public Seating project will showcase local artist(s) by creating an interesting and photoworthy seating option. All seating will be free to access and interactive for the public, and may even invite them into the process of creating it. Part of the mission at On Broadway is to support our local art community and show them that Green Bay is a city that can create fair wage opportunities.

With On Broadway's events, we attract over 400,000 people to the district throughout the year. Additionally, in a 5-year time frame, the district will see more than 1,000 residential units added to the area. Those units are either completed, under contract, or under construction. New residents, along with the existing residential neighborhood and event attendees, will benefit from additional seating and art.

With the number of exciting projects under way, we expect an economic development boost in the area. Many of those projects will include commercial space, increasing the number of office users we have. Our existing commercial spaces, such as the Railyard, are currently near full capacity. New office workers will recreate in the district after hours and public seating will become a need for that demographic as well.

Work Samples

Depending on artistic discipline, work samples might include images, PDFs, video or audio clips, curricula, learning modules, press articles, or marketing materials. Additional work sample upload boxes are available below. For technical support or assistance on work samples please contact City staff.

Work Sample #1

OnBroadway-Samples-PublicArtGrantsProgram.pdf

On Broadway, Inc.
Inspirational Samples

Artist Website

https://downtowngreenbay.com/about/broadway-district

Artist Social Media

https://www.facebook.com/OnBroadwayGB

Additional URL

https://downtowngreenbay.com/visit/publicart/murals

Report to the
Traffic, Bicycle and Pedestrian Commission of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # V.1

To receive and place on file the report by the Police Department on the monthly Traffic Enforcement Unit Traffic Safety Plan.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. TRAFFIC SAFETY PLAN OCT 2023

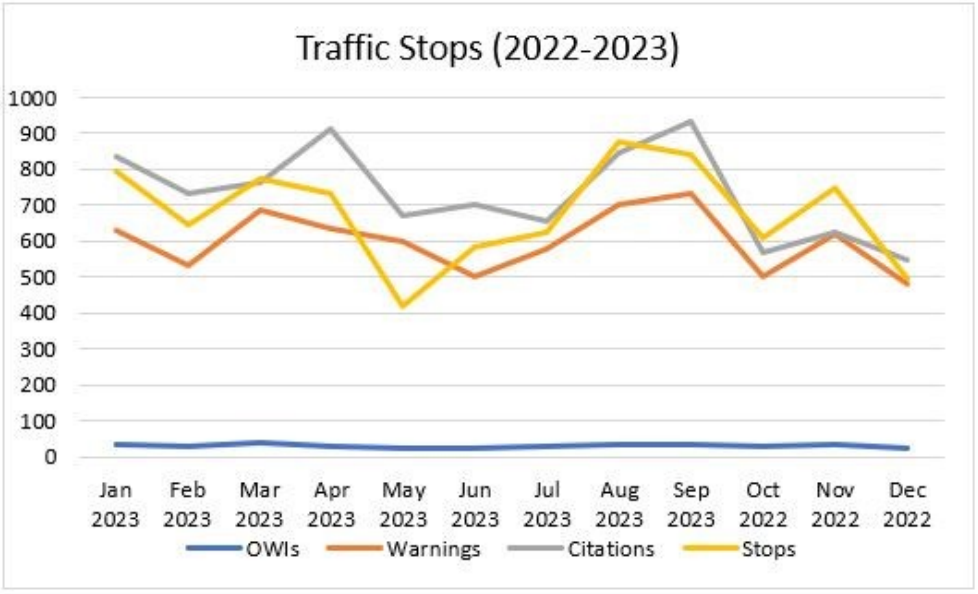
Green Bay Police Department

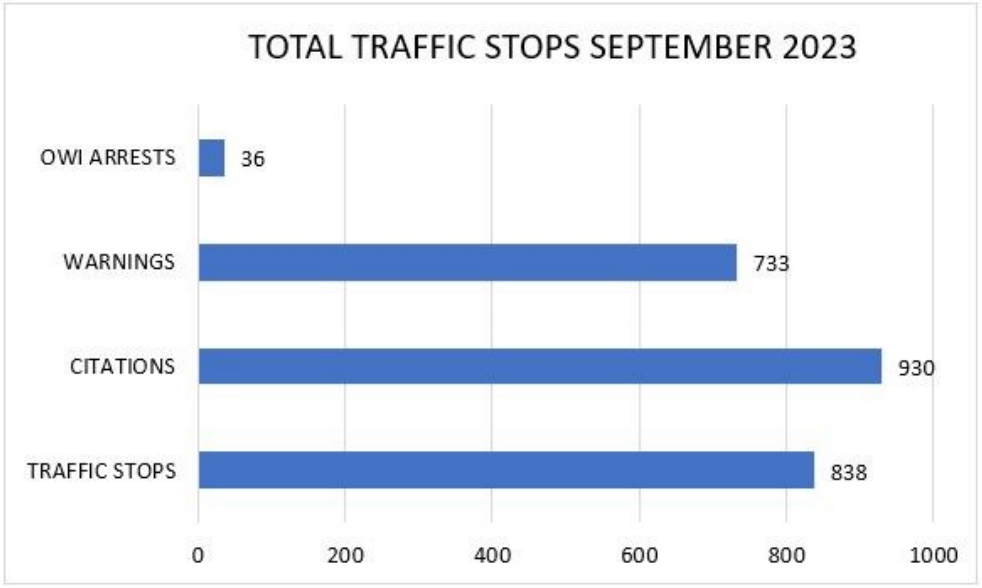
OCTOBER 2023

Traffic Safety Plan

Traffic complaints are the #1 complaint made to the Green Bay Police Department and City Alderpersons. The police department is committed to safe travels for motorists, pedestrians and bicyclists. With a goal of reducing traffic crashes, property damage, injury and death on Green Bay's roadways, the police department will use a data driven approach for traffic enforcement. Data analytics from crash data, citizens complaints and speed boards will be used to identify traffic emphasis areas. Each month's report will be posted on the police department's website and will be presented at each months Traffic, Bicycle and Pedestrian Commission meetings.

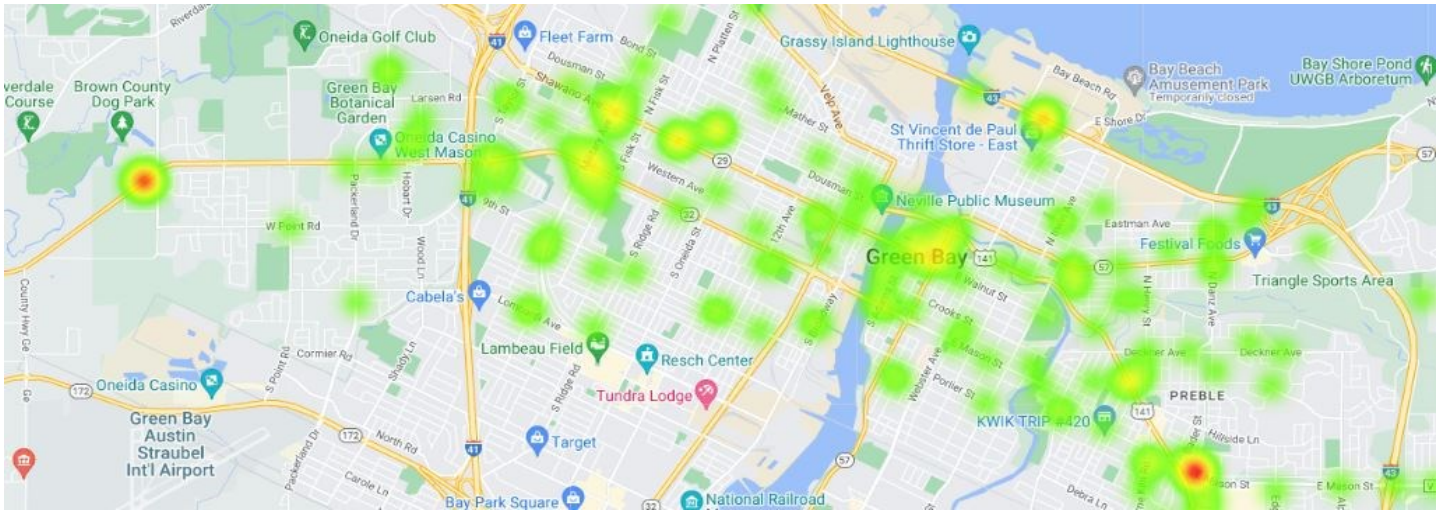
SEPTEMBER 2023 TRAFFIC STOP DATA



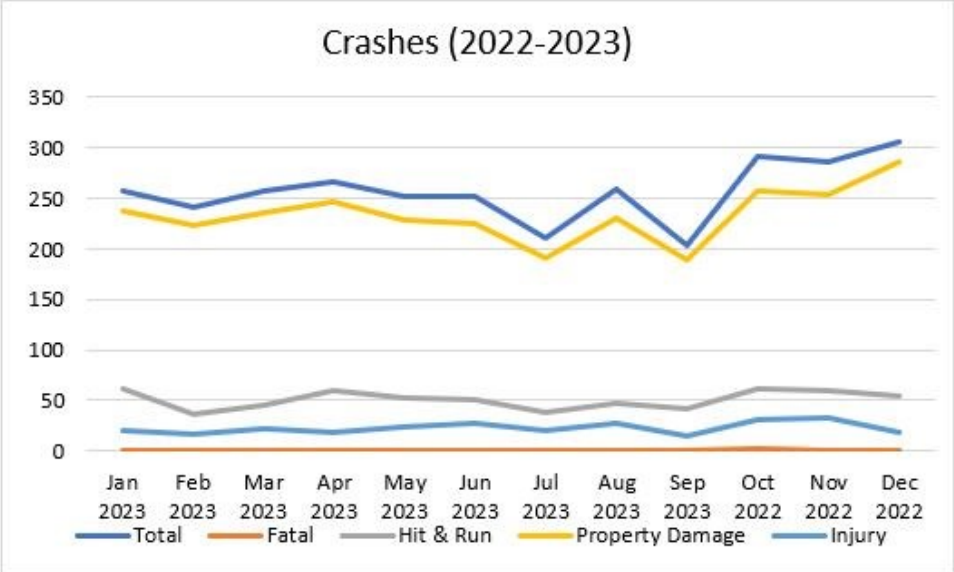


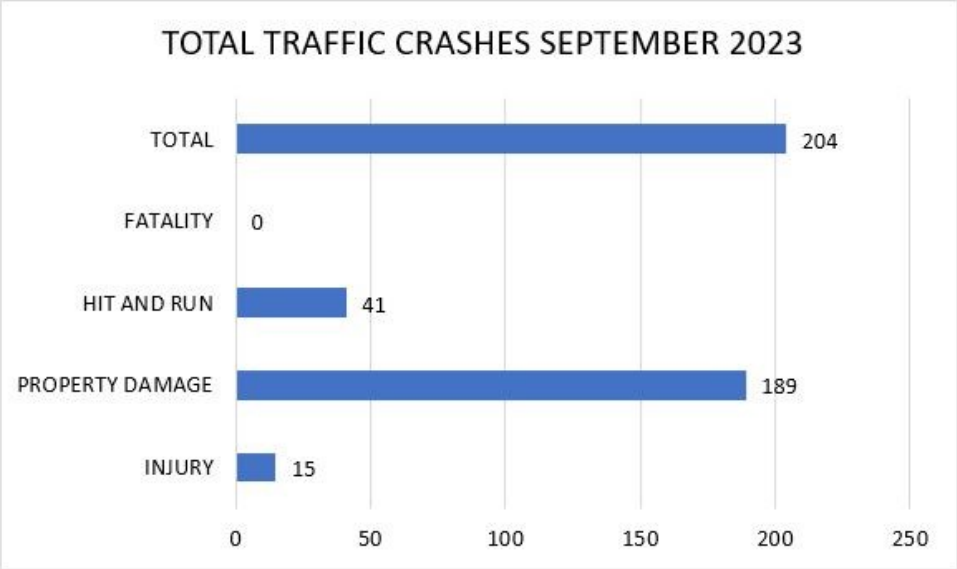
GREEN BAY POLICE DEPARTMENT TRAFFIC SAFETY PLAN

SEPTEMBER 2023 TRAFFIC CRASH HEAT MAP



SEPTEMBER 2023 TRAFFIC CRASH DATA





GREEN BAY POLICE DEPARTMENT TRAFFIC SAFETY PLAN

UPCOMING TRAFFIC TASK FORCE DEPLOYMENTS

OWI and Seat Belt Task Forces are awaiting approval from the State to begin. Once the State approves the GBPD application, deployments of officers will begin soon thereafter. This year, GBPD, along with neighboring jurisdictions in Brown County applied for $462,500 in grant money for traffic safety enforcement. This is an increase of $20,000 over last year's total, specifically for the purpose of increasing Speed Task Force deployments, since speeding is the #1 complaint received from citizens of Green Bay and Brown County. The grant money is expected to be approved before mid-October.

SEPTEMBER SCHOOL SPEED ZONE ENFORCMENT

During the Month of September, GBPD, along with our other Brown County law enforcement partners, initiated six School Speed Zone Enforcement deployments. Each jurisdiction conducted speed enforcement throughout the last week of September, focusing on school zones within their own jurisdictions. School speed zones are set at 15 MPH on school days when children are present.

During the enforcement week, Green Bay Police Officers conducted 115 traffic stops near 21 different schools within the city. These deployments resulted in the following:

- **104 Total citations**
- **72 Total written warnings**
- **59 Citations for speeding (mostly for speeding in school zones)**
- **45 Citations for seat belt, operating a vehicle after DL suspended or revoked, and other violations**
- **3 Arrests for outstanding criminal warrants**

In addition to the above, the officers' presence in the areas around the schools made other motorists more aware of the school zones as well as the school crossing guards nearby, hopefully resulting in slower, safer driving around all school zones in the future. This project was a great success and we have heard much positive feedback from the public, schools, and crossing guards. We will plan additional deployments specifically aimed at school zone enforcement in the future.

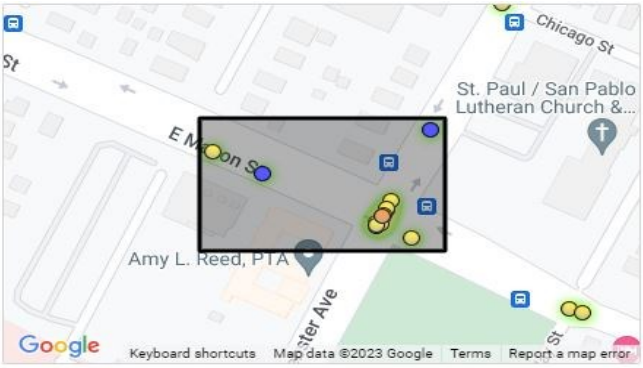
OPERATION LIFESAVER

OPERATION LIFESAVER®
Look, Listen & Live

The Green Bay Police Department has been approached by a local rail operator that there have been several near misses between trains and vehicles at railroad crossings recently. The railroad has asked GBPD to conduct an "officer on the train" operation, in which a GBPD police officer rides in the locomotive with the engineer to observe violations at railroad crossings. This officer radios ahead to road officers that are stationed nearby in order to stop the violators and take enforcement action. This operation will be scheduled in the near future. Please remember that when it comes to cars vs. trains, the train will always win.

GREEN BAY POLICE DEPARTMENT TRAFFIC SAFETY PLAN

ENFORCEMENT PRIORITY AREAS



Analysis Area #2: GREEN BAY (C)

Roadway: E MASON ST

Total Crashes: 15

Contributing Factors:

- Occp Protection (5)
- CMV (1)
- Teen Driver (4)
- Bike (2)
- Distracted (2)
- Speed (2)

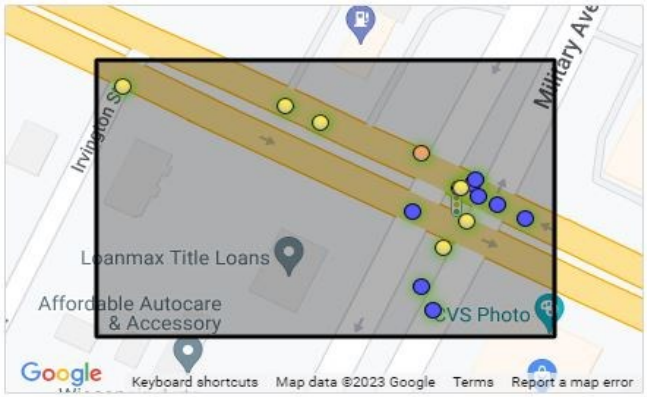
Analysis Area #3: GREEN BAY (C)

Roadway: E MASON ST

Total Crashes: 13

Contributing Factors:

- Teen Driver (4)
- 65+ Driver (3)
- Occp Protection (2)
- Speed (2)
- Impaired (1)



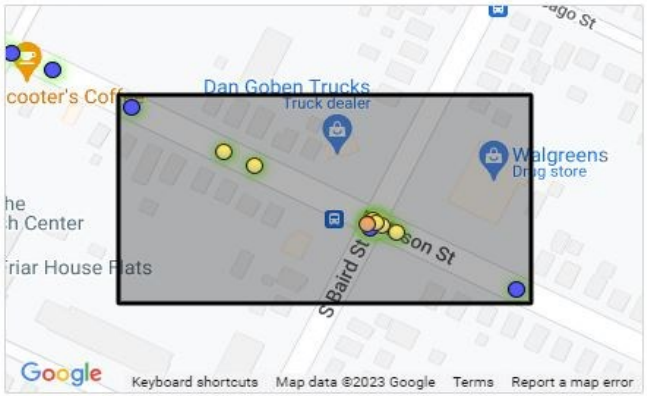
Analysis Area #4: GREEN BAY (C)

Roadway: 032

Total Crashes: 16

Contributing Factors:

- Teen Driver (3)
- CMV (1)
- 65+ Driver (3)
- Distracted (1)
- Bike (2)
- Occp Protection (1)
- Impaired (2)
- Speed (1)
- Pedestrian (2)



Analysis Area #5: GREEN BAY (C)

Roadway: E MASON ST

Total Crashes: 13

Contributing Factors:

- Teen Driver (5)
- Speed (1)
- Distracted (2)
- Impaired (1)
- Occp Protection (1)
- Pedestrian (1)

These areas are determined as the most likely to experience an injury traffic crash based on the last three years of crash data collected by the state of Wisconsin. Packerland & Mason was listed as Analysis Area #1, but since the road pattern in that area has been altered recently, it was excluded from this analysis until more data can be collected. In the short time the traffic pattern has been changed in the area, crashes have been reduced significantly.

Report to the
Traffic, Bicycle and Pedestrian Commission of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # V.2

To receive and place on file the report by the Police Department of the 2023 3rd quarter serious injury and fatal crashes.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. 3rd quarter fatal injury report

Green Bay Police Department
307 South Adams Street
Green Bay, Wisconsin 54301-4582
www.gbpolice.org

Phone 920.448.3200
Fax 920.448.3248

TITLETOWN, USA

2023 3rd Quarter Fatal/Serious Injury Accident Summary

Case #23-241988 | 8/1/2023 7:13AM | 1004 S. Broadway

A 2010 Chrysler Town & Country minivan was traveling northbound on S. Broadway near 7th St. For no apparent reason and without warning, the minivan veered left of the centerline and directly into the front of a semi-truck that was heading southbound on S. Broadway. The movement occurred so quickly that the semi was unable to maneuver out of the way, which resulted in a head-on collision. The driver of the minivan, a 51-year-old Green Bay man, was killed from the trauma sustained in the crash. The passenger in the minivan, a 21-year-old Green Bay woman, sustained broken bones and other serious injuries as a result of the crash. The semi driver was uninjured. The entire incident was captured on the semi's dash camera. A check of the minivan's "black box" revealed that the vehicle was travelling 35MPH and accelerating without applying the brakes 0.1 seconds before the collision. It is believed that the driver either fell asleep or suffered a medical event mere seconds before veering to the left and colliding with the truck. There was no indications of alcohol in either drivers' blood. The driver of the minivan had just gotten off of working an overnight shift and had not complained of any health issues recently. Neither party in the minivan was wearing their seatbelt. The semi driver was wearing his seatbelt.

Report to the
Traffic, Bicycle and Pedestrian Commission of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # V.3

To remove the 2-WAY YIELD condition on Hazel Street at Howard Street.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None

Report to the
Traffic, Bicycle and Pedestrian Commission of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # V.4

To adopt by ordinance the establishment of a 2-WAY STOP condition on Hazel Street at Howard Street.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None

Report to the
Equal Rights Commission of the City of Green Bay

MEETING DATE

November 7, 2023

AGENDA ITEM # X.1

To approve the Visibility Initiative Strategic Action Plan that was held over from the August 17, 2023 Equal Rights Commission meeting.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. ERC Visibility Strategic Plan 9-14-23

DRAFT GREEN BAY EQUAL RIGHTS COMMISSION VISIBILITY STRATEGY INITIATIVE

Revised September 13th, 2023

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Executive Summary

The Visibility Initiative Strategy is a comprehensive plan developed by the Equal Rights Commission (ERC) to educate the community about the commission's purpose and initiatives.

Section 1: Purpose, Mission, and Vision - The purpose of the Visibility Initiative is to inform Green Bay residents about the existence of the Equal Rights Commission and Civil Rights Ordinance, encourage feedback and participation, and empower individuals.

Section 2: Goals - The ERC's overarching goals include raising awareness of the commission, advancing equity and social justice, ensuring accessibility to resources, building partnerships, and promoting individual rights through conversations, community events, and partnerships to promote inclusivity and equity.

Section 3: Engagement Guidelines and Messaging - The ERC commits to engaging respectfully, using proper pronouns, avoiding stereotypes, being mindful of language, and asking questions respectfully. They also acknowledge privilege, avoid defensive reactions, educate themselves, and apologize and learn from mistakes.

Section 4: Infrastructure, Target Audience, Outreach Methods and Strategies - The infrastructure is focused on planning, promotion, presence, and participation. The target audience includes local community members, organizations, and institutions. The various methods and strategies include social media, traditional and non-traditional media, informative materials, forums, and collaborations with local organizations.

Section 5: Outreach Phase Plan and Timeline - There are four outreach phases including internal updates, creation of evaluation and educational documents, ERC introduction to the public, and external engagement. The phases will be executed from September 2023 through September 2024.

Section 6: Evaluation Method - Evaluation involves surveys and questionnaires, focus groups and interviews, and participatory evaluation and feedback loops. The ERC emphasizes SMART criteria for data collection and plans to publish a formal report at the end of the initiative.

The Visibility Initiative Strategy outlines a thorough and well-structured plan to engage the community, promote awareness of the ERC, and advance equity and inclusivity in Green Bay, Wisconsin.

Introduction

The Visibility Initiative Strategy was developed to enable an equitable and comprehensive approach to educate the community about the purpose and initiatives of the Equal Rights Commission. It aims to encourage individual and community engagement through educational materials and vocally at community events.

The Strategic Outreach Plan includes the following:
1. The Commission's mission and vision
2. Goals and Objectives
3. Engagement Guidelines and Messaging
4. Infrastructure, Target Audience, Outreach Methods and Strategies
5. Outreach Phase Plan and Timeline
6. Evaluation Method

Section 1: Purpose, Mission, and Vision

Purpose
The purpose of the Visibility Initiative is three-fold. The first is to inform Green Bay residents about the existence and responsibilities of the Equal Rights Commission (ERC). The second is to encourage individuals to provide feedback and participate in future public hearings, city programs, and processes. And the third goal is to empower and educate individuals about their rights.

Mission Statement
To grow public awareness of the existence of the Equal Rights Commission by facilitating conversations, being present at community events, and engaging with partners to foster a sense of inclusivity and equity.

Vision Statement
Our vision is to actively engage the people of Green Bay, empowering them to voice their concerns and share valuable input in regards to discrimination. By providing a platform and acknowledging the lived experiences in the community, we aspire to create a city that truly embraces diversity.

Section 2: Goals

The overall goal of the Commission is to reach out to Green Bay residents, particularly individuals from the communities noted and protected under the Equal Rights Ordinance. Specifically, the Commission's goals are:

Goal 1
We aim to raise awareness and promote understanding of the Equal Rights Commission's presence.

Goal 2
Advance diversity, equity, and social justice of the protected groups of people under the Equal Rights Ordinance.

Goal 3
Through effective education, share adequate information about the Equal Rights Commission and verify it is accessible to a wide range of Green Bay residents. Accessibility considerations include, but are not limited to:

- Technology and/or internet
- Understanding of the political system/political environment/disenfranchisement
- Not eligible to vote: Undocumented, formerly incarcerated, under 18 years old
- Incarcerated individuals
- Isolated/afraid to engage
- Transportation
- Limited technological or written literacy
- Mobile device accessible
- Cultural and/or Language
- Religion (including holidays & norms of engagement)
- Education level
- Disability

Goal 4
Continue to maintain and develop partnerships with the following groups of individuals:

- Geographically
    - o Villages/Towns
    - o Downtown Green Bay, West side, East side
- Race/Ethnicity
- Residents both documented and undocumented
- Immigrant, Refugee, Native-born
- Non-Profit
- Economic

- o Small business, big business
- o Business owner, employers, employee, labor unions
- Religious based organizations
- LGBTQ+, self-identified gender
- Disability
- Age: Youth, adults, seniors (65+)
- Native English Speakers and Limited English Proficiency
- Educational Institutions
- Local Industries, industrial, agriculture
- Homeowners/renters

Goal 5
Build trust, encourage participation, and build awareness of individual rights and the resources available to them through the Civil Rights Ordinance.

Section 3: Engagement Guidelines and Messaging

The ERC's goal is to present itself in the most respectful and cohesive way possible to maximize community impact. The Commission shall (1) engage in a comprehensive and equitable community outreach strategy, ensuring to it's best that the public is informed about the existence of the Equal Rights Commission and Civil Rights Ordinance; (2) establish rapport with local organizations and community members; (3) conduct themselves with integrity and fairness, fostering an inclusive and safe environment for community members to participate in the commission's activities.

The following are guidelines that the ERC will follow when engaging with community members and organizations:

1. **Listen and Learn**: Approach the conversation with an open mind and a willingness to listen and learn. Understand that everyone's experiences are unique, and take the opportunity to gain insight into their perspective.
2. **Respect Pronouns and Identity**: Use the correct pronouns and terminology that individuals use to describe their own identities. Avoid assumptions and respect their self-identified labels.

3. **Avoid Stereotypes**: Refrain from making assumptions based on stereotypes or preconceived notions. Treat each individual as an individual, not a representation of their entire group.

4. **Be Mindful of Language**: Use inclusive and respectful language. Avoid using offensive terms or slurs, and choose words that show your respect for their identities and experiences.

5. **Ask Respectful Questions**: If you have questions about their experiences, ask in a respectful and considerate manner. Be open to their comfort level in sharing information.

6. **Acknowledge Privilege**: Recognize your own privilege and be aware of the potential impact it may have on the conversation. Show empathy and avoid centering the conversation on your experiences.

7. **Avoid Defensive Reactions**: If someone shares their experiences of marginalization, avoid becoming defensive. Instead, express empathy and validate their feelings and experiences.

8. **Educate Yourself**: Take the initiative to educate yourself about their experiences, challenges, and history. Do your research to show that you're committed to understanding their perspective.

9. **Build Genuine Relationships**: Focus on building authentic connections based on shared interests and respect. Don't approach the conversation solely because of their marginalized identity.

10. **Apologize and Learn**: If you make a mistake or unintentionally offend someone, apologize sincerely and use it as an opportunity to learn and grow. Mistakes happen, but taking responsibility and showing a commitment to improvement is key.

All verbiage and messaging will align with the principals written in the Green Bay, Wisconsin Code of Ordinances, Chapter 12 - Civil Rights Ordinance. Full Civil Rights Ordinance:https://library.municode.com/wi/green_bay/codes/code_of_ordinances?nodeId=COOR_CH12CIRI

Section 4: Infrastructure, Target Audience, Outreach Methods and Strategies

Infrastructure

The ERC has created a high level infrastructure for outreach and engagement activities that will allow the commission to maximize its outreach efforts and target efforts towards the protected groups of population and residents of Green Bay. City staff, along with Commissioners, will build the ground level foundation to support the coordination of outreach activities efficiently and effectively.

The ERC has identified four main segments of coordinating engagement with the community summarized in the chart below with the four “P’s”: plan, promote, presence, and participation.

Plan	Create a detailed list of information that includes the event or campaign name, contact information, location, time, purpose of the event, funding/sponsors, and other important information specific to the event.
Promote	Announce and publicize the event/engagement on proper channels (dependent on event/engagement circumstances).
Presence	Determine whether the event/engagement is in-person or virtual and appoint commissioners to attend.
Participation	Disperse evaluation surveys and collect responses from attendees and/or event/engagement participants.

Target Audiences

- Local community members, including marginalized/underrepresented groups.
- Local organizations, advocacy groups, and community leaders.
- Educational institutions, including schools and universities.
- Media outlets, both traditional and digital platforms.

Outreach Methods and Strategies

The outreach methods and strategies below display a detailed list of possible actions the ERC can utilize for the Visibility Initiative. The column labeled “Outreach Method” describes the medium in communication. The column labeled “Strategy” describes the action that will be taken on the medium.

Outreach Method	Strategy
Social Media	● Establish a social media presence to share updates, educational content, and engage with the community.
Media Outlets (Traditional/Non-Traditional)	● Participate in local traditional and non-traditional media to share ERC’s mission (podcasts, email, newsletters, magazines, radio, etc.).

	● Produce informative brochures, pamphlets, and flyers about the ERC services and ordinance.
	● Engage with local news outlets to share press releases, organize interviews, and publish articles.
Website/ Webpage	● Create an informative and user-friendly ERC website/webpage, featuring resources, FAQs, and contact information.
Forum(s)	● Collaborate with local organizations and community leaders to host town hall meetings, workshops, and seminars.
	● Organize and/or collaborate in the development of public forums and listening sessions to provide platforms for community members to voice their concerns and share experiences.
	● Facilitate workshops and training sessions on topics related to equal rights and advocacy.
	● Offer online webinars and live Q&A sessions to make information accessible to a broader audience.
	● Host “open house” event for the Equal Rights Commission.
Education/ Schools	● Develop partnerships with local schools and universities to conduct educational presentations and workshops.
	● Engage with schools, universities, and educational institutions to integrate equal rights education into curricula and activities.
Other Local Government	● Collaborate with other local government departments and agencies to amplify outreach efforts.
Community Events	● Participate in local events, fairs, and festivals to reach a wider audience.

	● Encourage community feedback through surveys, online forms, and public comment periods.
	● Stay updated on emerging events and technologies to adapt outreach methods accordingly.
	● Collect and analyze feedback from the community through surveys and feedback mechanisms.
Local Organizations	● Build partnerships with community organizations, nonprofits, and advocacy groups to leverage their networks and resources.
	● Seek input from community stakeholders and partners to improve outreach efforts.
	● Partner with local organizations to host a series of proclamations.

Section 5: Phase Plans

The ERC Outreach Phase Plan is a systematic guide that optimizes the outreach process, leading to better engagement, more effective communication, and higher chances of achieving the overall initiative goals. The phase plans are organized in a chart that includes the stage of the phase, objective, method, task/s, and support.

Phase Plans

Phase 1: Internal Updates
Internal updates refers to the adjustments that are needed within the ERC before engaging with the public to verify that information about the ERC is detailed, cohesive, and accessible.

Stage	Objective	Method	Task	Support
A	Update ERC webpage	City Website	- Update Commissioner Bio's	City Staff and Commissioners
			- Update current initiatives	City Staff
			- Add social media	City Staff

			link/info	
			- Add discrimination complaint processes	City Staff
			- Add other helpful tools/resource links	City Staff
B	Create email signatures for commissioners		- Update Commissioner email signatures	Commissioners
			- Add city logo in email signatures	Commissioners
C	Print business cards for commissioners		- Design business cards and print	City Staff

Phase 2: Creation of Evaluation and Educational Documents

Evaluating community engagement and impact is crucial to understand the effectiveness of the Visibility Initiative. Evaluations will be on-going and will include tracking changes in key metrics such as participation rates, attendance at events, and etc. All surveys and questionnaires will be developed with the SMART criteria. SMART stands for Specific, Measurable, Achievable, Relevant, and Time-bound. A formal report with results and impact will be published at the end of the initiative. Here are the top three ways the ERC will evaluate community engagement and community impact:

1. **Surveys and Questionnaires**: The ERC will craft well-structured questions to assess the community's level of satisfaction, involvement, and perception of impact. We will also translate surveys that are culturally appropriate. We will make these accessible digitally and in traditional print-form.

2. **Focus Groups and Interviews**: The ERC plans to engage a diverse range of participants to gain comprehensive insights and in-depth exploration of community members' experiences, needs, and feedback. We will collect narratives and personal stories to humanize the data.

3. **Participatory Evaluation and Feedback Loops**: The ERC will establish feedback loops that enable community members to voice their in-put and help shape and direct ERC related activities.

Stage	Objective	Method	Task	Support
A	Create an evergreen digital feedback form for ERC	Online Survey Platform	Determine the best survey platform	City Staff
			Create S.M.A.R.T. survey questions	Commissioners
			Upload questions into online platform and add link to webpage	City Staff
			Develop tracking/monitoring system	City Staff
B	Create evaluations for community speaking engagements	Printed Surveys	Create S.M.A.R.T. survey questions	Commissioners
			Translate surveys into multiple languages	City Staff
			Print Surveys	City Staff
			Determine how to collect and analyze surveys	Commissioners and City Staff
C	Develop campaign to evaluate the community's perspective and knowledge of the Equal Rights Ordinance	Social Media (Facebook) and Printed Surveys	Determine the best survey platform(s) and how to best distribute the surveys	Commissioners and City Staff
			Create S.M.A.R.T. survey questions	Commissioners
			Determine partners	Commissioners
			Translate surveys into multiple languages	City Staff
			Upload survey online	City Staff
			Print and distribute	Commissioners
			Translate, print, and distribute to partners	City Staff and Commissioners
D	Create an evergreen document	Printed and available on ERC web	Determine the top highlights of the Equal Rights Ordinance and	Commissioners

	with general information about the Equal Rights Ordinance and the ERC	page as a pdf	Equal Rights Commission	
			Design the one page document	City Staff
			Translate the document	City Staff
			Share document with community partners	Commissioners
E	Create a bi-annual ERC Report to share updates with the public	Newsletter (email) and Printed	Develop newsletter template	City Staff
			Create content for newsletter	Commissioners and City Staff
			Determine distribution plan	Commissioners

Phase 3: Formal ERC Introduction to Public

Stage	Objective	Method	Task	Support
A	Announce the establishment of the ERC “anniversary”	Social Media (Facebook)	Take an ERC group photo	Commissioners
			Write a caption to highlight ERC and Commissioners	Commissioners and City Staff
			Post on Facebook	City Staff
			Add call to action: Invite public to share events, news, and information with ERC through the ERC contact information on the website	City Staff
B	Email partners and local organizations	Email	Write a short email highlighting the updated ERC webpage, current news/initiatives, and contact information	City Staff
			Send to partners	Commissioners
C	Pitch to news	News/Media	Write pitch/press release	City Staff and

	stations about our visibility initiative	Outlets	to news/media outlets	Commissioners
			Speak with media	Commissioners

Phase 4: External Engagement

The purpose of the external engagement phase is to foster open and constructive communication, collaboration, and participation between the local municipality and its residents. The ERC has already connected and spoke with community organizers and leaders at over 20 organizations in 2022. However, the ERC's goal with the Visibility Initiative is to create deeper connections with the protected populations listed under the Green Bay Civil Rights Ordinance and vulnerable populations that have limited access to resources and information. Vulnerable populations include, but are not limited to the following: people experiencing homelessness, communities of color, marginalized communities, refugees and immigrants, women and children, people with disabilities and special needs, and employees in labor intensive environments.

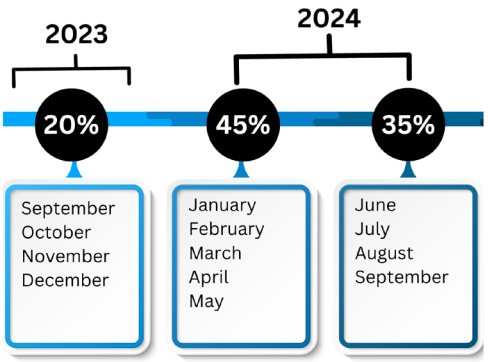
The ERC has categorized the local organizations and nonprofits that serve, support, and engage with the populations listed above into nine categories based on their services. The list is not indicative of the total number of categories or organizations that the ERC will engage with, however, it will be used as a guide. Engagement events will be scheduled on a rolling basis starting September 2023 through September 2024.

Housing	Workforce	Domestic Violence
Education	Disability	Children
LGBTQ+	Immigrant/Refugee	Seniors/Elders

Stage	Objective	Method	Task	Support
A	Identify local organizations	Online Search Engines	Search for organizations and local services that serve the target audience	Commissioners
		Email	Email professional networks and ask for contact information	Commissioners
B	Initiative conversation	Email	Contact partners and organizations	Commissioners
C	Collaborate	Event	Create an engagement event/forum/campaign with the partner organization or partner on an existing event and use the four-P	Commissioners

			method listed in section four	

Section 6: Timeline



The timeline of the external engagement phase is split into three sections for a more manageable execution through the twelve month initiative. The first section contains the last four months of the 2023 year. In these first months, the ERC will focus on phase plans 1, 2 and 3 while also starting to execute phase 4. The second section is split into the first five months of 2024 and the third section contains the four summer months of 2024. The ERC plans to reach out to 20% of the listed organizations above by the end of 2023. In 2024, the ERC will engage with another 40% of organizations bringing the total percentage of engagement to 60% by May of 2024. The last 40% of the engagement will happen in the last six months of 2024. The full initiative will close at the end of September 2024 and a full report will be provided to the Common Council.

Section 7: Conclusion

In conclusion, the Visibility Initiative Strategy represents a robust and proactive approach by the Equal Rights Commission to engage the Green Bay community, raise awareness about the commission's mission and the Civil Rights Ordinance, and promote equity and inclusivity. As we look ahead, it's important to note that this initiative will reach its culmination in September 2024.

At that time, a comprehensive and insightful report will be meticulously compiled, documenting the outcomes of the initiative. This report will not only include valuable feedback from our community members, but will also present quantifiable metrics regarding our engagement efforts and events.

The report will serve as a testament to our commitment to transparency, accountability, and continuous improvement. It will provide the City Council with a thorough understanding of the impact of the Visibility Initiative, the challenges faced, and the opportunities for growth. Ultimately, this report will be instrumental in shaping the future direction of our efforts to foster a more inclusive and equitable Green Bay.

END OF VISIBILITY INITIATIVE STRATEGY.

Report to the
Equal Rights Commission of the City of Green Bay

MEETING DATE	PREPARED BY
November 7, 2023	

AGENDA ITEM # X.2

To hold until the next Equal Rights Commission meeting the initiative to install signage that has the City of Green Bay in the language of each culture represented in Green Bay that was held over from the August 17, 2023 Equal Rights Commission meeting.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

1. Pucihkit Proposal Memo 823

MEMO
8/4/23

To: Tara Vang, Chairwoman of the Green Bay Equal Rights Commission, Joseph Faulds, Primary Contact for the Green Bay Equal Rights Commission
From: Marcus Grignon, Commissioner of the Green Bay Equal Rights Commission
RE: The Inclusive Names for Green Bay in Other Languages Initiative (?)

The City of Green Bay has and is home to a diverse population of cultures from across the world. Historic Settlement of Green Bay was founded by French fur traders and the Menominee people. The Menominee refer to Green Bay as “Pucihkit” or Bay of Green. The rich history of Green Bay before settlement as a trading route stop and food mero-complex for the Menominee and as a small trading post to the evolution into a city is documented through the eyes of diverse cultures and backgrounds. The various European cultures, the Latino/Central/South American cultures, the Hmong/Laotian cultures, African American cultures, and cultures that were created from Green Bay being a city. All of these cultures need to be represented and recognized whenever a visitor comes to our great city.

As a member of the Menominee Tribe of Wisconsin, I propose the Equal Rights Commission in collaboration with the Office of the Mayor create a permanent installation of every culture represented in our city their word for the city of Green Bay. Timeline would be unveiling the different names for Green Bay at significant times throughout the year, leading up to the NFL Draft in 2025. Each culture will be recognized and a plaque with their word installed at all road signs into the City of Green Bay as well as City Hall. We would start with Menominee on Native American Heritage Month, November 2023 and go by either months designated for each respective culture or significant dates/holidays. When the draft occurs, a potential opportunity would be to create Packer Jersey’s with either a chosen word in another language for Green Bay or all of the words available to every culture that makes up Green Bay.

The goal of this proposal is to recognize the territorial ethnicity of the Menominee Tribe and the cultures who have made Green Bay their home. This will amplify city pride for our residents and pay homage to the Menominee Tribe who’s been welcoming for centuries to our diverse populations.

CC: Members of the Green Bay Equal Rights Commission, Office of the Mayor

Detail Summary of Projects Issued

10/1/2023 to 10/31/2023

Proj #	Address	Owner	Applicant	Fees Paid	Estimated $	Status
114243	417 BRADLY CT..21-8401	ADAM M BLACKMAN		$1,190.71	$400,000.00	Pending
[1-101 - Residential - New - Single Family House] NEW SINGLE FAMILY HOME W/ ATTACHED GARAGE						
114273	3182 MORNINGWOODS CT..21-8187	LINDSAY & MATTHEW MCDONALD		$1,408.72	$390,000.00	Pending
[1-101 - Residential - New - Single Family House] NEW SINGLE FAMILY HOME WITH ATTACHED GARAGE						
114292	354 BAYWOOD TRL..21-8474	GREEN VIPER INC		$1,498.92	$525,000.00	Pending
[1-101 - Residential - New - Single Family House] NEW SINGLE FAMILY HOME W/ ATTACHED GARAGE						
114302	337 BAYWOOD TRL..21-8480	GREEN VIPER INC		$1,612.22	$575,000.00	Pending
[1-101 - Residential - New - Single Family House] NEW SINGLE FAMILY HOME W/ ATTACHED GARAGE						
114359	1915 HAROLD ST..21-2165	LEMENSE QUALITY HOMES INC		$972.46	$185,000.00	Pending
[1-101 - Residential - New - Single Family House] NEW SINGLE FAMILY HOME WITH ATTACHED GARAGE						
113872	1256 ROSCOE ST..1-428-A	CATHLEEN MCCORMICK		$155.00	$500.00	Pending
[2-434 - Residential - Alteration - 1 -2 Family House] OFFICE IN BASEMENT						
113938	113 ANTOINETTE ST..3-38	NEW BAY PROPERTIES LLC		$344.22	$50,000.00	Pending
[2-434 - Residential - Alteration - 1 -2 Family House] FIRE DAMAGE REPAIRS						
114141	228 S PLATTEN ST..6-1424	MB HOMES LLC		$205.00	$20,000.00	Pending
[2-434 - Residential - Alteration - 1 -2 Family House] ALTERATIONS						
114225	499 ALPINE DR..21-3463	NATHAN & REBECCA VANDERGRIFT		$50.00	$6,000.00	Pending
[2-434 - Residential - Alteration - 1 -2 Family House] EGRESS WINDOW						
114242	611 MENLO PARK RD..21-3831	REBECCA A MORALES		$280.00	$80,000.00	Pending
[2-434 - Residential - Addition - Single Family House] ADDITION						
114286	1613 S ONEIDA ST..1-2328	KAITLIN & MATTHEW BUCH		$50.00	$6,000.00	Closed
[2-434 - Residential - Alteration - 1 -2 Family House] REPAIR FRONT STEP AND SIDING						
114304	1555 E MASON ST..8-497	ARTURO DELGADO		$75.00	$18,000.00	Pending
[2-434 - Residential - Alteration - 1 -2 Family House] REPAIRS FOR TREE DAMAGE						
114318	1267 RALEIGH ST..1-2492	CAROL J & MARK A BOPRAY		$205.00	$35,000.00	Pending
[2-434 - Residential - Alteration - 1 -2 Family House] BATHROOM REMODEL						
114321	803 MATHER ST..5-1113	KRISTIN M & BENJAMIN D LAPLANTE		$75.00	$15,000.00	Pending
[2-434 - Residential - Alteration - 1 -2 Family House] STAIRWAY REMODEL						
114334	2055 SOUTH POINT RD..6H-3367	JENNA R & RICHARD J ROBBINS		$75.00	$26,000.00	Pending
[2-434 - Residential - Alteration - 1 -2 Family House] REPAIR ROOF DAMAGE						
114357	810 MARSHALL AV..18-408-A	MATTHEW BAILEY		$255.00	$5,000.00	Closed

[2-434 - Residential - Alteration - 1 -2 Family House] BASEMENT FINISH

114361 1744 13th AV..1-1308 — WS PROPERTY INVESTMENTS LLC — $434.50 — $35,000.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] BASEMENT FINISH, NEW KITCHEN, UPSTAIRS BATHROOM, UPDATES THROUGHOUT.

114367 3233 HIGHLAND VIEW LN..21-7139 — GRETA R & RUSSELL E LOCKARD — $175.00 — $7,000.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] BASEMENT BONUS ROOM FINISH

114375 3129 TOBERMORY DR..21-5388 — DANIEL J KIELPIKOWSKI — $50.00 — $1,100.00 — Closed

[2-434 - Residential - Alteration - 1 -2 Family House] DUPLEX TO ZERO LOT LINE DUPLEX

114398 728 CROOKS ST..14-494 — JOHVANY BARAJASRIZO — $230.00 — $15,000.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] BUILDING CODE, ZONING, EROSION CONTROL

114422 124 S ROOSEVELT ST..14-934 — RURIK MILLER — $205.00 — $10,000.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] KITCHEN REMODEL

114433 3136 WEST POINT RD..6H-1185-A — LEE J GEURTS, ETAL — $1,873.85 — $1,400,000.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] RENOVATIONS

114442 1150 S WEBSTER AV..16-318 — DUSTIN SALES — $50.00 — $2,500.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] REPAIR WATER DAMAGE

114469 2765 WEST POINT RD..6H-1227-13 — JEFFREY D & SUSAN A BRANDT — $155.00 — $9,280.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] ALTERATIONS

114484 1281 CHERRY ST..14-123 — JOSHUA A HISCOCK — $150.00 — $27,000.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] KITCHEN FIRE DAMAGE REPAIR

114490 1208 CASS ST..14-1180 — CHRIS WAKEMAN — $50.00 — $120.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] BUILD WALL IN BASEMENT

114501 1037 LARK ST..18-1181 — GAYLE & MICHAEL TORREZ — $75.00 — $1,500.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House] EXPANDING GARAGE DOOR FROM 8 FT TO 9 FT

114511 1100 9th ST..1-1529 — GREGORY S & LORI L JENSS — $150.00 — $14,000.00 — Pending

[2-434 - Residential - Alteration - 1 -2 Family House]

114311 1092 SHADOW LN..1-2631 — PRIME GROUP LLC — $210.00 — $20,000.00 — Pending

[4-438 - Residential - Alteration - Garage or carport or Shed] GARAGE REMODEL - CASE #134470

114530 2301 MANITOWOC RD..21-127-1-B — XUEYING & MICHAEL KWITKOWSKI — $50.00 — $800.00 — Pending

[4-438 - Residential - Alteration - Garage or carport or Shed]

113983 800 ST. GEORGE ST..7-107 — MCCLONE PROPERTIES LLC — $100.00 — $10,000.00 — Pending

[7-1 - Deck, Porch, Patio, Ramp (Residential)] DECK AND STAIRS

*NOTE PAPERWORK FROM NEW CONTRACTOR IS IN THE EMAILS IN DRAG FILES

113992 1092 SHADOW LN..1-2631 — PRIME GROUP LLC — $150.00 — $7,000.00 — Pending

[7-1 - Deck, Porch, Patio, Ramp (Residential)] FRONT AND BACK PORCH
Double Fee - Rear porch already built**

114214 2580 WOODRIDGE LN..6H-1961 — DAVID & BARBARA LANDOWSKI — $75.00 — $5,620.00 — Pending

[7-1 - Deck, Porch, Patio, Ramp (Residential)] REPLACE RAILINGS

114228 2443 VAN BEEK RD..21-4163 — LORI A KEISIC — $100.00 — $800.00 — Pending

[7-1 - Deck, Porch, Patio, Ramp (Residential)] DECK

114235 1401 SPARTAN RD..21-5575 | CHRIS J & MARY B OSMOND | $100.00 | $22,000.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] DECK

114261 1007 13th AV..2-857 | RACHEL BERG | $75.00 | $1,600.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] REPLACE STAIRS AND ADD RAILINGS TO EXISTING DECK

114270 1135 HIGHVIEW LN..6-657 | SUZANNE J DISHAW | $50.00 | $3,500.00 | Closed
[7-1 - Deck, Porch, Patio, Ramp (Residential)] PATIO

114285 3026 SUNSHINE PL..6H-2757 | PATRICIA A MURPHY | $100.00 | $15,000.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] DECK

114326 820 E WALNUT ST..14-317 | NAVARINO COLLECTIVE LLC | $50.00 | $20,000.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] WALKWAYS

114333 1141 PORLIER ST..17-118 | KIM M HOLMES | $50.00 | $6,000.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] PORCH

114346 1225 BAY DE NOC CT..21-5587 | CHERYL A GALECKE, ETAL | $100.00 | $12,000.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] DECK

114371 824 COLONIAL AV..2-1293 | HEIDI J STAROBA | $100.00 | $4,500.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] SWIMMING POOL WITH ATTACHED DECK

114377 856 KELLOGG ST..5-1427 | TWO CHICKS BUYING HOMES LLC | $50.00 | $600.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] REPAIR DECK

114383 1040 MARY JO WAY..21-4166 | DANIEL & SANDRA LINSSEN | $100.00 | $9,000.00 | Pending
[7-1 - Deck, Porch, Patio, Ramp (Residential)] DECK

114432 1830 14th AV..1-1318-A | MARK A & CYNTHIA S GOSSEN | $100.00 | $11,000.00 | Variance Request (s)
[7-1 - Deck, Porch, Patio, Ramp (Residential)] FRONT PORCH
Permit placed in Variance Request status on 10/27/23. See notes.

114520 1010 S ONEIDA ST..2-1332 | JOHN E STOLLBERG | $50.00 | $6,000.00 | Pending
[9-645 - Raze - Building or Structure (Residential)]

112641 1542 9th ST..6-199 | DARIN R GRIEGER | $50.00 | $3,400.00 | Closed
[11-1 - Driveway Replacement and/or Expansion (Residential)] DRIVEWAY

114076 1698 JUNIPER DR..21-1110-M-41 | ERIC N & KEATON J HAAS | $50.00 | $2,700.00 | Pending
[11-1 - Driveway Replacement and/or Expansion (Residential)] DRIVEWAY

114195 1004 DOUSMAN ST..5-330 | MARY JO TOMICH | $50.00 | $19,786.00 | Closed
[11-1 - Foundation Repair (Residential)] FOUNDATION REPAIR

114222 1457 SHIRLEY ST..6-324-1 | THOMAS C MARONEK | $100.00 | $23,000.00 | Pending
[11-1 - Garage/Carport/Shed (residential)] DETACHED GARAGE

114223 2722 FINGER RD..21-150-8 | KEVIN DENNIS & MICHELLE LYNN BENCE | $50.00 | $5,600.00 | Closed
[11-1 - Z - Misc Project Not Listed (Resiential)] INSTALL EGRESS WINDOW

114238 1126 ELMORE ST..5-1302-D | RICHARD J & MICHELLE A LITTLE | $50.00 | $3,000.00 | Pending

[11-1 - Fence (Residential)] FENCE

114269 429 N LOCUST ST..6-1592 — ARLEEN F DUCHATEAU — $50.00 — $10,626.00 — Pending
[11-1 - Fence (Residential)] FENCE

114276 905 BIEMERET ST..1-1839 — ELIZABETH M HAMMER, ETAL — $50.00 — $4,000.00 — Pending
[11-1 - Fence (Residential)] FENCE

114303 1179 DOTY ST..14-938 — MOLLY STILTJES — $50.00 — $9,100.00 — Pending
[11-1 - Fence (Residential)] FENCE

114315 1260 LOCH DR..6-196-K — CONRAD J FEIVOR — $50.00 — $3,192.00 — Pending
[11-1 - Foundation Repair (Residential)] FOUNDATION REPAIR

114317 1138 ROCKDALE ST..1-1391-1 — RAQUEL & MITCHELL L GARD — $50.00 — $9,000.00 — Pending
[11-1 - Fence (Residential)] FENCE

114328 1421 INSPIRATION AV..21-7366 — ANDREW JAMES & GE NICHOLSON — $50.00 — $2,000.00 — Pending
[11-1 - Fence (Residential)] FENCE

114330 1356 EMILIE ST..17-572 — LYNN M CORBEILLE — $50.00 — $6,648.00 — Pending
[11-1 - Fence (Residential)] FENCE

114332 500-506 N CHESTNUT AV..5-921 — STEPHANIE J HUMMEL — $50.00 — $3,000.00 — Pending
[11-1 - Fence (Residential)] FENCE

114335 905 LARK ST..18-1219 — JULIE A & DONALD A SMITH — $50.00 — $4,000.00 — Closed
[11-1 - Fence (Residential)] FENCE

114336 1126 S QUINCY ST..16-98 — BRENDT J PEETERS — $50.00 — $30,000.00 — Pending
[11-1 - Driveway Replacement and/or Expansion (Residential)] DRIVEWAY
*COA REQUIRED. EMAILED STEPH H 10/2/23

114337 1350 EMILIE ST..17-574 — HARRY & DIANA KISPERT — $50.00 — $5,640.00 — Pending
[11-1 - Foundation Repair (Residential)] FOUNDATION REPAIR

114338 850 MATHER ST..5-169 — CATHERINE T KAMP — $100.00 — $25,000.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] REMOVE & REBUILD GARAGE + REDO FRONT DRIVEWAY

114339 830 7th ST..1-471 — JACOB R CHAMBERS — $150.00 — $20,000.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] DETACHED GARAGE AND DRIVEWAY

114341 1021 S WEBSTER AV..17-46 — BARBARA A & KENNETH H WHITFORD — $75.00 — $10,725.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] SHED

114343 1680 LILAC LN..21-1110-M-68-A — JUDITH A KREUZIGER — $50.00 — $12,300.00 — Pending
[11-1 - Fence (Residential)] 6 ft fence

114348 1695 BEAVER DAM DR..6-2325 — BRENT A CRIER — $50.00 — $2,400.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] SHED

114352 1435 SHANNON ST..6-1172 — BENJAMIN & DAYNA KLEIN — $50.00 — $2,500.00 — Pending
[11-1 - Fence (Residential)] FENCE

114353 1510 LANGLADE AV..6-1305 — AMY J STERNBERG — $100.00 — $9,500.00 — Pending
[11-1 - Driveway Replacement and/or Expansion (Residential)] DRIVEWAY

114355 1434 S LOCUST ST..6-875 — MICHAEL H & LAURIE A FERRIS REVOCABLE TRUST — $50.00 — $5,500.00 — Pending
[11-1 - Fence (Residential)]

114368 611 MENLO PARK RD..21-3831 — REBECCA A MORALES — $50.00 — $3,642.34 — Pending
[11-1 - Garage/Carport/Shed (residential)] 10X12 SHED

114376 2541 CHERRYWOOD LN..6H-2169 — GENE D & ALICE F HUELMAN — $50.00 — $4,000.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] SHED

114388 1350 THOMAS ST..18-1027 — NICOLE A & JEFFERY J JOACHIM, ETAL — $50.00 — $3,962.00 — Closed
[11-1 - Fence (Residential)] FENCE

114393 1809 14th AV..1-1313-2 — PETER LUCAS — $50.00 — $18,750.00 — Closed
[11-1 - Foundation Repair (Residential)] FOUNDATION REPAIR

114394 1110 9th ST..1-1550 — DIANE C CORMIER — $50.00 — $11,300.00 — Closed
[11-1 - Driveway Replacement and/or Expansion (Residential)] REPLACE DRIVEWAY AND GARAGE FLOOR

114396 1375 9th ST..6-204-A-1 — TRENTON T ESTANO — $50.00 — $6,300.00 — Pending
[11-1 - Fence (Residential)] FENCE

114397 1108 BIEMERET ST..1-1395-A — CALLI & ANEURIS MATERNIAK — $50.00 — $7,787.00 — Closed
[11-1 - Fence (Residential)] FENCE

114399 243 DELEERS ST..21-1514-28 — BEVERLY J KROUTH — $75.00 — $12,000.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] SHED

114400 1451 11th AV..1-1762 — TERESSA M PATENAUDE — $50.00 — $3,000.00 — Pending
[11-1 - Fence (Residential)] FENCE

114416 900 S OAKLAND AV..2-919 — AARON & SANDRA NABER — $50.00 — $12,000.00 — Pending
[11-1 - Driveway Replacement and/or Expansion (Residential)] REPLACING NEW CONCRETE PAD

114429 1727 14th AV..1-1310 — SHELTER FROM THE STORM LLC — $75.00 — $41,100.00 — Pending
[11-1 - Foundation Repair (Residential)] FOUNDATION REPAIR
Permit paid but owner is now trying to sell. House is condemned - email in folder

114430 635 S JEFFERSON ST..15-93 — JENNIFER J OLSCHESKY — $50.00 — $6,880.00 — Pending
[11-1 - Driveway Replacement and/or Expansion (Residential)] DRIVEWAY

114431 1668 JUNIPER DR..21-1110-M-50 — CYNTHIA & DOUGLAS EGNARSKI — $50.00 — $13,000.00 — Pending
[11-1 - Foundation Repair (Residential)] FOUNDATION REPAIR

114453 840 S JACKSON ST..16-148 — HENRY D & MARY ZIMMERN REVOCABLE TRUST OF 2000 — $50.00 — $7,900.00 — Closed
[11-1 - Driveway Replacement and/or Expansion (Residential)] DRIVEWAY
*coa required. emailed steph H 10.16.23

114454 1638 LILAC LN..21-1110-M-7 — MARY ANN TENOR — $50.00 — $10,000.00 — Pending
[11-1 - Driveway Replacement and/or Expansion (Residential)] DRIVEWAY REPLACE

114461 3481 BAYWATCH DR..22-1763 — JOSEPH P & AMBER L HANRAHAN — $50.00 — $11,000.00 — Pending
[11-1 - Fence (Residential)] FENCE

114468 940 ROSCOE ST..1-331 — MARY ANN KANUGH — $150.00 — $13,000.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] GARAGE

114472 1659 MURPHY DR..6-1243 — SUSAN H SWIEKATOWSKI IRREVOCABLE TRUST OF 2023 — $50.00 — $18,000.00 — Pending

[11-1 - Driveway Replacement and/or Expansion (Residential)] REPLACE DRIVEWAY

114502 1101 THORNDALE ST..1-2292 — JOHN BENNETT DYKEMA — $50.00 — $6,300.00 — Closed
[11-1 - Fence (Residential)] FENCE

114503 235 MCKENZIE LN..21-7895 — CHRISTOPHER A & ASHLEY L KANE — $50.00 — $9,405.00 — Pending
[11-1 - Fence (Residential)]

114531 2301 MANITOWOC RD..21-127-1-B — XUEYING & MICHAEL KWITKOWSKI — $50.00 — $2,000.00 — Pending
[11-1 - Fence (Residential)] FENCE

114534 139 SCHOBER ST..21-2475-20 — KAREN B & KEITH K NEILSON — $50.00 — $2,500.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] SHED

114539 810 DIVISION ST..5-1469 — WISCONSIN RENTAL SOLUTIONS LLC — $50.00 — $2,500.00 — Pending
[11-1 - Fence (Residential)]

114542 1058 ROCKDALE ST..1-2031 — EDWINA J & ARNOLD J VANDYKE — $50.00 — $16,760.00 — Pending
[11-1 - Driveway Replacement and/or Expansion (Residential)]

114551 1010 S ONEIDA ST..2-1332 — JOHN E STOLLBERG — $100.00 — $35,000.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] GARAGE

114556 508 COUNTRY CLUB RD..6H-2467 — KADIJA & ABDIKARIM Y AYNAN — $50.00 — $3,200.00 — Pending
[11-1 - Fence (Residential)] FENCE

114557 217 N LOCUST ST..6-107-E — CHAD E & CONSTANCE L KUFAHL — $75.00 — $4,000.00 — Pending
[11-1 - Garage/Carport/Shed (residential)] SHED

114564 550 LORRAINE LN..21-4343 — SAMUEL L & NICOLE L LUCHTERHAND — $50.00 — $12,000.00 — Pending
[11-1 - Driveway Replacement and/or Expansion (Residential)] REPLACE DRIVEWAY

114158 211 S MONROE AV..14-443 — MERRICK DEVELOPMENT — $4,198.26 — $200,000.00 — Pending
[30-434 - Commercial - Alteration - Multi-Family of 3 or more units] NO PLUMBING WORK UNTIL PLANS ARE SUBMITTED - PVC 10/26/2023

110421 301-210 N ADAMS ST..12-201 — HCW LLC — $38,646.69 — $7,300,000.00 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping] NO PLUMBING WORK UNTIL APPROVED PLANS ARE SUBMITTED - PVC - 10/4/2023

110645 2128 UNIVERSITY AV..21-2221-1 — MULTISTATE ENVIRONMENTAL RESPONSE TRUST — $1,427.34 — $900,000.00 — Pending
[31-327 - Commercial - New - Stores, Customer Services (restaraunts, beauty shops, malls, taverns, auto showrooms, laundromats, warehouses, markets, kennels)] PIZZA HUT

113545 1160 KEPLER DR..21-155 — BAYCARE AURORA LLC — $1,500.00 — $241,041.02 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping]

113833 2360 E MASON ST..21-126-3-1 — HOBLOB GREEN BAY EAST LLC — $1,337.48 — $808,250.00 — Pending
[31-327 - Commercial - New - Stores, Customer Services (restaraunts, beauty shops, malls, taverns, auto showrooms, laundromats, warehouses, markets, kennels)] $5000 SWB
EC approved 9/22/23

113977 3140 LOWELL DR..21-180-6 — SWING AWAY DEVELOPMENT LLC — $1,636.80 — $450,000.00 — Pending
[31-437 - Commercial - Addition - Non-Residence, Non-housekeeping] EARLY START ON FOOTING & FOUNDATION ONLY - PVC 10/27/2023

114229 744 S WEBSTER AV..14-825 — BELLIN MEMORIAL HOSPITAL — $600.00 — $89,000.00 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping] WAITING RM TO SHOWER - South Wing, 2nd FLR

114356 2540 UNIVERSITY AV..21-301 — UHAGB LLC — $732.46 — $165,000.00 — Pending

[31-328 - Commercial - New - Other Non-Residential Buildings (barns, storage garages, jails, silos, post offices, animal hospitals, reformatories)] 1 - 4 stall across from BLDG 5
1 - 8 stall between BLDG 3 & 4
1 - 6 stall next to BLDG 7

114380 612 S MILITARY AV..6-149-1 — OASIS ESTATE LLC — $377.75 — $5,000.00 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping] CARWASH AREA TO STORAGE

114381 1117 W MASON ST..2-1102-2 — MOUA INVESTMENTS LLC — $1,321.14 — $42,600.00 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping] OFFICE ALTERATIONS - NO PERMIT *DOUBLE FEE

114392 1201 MAIN ST..9-20 — WOCHINSKE REALTY LLC — $1,108.29 — $158,000.00 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping] 2ND FLR CONFERENCE ROOM

114446 1201 MAIN ST..9-20 — WOCHINSKE REALTY LLC — $494.10 — $128,000.00 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping] RIVERSIDE DECK

114466 510 S MONROE AV..15-122 — LTB PROPERTY LLP — $140.00 — $30,000.00 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping] VEHICLE DAMAGE REPAIR

114510 164 N BROADWAY..4-60 — BLH HOLDINGS LLC — $621.05 — $52,000.00 — Pending
[31-434 - Commercial - Alteration - Non-Residence, Non-Housekeeping] 3 OFFICE AREA REMODELS

110796 2250 EASTMAN AV..21-2147-1 — RANKIN GB HOLDINGS LLC — $140.00 — $20,835.00 — Pending
[34-1 - Window, Door - Replacement (Commercial)] REPLACING OLD WINDOWS WITH NEW
*double fee - completed work without a permit

110797 2252 EASTMAN AV..21-2147-1 — RANKIN GB HOLDINGS LLC — $140.00 — $20,835.00 — Pending
[34-1 - Window, Door - Replacement (Commercial)] NEW WINDOWS
*double fee - completed work without a permit

110798 2254 EASTMAN AV..21-2147-1 — RANKIN GB HOLDINGS LLC — $140.00 — $20,835.00 — Pending
[34-1 - Window, Door - Replacement (Commercial)] NEW WINDOWS
*double fee - completed work without a permit

110799 2260 EASTMAN AV..21-2147-1 — RANKIN GB HOLDINGS LLC — $140.00 — $20,835.00 — Pending
[34-1 - Window, Door - Replacement (Commercial)] NEW WINDOWS
*double fee - completed work without a permit

110800 2262 EASTMAN AV..21-2147-1 — RANKIN GB HOLDINGS LLC — $140.00 — $20,835.00 — Pending
[34-1 - Window, Door - Replacement (Commercial)] NEW WINDOWS
*double fee - completed work without a permit

110801 2264 EASTMAN AV..21-2147-1 — RANKIN GB HOLDINGS LLC — $140.00 — $20,835.00 — Pending
[34-1 - Window, Door - Replacement (Commercial)] NEW WINDOWS
*double fee - completed work without a permit

114081 300 S BROADWAY..3-591 — SANCTUARY SPAS LLC — $70.00 — $26,000.00 — Pending
[34-1 - Fence (Commercial)] FENCE

114278 715 S ADAMS ST..15-57 — JEHANZEB SHEIKH — $50.00 — $300.00 — Pending
[34-649 - Raze- Building or Structure (Commercial)] RAZE OF GARAGE

114366 704 BELLEVUE ST..21-2037 — BELLEVUE BAR LLC — $70.00 — $19,595.00 — Pending
[34-1 - Parking Lot - New & Reconstruction (Commerical)] RESURFACE PARKING LOT

114370 515 PINE ST..11-263 — BROWN COUNTY LIBRARY DOWNTOWN — $70.00 — $50,000.00 — Pending
[34-1 - Fence (Commercial)] FENCE

114378 141 BADER ST..21-2284-5 — GREEN BAY MULTIFAMILY LLC — $70.00 — $50,000.00 — Pending
[34-1 - Parking Lot - New & Reconstruction (Commerical)] REPAVE PARKING LOT

114379 125 BADER ST..21-2284-3-1 — GREEN BAY MULTIFAMILY LLC — $70.00 — $50,000.00 — Pending

[34-1 - Parking Lot - New & Reconstruction (Commerical)] REPAVE PARKING LOT

114423 716 PINE ST..10-52 — BELLUE PROPERTIES LLC — $70.00 — $10,000.00 — Closed
[34-1 - Roofing (Commercial)]

114427 304 S BROADWAY..3-590 — DAWN M MCCOY — $70.00 — $8,666.66 — Pending
[34-1 - Fence (Commercial)] FENCE

114428 312 S BROADWAY..3-589 — DAWN M MCCOY — $70.00 — $8,666.00 — Pending
[34-1 - Fence (Commercial)] FENCE

114441 1606 MAIN ST..21-1993 — RUBEN MOSQUEDA — $70.00 — $36,000.00 — Pending
[34-1 - Parking Lot - New & Reconstruction (Commerical)]

114451 1582 AMY ST..8-664-7 — THERESA A RACINE — $70.00 — $1,375.00 — Closed
[34-1 - Z - Misc Project Not Listed (Commercial)] REPAIR STOOP

114452 514 S CLAY ST..14-861 — SAINT PAUL EVANGELICAL LUTHERAN CHURCH — $70.00 — $26,000.00 — Pending
[34-1 - Fence (Commercial)] FENCE

114474 1232 ELIZABETH ST..21-1193-1 — SAZMO PROPERTIES LLC — $70.00 — $5,200.00 — Pending
[34-1 - Roofing (Commercial)] RE-ROOF

114485 1598 WESTERN AV..6-133 — E & P PROPERTIES — $70.00 — $26,000.00 — Pending
[34-1 - Parking Lot - New & Reconstruction (Commerical)] APPROVED VARIANCE.

114486 1609 WESTERN AV..6-119-A — E & P PROPERTIES — $70.00 — $26,000.00 — Pending
[34-1 - Parking Lot - New & Reconstruction (Commerical)] APPROVED VARIANCE.

114488 1593 WESTERN AV..6-119 — E&P PROPERTIES LLP — $70.00 — $26,000.00 — Pending
[34-1 - Parking Lot - New & Reconstruction (Commerical)] VARIANCE APPROVED.

114504 1035 KEPLER DR..21-145-5 — BAYCARE HEALTH SYSTEMS LLC — $70.00 — $27,600.00 — Pending
[34-1 - Roofing (Commercial)]

114515 904 S TAYLOR ST..6H-1081-3 — BROOKWIEW MEADOWS LLC — $280.00 — $15,000.00 — Pending
[34-649 - Demolition - Interior (Commercial)]

114547 1751 DECKNER AV..21-1210-1 — HU-NU INVESTMENTS LLC — $70.00 — $32,000.00 — Pending
[34-1 - Z - Misc Project Not Listed (Commercial)] CAR VS VEHICLE REPAIR

114562 310 W WALNUT ST..4-194 — PETES ANNEX LLC — $190.00 — $68,820.00 — Pending
[34-1 - Z - Misc Project Not Listed (Commercial)]

114565 1001 MAIN ST..9-39 — MAIN STREET GREEN BAY PROPERTIES LLC — $280.00 — $5,000.00 — Pending
[34-1 - Z - Misc Project Not Listed (Commercial)] TEMPORARY HEAT AND ADDING R-30 INSULATION AT CEILING

114126 1415 PORLIER ST..17-751 — ASNJ PROPERTY INVESTMENT LLC — $50.00 — $5,000.00 — Pending
[40-53 - Electrical Service - Change (Residential)] SERVICE CHANGE

114209 1509 MORROW ST..19-183 — ELIZABETH M & CHRISTOPHER LEMENS — $150.00 — $41,028.00 — Pending
[40-61 - Solar Panels - Electric] ROOF MOUNTED SOLAR PANELS

114263 1105 CROOKS ST..14-1019 — WILLIAM R CORRIVEAU — $150.00 — $53,811.00 — Pending

[40-61 - Solar Panels - Electric] SOLAR PANELS

114301 212 WOODLAWN AV..5-573 — THOMAS A ORYALL — $50.00 — $3,500.00 — Closed
[40-53 - Electrical Service - Change (Residential)] SERVICE UPGRADE

114331 1230 13th AV..1-720 — JOANN A BLANK — $50.00 — $1,000.00 — Closed
[40-55 - Electrical Service - Repair (Residential)] SERVICE REPAIR

114354 1400 N BAIRD ST..21-1198-6 — PERRY PARK PARTNERS ETAL — $50.00 — $3,600.00 — Pending
[40-53 - Electrical Service - Change (Residential)] SERVICE UPGRADE - LOT 61 & 62

114362 1114 MEACHAM ST..1-1629 — PACKERLAND CAPITAL PROPERTIES LLC — $50.00 — $2,000.00 — Pending
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)] MISC ELEC

114384 1141-1151 PACKERLAND DR..6H-1137-6 — PETERS FAMILY WISCONSIN LTD PARTNERSHIP — $140.00 — $45,000.00 — Pending
[40-56 - Electrical Wiring (Misc., Alteration, Repair) (Commercial)] SERVICE ALTERATIONS - 1151 PACKERLAND

114385 803 CHERRY ST..10-66 — CURTIS E CHRISTENSEN — $50.00 — $2,000.00 — Closed
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)] SERVICE UPGRADE

114386 805 CHERRY ST..10-67 — 805 CHERRY LLC — $50.00 — $2,000.00 — Closed
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)] SERVICE UPGRADE

114387 809 CHERRY ST..10-68 — GB REAL ESTATE INVESTMENTS LLC — $50.00 — $2,000.00 — Closed
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)] SERVICE UPGRADE

114389 1141 PACKERLAND DR..6H-1137-6 — PETERS FAMILY WISCONSIN LTD PARTNERSHIP — $140.00 — $45,000.00 — Pending
[40-56 - Electrical Wiring (Misc., Alteration, Repair) (Commercial)] SERVICE ALTERATIONS - 1141 PACKERLAND

114390 1636 EASTMAN AV..19-444 — BASTEN INVESTMENTS LLC — $50.00 — $2,575.00 — Pending
[40-53 - Electrical Service - Change (Residential)] SERVICE UPGRADE

114391 1333-1337 S NORWOOD AV..1-954 — PETERS FAMILY WISCONSIN LTD PARTNERSHIP — $210.00 — $55,000.00 — Pending
[40-56 - Electrical Wiring (Misc., Alteration, Repair) (Commercial)] SERVICE ALTERATIONS

114395 1714 BRIQUELET ST..6-1496 — MICHAEL K & JULIE K LAMARRE — $50.00 — $2,000.00 — Closed
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)] SERVICE ALTERATION

114411 2765 HE-NIS-RA LN..6H-2415 — DEBRA R & LAWRENCE D CLAY — $50.00 — $2,900.00 — Closed
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)]

114412 831 FOREST HILL DR..21-1111-D-163 — TALOR COUNTER — $50.00 — $2,800.00 — Pending
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)]

114426 1355 SUBURBAN AV..6-1502 — MARLENE J LONDO — $50.00 — $3,500.00 — Pending
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)]

114457 2856 CURRY LN..21-275-7-1 — JOHN G & SUSAN E LEE — $50.00 — $3,000.00 — Pending
[40-53 - Electrical Service - Change (Residential)] SERVICE UPGRADE

114458 1507 OAK RIDGE DR..6-2347-1 — KATHLEEN A & JEFFREY A KROSNICKI — $50.00 — $2,000.00 — Closed
[40-53 - Electrical Service - Change (Residential)] SERVICE UPGRADE

114473 1180 MT MARY DR..21-429-1-17 — DEBRA B & PAUL J STRELKA — $50.00 — $8,015.00 — Pending

[40-53 - Electrical Service - Change (Residential)] SERVICE UPGRADE

114487 905 9th ST..1-1552 — LEE T DAUBNER — $50.00 — $1,370.00 — Pending
[40-55 - Electrical Service - Repair (Residential)]

114495 1706 EDGEHILL DR..6H-1953 — MICHAEL J & GAIL D JOSEPHSON — $50.00 — $3,000.00 — Pending
[40-55 - Electrical Service - Repair (Residential)] SERVICE UPGRADE

114496 1208 S JACKSON ST..16-215 — ERIN & JONATHAN HERRBOLDT — $50.00 — $3,800.00 — Pending
[40-53 - Electrical Service - Change (Residential)] SERVICE UPGRADE

114497 1000 HOLZER ST..18-819-B — SHANNON S & CHRISTIAN R SCHUSTER — $50.00 — $3,000.00 — Pending
[40-53 - Electrical Service - Change (Residential)] SERVICE UPGRADE

114525 813 REBER ST..20-108 — FRANCIS M FITZPATRICK — $50.00 — $3,000.00 — Pending
[40-53 - Electrical Service - Change (Residential)] SERVICE CHANGE

114526 442 ALPINE DR..21-107-3 — GREEN BAY AREA PUBLIC SCHOOL DISTRICT EDISON — $500.00 — $385,937.00 — Pending
[40-56 - Electrical Wiring (Misc., Alteration, Repair) (Commercial)] CEILING AND LIGHTING RENOVATION

114540 3350 SONATA DR..21-6097 — CLAUDIA L WHEELER — $50.00 — $1,500.00 — Pending
[40-57 - Electrical Wiring (Misc., Alteration, Repair) (Residential)]

114573 424 PINE TERR..6-2625 — ARMANDO & MARTHA JAUREGUI — $50.00 — $3,000.00 — Pending
[40-55 - Electrical Service - Repair (Residential)] EMERGENCY SERVICE REPAIR

114575 625 LAURA ST..21-2492 — CLARENCE H LAFAVE — $50.00 — $695.00 — Pending
[40-55 - Electrical Service - Repair (Residential)] SERVICE REPAIRS

114581 120 OAK ST..3-235 — SHERRY M SCHMIDT TRUST — $50.00 — $1,630.00 — Closed
[40-55 - Electrical Service - Repair (Residential)] SERVICE REPAIRS

114246 1747 JUNIPER DR..21-1110-M-129 — NICHOLAS B & COURTNEY L DEUCHERT — $50.00 — $4,992.00 — Pending
[50-41 - AC Unit Only (Residential)] AIR CONDITIONER

114295 1133 MARQUETTE AV..1-1499 — DIANE M KWASNY — $50.00 — $5,000.00 — Closed
[50-45 - Heating Unit Only (Residential)] FURNACE

114296 1629 BOLAND RD..6-1388 — BRIAN J BISWABIC, ETAL — $50.00 — $5,000.00 — Pending
[50-45 - Heating Unit Only (Residential)] FURNACE

114297 1815 JEAN ST..21-2879 — ROBYN J SCHADT — $50.00 — $5,000.00 — Pending
[50-45 - Heating Unit Only (Residential)] FURNACE

114342 614 KELLOGG ST..5-1045 — DEREK S & CELESTINE M JEFFREYS — $50.00 — $10,234.85 — Closed
[50-49 - Repair/Alter Existing HVAC System (Residential)] REPLACE WOODBURNING FIREPLACE

114345 1948 DECKNER AV..21-2286-2 — JUDITH A SPRANGERS — $50.00 — $6,595.00 — Closed
[50-45 - Heating Unit Only (Residential)] FURNACE

114349 1300 ALPINE DR..21-7857 — GEOFFERY S & ANNE L NESTOR — $50.00 — $6,993.00 — Pending
[50-45 - Heating Unit Only (Residential)] FURNACE UNIT 605

114350 2637 EAST SHORE DR..21-1110-11 — STR SERVICES LLC — $50.00 — $7,022.00 — Closed

[50-41 - AC Unit Only (Residential)] AIR CONDITIONER

114365 118 S WASHINGTON ST..12-341 — MICHAEL P & KATHRYN L TUBBS — $140.00 — $12,904.00 — Pending
[50-42 - Heating and Air Conditioning Units (Commercial)] FURNACE & AIR CONDITIONER - UNIT 322A

114372 2231 MACCAUX DR..21-2144-M-4 — LYLE J LALUZERNE — $50.00 — $5,600.00 — Closed
[50-45 - Heating Unit Only (Residential)] BOILER

114373 3374 BUSHWOOD LN..21-7712 — MICHAEL J & MARLA J LEE — $50.00 — $12,226.50 — Closed
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE AND AIR CONDITIONER

114374 3165 NICOLET DR..22-871 — GRECO RAYMOND A & DIANE L LIVING TRUST — $50.00 — $10,930.00 — Pending
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE AND AIR CONDITIONER

114401 2237 DECKNER AV..21-1258 — BARBARA J SIMONS — $50.00 — $5,127.00 — Closed
[50-45 - Heating Unit Only (Residential)] FURNACE

114402 2306 RED OAK DR..6H-1640 — PAUL B & LORI J REYNOLDS — $50.00 — $15,950.00 — Closed
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE AND AIR CONDITIONER

114403 1073 LANGLADE AV..1-1396 — PAMELA MOMMAERTS — $50.00 — $4,000.00 — Pending
[50-45 - Heating Unit Only (Residential)] FURNACE

114404 1605 CREEKSIDE LN..21-5562 — BLACKMAN DAVID W & LORI A REVOCABLE TRUST — $50.00 — $15,853.00 — Closed
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE AND AIR CONDITIONER

114407 421 WESTPLAIN DR..6-2501 — TIMOTHY J & JULIE A ARBOUR — $50.00 — $8,276.00 — Closed
[50-45 - Heating Unit Only (Residential)] BOILER

114408 2816 NICOLET DR..22-143-4 — MICHAEL J CONNELLY — $50.00 — $21,856.00 — Closed
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE AND AIR CONDITIONER

114413 112 N ADAMS ST..12-134 — NEIGHBORHOOD HOUSING SERVICES OF GREEN BAY INC — $70.00 — $62,728.00 — Pending
[50-44 - Heating Unit Only (Commercial)] BOILER

114415 615 KELLOGG ST..5-1047 — NADIA & LINDA KNAUS — $50.00 — $5,338.00 — Closed
[50-41 - AC Unit Only (Residential)]

114418 725 S JACKSON ST..14-592 — MARCELO U GRAZZIOTIN — $50.00 — $6,740.00 — Closed
[50-45 - Heating Unit Only (Residential)] FURNACE

114419 345 N OAKLAND AV..5-1477 — HAROLD DORBAND — $50.00 — $5,493.00 — Closed
[50-45 - Heating Unit Only (Residential)] FURNACE

114420 961 MATHER ST..5-1281 — TODD M & TRACY L BUTH — $50.00 — $8,689.00 — Closed
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE & AIR CONDITIONER

114421 1734 S ONEIDA ST..1-2679 — LISA R COREY — $50.00 — $9,166.00 — Pending
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE & AIR CONDITIONER

114425 812 CASS ST..14-597 — TIMOTHY & KARI A PERLEWITZ — $50.00 — $7,889.00 — Closed
[50-45 - Heating Unit Only (Residential)]

114434 1831 14th AV..1-1316-A — BGC HOME INVESTMENTS LLC — $50.00 — $6,000.00 — Closed
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE & AIR CONDITIONER

114435 2076 MEADOWSWEET DR..6H-4115 [50-45 - Heating Unit Only (Residential)] FURNACE	SARAH A & JUSTIN P NEWTON	$50.00	$8,839.00	Closed
114436 1799 SUNDALE DR..6-1636-9 [50-45 - Heating Unit Only (Residential)] FURNACE	ST MARYS HOSPITAL MEDICAL CENTER OF GB INC	$50.00	$5,499.00	Pending
114437 409 FAIRVIEW CT..5-1589 [50-43 - Heating and Air Conditioning Units (Residential)]	SUSAN B LEMEROND	$50.00	$9,350.00	Closed
114439 2472 FORESTVILLE DR..6H-1938 [50-45 - Heating Unit Only (Residential)]	NOHEMI ARCOS LANDA	$50.00	$3,400.00	Pending
114456 1683 9th ST..6-210-F [50-41 - AC Unit Only (Residential)] AIR CONDITIONER	ALICIA COLLINS, ETAL	$50.00	$5,228.00	Pending
114459 953 COPPENS RD..18-830-A-1 [50-45 - Heating Unit Only (Residential)] FURNACE	PATRICK V CURREN	$50.00	$5,300.00	Closed
114460 896 9th ST..1-674 [50-45 - Heating Unit Only (Residential)] FURNACE	MICHAEL A CZYZ	$50.00	$4,900.00	Pending
114464 1721 W CRUSADE LN..6H-3964 [50-45 - Heating Unit Only (Residential)] FURNACE	ALIDA L & RONDA L WAITS	$50.00	$12,613.00	Pending
114470 129 S OAKLAND AV..3-355 [50-45 - Heating Unit Only (Residential)] FURNACE	RAYMOND RASKE	$50.00	$5,414.00	Closed
114475 954 HOWARD ST..3-455 [50-45 - Heating Unit Only (Residential)] FURNACE	DENNIS D & SHARON L SKENANDORE	$50.00	$15,998.00	Pending
114477 711 HINKLE ST..6H-1626 [50-44 - Heating Unit Only (Commercial)] INSTALL UNIT HEATER	F & O PARTNERSHIP LLP	$70.00	$5,000.00	Expired
114478 1801 BEECH TREE DR..6H-2086 [50-45 - Heating Unit Only (Residential)]	TIMOTHY K ANDERSON	$50.00	$4,000.00	Closed
114480 3423 WIGGINS WAY..22-1734-18 [50-43 - Heating and Air Conditioning Units (Residential)]	BETTY J KRCMA	$50.00	$15,070.80	Closed
114481 3195 HUMBOLDT RD..21-3065 [50-45 - Heating Unit Only (Residential)]	JEFFREY M WERY	$50.00	$7,194.00	Pending
114482 2324 HILLSIDE LN..21-98-2 [50-45 - Heating Unit Only (Residential)]	KELLEY JO BRIEN	$50.00	$7,032.66	Closed
114505 2528 DUNBAR LN..6H-1494-7 [50-41 - AC Unit Only (Residential)]	DAWN MARIE THOMPSON	$50.00	$18,268.00	Closed
114506 217 S LOCUST ST..6-1429 [50-45 - Heating Unit Only (Residential)]	ANTHONY M WILDE	$50.00	$7,381.00	Closed
114512 998 9th ST..1-1448 [50-45 - Heating Unit Only (Residential)]	RICKY A SMITH	$50.00	$4,000.00	Pending
114517 410 S WEBSTER AV..14-767	NEIGHBORHOOD HOUSING SERVICES OF GREEN BAY INC	$70.00	$33,780.00	Pending

[50-44 - Heating Unit Only (Commercial)] BOILER

114521 433 MEADOW WIND DR..21-7180 — MICHELLE M & KELLY G WATZKA — $50.00 — $15,039.00 — Pending
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE AND AIR CONDITIONER

114535 118 S WASHINGTON ST..12-341 — MICHAEL P & KATHRYN L TUBBS — $140.00 — $12,904.00 — Pending
[50-42 - Heating and Air Conditioning Units (Commercial)] FURNACE AND AIR CONDITIONER

114536 1698 KENNEDY DR..6-2721 — SHERIE R LABROSSE — $50.00 — $9,450.00 — Pending
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE AND AIR CONDITIONER

114537 3304 NAUTICAL AV..22-1468 — CYNTHIA M ZIOLKOWSKI — $50.00 — $750.00 — Closed
[50-45 - Heating Unit Only (Residential)] FURNACE

114545 640 RAVENSWOOD DR..21-820-R-14 — ADRIANA E PADILLA — $50.00 — $10,000.00 — Pending
[50-43 - Heating and Air Conditioning Units (Residential)]

114546 919 APHRODITE RD..21-4319 — BRAD S & MELANIE S ZABEL — $50.00 — $5,260.00 — Pending
[50-41 - AC Unit Only (Residential)]

114552 409 HARVARD ST..5-421 — PAI MOUA — $50.00 — $11,000.00 — Pending
[50-43 - Heating and Air Conditioning Units (Residential)] FURNACE & AIR CONDITIONER

114566 2113 CRESTWOOD SPRINGS DR..6H-3292 — JOYCE K ANGST — $50.00 — $5,080.00 — Pending
[50-45 - Heating Unit Only (Residential)] FURNACE

114569 1120 ELIZA ST..17-140 — DEBORAH & MARK SCHWALLIE — $50.00 — $4,000.00 — Pending
[50-45 - Heating Unit Only (Residential)] FURNACE

114572 1139 BADGER ST..3-1175-A — ANTIONETTE & JASON B WRIGHT — $50.00 — $2,605.00 — Pending
[50-45 - Heating Unit Only (Residential)] FURNACE

114298 1133 MARQUETTE AV..1-1499 — DIANE M KWASNY — $30.00 — $2,000.00 — Closed
[60-27 - Water Heater (Residential)] WATER HEATER

114299 1815 JEAN ST..21-2879 — ROBYN J SCHADT — $30.00 — $2,000.00 — Pending
[60-27 - Water Heater (Residential)] WATER HEATER

114329 1185 SHADOW LN..1-2225 — LAFORCE LLC — $100.00 — $4,600.00 — Pending
[60-37 - Lawn Sprinklers (Residential)] SPRINKLER

114340 2935 MILKY WAY DR..6H-3557 — JUDITH A & ROBERT A MYERS — $30.00 — $4,000.00 — Closed
[60-33 - Storm Sewers - Connection/Repair (Residential)] STORM SEWER REPAIR

114351 411 N MONROE AV..11-66 — MP APARTMENTS LLC — $70.00 — $25,000.00 — Closed
[60-26 - Water Heater (Commercial)] WATER HEATER

114358 1502 WESTERN AV..6-136-B — GLORIA P & GERALD C BIGELOW — $70.00 — $5,000.00 — Closed
[60-24 - Repair/Alter Existing Plumbing System (Commercial)] MISC PLUMBING WORK - UNIT 15

114405 610 GOODELL ST..17-786-B — SHERELLE SCHMIDT — $30.00 — $2,000.00 — Pending
[60-27 - Water Heater (Residential)] WATER HEATER

114406 1849 EAST SHORE DR..21-1095 — LORI A PARKS — $50.00 — $5,150.00 — Closed
[60-25 - Repair/Alter Existing Plumbing System (Residential)] REPLACE MIXER VALVE

114410 1568 CEDAR ST..19-153 — MOUA INVESTMENTS LLC — $30.00 — $1,000.00 — Closed
[60-29 - Water Service - Connection/Repair (Residential)] REPAIR SANITARY SEWER

114424 136 ALLEN AV..21-1116 — KIM M CARPENTER — $50.00 — $1,190.00 — Closed
[60-25 - Repair/Alter Existing Plumbing System (Residential)]

114438 1188 THORNDALE ST..1-2154 — BARRY J & KRISTY E CHAMBERS — $30.00 — $6,000.00 — Closed
[60-31 - Sanitary Sewers - Connection/Repair (Residential)] SANITARY SEWER REPLACEMENT

114440 1200 E WALNUT ST..14-265 — MIRHASHEMI INC — $30.00 — $5,000.00 — Closed
[60-31 - Sanitary Sewers - Connection/Repair (Residential)] SANITARY SEWER LATERAL REPAIR

114455 328 QUINTON ST..21-1461 — JEREMY R DONATH — $50.00 — $16,000.00 — Closed
[60-25 - Repair/Alter Existing Plumbing System (Residential)] REPLACE SHOWER STALL & 2 MIXER VALVES

114471 724 S CLAY ST..14-843 — CHERYL D & JONATHAN T BUNKER — $30.00 — $3,500.00 — Closed
[60-31 - Sanitary Sewers - Connection/Repair (Residential)] CLOSING GAP FROM PRIVATE PROPERTY TO CITY MAIN

114514 1129 MARQUETTE AV..1-1498 — SCOTT A CRAWFORD — $30.00 — $1,000.00 — Closed
[60-27 - Water Heater (Residential)]

114538 148 GARDEN GATE CT..6H-3761 — SANTAGA GREGORY P & ANN 200R JOINT REVOC TRUST — $30.00 — $2,000.00 — Closed
[60-29 - Water Service - Connection/Repair (Residential)]

114553 1561 MORROW ST..19-170 — STEPHANIE A MOORE — $30.00 — $7,200.00 — Closed
[60-31 - Sanitary Sewers - Connection/Repair (Residential)] SANITARY LATERAL REPLACEMENT

114554 1275 ST. CLAIR ST..14-59 — RONALD F JACOBE — $30.00 — $7,200.00 — Closed
[60-31 - Sanitary Sewers - Connection/Repair (Residential)] SANITARY LATERAL REPLACEMENT

114561 1481-1483 7th ST..6-523-5 — VICKI PROPERTIES LLC — $30.00 — $12,000.00 — Closed
[60-31 - Sanitary Sewers - Connection/Repair (Residential)] REPAIR SANITARY SEWER AND WATER LATERAL

114567 821 COLUMBIA AV..18-1371 — LANE BOZEMAN — $30.00 — $2,000.00 — Pending
[60-27 - Water Heater (Residential)] WATER HEATER

114568 1811 DE GRAND ST..6H-1526 — MARY ANN & VAUGHN MOORE — $50.00 — $10,121.00 — Pending
[60-25 - Repair/Alter Existing Plumbing System (Residential)] TUB TO SHOWER

113918 2430 E MASON ST..21-126-11 — SKY GREEN BAY LLC — $30.00 — $100.00 — Pending
[70-1 - Signs - Temporary] Banner - 20'x3'=60 sqft

114114 1004 BRETT FAVRE PASS..1-1841-C-2 — LEGACY GREEN BAY LLC — $747.05 — $127,000.00 — Pending
[70-1 - Signs - Permanent] 5 Wall Signs - (2) East/West 7'x46'=644 sq ft; (2) North/South 16'x10.33'=330.56sq ft; (1) 2'x9.77'=19.54'sq ft

114369 1620 S ASHLAND AV..1-1097-1 — HILGENBERG & ASSOCIATES INC — $103.98 — $3,480.00 — Pending
[70-1 - Signs - Permanent] Install new 28 sq ft (2.33'X12') aluminum frame internally lit LED wall sign on the east facade of multi-tenant building (for unit 104)

114498 825 CHALLENGER DR..21-143-4 — ENZYMATIC THERAPY LLC — $134.00 — $14,500.00 — Pending
[70-1 - Signs - Permanent] Monument Sign: 11'x8' = 88 sq ft (interally illuminated)

114500 3466 E MASON ST ..21-171-2 — ERIE ROAD PROPERTIES LLC — $202.35 — $27,000.00 — Pending
[70-1 - Signs - Permanent] Monument Sign: 11'x8'=88 sq ft (internally illuminated)
Wall Sign: 9'x6.3'=56.7 sq ft (internally illuminated)

114548 1593 W MASON ST..6-421 — MILWAUKEE DEVELOOPMENT LLC — $174.00 — $17,000.00 — Pending

[70-1 - Signs - Permanent] (2) Wall Signs (internally illuminated): 4'x17'=68sq ft; 4'x5'=20sq ft

Totals:	253 projects	$81,563.34	$17,294,106.83

Summary of Projects Issued

10/1/2023 to 10/31/2023

Class of Work	Proj	Site	Plan	Bldg	Elec	HVAC	Plbg	EC	Fees Paid	Estimated Cost
1 Residential - New - Single Family House	5	5	10	5	5	5	5	5	$6,683.03	$2,075,000.00
2 Residential - Addition - Single Family House	1	1	1	1	1	1	1	0	$280.00	$80,000.00
2 Residential - Alteration - 1 -2 Family House	22	2	15	22	13	6	9	1	$5,087.57	$1,704,000.00
4 Residential - Alteration - Garage or carport or Shed	2	0	1	2	0	0	0	0	$260.00	$20,800.00
7 Deck, Porch, Patio, Ramp (Residential)	15	8	11	15	0	0	0	0	$1,300.00	$128,620.00
9 Raze - Building or Structure (Residential)	1	0	0	1	0	0	0	0	$50.00	$6,000.00
11 Driveway Replacement and/or Expansion (Residential)	12	0	0	12	0	0	0	0	$650.00	$140,440.00
11 Fence (Residential)	22	0	0	22	0	0	0	0	$1,100.00	$127,128.00
11 Foundation Repair (Residential)	6	0	1	6	0	0	0	0	$325.00	$101,468.00
11 Garage/Carport/Shed (residential)	12	8	5	12	2	0	0	0	$1,025.00	$155,267.34
11 Z - Misc Project Not Listed (Resiential)	1	0	0	1	0	0	0	0	$50.00	$5,600.00
30 Commercial - Alteration - Multi-Family of 3 or more units	1	1	1	1	1	1	1	0	$4,198.26	$200,000.00
31 Commercial - Addition - Non-Residence, Non-housekeeping	1	1	1	1	1	1	1	0	$1,636.80	$450,000.00
31 Commercial - Alteration - Non-Residence, Non-Housekeeping	9	1	13	9	8	7	5	0	$44,809.02	$8,045,641.02
31 Commercial - New - Other Non-Residential Buildings (barns, storage garages, jails, silos, post offices, animal hospitals, reformatories)	1	0	1	1	1	0	0	0	$732.46	$165,000.00
31 Commercial - New - Stores, Customer Services (restaraunts, beauty shops, malls, taverns, auto showrooms, laundromats, warehouses, markets, kennels)	2	2	5	2	2	2	2	2	$2,764.82	$1,708,250.00
34 Demolition - Interior (Commercial)	1	0	0	1	1	1	1	0	$280.00	$15,000.00
34 Fence (Commercial)	5	0	0	5	0	0	0	0	$350.00	$119,332.66
34 Parking Lot - New & Reconstruction (Commerical)	7	0	0	7	0	0	0	0	$490.00	$233,595.00
34 Raze- Building or Structure (Commercial)	1	0	0	1	0	0	0	0	$50.00	$300.00
34 Roofing (Commercial)	3	0	0	3	0	0	0	0	$210.00	$42,800.00
34 Window, Door - Replacement (Commercial)	6	0	0	6	0	0	0	0	$840.00	$125,010.00
34 Z - Misc Project Not Listed (Commercial)	4	0	0	4	2	1	0	0	$610.00	$107,195.00
40 Electrical Service - Change (Residential)	10	0	0	0	10	0	0	0	$500.00	$37,490.00
40 Electrical Service - Repair (Residential)	6	0	0	0	6	0	0	0	$300.00	$10,695.00
40 Electrical Wiring (Misc., Alteration, Repair) (Commercial)	4	0	0	0	4	0	0	0	$990.00	$530,937.00
40 Electrical Wiring (Misc., Alteration, Repair) (Residential)	9	0	0	0	9	0	0	0	$450.00	$20,700.00
40 Solar Panels - Electric	2	2	2	2	2	0	0	0	$300.00	$94,839.00
50 AC Unit Only (Residential)	6	0	0	0	0	6	0	0	$300.00	$46,108.00
50 Heating and Air Conditioning Units (Commercial)	2	0	0	0	0	2	0	0	$280.00	$25,808.00
50 Heating and Air Conditioning Units (Residential)	14	0	0	0	0	14	0	0	$700.00	$170,580.30
50 Heating Unit Only (Commercial)	3	0	0	0	0	3	0	0	$210.00	$101,508.00
50 Heating Unit Only (Residential)	29	0	0	0	0	29	0	0	$1,450.00	$175,718.66
50 Repair/Alter Existing HVAC System (Residential)	1	0	0	0	0	1	0	0	$50.00	$10,234.85

60 Lawn Sprinklers (Residential)	1	0	0	0	0	0	1	0	$100.00	$4,600.00
60 Repair/Alter Existing Plumbing System (Commercial)	1	0	0	0	0	0	1	0	$70.00	$5,000.00
60 Repair/Alter Existing Plumbing System (Residential)	4	0	0	0	0	0	4	0	$200.00	$32,461.00
60 Sanitary Sewers - Connection/Repair (Residential)	6	0	0	0	0	0	6	0	$180.00	$40,900.00
60 Storm Sewers - Connection/Repair (Residential)	1	0	0	0	0	0	1	0	$30.00	$4,000.00
60 Water Heater (Commercial)	1	0	0	0	0	0	1	0	$70.00	$25,000.00
60 Water Heater (Residential)	5	0	0	0	0	0	5	0	$150.00	$9,000.00
60 Water Service - Connection/Repair (Residential)	2	0	0	0	0	0	2	0	$60.00	$3,000.00
70 Signs - Permanent	5	5	0	5	0	0	0	0	$1,361.38	$188,980.00
70 Signs - Temporary	1	0	0	1	0	0	0	0	$30.00	$100.00
Totals:	253	36	67	148	68	80	46	8	$81,563.34	$17,294,106.83

RESOLUTION AUTHORIZING CONDITIONAL USE PERMIT AT 1184 SHADOW LANE/PARCEL 1-2509 (ZP 23-40)

NOVEMBER 7, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY, RESOLVED:

That, pursuant to Zoning Petition 23-40 and the recommendation of the Plan Commission on October 23, 2023, the City of Green Bay does authorize a Conditional Use Permit (CUP) to allow for a detached structure with a metal exterior finished exceeding 120 square feet in a Low-Density Residential (R1) district on the following described property located at 1184 Shadow Lane:

Legal Description:

> THE EAST FORTY-TWO (42) FEET OF LOT ELEVEN (11), AND THE WEST THIRTY (30) FEET OF LOT TWELVE (12), ACCORDING TO THE RECORDED PLAT OF GAVERAS-KAPITZ SUDDIVISION, IN THE CITY OF GREEN BAY, WEST SIDE OF FOX RIVER, BROWN COUNTY, WISCONSIN.
>
> Tax Parcel No. 1-2509

Said CUP shall be granted.

Adopted _____

Approved _____

_____
Eric Genrich, Mayor

_____
Celestine Jeffreys, Clerk

dam:

Attachment – Map

Proposed CUP

200' Property Owner Notice

This is a compilation of records and data located in various City of Green Bay offices and is to be used for reference purposes only. The City of Green Bay is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied. Map prepared by DM.

Zoning Petition (ZP 23-40) Proposed Conditional Use Permit (CUP) at 1184 Shadow Lane

CITY OF GREEN BAY 1854 Titletown, USA

RESOLUTION AUTHORIZING
BUDGET AMENDMENT

November 7, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY, RESOLVED:

Pursuant to the recommendation of the Finance Committee at its meeting of October 24, 2023, the following 2023 amendment of funds is hereby authorized:

	ACCOUNT		AMOUNT
Increase:	101300 50501	Police-Overtime	$14,303.40
Increase:	101300 46223	Police Overtime Reimbursement	$14,303.40

***This budget amendment is for 2023 unbudgeted overtime for staffing at various task forces-FBI, US Marshalls and Internet Crimes Against Children.*

Increase:	101400 50501	Fire-Overtime	$19,482.74
Increase:	101400 46223	Fire Overtime Reimbursement	$19,482.74

***This budget amendment is for 2023 unbudgeted overtime for staffing at the UWGB Cross Country and Festival events, Packers Flo Rida Concert, Cellcom Marathon, Packer Training Camp and the Packer 5K.*

Increase:	101400 50501	Fire-Overtime	$3,520.00
Increase:	101400 43611	Fire-State Overtime Reimbursement	$3,520.00

***This budget amendment is for 2023 unbudgeted state reimbursements of costs incurred for employees to attend USAR (Urban Search & Rescue) trainings.*

Adopted _____

Approved _____

_____
Mayor

_____
Clerk

FINAL PAYMENTS RESOLUTION
November 7, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY, RESOLVED:

That the City Clerk be and is hereby instructed to draw FINAL ORDERS in favor of the following contractors for their projects in the amounts listed as follows:

1. **SEWERS 2-22 (MINI SEWERS)**
KIP GULSETH CONSTRUCTION CO., INC.

TOTAL AMOUNT EARNED:	$	396,549.20
LESS AMOUNT RETAINED:	$	0.00
	$	396,549.20
LESS AMOUNT PREVIOUSLY PAID:	$	375,684.97
AMOUNT DUE THIS PAYMENT:	**$**	**20,864.23**

ACCOUNT NUMBERS
412500E-55355-68032: $20,864.23
PO #2200115

Adopted _____, 2023

Approved _____, 2023

_____
Mayor

ATTEST:

_____
City Clerk

SAP

RESOLUTION REQUESTING DECLARATION OF EMERGENCY
REPAIR OF STORM SEWER OUTFALL
EAST RIVER AT ELLIS STREET EXTENDED

November 7, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY:

WHEREAS, the City of Green Bay operates a Municipal Separate Storm Sewer System; and

WHEREAS, the City of Green Bay is obligated maintain this storm sewer system in good repair by conditions of its permits issued by the Wisconsin Department of Natural Resources (WDNR) and United States Environmental Protection Agency (EPA); and

WHEREAS, the storm sewer main discharging to the East River, south of Main Street, in the vicinity of Ellis Street extended has failed and is creating a situation where excess sediment is discharging to the East River, the land above the buried pipe is caving in, a safety hazard to the public exists, and further precipitation resulting in storm sewer discharge will further exacerbate this hazardous condition.

NOW, THEREFORE BE IT RESOLVED, the City of Green Bay Improvement & Services Committee and Common Council hereby declare an emergency condition in accordance with the provisions of ss. 62.15 (1)(b), Wis. Stats, and hereby authorizes the Department of Public Works to take all actions necessary for the immediate repair of the storm sewer main, and associated appurtenant structures, to repair and correct the hazardous condition.

Adopted _____

Approved _____

_____
Eric Genrich, Mayor

Attest:

_____
Celestine Jefferies, Clerk

RESOLUTION REQUESTING RECONSIDERATION ON NEED FOR SIDEWALKS AS IDENTIFIED IN COUNTRY CLUB ROAD RECONSTRUCTION

November 2, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY:

WHEREAS, the City of Green Bay and Wisconsin Department of Transportation (WisDOT) have entered into a State/Municipal Agreement (SMA), dated May 14, 2020, for the reconstruction of Country Club Road; and

WHEREAS, the aforementioned SMA provides more than $4,000,000 in Surface Transportation Block Grant (STBG) federal funding to the project; and

WHEREAS, residents adjacent to the project area have identified the following concerns:

1. Sidewalks to be constructed along the project length do not connect to any sidewalks adjacent to the project limits; and
2. Residents report little to no current pedestrian activity in the project area; and
3. Residents believe that the narrow terraces resulting from installation of sidewalk will result in adverse impacts due to plowed snow from Country Club Road landing on the proposed sidewalk; and
4. Several residents have gardens, landscaping, and fences within the public right-of-way that would be adversely impacted by the construction of sidewalk;

NOW, THEREFORE BE IT RESOLVED, the City of Green Bay Common Council respectfully requests WisDOT reconsider the need for installation of sidewalk along the project length in the following priority order:

1. Consideration of no sidewalks on either the east or west sides of the project; or
2. If sidewalks are required, that the be limited to the east side of the project only; or
3. If sidewalks are required to installed on both sides of the project, that the sidewalks on the west side of the project be limited to three (3) feet in width.

Adopted _____

Approved _____

_____
Eric Genrich, Mayor

Attest:

_____
Celestine Jefferies, Clerk

RESOLUTION REQUESTING AN ANNUAL INCREASE TO THE COMMON COUNCIL SALARY

November 7, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY:

WHEREAS, each Alderperson on the City of Green Bay Common Council ("Common Council") is currently compensated $10,233, for a total salary budget of $122,796.00; and

WHEREAS, the Common Council wishes to implement an annual two percent (2%) increase to the compensation for Alderpersons; and

WHEREAS, the 2024 annual increase would amount to each Alderperson being compensated $10,438, for a total salary budget of $125,256; and

WHEREAS, this annual increase shall occur each year on the third Tuesday of April.

NOW, THEREFORE BE IT RESOLVED, the Common Council hereby authorizes an annual two percent (2%) increase to the Alderpersons salary. This annual increase shall be effective on the third Tuesday of April each year.

Adopted _____

Approved _____

_____
Eric Genrich, Mayor

Attest:

_____
Celestine Jefferies, Clerk

RESOLUTION REQUESTING AN INCREASE IN THE MUNICIPAL JUDGE HOURS

November 7, 2023

BY THE COMMON COUNCIL OF THE CITY OF GREEN BAY:

WHEREAS, the Municipal Court Judge is currently a .5 FTE position compensated at an hourly rate of $52.28 for 1,040 budgeted hours for a total salary of $54,371; and

WHEREAS, the Common Council of Green Bay ("Common Council") wishes to increase the Municipal Court Judge to a .65 FTE position for the remainder of their term. This would increase the budgeted hours from 1,040 to 1,352 for a total salary of $70,683; and

WHEREAS, the Municipal Court Judge would remain eligible for the City Pay Plan steps as amended and approved by the Common Council.

NOW, THEREFORE BE IT RESOLVED, the Common Council hereby authorizes the Municipal Court Judge position to be increased to a .65 FTE position. This shall be effective beginning in 2024.

Adopted _____

Approved _____

_____
Eric Genrich, Mayor

Attest:

_____
Celestine Jefferies, Clerk

Human Resources Department
100 North Jefferson Street • Room 500
Green Bay, Wisconsin 54301-5026
www.greenbaywi.gov

Phone 920.448.3147
Fax 920.448.3128

MEMORANDUM

To: Committee of the Whole

From: Mayor's Office

Re: Mayor's Office Community Liaison

Date: November 7th, 2023

RECOMMENDATION

I. The City is recommending to over hire the Community Liaison position for training purposes for the cost of $2,878.

Financial Impact

The Mayor's office will be favorable in its budget by $28,000 due to a vacancy during the first quarter of 2023. The over hire for our Community Liaison, will allow the person who currently serves in that role to lead the training and development of a new staff member. This support will positively impact the services provided by the Mayor's Office, in particular constituent services, and coordination of special events, as the new employee receives needed on the job training in these corresponding areas. This will not have an impact on the 2024 budget.

ZONING ORDINANCE NO. 19-23

AN ORDINANCE ZONING CERTAIN PROPERTY LOCATED AT 641 SOUTH GRANDVIEW ROAD, 3757 VITAL PLACE, 3751 EAST MASON STREET, 3760 EAST MASON STREET, AND 3855 FINGER ROAD AS A PLANNED UNIT DEVELOPMENT DISTRICT FOR PURPOSES OF DEVELOPING THE GRANDVIEW INDUSTRIAL PARK (ZP 23-39)

THE COMMON COUNCIL OF THE CITY OF GREEN BAY DOES ORDAIN AS FOLLOWS:

SECTION 1. Section **44-30**, Green Bay Municipal Code, together with the zoning map referred to therein, is hereby amended by establishing a Planned Unit Development District on the properties listed below and as depicted as Phase 1 on Exhibit A - Location Map and described below:

Parcel ID	Address	Legal description
21-189	3751 E Mason St	LOT 4 OF 53 CSM 232 BNG PRT OF NW1/4 NE1/4 SEC 12 T23N R21E
21-189-1	**3760 E Mason St**	LOT 3 OF 53 CSM 232 BNG PRT OF NW1/4 NE1/4 SEC 12 T23N R21E
21-22	**3757 Vital Place**	LOT 1 OF 53 CSM 232 BNG PRT OF SW/14 SE1/4 SEC 1 T23N R21E
21-22-1	641 **S** Grandview Rd	W 310 FT OF S 399 FT OF SW1/4 SE1/4 SEC 1 T23N R21E EX RDS
21-24	**3855 Finger Rd**	LOT 2 OF CSM 9499 BNG PRT OF SE1/4 SE1/4 SEC 1 T23N R21E

Planned Unit Development Phase 1 area contains 2,187,669 sq ft/50.22 acres, more or less.

SECTION 2. Pursuant to Chapter 44, Article XX, Green Bay Municipal Code, as they apply, the following conditions are imposed:

A. INDUSTRIAL PARK OVERVIEW. The Grandview Industrial Park (GIP) is a planned development designed to provide a high-quality location **for industrial businesses** and promote the efficient and effective growth of light-medium industrial businesses within the greater Green Bay market, while also integrating land area suitable for supportive commercial retail and service uses.

GIP will initially consist of five parcels **totaling** approximately 50 acres of **land** area. This is the first phase of a larger industrial park that will ultimately include approximately 30 parcels, comprising approximately 375 acres of land. It is located on the east side of the city on both sides of the 3700-3800 Blocks of East Mason Street approximately one and a half miles east of Interstate 43, nine and a half miles from Interstate 41 and about 11 miles from the Green Bay Austin Straubel International Airport.

Through appropriate land use regulation, supportive infrastructure, proximity to the

interstate highway system and nearness of work force, the City has set the stage for a regional industrial "campus" that has been identified as a necessity in the Green Bay Smart Growth Comprehensive Plan and 2021 Commercial Market Study.

GIP is intended to be primarily a light to medium intensity industrial park supporting production, processing, storage, distribution, and transportation uses. Select commercial and workforce-oriented support uses such as restaurants, business and personal services, and vehicle-oriented businesses are also permitted along arterial roadways. It is important to note that regulation within this PUD may be differentiated based on the industrial or commercial nature of the use

B. LAND-USE REGULATIONS. The only permitted or conditional uses that may be established and/or maintained within the PUD area shall be those uses listed below. All other uses shall be specifically prohibited within the PUD area.

Table 1-1. Principal Uses in the PUD

Use	GIP	Development Standards	Location limited
Production, Processing, and Storage			
Agricultural Uses	P		
Limited production and processing	P	X	
Light industrial uses	P		
General industrial uses	C		
Heavy industrial uses	C		
Contractor yard	C		
Dry cleaning establishment, commercial laundry	P		
Research and development facility	P		
Warehousing (not including self-service)	P		
Wholesale and distribution facility	P		
Transportation Uses			
Ground transportation service	C		
Motor freight terminal	C	X	
Package delivery service	P		
Public Service and Utility Uses			
Public safety/service facility	P		
Telecommunication tower, wireless communication facility	C	X	
Substation/distribution equipment	C		
Solar or Wind Energy Systems	C		
Office and Mixed Uses			
General office	P		
Government office	P		
Bank or other financial institution	P		Arterial Road
Clinic, healthcare facility	P		Arterial Road
Commercial Uses			
Accommodation and Food Service Uses			

Restaurant,* not including drive-through	P		Arterial Road
Restaurant* with drive-through	P		Arterial Road
Service Businesses			
Business service**	P		
Building maintenance, janitorial service	P		
Catering service	P		
Printing and publishing establishment	P		
Small appliance repair service	P		
Tool/equipment rental facility	P		
Animal hospital, veterinary clinic	C	X	Arterial Road
Animal grooming establishment	C		
Animal boarding facility, kennel	C	X	Arterial Road
Retail Sales			
General retail sales **	C		Arterial Road
Building material sales	P	X	
Contractor showroom	P		
Greenhouse, garden supply store	C		
Commercial Recreation and Entertainment			
Health clubs, fitness centers	C	X	Arterial Road
Vehicle Services			
Automobile rental	C	X	Arterial Road
Convenience store	P		Arterial Road
Fuel/gas/service station	P	X	Arterial Road
Motor vehicle repair, major	C		
Motor vehicle repair, minor	P		Arterial Road
Drive-through facility	C	X	Arterial Road
Educational Uses (Amd. GO 10-18)			
School, specialty or personal instruction, etc.	C	X	
Group daycare center, preschool (9 or more children)	C	X	Arterial Road

Note: P = Permitted Use; C = Conditional Use

* Any establishment at which primarily alcoholic beverages are served must also meet the requirements of Green Bay Municipal Code, Chapter 4 – Alcohol Beverages.

** See Land Use Definitions section of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code for complete list of uses.

Table 1-2. Accessory Uses in the PUD:

Use	GIP	Development Standards	Location Limited
Antennas, satellite dishes, and similar equipment	P	X	
Carwash	C	X	
Music (outdoor live or amplified music)	C		Arterial Road
Off-street loading docks	P		
Outdoor display of vehicles	C	X	
Outdoor commercial recreation	C	X	Arterial Road
Outdoor sales, display, and storage	P	X	
Parking (surface)	P		
Parking (structured)	P		

Parking and storage of vehicles licensed to a business	P	X	
Signs, as regulated by Chapter 30	P		
Small wind energy systems	P	X	
Solar energy systems	P	X	
Telecommunication facilities	C	X	
Warehousing, incidental repair, or processing necessary to conduct a permitted principal use, conducted within the principal building	P	X	Arterial Road
Waste and recycling storage	P	X	

Note: P = Permitted Use; C = Conditional Use

1. Table 1-1 and 1-2 above lists all permitted and conditional uses allowed in the PUD.
   a. Permitted uses. Uses specified with a "P" are permitted in the PUD or districts where designated, provided that the use complies with all other applicable provisions of this PUD.
   b. Conditional uses. Uses specified with a "C" are allowed as a conditional use in the PUD where designated, provided that the use complies with all other applicable provisions of this PUD.
   c. Prohibited uses. Any use not listed as either "P" (permitted) or "C" (conditional) or any use not determined by the Zoning Administrator to be substantially similar to a use listed as permitted or conditional shall be prohibited in the PUD.
   d. Specific development standards. Permitted and conditional uses specified with an "x" under the development standards column shall be subject to the standards identified in Article XVI of the Green Bay Zoning Code, Chapter 44, the City of Green Bay Municipal Code and below.
   e. Specific uses are only permitted on parcels with arterial roadway frontage as listed in the use tables and depicted on Exhibit B.

2. Accessory Structures: An accessory structure shall be considered attached and an integral part of the principal structure when it is connected by an enclosed passageway. Such structures shall be subject to the following requirements:
   a. The structure shall meet the required yard setbacks for a principal structure, as established for the PUD.
   b. For Commercial uses, the total floor area of an accessory structure shall not exceed the ground floor area of the principal building located on the same lot.
   c. The structure shall not exceed the height of the principal building to which it is attached.

3. Outdoor storage and Display:
   a. Outdoor storage areas shall not exceed 35 percent of the lot area and shall be contiguous to the principal use on the site.
   b. Solid or a minimum of a 90 percent screen is required for outdoor storage and loading/service bays unless the loading/service bay doors are an integral

and necessary component of the principal building and operation of the use, as determined by the Zoning Administrator. The fence shall be at least six feet in overall height and shall consist of wood, vinyl, or masonry material.

c. All outdoor storage, outdoor display, employee and customer parking, drives and other facilities are required to be surfaced as regulated in Section 44-1694 of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code.
d. No material/product may be stored higher than the screening.
e. No outdoor storage shall encroach within a required setback.
f. Outdoor storage shall be completely screened in compliance with Section 44-1964 of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code and the Landscape Section of this PUD.
g. Outdoor sales and display areas shall be separated from any adjacent street, sidewalk, or public walkway by a low landscaped screen, in compliance with Section 44-1918 of the City of Green Bay Zoning Code Chapter 44, Green Bay Municipal Code.

C. SITE RELATED REGULATIONS. The purpose of this section is to regulate the development of land in an integrated and innovative fashion; allow for flexibility in site design; and to encourage development that is sensitive to environmental, cultural, and economic considerations.

1. Dimensional and area requirements. Dimensional and area requirements shall meet the standards in the commercial and industrial districts as enumerated within Articles VIII and IX of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code, with the following modifications:
   a. Lot(s). Minimum lot width and lot area shall be regulated as follows:
      (1) Minimum lot area: 10,000 sq. ft. for commercially used lots and 40,000 sq. ft. for industrially used lots.
      (2) Minimum frontage: 75 feet for commercially used lots and 200 feet for industrially used lots.
   b. Floor area ratio (FAR): Minimum is 0.25 for both commercially used lots and industrially used lots.
   c. Setbacks:
      (1) Front yard setback, principal structures. Minimum 25 feet.
      (2) Front yard setback, accessory and/or ancillary structures. Minimum 100 feet. Additionally, no accessory and/or ancillary structures shall be closer to the right-of-way than the principal structure(s) on the site.
      (3) Side yard Setback. 10 feet.
      (4) Rear yard setback. 15 feet.
      (5) The side façade of a corner building adjoining a public street shall maintain the minimum front yard setback for both the front and side facades.
      (6) When a side or rear yard adjoins a residential use, the side yard or rear yard setback is 25 feet with screening as regulated by the landscaping standards of this PUD (see Section 2.C.3.d.).
      (7) Special setbacks. No detached accessory structure shall be located closer

than three (3) feet from the principal structure. Distance between structures shall be measured from wall to wall.

d. Impervious Surface. Impervious surfaces shall meet the standards in the commercial and industrial districts as enumerated within Articles VIII and IX of the Green Bay Zoning Code, Chapter 44, Green Bay Municipal Code, with the following modifications:
   (1) Maximum impervious surface. 70% in both the commercially used lots and industrially used lots.
   (2) Special Considerations. The maximum impervious surface requirement may be increased to 80% if green infrastructure elements such as bioretention areas/ rain gardens, bioswales, green roofs, etc. are installed at a 1.5 to 1 (impervious to green infrastructure) ratio.

2. Access, Circulation and Parking. Access, circulation, parking and outdoor storage or display areas on lots throughout the PUD area shall meet the standards as set forth within the Green Bay Zoning Code, Article XVIII of the Green Bay Municipal Code, and as modified as follows:
   a. Industrial use drives. If possible, separate individual drives shall be established for customer/employee parking lot access and commercial truck traffic access.
   b. Areas used for permanent screened outdoor storage:
      (1) Interior Landscaping. Permanent screened outdoor storage areas are exempt from the interior landscaping and island requirements of Section 2.C.3.e.
      (2) Pedestrian and Bicycle access and Parking. Permanent screened outdoor storage areas are exempt from the pedestrian and bicycle access and parking regulations of the Green Bay Zoning Code, Article XVIII of the Green Bay Municipal Code.

3. Landscaping. Landscaping for any development site within the PUD area shall meet the standards as set forth below:
   a. All undeveloped areas of a development site shall at a minimum be covered in vegetative ground cover as well as:
      (1) One (1) tree and three (3) shrubs per 7,500 square feet of total lot area for a commercial use and one (1) tree and two (3) shrubs per 10,000 square feet of total lot area for Industrial uses.
      (2) Required trees and shrubs are encouraged to be organized in an attractive and ecologically beneficial configuration that may include grouping and variations of plan species. The use of native plants is ideal.
      (3) All landscape material shall be installed to current industry standards.
      (4) All ground cover, landscaping and screening features shall be kept free of refuse and debris.
      (5) Maintenance and replacement of landscape materials on the site shall be the responsibility of the occupant/landowner. Replacement of dead or dying plants shall be required to take place within no more than one planting season.

(6) Landscaping required within subsection b-f below may count towards satisfying this tree/shrub requirement.

b. Frontage Landscaping. In addition to the requirements of Section 2.C.3.a, all land area located along a public right-of-way shall contain:
   (1) A minimum of one (1) deciduous, ornamental, or evergreen tree for every 30 linear feet of right-of-way/street frontage.
   (2) Required frontage trees are encouraged to be organized in an attractive and ecologically beneficial configuration that may include grouping and variations of plan species.

c. Buffering Outdoor Storage. All permanent outdoor storage areas shall be screened from view and include:
   (1) A solid fence or wall that is impervious to sight.
   (2) Fence or wall shall be a minimum of eight (8) feet of in height.

d. Buffer from Residential. Property lines adjacent to lands currently zoned residential or that have future residential land use designation in the City's Comprehensive Plan shall include:
   (1) A screening element such as a fence, berm or evergreen trees/shrubs that is 80% impervious to sight year-round running the length of the property line adjacency.
   (2) Screening shall be a minimum of 8 feet high at installation if a fence/berm or at plant maturity.

e. Interior Parking Facility Landscaping. Interior parking lot landscaping regulations apply to all parking facilities containing 25 or more parking stalls designed/intended to be used by visitors, customers, and employees. The goal is to minimize the expansive appearance of hard surface areas and provide shade trees that reduce the "heat island" affect associated with such development. Internal parking facility landscaping shall consist of:
   (1) Landscaped islands shall be provided at the end of all parking rows and within the rows of parking spaces so that there are no more than 15 consecutive parking spaces without an island.
   (2) Landscape islands shall have a minimum interior dimension of at least 10 feet in width and 15 feet in length.
   (3) Landscape islands shall be planted with vegetative ground cover and a minimum of 1 shade or deciduous tree that is hardy and salt resistant.

f. Building Foundation Landscaping. Landscaping required around customer and office areas shall be regulated as follows:
   (1) A minimum of 5 feet of landscaped area shall be provided around a minimum of 60% of a structure's foundation, excluding areas utilized for loading/service.
   (2) Plant material shall be decorative such as ornamental trees, flowering shrubs and perennials.

4. Stormwater Management and Grading. A storm water management and grading plan meeting the standards established by the Department of Public Works, Brown County, and the State of Wisconsin shall be submitted to and approved by the

City prior to the issuance of building permits. The purpose of these standards to promote the use of green infrastructure or vegetated stormwater management measures, where suitable, to manage stormwater runoff volumes and quality.

a. Scope. Storm water management and grading shall be comprehensive and take into account expected build-out of the entire PUD area as depicted on Exhibit A.
   (1) A regional stormwater management approach may be utilized for any and all new developments; if so, the site may be required to buy in and be a part of the regional plan. This will be required upon approval of the Department of Public Works.
b. Additional Function.
   (1) Human-scale interest and native planting should be included.
   (2) Stormwater management facilities shall function not only as a utility but also as site amenity. This applies to both regional and site specific.
      a) Site amenities include but not limited to walking paths, sitting areas, art, educational/interpretive signage, etc.
   (3) It is encouraged to include suitable green infrastructure practices in streetscapes (tree boxes, sidewalk bioretention areas, curb bump-outs).
   (4) In areas where infiltration is needed to manage stormwater or where soils are highly erodible, these areas shall be identified on erosion control plans and specifically protected from disturbance during and after development.
   (5) Stormwater management areas such as bioretention areas, rain gardens, stormwater trees, or other plantings may count toward required landscape minimums.

5. Refuse and Mechanical Equipment. Screening of refuse material containers and mechanical equipment throughout the PUD area shall meet the standards as set forth within the Green Bay Zoning Code, Article XIX-Division 3 of the Green Bay Municipal Code, and as modified as follows:
   a. Refuse storage and ground mechanical equipment shall not be located closer to the right-of-way than the front façade of the principal structure located on the same lot, regardless of minimum setbacks.
   b. Wall or roof mounted mechanical equipment is regulated by Architectural Standards Section 2.D.2.h.

6. Lighting. Lighting throughout the PUD area shall meet the standards as set forth within the Green Bay Zoning Code, Article V-Division 8 of the Green Bay Municipal Code and further regulated as follows:
   a. Pedestrian oriented lighting is required for all walkways/trails and building entrances.
   b. Wall or roof-mounted lighting shall be integrated into overall building design/architecture. Fixtures shall be consistent for either the entire building or alternatively for each of the building's individual units.

7. Signage throughout the PUD area shall be regulated as follows:
   a. Signage shall meet the standards for the Business Park District (BP) as set forth in Chapter 30, Article II of the Green Bay Municipal Code with the following additions.
   b. Industrial Park Identity Signage.
      Signs identifying the industrial park itself as well as identifying uses located within the PUD boundaries, though they may not be on the parcel for which the use is located.
      (1) Must be located as depicted on Exhibit B. These are highly visible locations on arterial roads near entrances to the industrial park boundaries.
      (2) Industrial Park identity signage shall be limited to the monument style of signage no greater than 300 square feet in area (per side) and no greater than 10 feet in height.
   c. Monument Signage for Individual Parcels
      (1) Maximum height of a monument sign is limited to no greater than 10 feet in height.
   d. Campus way finding signage (internal operations for wall signs for industrial use sites)
      (1) Directional signage is limited to no greater than 64 total square feet per sign.
      (2) Any directional signage exceeding standards for the Business Park District (BP) shall be counted towards the overall maximum attached sign area for signs attached to buildings.
      (3) No greater than 10 percent of a directional sign may be used for branding purposes.
   e. Campus way finding signage (internal operations for freestanding signs for industrial use sites)
      (1) Directional signage is limited to no greater than 32 total square feet per sign.
      (2) A directional sign is permitted along a travel route within the campus. Multiple freestanding directional signs are permitted if an individual freestanding directional sign is separated by a minimum of 500 feet from another freestanding directional sign.
      (3) Sign height is limited to 8 feet.
      (4) No greater than 10 percent of a directional sign may be used for branding purposes.

D. STRUCTURAL DESIGN REGULATIONS. The purpose of this section is to regulate the design and materials used for buildings within the PUD area to maintain and enhance the aesthetic, function, and values of property within the greater area.

1. Applicability. Architectural design of new construction, additions to existing

buildings, and alterations to existing buildings within the PUD area shall meet the standards as set forth below:

a. New Construction. The requirements of this Section shall apply to all structures and buildings within the PUD area constructed after the effective date of its adoption. Future expansions of structures shall be compatible with the existing structures.
b. Exceptions and Appeals. Exceptions to the Architectural Design Standards may be granted by the Director of Community and Economic Development. Exceptions can include: 1. permission to substitute building materials; 2. construction of comparable quality or design; or 3. to enable unique and inventive architectural concepts within the PUD.
   (1) Denial by the Director of Community and Economic Development of the requested exception may be appealed to the Plan Commission. Appeals shall be made within thirty (30) days of the date of the denial.

2. Architectural Design Standards.
   a. Orientation.
      (1) Front façades shall face the street right-of-way, land area dedicated to pedestrian ways or internal drive aisle (if building does not front the right-of-way).
      (2) Service or loading areas shall not be permitted between the building and the street right-of-way.
   b. Height. The maximum height on commercially used lots shall be thirty-five (35) feet, including screening for rooftop mechanicals. The maximum height in industrially used lots shall be fifty (50) feet, including screening for rooftop mechanicals.
      (1) Smokestacks, water towers, and similar structures associated with industrial uses may exceed the maximum height limit as specified by conditional use in Chapter 44, Article IX and Article II, Section 44-83 of the Municipal Code.
      (2) Heights of structures may be increased with a conditional use permit as specified by conditional use in Chapter 44, Article II, Section 44-83 of the Municipal Code.
   c. Exterior Materials. Building materials should be durable and appropriate for the district.
      (1) Commercial structures.
         a) Exterior building façades shall be predominately:
            i. Brick or brick veneer.
            ii. Stone or stone veneer.
            iii. Glass (curtain/storefront).
            iv. Windows and doors.
         b) The following materials may be used as <u>secondary building façade materials</u>. Secondary materials shall not cumulatively exceed 40% of the front and side façades or 75% of the rear façade.
            i. Concrete panels.

ii. Decorative or split-face block.
iii. Architectural/decorative metals.
iv. Wood or wood composite.
v. Cementitious panels/siding.
vi. Stucco or exterior insulation and finish system (EIFS).

c) The following materials may be used as accent building façade materials. Accent materials shall not cumulatively exceed 10% of the front and side façades or 10% of the rear façade.
i. Vertical vinyl or corrugated metal siding.
ii. Concealed fastener metal panels.

d) The following materials are prohibited exterior building façade materials.
i. Smooth face or non-decorative block.
ii. Asphaltic or fiberglass siding.
iii. Non-decorative metal panels or corrugated metal.
iv. Plywood, chipboard, rough texture wood siding, or other non-decorative wood.
v. Imitation/"fake" brick or stone and gravel aggregates.

(2) Industrial structures.

a) Exterior building façades shall be predominately:
i. Brick or brick veneer.
ii. Stone or stone veneer.
iii. Concrete panels.
iv. Cementitious panels/siding.
v. Concealed fastener metal panels.
vi. Windows and doors.

b) The following materials may be used as accent building façade materials. Accent materials shall not cumulatively exceed 10% of the front and side façades or 10% of the rear façade.
i. Vinyl or corrugated metal siding.
ii. Decorative or split-face block.
iii. Architectural/decorative metals.
iv. Wood or wood composite.
v. Stucco or exterior insulation and finish system (EIFS).

c) The following materials are prohibited exterior building façade materials:
i. Smooth face or non-decorative block.
ii. Asphaltic or fiberglass siding.
iii. Non-decorative metal panels or corrugated metal.
iv. Plywood, chipboard, rough texture wood siding, or other non-decorative wood.
v. Imitation/"fake" brick or stone and gravel aggregates.

(3) Material substitutions may be permitted as an exception per Section 2.D.1.a. of this PUD.

d. Façade Articulation. Buildings shall be designed to provide interest and

variety. Flat, unadorned walls should be avoided.

(1) Façade lengths for industrially used structures shall not be greater than one hundred (100) feet without articulation, and façade lengths for commercially used structures shall not be greater than fifty (50) feet without articulation. Articulation includes, but is not limited to:
   a) Division of façade into individual components (i.e. storefronts, distinct uses) through the use of architectural elements such as entrances, arcades, windows, balconies, awnings, marquees, etc.
   b) Recesses or projections of the main façade plane.
   c) Recesses or projections of upper floors from the ground floor façade plane.
   d) Vertical division using different materials and textures.
   e) Roof form variation such as the change in roof lines or roof types.

(2) Minimum fenestration. Facades facing the right-of-way or pedestrian way/internal drive aisle for which the building fronts (if building does not front the right-of-way) shall consist of a minimum percentage of windows and doors to promote a visual connection. The principal structure on a corner property that faces two public rights-of-way shall be treated as two front facades. Mirrored, smoked, or heavily tinted glass is discouraged. Windows should be proportional with doors in height and design. The minimum percentage of windows and doors are based on floor and use as follows:
   a) Ground floor, industrial use. Total area of windows and doors shall comprise no less than ten (10) percent of the ground floor customer and office areas.
   b) Ground floor, commercial use. Total area of windows and doors shall comprise no less than ten (20) percent of the ground floor façade area.
   c) Upper floors, all uses. Total area of windows and doors shall comprise no less than ten (10) percent of the total façade area above the ground floor.

e. Building Entrances. Main entrances shall be clearly identified and articulated using detailing, distinctive materials and/or colors, projections, recesses, or another comparable element.
   (1) Main entrances are defined as those regularly used by employees, customers, and/or the public.
   (2) Main entrances shall be visible from the right-of-way or pedestrian way/internal drive aisle for which the building fronts (if building does not front the right-of-way).

f. Patios, Decks and Balconies.
   (1) Ground level patios and decks facing the right-of-way or pedestrian way/internal drive aisle for which the building fronts (if building does not front the right-of-way) should be bordered with treatment such as landscaping.
   (2) Exterior stairs leading to a deck or balcony shall not be permitted on

the front or right-of-way side of buildings

g. Accessory structures. Accessory structures shall match the character of the principal structure, reflected in colors, materials, windows, and architectural features.
h. Mechanical and Exterior Building Systems. Mechanical and exterior building systems should be integrated into the overall building design.
   (1) Roof-mounted equipment shall be screened, preferably by parapet walls. Screening shall be architecturally compatible with the structure which it is attached, be of identical or substantially similar materials used on the nearest building façade and designed as an integral part of the building.
   (2) Wall mounted equipment are not permitted on the front or any right-of-way facing side of the building.
   (3) Refer to Section 2.C.5 of the PUD.

SECTION 3. The provisions of this ordinance, including, without limitation, the granting of a conditional-use permit and all obligations, conditions, restrictions, and limitations related thereto shall run with and be jointly and severally binding upon the fee simple owner and the beneficial owner of all or any portion of the subject property. All obligations, requirements, and rights of the owner shall run with the land and shall automatically be assigned to be binding upon and inure to the benefit of its successors and assigns, including, but not limited to, any entity acquiring any financial interest in the subject property and/or any subsequent owner and/or beneficial owner of all or any portion of the subject property.

SECTION 4. Each exhibit which is attached to this ordinance is deemed to be and is expressly made a part of and incorporated into this ordinance to the same extent as if each such exhibit, and the plans identified therein, had been set forth in its entirety in the body of this ordinance.

SECTION 5. All ordinances or parts of ordinances, in conflict herewith are hereby repealed.

SECTION 6. In addition to all other remedies available to the City of Green Bay, the City may decline to issue any building or other permits otherwise required by any ordinance of this City while any violation of this ordinance remains uncured.

SECTION 7. If any provision in this ordinance is held invalid or unconstitutional by any court of competent jurisdiction, such a decision shall not affect the validity of any other provision of this ordinance. It is hereby declared to be the intention of the City of Green Bay that all provisions of this ordinance are separable.

SECTION 8. This ordinance shall not take effect until a public hearing is held thereon as provided by Chapter 44, Article II, Division 2, Section 44-82 Zoning Amendments, Green Bay Municipal Code, and the adoption and publication of this ordinance.

Dated at Green Bay, Wisconsin, this _____ day of _____, 2023.

APPROVED:

_____
Eric Genrich, Mayor

ATTEST:

_____
Celestine Jeffreys, City Clerk

jl:
10.13.23

Attachments:
Exhibit A - Location Map
Exhibit B – Land-Use Map

EXHIBIT A: LOCATION MAP

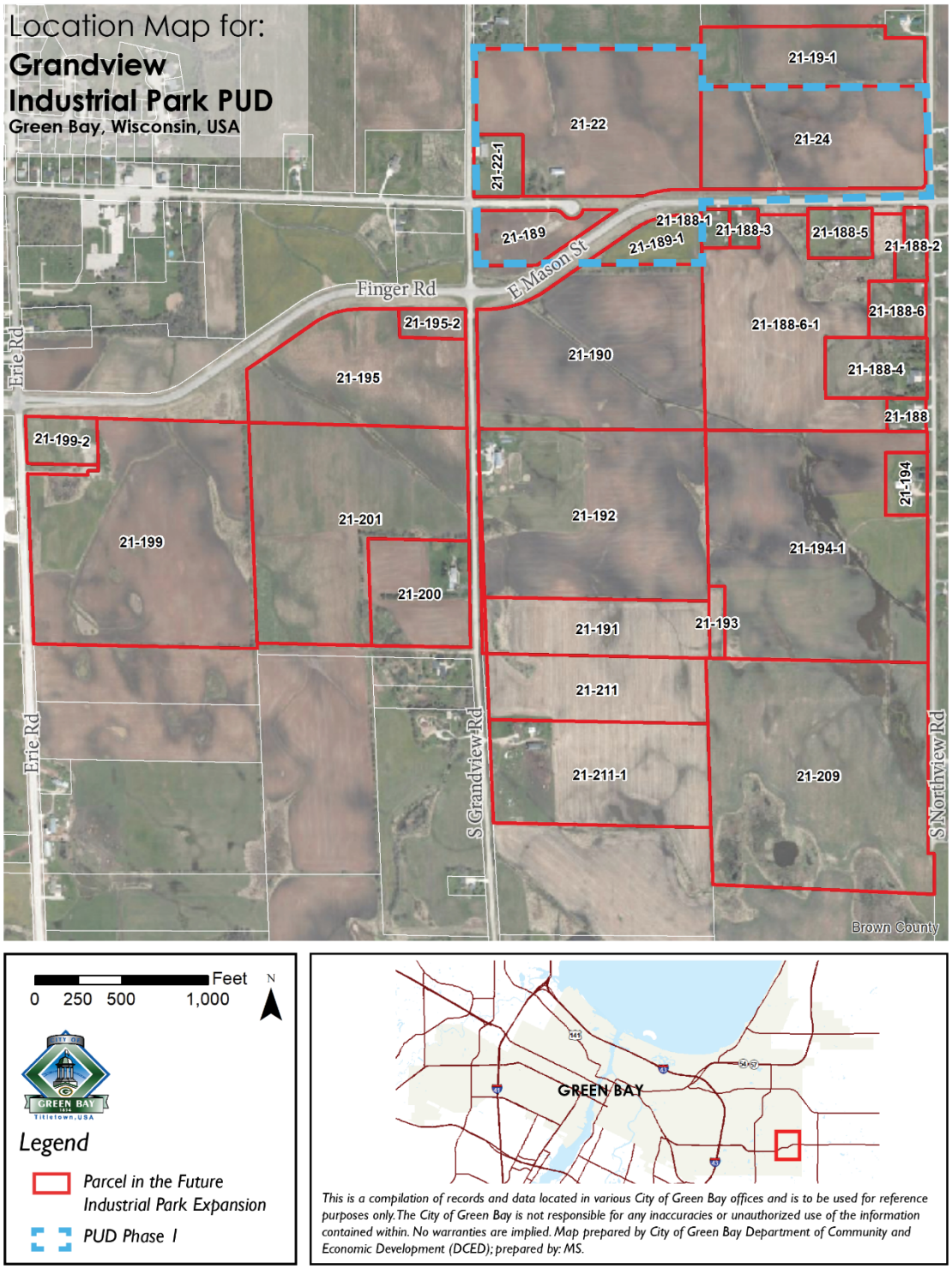
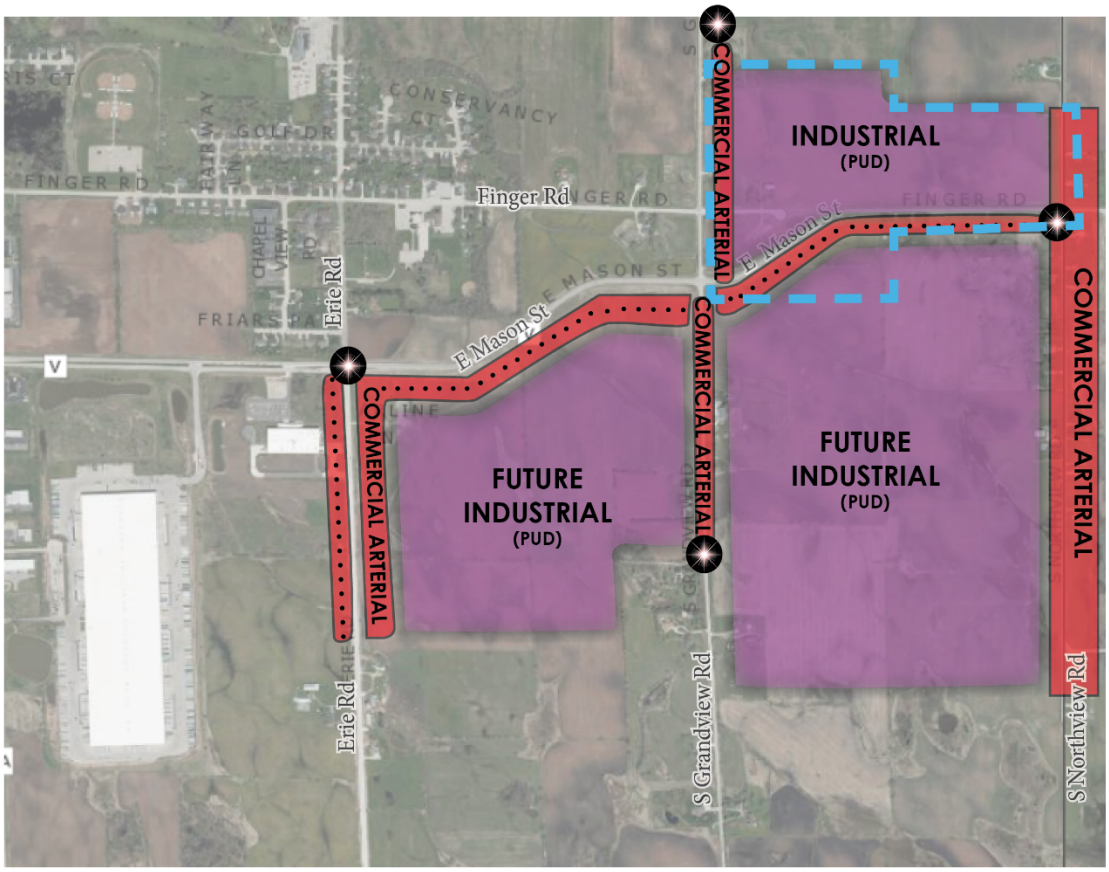
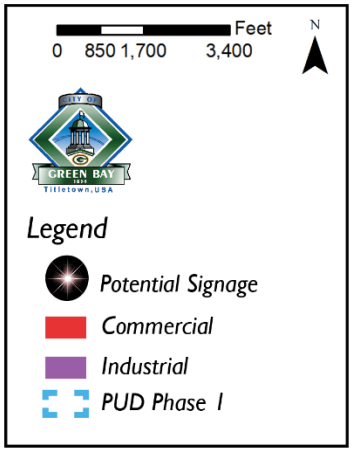
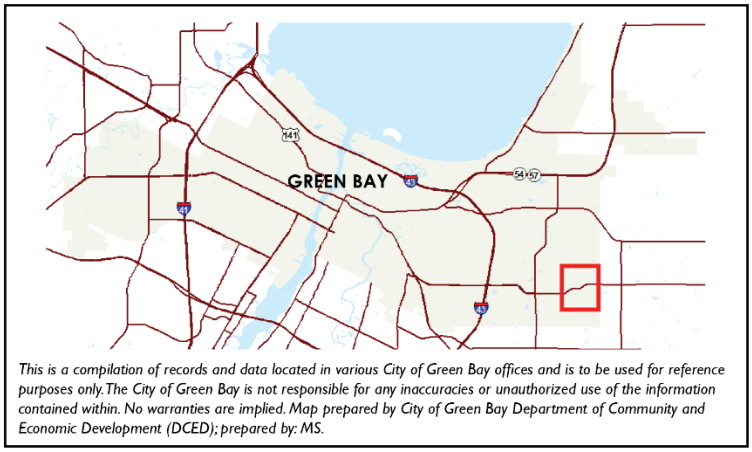


EXHIBIT B: LAND-USE MAP

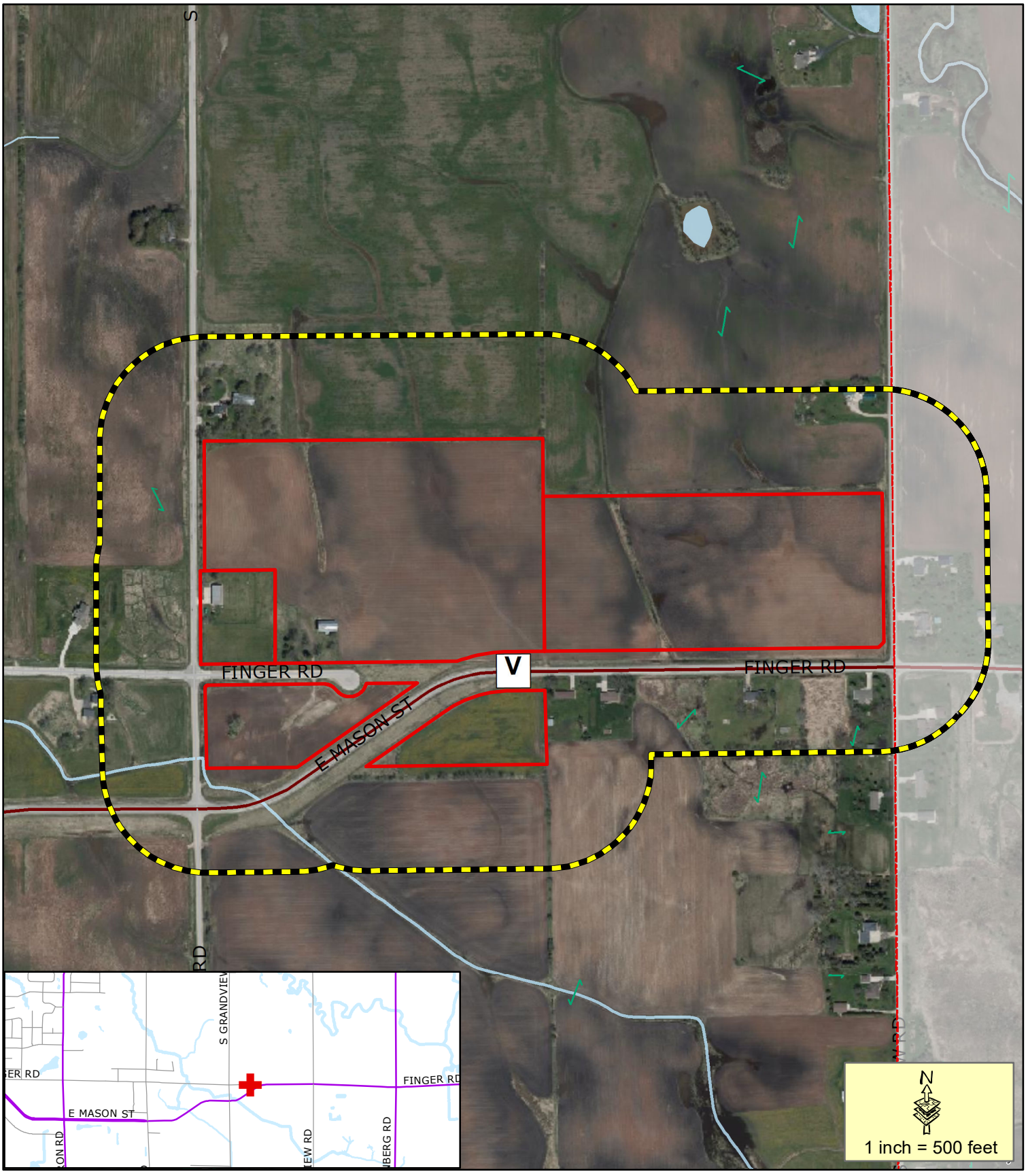
Land-Use Composition for:
Grandview
Industrial Park PUD
Green Bay, Wisconsin, USA







This is a compilation of records and data located in various City of Green Bay offices and is to be used for reference purposes only. The City of Green Bay is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied. Map prepared by City of Green Bay Department of Community and Economic Development (DCED); prepared by: MS.



Proposed CUP

400' Property Owner Notice

This is a compilation of records and data located in various City of Green Bay offices and is to be used for reference purposes only. The City of Green Bay is not responsible for any inaccuracies or unauthorized use of the information contained within. No warranties are implied.
Map prepared by DB

Zoning Petition (ZP 22-10)
Proposed Planned Unit Development for Industrial Park (Phase I) at 641 Grandview Rd, 3714 E Mason St, 3760 E Mason St, and 3731 Finger Rd

CITY OF GREEN BAY 1854 Titletown, USA

GENERAL ORDINANCE NO. 22-23

AN ORDINANCE
AMENDING SECTION 40-71,
GREEN BAY MUNICIPAL CODE,
RELATING TO TRAFFIC REGULATIONS

THE COMMON COUNCIL OF THE CITY OF GREEN BAY DOES ORDAIN AS FOLLOWS:

SECTION 1. Section 40-71, Green Bay Municipal Code, is hereby amended to remove the following 2-WAY YIELD condition:

HAZEL STREET, at Howard Street

SECTION 2. Section 40-71, Green Bay Municipal Code, is hereby amended to establish the following 2-WAY STOP condition:

HAZEL STREET, at Howard Street

SECTION 3. All ordinances, or parts of ordinances, in conflict herewith are hereby repealed.

SECTION 4. Effective date. This ordinance shall take effect on and after its passage and publication.

Dated at Green Bay, Wisconsin this _____ day of _____, 2023.

APPROVED:

_____
Eric Genrich, Mayor

ATTEST:

_____
Celestine Jeffreys, City Clerk

11/7/23

MISCELLANEOUS ORDINANCE NO. 7-23

AN ORDINANCE REDISTRICTING THE BOUNDARIES OF THE ALDERMANIC DISTRICTS OF THE CITY OF GREEN BAY

THE COMMON COUNCIL OF THE CITY OF GREEN BAY DOES ORDAIN AS FOLLOWS:

SECTION 1. The Common Council of the City of Green Bay hereby creates twelve (12) aldermanic districts for the City which are composed of the following wards, as established by resolution pursuant to Wis. Stats. § 5.15:

ALDERMANIC DISTRICT	WARDS
1	1, 2, 3, 4, 4A, 5
2	6, 7, 8, 8A
3	9, 10, 10A, 11, 11A, 12
4	13, 14, 14A, 15
5	16, 17, 18, 19, 19A
6	20, 20A, 21, 22
7	23, 24, 25, 26, 27
8	28, 29, 30, 31, 31A, 32, 32A, 32B
9	33, 34, 35, 36
10	37, 38, 39, 39A, 40
11	41, 42, 42A, 43, 44
12	45, 46, 47

SECTION 2. The boundaries of said aldermanic districts are portrayed on a map attached hereto as Exhibit A and made part hereof as though fully incorporated herein.

SECTION 3. All ordinances, or parts of ordinances, in conflict herewith are hereby repealed.

SECTION 4. This ordinance shall take effect on and after its passage and publication.

Dated at Green Bay, Wisconsin, this _____ day of _____, 2023.

APPROVED:

_____
Mayor, Eric Genrich

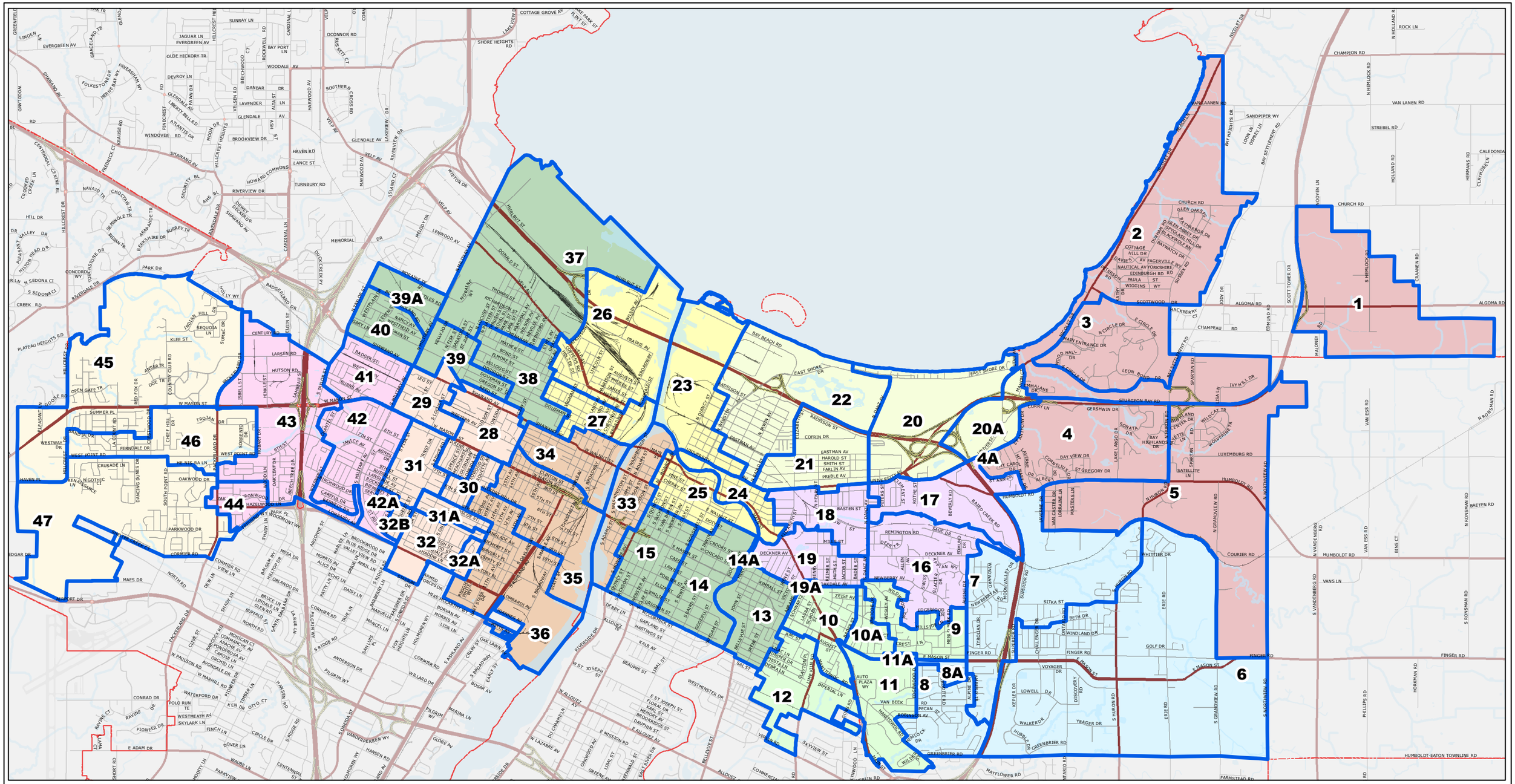
ATTEST:

_____
Clerk, Celestine Jeffreys

November 7, 2023

Exhibit A

Map of the Wards
of the City of Green Bay


1
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31A
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32A
32B
33
34
35
36
37
38
39
39A
40
41
42
42A
43
44
45
46
47
4A
8A
CHURCH RD
VAN LANEN RD
STREBEL RD
HOLLAND RD
ALGOMA RD
CHAMPEAU RD
SCOTTWOOD DR
SCOTT TOWER DR
EDMUND RD
MALONEY RD
S HEMLOCK RD
HOOYEN LN
CHAMPION RD
N HEMLOCK RD
N HOLLAND RD
ROCK LN
CALEDONIA
HERMANS RD
CLAYMORE LN
ROANE N RD
SANDPIPER WY
BAY HEIGHTS DR
LOON LN
OSPREY LN
BAY SETTLEMENT RD
NORTHERN DR
HILDALE DR
CHURCH RD
GLEN OAKS DR
RAYMOOR DR
DUNHAM GLEN DR
SPRUCE HILL DR
BLACKTHORN AV
COTTAGE HILL DR
BAYWATCH DR
DAVIES AV
FAGERVILLE WY
NAUTICAL AV
YORKSHIRE
EDINBURGH RD
PAULA ST
WIGGINS WY
SUSSEX RD
PETERSON RD
KATHY DR
JODY DR
HACKBERRY CT
N CIRCLE DR
E CIRCLE DR
MAIN ENTRANCE DR
WOOD HALL DR
SCHOOL DR
LEON BOND DR
ANN ESTHER DR
SPARTAN RD
IVY HILL DR
LESA LN
MCEMMALANE DR
CURRY LN
GERSHWIN DR
SONATA DR
LAKE LARGO DR
BAY HIGHLANDS DR
WILDCAT TR
WOLVERINE TR
SATELLITE LN
LUXEMBURG RD
HUMBOLDT RD
N GRANDVIEW RD
WHITTIER DR
COURIER RD
N VANDENBERG RD
VAN ESS RD
BINS CT
N RONSMAN RD
BAETEN RD
VANS LN
S VANDENBERG RD
S RONSMAN RD
HUMBOLDT-EATON TOWNLINE RD
FARMSTEAD RD
ONTARIO RD
E MORNINGVIEW RD
HORKMAN RD
PHILLIPS RD
ERIE RD
S GRANDVIEW RD
S HURON RD
E MASON ST
FINGER RD
GOLF DR
WINDLAND DR
SITKA ST
BETH DR
CHALLENGER DR
KEPLER DR
LOWELL DR
DISCOVERY RD
VOYAGER DR
WALKER DR
YEAGER DR
HUBBARD DR
GREENBRIER RD
MAYFLOWER RD
AUTO PLAZA WY
VAN BEEK RD
BORNSON AV
PECAN ST
MANITOWOC RD
MENOMINEE DR
WILSON DR
GREENBRIER RD
SKYVIEW ST
PERKINS DR
ALTHEA DR
MEN'S PLACE
NEWBERRY AV
NEWBERRY RD
WYNDHAM RD
HOBNOB VALLEY DR
GLACIER DR
SWISS DR
ALPINE RD
TYROLEAN DR
CHALET ENGLISH DR
MEN'S PLACE
EDGEWOOD DR
WESLEY AV
ZEISE AV
DECKNER AV
REMINGTON RD
SAGE DR
IDEAL TR
EDMUND DR
BAIRD CREEK PKWY
BAIRD GREEN DR
ROTHE ST
BEVERLY RD
BASTEN ST
MILL ST
KIMBALL ST
NEWBERRY AV
HARRIS ST
REIMER ST
HUTH ST
JACOB ST
IMMEL ST
HARRIS ST
ALLEN ST
HAROLD ST
SMITH ST
FARLIN AV
PREBLE AV
COFRIN DR
RADISSON ST
EASTMAN AV
ELIZABETH ST
W WALNUT ST
W BROADWAY
S WASHINGTON ST
S ADAMS ST
S MONROE AV
S JEFFERSON ST
S MADISON ST
S WASHINGTON ST
S MONROE AV
S ADAMS ST
S JEFFERSON ST
S MADISON ST
S BROADWAY
S MILITARY AV
S LIBERTY AV
S MONROE AV
S ADAMS ST
S JEFFERSON ST
S MADISON ST
S WASHINGT