

## Board of Park Commissioners Project Summary

### **Brewer Park Easement and Maintenance Agreement**

**Project No: n/a**

### **Project Approval Request**

#### **Scope of Work:**

This request is for approval of an easement and maintenance agreement with the City of Fort Wayne Board of Stormwater Management, associated with planned improvements in Brewer Park. This easement is required to protect stormwater infrastructure that will be installed as part of the Brewer Park Redevelopment Project. See the attached agreements for more detailed information.

#### **Board Approval:**

The Board has previously approved this agreement by an email vote, and today we are following up to get that approval on the record.

At this time, I would like to request approval of this easement and maintenance agreement as described above.

The Fort Wayne Parks and Recreation and the Board of Park Commissioners met to host their regularly scheduled monthly Board meeting on **August 8, 2024**, to approve the above-referenced project.

*On the date stated, we The Board of Park Commissioners do ATTEST and sign to the above-referenced and attached document, and approve as presented.*

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**Justin Shurley, President**

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**Cory Miller Vice President**

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**Rick Briley, Commissioner**

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**Jenna Jauch, Commissioner**

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**Steve McDaniel, Director / Board Secretary**

**EASEMENT AGREEMENT  
STORMWATER DRAINAGE**

Project Name/Address: Brewer Park Renovation / 898 E Pettit Ave Fort Wayne IN, 46806

Cross Reference to Document(s) Brewer Park Easement Plat Exhibit A and B

**THIS** Easement Agreement ("Agreement") is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between \_\_\_\_\_ Steve McDaniel

\_\_\_\_\_ ("Grantor") and the **City of Fort Wayne, Indiana, Board of Stormwater Management** ("City"), for the following and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, to wit:

1. Grantor is the owner of certain real estate located in Allen County, Indiana, and recorded at the Cross Reference Document(s) listed above in the office of the Recorder of Allen County, Indiana ("Real Estate"), over, under, across and through which Real Estate Grantor does hereby grant, warrant and convey to City a permanent, non-exclusive stormwater drainage easement ("Easement"), legally described and in the location and dimensions depicted in the attached Exhibit A, for the uses and purposes described herein.
2. City, including its employees, agents and assigns, has the right of ingress and egress on and over the Easement at all times for the purpose of constructing, operating, maintaining and reconstructing existing and future public stormwater swales, ditches, basins, pipes and related equipment and structures ("City Stormwater Facilities"), and building stormwater services, within the Easement, and City shall at its expense and as determined by City, provide functional maintenance of the City Stormwater Facilities in order to assure their adequate operation. For non-emergency access, City will provide reasonable notice to Grantor prior to entering upon the Easement and will use reasonable efforts to minimize interference with Grantor's use of the Easement. In an emergency, City will proceed with notice and appropriate emergency actions pursuant to City of Fort Wayne and other applicable regulations.
3. Except as otherwise agreed, anything that was installed in the Easement prior to Grantor's approval of this Agreement and that does not comply with this Agreement may remain as an authorized obstruction, but may not be enlarged or relocated in the Easement without City's prior written approval. Other authorized obstructions that Grantor may install in the Easement shall include asphalt or concrete pavement, curbs, grass, and low level plantings not exceeding three (3) feet in height at maximum growth; provided, however, that all City Stormwater Facilities that must be accessible are readily accessible. Except as permitted in this Agreement, nothing shall be placed in, on, over or under the Easement which will obstruct or interfere with the purpose of the Easement as

established by this Agreement, unless such placement has City's prior written authorization. City may remove any unauthorized obstruction or impediment placed or arising upon the Easement, without obligation to restore or replace said unauthorized obstruction or impediment.

4. City will assume responsibility for claims resulting from damage to any land, improvement or the environment within the Easement, or to any land or improvements used for ingress and egress to the Easement, caused by City, including City's employees, during construction, operation, maintenance or reconstruction of the City Stormwater Facilities, provided that such responsibility shall not include damage caused by the placement of any unauthorized obstruction within the Easement in violation of this Agreement, in which case no liability will be assumed by City. City agrees to restore the property within the Easement to a condition similar to its condition before City's entry onto the Easement for the purposes set out in this Agreement; however, City shall not be responsible for indirect or consequential damages caused by its actions pursuant to the purposes of this Agreement.
5. Grantor agrees to indemnify and hold harmless City, its agents, employees, contractors and assigns, from and against any and all claims against City for damages, injuries, losses, demands or costs arising out of or in any manner associated with Grantor's operation, use or maintenance of the Easement, except for claims arising as a result of City's own negligent or intentional acts or omissions.
6. City agrees to indemnify and hold harmless Grantor against all liability, loss, direct damage, costs or expenses, including claims of lien of laborers, material suppliers or others, for work performed on the Easement by the City except for claims arising as a result of Grantor's own negligent or intentional acts or omissions.
7. At such future time as the City Stormwater Facilities shall cease to be used, and upon City's approval, not to be unreasonably conditioned, delayed or withheld, City will record a release of easement in the office of the Recorder of Allen County, Indiana, and this Agreement and the Easement shall terminate and be of no further force and effect.
8. Grantor acknowledges that the consideration received for the conveyance made herein does not include any express or implied release or waiver by City of rights to subject Grantor and its property to sewer rates, drainage fees, potable water rates, rentals, and other charges, including special assessments, as may be authorized by law.
9. The Easement is granted subject to all prior easements or encumbrances of record. Except as to the rights granted herein, Grantor shall have the full use and control of the Easement.
10. Grantor covenants that it is lawfully seized of the property through which the Easement is granted and that it has full right and power to convey the same.
11. The terms and provisions of this Agreement shall be binding upon City, its successors, nominees and assigns in right, title, and interest in and to the City Stormwater Facilities, and upon the current owner of the Real Estate, its successors, nominees and assigns, and shall run with the Real Estate.
12. This Agreement may only be amended by prior written consent signed by Grantor and City. The laws of the State of Indiana shall govern this Agreement.

[Signatures appear on following pages]

**GRANTOR**

By: \_\_\_\_\_  
Signature  
Steve McDaniel, Director of Fort  
Wayne Parks and Recreation  
Printed Name and Title  
Fort Wayne Parks and Recreation  
Organization Name

By: \_\_\_\_\_  
Signature  
\_\_\_\_\_  
Printed Name and Title  
\_\_\_\_\_  
Organization Name

**ACKNOWLEDGEMENT**

**STATE OF** INDIANA )  
 ) **SS**  
**COUNTY OF** ALLEN )

**BEFORE ME**, a Notary Public in and for said State and County, personally appeared

(Insert Name(s) Exactly as Indicated Above) Steve McDaniel

(Insert Title of Person Signing) Director of Fort Wayne Parks and Recreation

(Insert Name of Organization, if Applicable) Fort Wayne Parks and Recreation,

and acknowledged the execution of the foregoing Agreement as a voluntary act and deed for the uses and purposes therein contained.

**WITNESS** my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Signature of Notary Public

Resident of \_\_\_\_\_ County

\_\_\_\_\_  
Printed Name

[Signatures continue on following page]



# EASEMENT PLAT

1313 Broadway  
Fort Wayne, Indiana 46802  
Phone: (260) 755-5993  
Fax: (888) 808-4177

# APEX Consulting & Surveying

Prepared for the City of Fort Wayne

EXHIBIT A

Nana A. Opoku, LS 21200012

## WAYNE TOWNSHIP

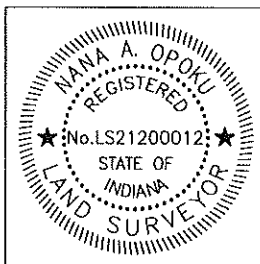
Parcel #02-12-24-327-001.000-074

### Permanent Easement Description

Part of the vacated South Park Drive from the South right-of-way line of Pettit Avenue to the North right-of-way line of Philley Avenue in the City of Fort Wayne, Indiana, being a portion of the grantor's land described in Deed Book 546, Page 327 and Declaratory Resolution No. 1006-1959 all in the Office of the Recorder of Allen County, Indiana, more particularly described as follows:

BEGINNING at the Northeast corner Lot Number 28 in Philley's Subdivision "Amended" as recorded in Plat Book 10, pages 24-25 in the Office of the Recorder of Allen County, Indiana; thence North 89 degrees 23 minutes 46 seconds East (State Plane bearing and basis of bearings to follow) along the South right-of-way line of said Pettit Avenue, a distance of 20.00 feet; thence South 02 degrees 22 minutes 38 seconds East, a distance of 130.19 feet; thence South 01 degrees 35 minutes 57 seconds East, a distance of 157.32 feet to the North right-of-way line of Philley Avenue; thence South 89 degrees 21 minutes 41 seconds West along said North right-of-way line, a distance of 20.00 feet; thence North 01 degrees 35 minutes 37 seconds West, a distance of 156.85 feet; thence North 02 degrees 22 minutes 38 seconds West, a distance of 130.68 feet to the Point of Beginning.

Containing 0.132 acres (5,750 square feet), more or less. Subject to easements of record.



This description was prepared  
for the City of Fort Wayne by  
Nana A. Opoku, Indiana Registered  
Land Surveyor, LS 21200012.

A handwritten signature of Nana A. Opoku in black ink.

Nana A. Opoku, LS 21200012

IN WITNESS WHEREOF, I hereto place my  
hand and seal this 22nd day of June, 2024.

Job Number 23040077

"I affirm, under the penalties for perjury, that I have taken reasonable care to  
redact each Social Security number in this document, unless required by law."  
Nana A. Opoku

# EASEMENT PLAT

1313 Broadway  
Fort Wayne, Indiana 46802  
Phone: (260) 755-5993  
Fax: (888) 808-4177

Prepared for the City of Fort Wayne  
EXHIBIT B

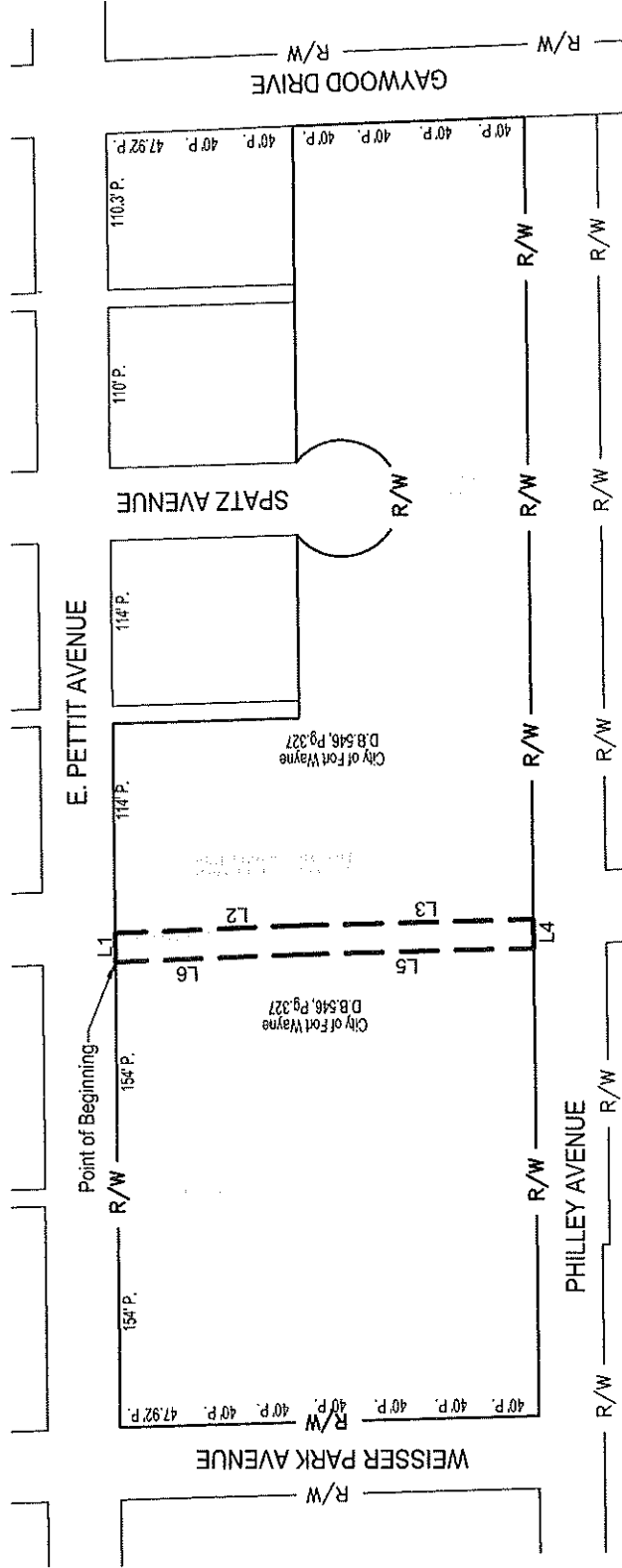
# APEX CONSULTING & Surveying

Nana A. Opoku, LS21200012

WAYNE TOWNSHIP

Parcel #02-12-24-327-001.000-074

Line Table		
Line #	Direction	Length
L1	N89° 23' 46"E	20.00'
L2	S02° 22' 38"E	130.19'
L3	S01° 35' 57"E	157.32'
L4	S89° 21' 41"W	20.00'
L5	N01° 35' 57"W	156.85'
L6	N02° 22' 38"W	130.68'



To the best of my knowledge and belief, this plat is prepared in accordance with Indiana Administrative Code Title 865, Article 1, Rule 12, Sections 20-25.

*Nana A. Opoku*  
Nana A. Opoku, LS21200012

I, NANA A. OPOKU, HERETOBY place my hand and seal this 22nd day of June, 2024.

Job Number 243040077



PROPOSED  
PERMANENT  
EASEMENT  
5,750 Square Feet  
0.132 Acres

Legend  
P - Plat Distance

## INSPECTION AND MAINTENANCE AGREEMENT FOR STORMWATER FACILITIES

Project Name/Address: **Brewer Park/ 898 E Pettit Ave. Ft. Wayne, In. 46806**

Cross Reference to Document(s) Operation Maintenance Manual and Schedule of Fees

**THIS** Inspection and Maintenance Agreement for Stormwater Facilities ("Agreement") is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2024, by and between **Steve McDaniel** ("Owner") and the **City of Fort Wayne, Indiana, Board of Stormwater Management** ("City"), for the following and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, to wit:

### **Owner is Current Owner**

1. Owner is the owner of certain real estate located in the City of Fort Wayne, Indiana, as reflected in the deed or other conveyance instrument recorded in the office of the Recorder of Allen County, Indiana, at the Cross Reference Document(s) listed above ("Real Estate").

### **Agreement**

2. Owner will at its expense and prior to beginning any construction on the stormwater facilities described herein prepare plans and specifications for surface and/or sub-surface stormwater control facilities that may include pipes, ditches, swales, basins, and related equipment and structures ("Stormwater Facilities"), in accordance with City of Fort Wayne design standards and other applicable regulations and will obtain all required approvals of the plans and specifications for construction of the Stormwater Facilities on the Real Estate and on adjoining real estate or rights-of-way, if any, and for connection to City's public stormwater system ("Approved Plans"). Prior to commencement of construction, Owner shall submit to City a performance bond in the amount of the estimated project cost to secure Owner's construction of the Stormwater Facilities in accordance with the Approved Plans. The performance bond shall remain in effect for a period of one (1) year following acceptance of the Stormwater Facilities by the Board of Stormwater Management to ensure any defects discovered within such one (1) year period are properly repaired.
3. Owner will at its expense and prior to beginning any construction on the Stormwater Facilities, or prior to making any modifications to Stormwater Facilities that change the design, function, operation, or maintenance thereof, procure all approvals, permits, easements and/or rights-of-entry required for construction and maintenance of any part of the Stormwater Facilities that will be located in rights-of-way or on real estate other than Owner's Real Estate.
4. For projects involving the projected land disturbance of one (1) acre or more or a land disturbance of less than one (1) acre that is part of a larger common plan of development that will ultimately disturb one (1) acre or more of land area, Owner must submit a Notice of Intent ("NOI") to the Indiana Department of Environmental Management and provide a copy to City's Development Services Department. Owner must also submit a Stormwater Pollution Prevention Plan ("SWPPP") to the Development Services office to determine the plan sufficiently meets the requirements of the Indiana Construction Stormwater General Permit. The SWPPP must have been determined sufficient and a copy of the NOI must be provided to the Development Services office prior to Owner undertaking any land disturbing activity on the Real Estate. For projects involving a land disturbing activity of less than one (1) acre of land area that is not part of a larger common plan of development, Owner must still meet the minimum erosion and sediment control measures contained in the Fort Wayne Stormwater Utility General Rules and Regulations. Failure to comply with these requirements may delay approval of the Stormwater Facilities and cause Owner to incur additional inspection fees. Owner may also be subject to enforcement action by City's Department of Stormwater Management in accordance with Chapter 53 of the Fort Wayne, Indiana Code of Ordinances or applicable Rules and Regulations.



5. Owner will at its expense and in accordance with the Approved Plans, the SWPPP, and other approvals and permits, construct the Stormwater Facilities on the Real Estate and on adjoining private or public property and rights-of-way, if any.
6. Following City's inspection and approval of the constructed Stormwater Facilities, City will own, operate and maintain those parts of the Stormwater Facilities that have been accepted by City as part of City's public stormwater system ("Public Stormwater Facilities").
7. Owner will, in accordance with the Approved Plans, applicable regulations, and the terms of this Agreement and at Owner's sole cost and expense, own, operate and maintain those parts of the Stormwater Facilities not designated by City as Public Stormwater Facilities ("Private Stormwater Facilities"), and will procure all City and other approvals, permits, easements and rights-of-entry. Owner shall maintain the Private Stormwater Facilities in accordance with the O&M manual attached hereto as Exhibit "A".
8. Following City's approval of the completed work, Owner will not cause or permit alteration or relocation of the Stormwater Facilities and will not cause or permit any other connection to the Private Stormwater Facilities or Public Stormwater Facilities, except with City's prior written approval and receipt of any required permits.
9. Owner agrees to indemnify and hold harmless City, its agents, employees, contractors and assigns, from and against any and all claims against City for damages, injuries, losses, demands or costs arising out of or in any manner associated with Owner's construction, operation, use or maintenance of the Private Stormwater Facilities, except for claims arising as a result of City's own negligent or intentional acts or omissions.
10. The Private Stormwater Facilities shall be periodically inspected by Owner to ensure proper functioning in accordance with City's post-construction BMP manual, which may be found on City's website at <https://utilities.cityoffortwayne.org>.
11. In the event Owner does not maintain the Private Stormwater Facilities as required by this Agreement and the attached O&M manual, or in an emergency, City will proceed with notice, maintenance and/or other actions pursuant to City of Fort Wayne and other applicable laws or regulations.
12. Owner expressly grants to City, including City's employees, agents and assigns, a right-of-entry over, across and through the Real Estate for the purpose of inspecting and evaluating the Private Stormwater Facilities.
13. Owner acknowledges and agrees that City will conduct an annual inspection of the Private Stormwater Facilities on the Real Estate and Owner will be charged an annual inspection fee in accordance with the Schedule of Fees attached hereto as Exhibit "B". If the inspection reveals any deficiencies necessitating repair and reinspection, additional reinspection costs will apply.
14. In accordance with IC 36-1-6-2, any costs incurred by City to bring the Real Estate into compliance with applicable laws or regulations shall constitute a lien on the Real Estate. Such costs, may include, without limitation, costs incurred by City in performing work to bring the Real Estate into compliance as a result of Owner's failure to properly maintain the Private Stormwater Facilities as well as the annual BMP inspection and reinspection costs.
15. Owner acknowledges that the consideration received pursuant to this Agreement does not include any express or implied release or waiver by City of rights to subject Owner and its property to sewer rates, drainage fees, potable water rates, rentals, and other charges, including special assessments, as may be authorized by law.
16. The terms and provisions of this Agreement shall be binding upon the current owner of the Real Estate, its successors, nominees and assigns, and shall run with the Real Estate.
17. This Agreement may only be amended by prior written consent signed by Owner and City. The laws of the State of Indiana shall govern this Agreement.

[Signatures appear on following pages]

**OWNER**

By: \_\_\_\_\_  
Signature  
Steve McDaniel, Director of Fort  
Wayne Parks and Recreation  
\_\_\_\_\_  
Printed Name and Title

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name and Title

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name and Title

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name and Title

## ACKNOWLEDGEMENT

STATE OF INDIANA )  
 ) ss  
COUNTY OF ALLEN )

**BEFORE ME**, a Notary Public in and for said State and County, personally appeared Steve McDaniel  
as Director of Fort Wayne Parks and Recreation \_\_\_\_\_, and  
acknowledged the execution of the foregoing Agreement as a voluntary act and deed for the uses and purposes  
therein contained.

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My Commission Expires: \_\_\_\_\_

Signature of Notary Public

Resident of \_\_\_\_\_ County

Printed Name

[Signatures continue on following page]

CITY

By: \_\_\_\_\_  
Maria Gomez-Espino, Program Manager,  
Development Services

**ACKNOWLEDGEMENT**

STATE OF INDIANA )  
                                  ) SS  
COUNTY OF ALLEN )

**BEFORE ME**, a Notary Public in and for said State and County, personally appeared Maria Gomez-Espino on behalf of the City of Fort Wayne, Indiana, Board of Stormwater Management, and acknowledged the execution of the foregoing Agreement as a voluntary act and deed for the uses and purposes therein contained.

**WITNESS** my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Signature of Notary Public

Resident of \_\_\_\_\_ County

\_\_\_\_\_  
Printed Name

*I affirm, under penalties for perjury, that I have taken reasonable care to redact each  
Social Security number in this document, unless required by law.*

*This instrument prepared by Maria Gomez-Espino, Program Manager, Fort Wayne City Utilities,  
Development Services, 200 East Berry Street, Suite 250, Fort Wayne, Indiana 46802.*

Stormwater Inspection & Maintenance 3/24

**Exhibit "A"**

**O&M Manual**

STORMWATER OPERATION & MAINTENANCE MANUAL FOR:

***"BREWER PARK REDEVELOPMENT"***

A PART OF

THE CITY OF FORT WAYNE, INDIANA

THE SOUTHWEST QUARTER OF SECTION 24, TOWNSHIP 30 NORTH, RANGE 12 EAST,  
WAYNE TOWNSHIP, ALLEN COUNTY

CREATED BY



June 2024

REQUESTED BY AND PREPARED FOR:

FORT WAYNE PARKS AND RECREATION

705 EAST STATE BLVD

FORT WAYNE, IN 46805

<b>ELEMENT INDEX</b>		
<b>Item Number</b>	<b>Description</b>	<b>Location</b>
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<b>8</b>	Pollution Control Measures	Page 10
<b>9</b>	Watershed Overall Map	Exhibit
<b>10</b>	Stormwater Management Exhibit	Exhibit

## **Introduction**

This operations and maintenance manual relates to the park improvements at Brewer Park in Fort Wayne, which includes drainage and grading improvements along with detention basins, underground retention storage systems and storm sewer systems that discharge the stormwater into an existing 15" storm sewer line located in the middle of the park.

The entire subject property is approximately 4.68 acres.

The overall project site is divided into four watershed areas: Watershed Area 1, Watershed Area 2, Watershed Area 3, and Watershed Area 4. Watershed Area 1 encapsulates an area of 1.47 acres with stormwater improvements of three manholes, a 2,773 cft detention basin and a 1,376 sft underground retention storage system. Watershed Area 2 encapsulates an area of 1.41 acres with stormwater improvements of four catch basins, four manholes, two 24" vertical pipes, a 75 lft culvert, a 3,284 cft and 685 cft detention basin, and a 2,587 sft underground retention storage system. Watershed Area 3 encapsulates an area of 1.61 acres with stormwater improvements of two manholes and a 6,726 cft detention basin. Watershed Area 1-3, direct stormwater into the existing 15" storm sewer line located in the middle of the park. Watershed Area 4 encapsulates an area of 0.19 acres, and stormwater is directed into the existing beehive inlet south of the project site, functioning similar to existing conditions.

All of the stormwater features shall be maintained in perpetuity. The owner shall annually inspect all stormwater management facilities and playing field features to ensure compliance and provide for the removal of silt, litter, grass cutting, vegetation and other debris from all perforated pipes, trench drains, and storm quality control structure.

The owner is responsible for operation and maintenance of the stormwater management facilities shall make and maintain records for all installation, maintenance and repairs of all systems, structures, and measures.

## **City Entry Statement**

The City of Fort Wayne shall have the right to enter the property and inspect all stormwater features.

## **Inspection & Maintenance Guidelines**

The OWNER will designate the person(s) responsible for maintaining the subject site according to this plan.

All stormwater management facilities must undergo, at the minimum, an annual inspection to document maintenance and repair needs and ensure compliance with the requirements of the maintenance agreement and maintenance covenant. All stormwater management facilities are also recommended to be inspected and repaired within 36 hours after storm events which have three inches of rain or larger. Litter and spills shall be inspected and maintained on a regular basis. Any spills shall be cleaned up immediately.

Inspection documentation shall be made for those pollution control measures under the designated control of the responsible party. For the OWNER, the items requiring regular inspection include cleaning debris/sediment out of the storm structures, spills and cleanup, and grass cutting of sod.

The City, or its designee, is authorized to access the Subject Real Property as City deems necessary to conduct inspections of the stormwater management practices, facilities, structures, operations or drainage easements to determine if the facilities are being properly maintained.

Maintenance records shall be kept for a minimum of five (5) years.

Sediment buildup in the detention basin shall be evaluated on a five (5) year cycle. The evaluation should be performed using a measuring device such as a staff gauge or other means of measuring to determine the depth of sediment. The volume of retained sediment can be compared to the design capacity to determine the available sediment in the basin and/or if the pond will require maintenance. It is recommended that this be performed soon after construction of the basin to develop a benchmark for future assessment. Once sediment has accumulated to a level of 6", it should be removed. Inspect the basin after a rainfall of 3", if the stormwater fails to drawdown within the required 36 hours, remove the sediment that has accumulated. Companies such as a surveyor, professional engineer and/or other private contractors may be contracted for investigation of sediment depth along with the removal of sediment within the detention basin. A contractor will have specialized equipment which can be utilized for the silt and sediment removal.

The slope of the detention basin shall be monitored for erosion and loss of vegetative cover. When either condition occurs, appropriate measures shall be taken to restore the damaged area such as re-seeding and maintenance of the embankments due to animals burrowing or erosion rills and/or gullies.

Storm sewer outfalls (stormwater discharge points) shall be evaluated for scour (erosion), a clear release area and the accumulation of debris. Scoured areas shall be stabilized with appropriate backfill, geotextile fabric and riprap to resist additional scouring. Look for sediment below outlet and remove if it's impeding the water flow. Inspect for damaged joints, broken edges, dents, etc. and repair accordingly. Any dent that decreases the pipe's cross section by more than 20% shall be repaired. Any restoration shall be in accordance and match the existing conditions.

Mowing and maintenance of upland vegetation areas and the basin side slopes to be performed on at least a monthly basis, or at a minimum height of 3 inches, during the growing season. Mowing operations shall throw the cut vegetation away from pond and preferably above the pond embankment. The growth of woody vegetation shall be discouraged within the basins. If waterfowl becomes an issue along the detention basin, then the vegetation along the edge of the pond can be allowed to grow taller to discourage waterfowl from walking along the edges. Landscape beds shall be inspected for erosion and repaired as necessary. Landscape trees and shrubs shall be inspected, damaged growth shall be removed, and dead plant material replaced as required.



For underground stormwater storage systems, periodically inspect the manhole structures and standpipe structures to assess the system functionality. Inspect a minimum of once per year and/or after each rainfall event of 3" or greater. The system shall be cleaned when sediment height reaches 10 to 20 percent of the pipe diameter. The system should be vacuumed to remove sediment and dispose of properly.

For Storm Structures, inspect a minimum of once per year and/or after each rainfall event greater than three (3) inches. Inlet grates shall be kept clean of trash, sediment and/or debris to allow free flow of runoff into the structure and sewer system. Sediment shall be removed from the structures when sediment depth reaches ½ of the depth of the structure sump, or when sediment reaches two (2) inches in structures without sumps. All sediment and debris shall be removed and disposed of properly.

Lawn areas within the project boundaries are to be maintained on a regular basis. Maintenance is to include visually checking for sparsely vegetated areas, damaged or disturbed areas and sediment deposits. Damaged and/or eroded areas shall be re-stabilized and seeded immediately. Reseeding and restoration of any areas found to be damaged or sparse is to occur. Do not over water lawns and water only during cooler parts of the day. Fertilizers, pesticides, and herbicides should be used at minimal amounts, and never within 48 hours of an anticipated precipitation event. Sediment deposits are to be collected and returned to their source, and the source of the sediment deposits is to be stabilized. All repairs are to be noted in the project journal.

Grass clippings and other organic debris collected during general lawn maintenance should be composted and incorporated back into the landscaping of the site. Clippings are to be removed from the paved/concreted areas of the project. Grass clippings may be left on grassed areas of the project. The clippings retain moisture and provide nutrients. Inorganic fertilizers should be replaced with slow-release organic fertilizers. Piles of excess dirt and mulch shall not be stored near any stormwater drainage features. Alternative pesticide products should be incorporated into the landscape regime of the project. Alternative products include insecticidal soap or natural bacteria.

***No clippings, trimmings or plant materials are to be placed adjacent to stormwater drainage structures. All mulch or compost piles shall be disposed of in a lawful manner and as far away as possible from the storage areas.***

Fuel spills and oil leaks shall be cleaned up immediately to significantly reduce pollution that reaches water bodies through the storm drains. The following suggestions shall be administered to help prevent pollution.

1. Conduct daily inspection of site for presence of wastes.
2. Do not use storm drains for disposal of materials.
3. Train or educate employees on reducing pollutant discharge, spill prevention, cleanup, and the proper disposal of liquids.

4. Equipment shall be inspected and cleaned regularly to prevent leaks and excessive buildup of contaminants. Avoid using water to clean work areas.
5. Know the type of materials that are kept at the complex and the procedures that are necessary to clean the material up if a spill should occur.
6. Clean-up spills with dry absorbent materials (i.e kitty litter or floor dry) to soak up the liquids. Use absorbent "snakes" as temporary booms to contain a liquid while you clean it up.

Sweep up the used absorbent and snakes and dispose of them properly as hazardous wastes. Or, use a wet/dry shop vacuum cleaner to collect spills and dispose of the liquid with the hazardous wastes. Do not use vacuums for gasoline, solvents, or other volatile fluids because of the explosive hazards and do not use water to wash off pavement areas.

8. Spill response kit(s) should be kept on-site near material storage areas and areas where the materials are used.

<b>Inspection Schedule Table</b>	
<b>Inspection Item</b>	<b>Schedule</b>
Catch Basins, Stormwater Manholes and Stormwater Cleanouts	Annually or after a rain event of 3" more

<b>Inspection &amp; Maintenance Log Form</b>			
Inspection Type: <input type="checkbox"/> Routine <input type="checkbox"/> Rain Event (>3")			
Weather at Time of Inspection: <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snow <input type="checkbox"/> High Winds <input type="checkbox"/> Other			
<b>Catch Basins/Storm Structures</b>			
Maintenance Item	Satisfactory (S)	Unsatisfactory (US)	Comments
Inspect catch basins, stormwater manholes and removed built-up trash and debris (minimum of annually and after each storm event greater than 3 inches)			
Remove root intrusions & repair broken grates (as needed)			
Remove debris/sediment from storm structures when volume is reduced by 1/2 of the original depth to invert of the lowest pipe or opening out of the basin (as needed)			
<b>Roof Drainage Inspection and Maintenance Items</b>			
Inspect downspouts			
Inspect cleanouts			
<b>Sidewalk Inspection and Maintenance Items</b>			
Inspect pavement for signs of deterioration, spills, and excessive sediment buildup			
Inspect stormwater structures for sediment buildup, clogging, and deterioration			
<b>Underground Storage System Maintenance</b>			
Inspect the manhole structures & vertical pipes to assess the system functionality. (min once per year and/or after each rainfall event of 3" or greater.) Clean when sediment height reaches 10 to 20 percent of the pipe diameter. Perforated pipes shall be vacuumed annually via cleanout structures.			
<b>Site Maintenance Items</b>			
Remove and replace any dead or dying landscaping including trees. (as needed)			
Mow and remove litter & debris within lawn areas (as needed)			
Empty waste containers and pick up trash (as needed)			
Visually inspect the surface to ensure clean cap of soil isn't			

disturbed. If surface has been disturbed or dug, replace area of soil to match existing surrounding topsoil.			
<b>Detention Basin Inspection and Maintenance Items</b>			
Note: The presence of sheen and/or discoloration of water			
Check Basin within 36 hours after each 3 inch or greater storm event to ensure the water percolates			
Inspect basins for signs of damage or wetness (annually)			
Debris Cleanout			
Clean pipe outlet of debris			
Clear basin of debris			
Scrape bottom of basins and remove sediment, restore original cross section and reseed all disturbed areas. (as needed, however if land disturbance is over one acre then a CSGP will be required prior to cleaning the basins)			
Mow and remove litter & debris (as needed)			
Look for signs of erosion, repair and stabilize any eroded areas (as needed)			
Look for signs of scouring near Riprap Outlet Protection			
Waterfowl or Wildlife Fecal matter			
Vegetation (dead or dying), repair and seed (as needed)			
Inspect outlets into detention basin for riprap scouring			

## Potential Pollutant Sources

Pollutant Type	Source	Harmful Effects
Oil/Grease	Automobiles, routine maintenance of equipment, vehicle and equipment dripping.	High amounts of petroleum products enter stormwater run-off from parking areas, roads, and gas stations, and where automobiles are congested. An accumulation of oil and grease forms a film over water, which spreads and makes oxygen transfer difficult and toxic for aquatic animals and plants. One gallon of oil can contaminate one million gallons of drinking water.
Sediments/Solids	Sand/gravel storage, construction sites unpaved areas, degradation/wearing of paved surfaces.	A decrease in visibility and increase in turbidity for organisms, making it difficult for these organisms to capture prey. A decrease in light availability for photosynthetic organisms. Closing of gills in fish and aquatic species. Reduction in spawning of fish and general survival. Increase in the transportation of heavy metals, phosphorous and other pollutants through waterways as they attach to the sediment particles and harm water quality.
Metals	<i>Copper:</i> vehicle brake pads, natural minerals, copper plumbing, <i>Zinc:</i> vehicle tires, motor oils, galvanizing works, corrosion from galvanized iron. <i>Lead:</i> mainly automobile exhausts and engines. <i>Arsenic:</i> brake linings, fluid leaks, vehicle emissions.	Metals have toxic effects on aquatic plants and animals and can bioaccumulate in aquatic species, such as mussels, which can then have a dangerous impact all the way through the food chain. Trace metals, such as arsenic, copper, cyanide, mercury, nickel, and lead can come from air emissions from far away factories. These metals are toxic to aquatic life and accumulate in the sediments of streams, lakes, and estuaries as well as in fish tissue. These metals may come from pesticides, industrial waste discharges, solid waste landfill leachate, agricultural waste, or corroding metal pipes and storage tanks.
Litter	Plastic bottles, bags, packaging, general garbage, cigarette butts, cardboard and Styrofoam.	Litter produces an obvious visual pollutant that can physically damage aquatic animals and fish. These pollutants can release substances poisonous to natural systems as it breaks down.

Pollutant Type	Source	Harmful Effects
Pesticides, Herbicides, and Fertilizers	Nitrogen, Phosphorus Compounds, Decaying Vegetation, Organic Matter, biodegradable detergents, irrigated lawns, fertilizers	Nitrogen and Phosphorous compounds promote toxic and non-toxic algae blooms which harm aquatic life by depleting the amount of oxygen in the water and by decreasing light penetration for photosynthetic organisms promotes unwanted weed growth.
Temperature Change	Temperature generated by areas of pavement (asphalt and concrete)	Temperature change can cause stress and/or kill plants and/or species of animals. Higher temperatures can decrease oxygen supply in water.
Bacteria (Fecal Coliform)	Animal waste from pets and urban wildlife, waterfowl, fertilizers	A major health hazard to humans. Destroys recreational potential of waterways, causing economic loses, increases water treatment costs. Large numbers of waterfowl will increase bacterial contamination in small ponds. The accumulation of bacteria from wastes, pose not only a serious threat to the environment, but also to public health standards, especially for waterways where recreational activities take place. Fecal bacteria increase nutrient levels in stormwater which can cause imbalances in the chemistry and lead to toxic algal blooms. From stormwater, these bacteria make their way into streams and lakes, which can lead to closure of shellfish beds and swimming beaches

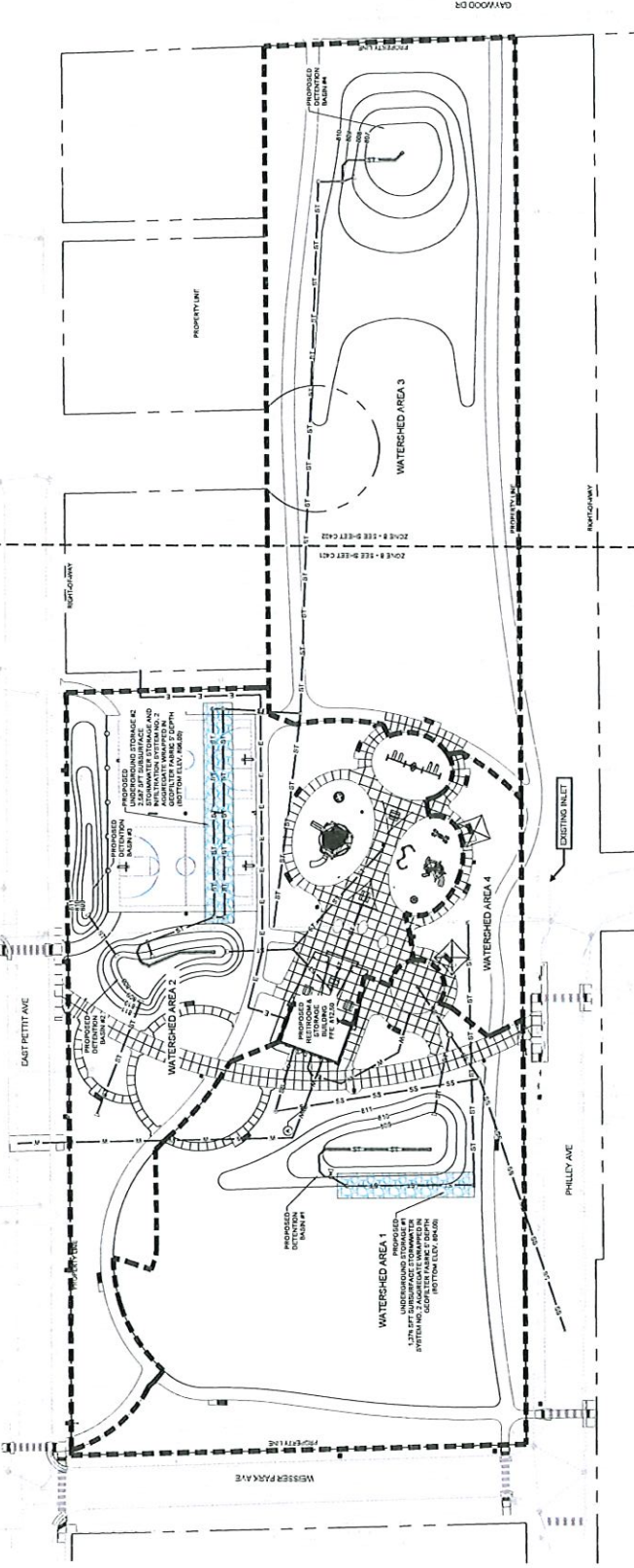
### **Pollution Control Measures**

The development will utilize both structural and non-structural stormwater pollution control measures to minimize the transport of pollutants to local waterways.

Litter and trash shall be collected and disposed of during landscape maintenance. All litter, trash and/or recycled materials shall be stored in either a refuse container or recycling container. When needed, snow will be plowed to the edges of pavement where it will drain into the storm sewer system.

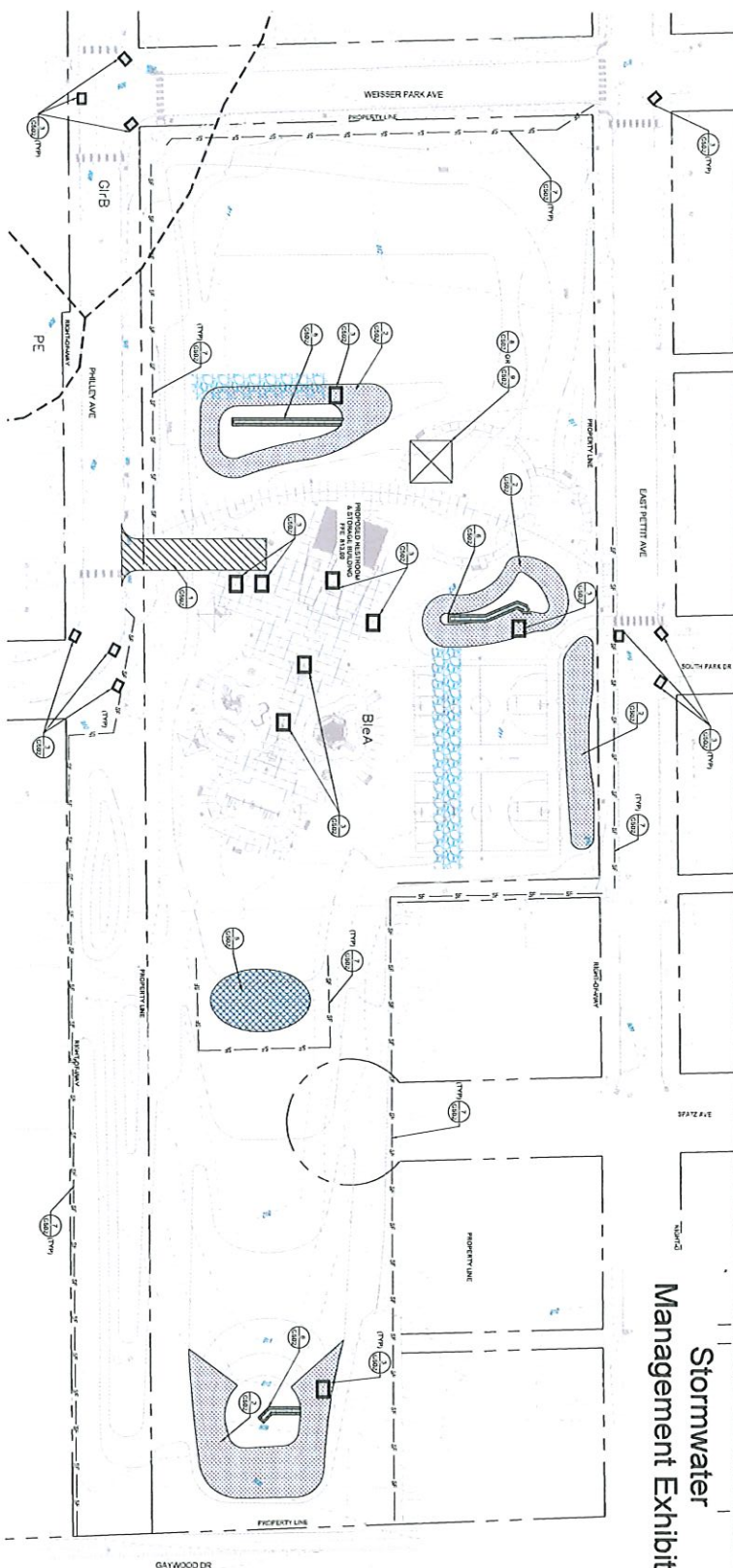
All chemicals and other potentially hazardous materials are to be stored indoors, if possible, or covered with secondary containment if they must be stored outdoors. If spills occur, they shall be cleaned up and not hosed off into the surrounding storm structures and retention basins. If Fertilizers and Pesticides are utilized, they shall be applied in accordance with the manufacturer's recommendations and if they end up on the pavement surfaces then they shall be removed by sweeping or a similar method of activity.

# Watershed Overall Map



RECREATION PARK STORMWATER MANAGEMENT									
Proposed Stormwater Area Stormwater Storage Calculations - Area 1									
Area 1									
Category	Area (sq ft)	Runoff Coefficient	Volume (cu ft)	Volume (cu yd)	Category	Area (sq ft)	Runoff Coefficient	Volume (cu ft)	Volume (cu yd)
Impervious Area	10,000	0.90	2,700	100	Grass	10,000	0.10	270	10
Grass	10,000	0.10	270	10	Open Space	10,000	0.20	540	20
Open Space	10,000	0.20	540	20	<b>Total</b>	<b>30,000</b>	<b>0.20</b>	<b>3,510</b>	<b>130</b>
Storm Requirements									
Storm Duration	Intensity (in/hr)	Volume (cu ft)	Rate (cfs)	Volume (cu yd)	Storm Duration	Intensity (in/hr)	Volume (cu ft)	Rate (cfs)	Volume (cu yd)
1 min	1.0	100	1.0	100	1 min	1.0	100	1.0	100
15 min	1.5	150	1.5	150	15 min	1.5	150	1.5	150
30 min	3.0	300	3.0	300	30 min	3.0	300	3.0	300
60 min	6.0	600	6.0	600	60 min	6.0	600	6.0	600
120 min	12.0	1200	12.0	1200	120 min	12.0	1200	12.0	1200
240 min	24.0	2400	24.0	2400	240 min	24.0	2400	24.0	2400
480 min	48.0	4800	48.0	4800	480 min	48.0	4800	48.0	4800
960 min	96.0	9600	96.0	9600	960 min	96.0	9600	96.0	9600
1920 min	192.0	19200	192.0	19200	1920 min	192.0	19200	192.0	19200
3840 min	384.0	38400	384.0	38400	3840 min	384.0	38400	384.0	38400
7680 min	768.0	76800	768.0	76800	7680 min	768.0	76800	768.0	76800
15360 min	1536.0	153600	1536.0	153600	15360 min	1536.0	153600	1536.0	153600
30720 min	3072.0	307200	3072.0	307200	30720 min	3072.0	307200	3072.0	307200
61440 min	6144.0	614400	6144.0	614400	61440 min	6144.0	614400	6144.0	614400
122880 min	12288.0	1228800	12288.0	1228800	122880 min	12288.0	1228800	12288.0	1228800
245760 min	24576.0	2457600	24576.0	2457600	245760 min	24576.0	2457600	24576.0	2457600
491520 min	49152.0	4915200	49152.0	4915200	491520 min	49152.0	4915200	49152.0	4915200
983040 min	98304.0	9830400	98304.0	9830400	983040 min	98304.0	9830400	98304.0	9830400
1966080 min	196608.0	19660800	196608.0	19660800	1966080 min	196608.0	19660800	196608.0	19660800
3932160 min	393216.0	39321600	393216.0	39321600	3932160 min	393216.0	39321600	393216.0	39321600
7864320 min	786432.0	78643200	786432.0	78643200	7864320 min	786432.0	78643200	786432.0	78643200
15728640 min	1572864.0	157286400	1572864.0	157286400	15728640 min	1572864.0	157286400	1572864.0	157286400
31457280 min	3145728.0	314572800	3145728.0	314572800	31457280 min	3145728.0	314572800	3145728.0	314572800
62914560 min	6291456.0	629145600	6291456.0	629145600	62914560 min	6291456.0	629145600	6291456.0	629145600
125829120 min	12582912.0	1258291200	12582912.0	1258291200	125829120 min	12582912.0	1258291200	12582912.0	1258291200
251658240 min	25165824.0	2516582400	25165824.0	2516582400	251658240 min	25165824.0	2516582400	25165824.0	2516582400
503316480 min	50331648.0	5033164800	50331648.0	5033164800	503316480 min	50331648.0	5033164800	50331648.0	5033164800
1006632960 min	100663296.0	10066329600	100663296.0	10066329600	1006632960 min	100663296.0	10066329600	100663296.0	10066329600
2013265920 min	201326592.0	20132659200	201326592.0	20132659200	2013265920 min	201326592.0	20132659200	201326592.0	20132659200
4026531840 min	402653184.0	40265318400	402653184.0	40265318400	4026531840 min	402653184.0	40265318400	402653184.0	40265318400
8053063680 min	805306368.0	80530636800	805306368.0	80530636800	8053063680 min	805306368.0	80530636800	805306368.0	80530636800
16106127360 min	1610612736.0	161061273600	1610612736.0	161061273600	16106127360 min	1610612736.0	161061273600	1610612736.0	161061273600
32212254720 min	3221225472.0	322122547200	3221225472.0	322122547200	32212254720 min	3221225472.0	322122547200	3221225472.0	322122547200
64424509440 min	6442450944.0	644245094400	6442450944.0	644245094400	64424509440 min	6442450944.0	644245094400	6442450944.0	644245094400
128849018880 min	12884901888.0	1288490188800	12884901888.0	1288490188800	128849018880 min	12884901888.0	1288490188800	12884901888.0	1288490188800
257698037760 min	25769803776.0	2576980377600	25769803776.0	2576980377600	257698037760 min	25769803776.0	2576980377600	25769803776.0	2576980377600
515396075520 min	51539607552.0	5153960755200	51539607552.0	5153960755200	515396075520 min	51539607552.0	5153960755200	51539607552.0	5153960755200
1030792151040 min	103079215104.0	10307921510400	103079215104.0	10307921510400	1030792151040 min	103079215104.0	10307921510400	103079215104.0	10307921510400
2061584302080 min	206158430208.0	20615843020800	206158430208.0	20615843020800	2061584302080 min	206158430208.0	20615843020800	206158430208.0	20615843020800
4123168604160 min	412316860416.0	41231686041600	412316860416.0	41231686041600	4123168604160 min	412316860416.0	41231686041600	412316860416.0	41231686041600
8246337208320 min	824633720832.0	82463372083200	824633720832.0	82463372083200	8246337208320 min	824633720832.0	82463372083200	824633720832.0	82463372083200
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263882790666240 min	26388279066624.0	2638827906662400	26388279066624.0	2638827906662400	263882790666240 min	26388279066624.0	2638827906662400	26388279066624.0	2638827906662400
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2767011611056432739287040 min	27670</								





## Stormwater Management Exhibit

REV	DESCRIPTION	BY	DATE
	THE USER AGREE TO HOLD THE INFORMATION CONTAINED HEREIN IN CONFIDENCE AND TO MAINTAIN THE INFORMATION AS A TRADE SECRET AND NOT TO DISCLOSE IT TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF THE COMPANY. THE USER AGREE TO HOLD THE INFORMATION CONTAINED HEREIN IN CONFIDENCE AND TO MAINTAIN THE INFORMATION AS A TRADE SECRET AND NOT TO DISCLOSE IT TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF THE COMPANY.		

JP

South Bend, IN  
p. 574.232.6348

PRELIMINARY FOR  
PERMIT REVIEW  
PURPOSES ONLY

NOT FOR  
CONSTRUCTION

BREWER PARK REDEVELOPMENT	
FORT WAYNE PARKS AND RECREATION	
725 EAST STATE BLVD	FORT WAYNE, IN 46805
EROSION CONTROL	

DATE: APRIL 2024

**SCALE**

CS01



**GRAPHIC SCALE**

1000



**Exhibit "B"**

**Schedule of Fees**

## EXHIBIT B

### Stormwater Best Management Practice (BMP) Inspections

Permit / Fee Type	Annual BMP Inspection Fee <sup>1</sup>	BMP Extra Inspection Hourly Rate (\$/Hour) <sup>2</sup>
Stormwater BMP	\$520.00	\$290.00

<sup>1</sup> Inspection fee for a single private BMP per site if the required annual inspection by the site owner is not performed and/or information from the site owner inspection is not satisfactorily provided as per CU requirements.

<sup>2</sup> Sites with BMP deficiencies identified in site inspections that need repair and re-inspection. Inspection will be charged to site owner per site visit until the BMP is brought to compliance. For projects involving only CU staff, the time charged will be on the basis of CU review staff time spent. For projects involving staff and consultants, the time charged will be on the basis of the senior consultant review time spent.