Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control
ANNUAL FACILITY INSPECTION REPORT
for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.

Report Period: From March, 2016 To March, 2017

Permit No. ILR40 0394

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: Village of Mt. Zion Mailing Address 1: 1400 Mt. Zion Pkwy

Mailing Address 2: County: Macon

City: Mt. Zion State: IL Zip: 62549 Telephone: 217-864-5424

Contact Person: Julie Miller Email Address: j_miller@mtzion.com
(Person responsible for Annual Report)

Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

Macon County

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

1. Public Education and Outreach ☐
2. Public Participation/Involvement ☐
3. Illicit Discharge Detection & Elimination ☑
4. Construction Site Runoff Control ☐
5. Post-Construction Runoff Control ☐
6. Pollution Prevention/Good Housekeeping ☑

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Julie Miller
Owner Signature:

5/24/17
Date:

Julie Miller
Printed Name:

Village Administator
Title:

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

Mt. Zion Annual Facility Inspection Report

March 2016 - March 2017

VILLAGE OF
MT.ZION

This proposal was produced with paper having 40% recycled content.

Prepared by: Chastain & Associates LLC
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CHASTAIN
& ASSOCIATES LLC
CONSULTING ENGINEERS
SERVICE | SOLUTIONS | COMMITMENT ™

VILLAGE OF MT. ZION

March 2016 to March 2017 Annual Facilities Inspection Report (Year 3)

A. CHANGES TO BMP'S

1. The Village of Mt. Zion has begun monitoring Finley Creek for water quality
2. Staff Training will now be conducted at least once a year on one of the MS4 categories.

B. COMPLIANCE WITH PERMIT CONDITIONS

C. RESULTS OF INFORMATION COLLECTED AND ANALYZED

D. ACTIVITIES FOR NEXT REPORTING CYCLE (MARCH 2016 TO MARCH 2017)

E. ANNUAL EVALUATION STATEMENT

PUBLIC EDUCATION AND OUTREACH

1. BMP A.1 – Distributed Paper Material

B. Compliance with Permit Conditions	The Village, as a part of the Macon County MS4 communities, distributed new flyers at the Village Hall and held a Stormwater Quality Open House public meeting at the Decatur Public Library. See Exhibit A for the flyer and attendance list.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Continue to distribute fliers at Village Hall and distribute to residents at community events and hold an annual public meeting.

2. BMP A.2 – Speaking Engagement

B. Compliance with Permit Conditions	The Village, as a part of the Macon County MS4 communities, hosted a Stormwater Workshop on Tuesday, October 18, 2016 at Richland Community College. A flyer for the workshop is included in the Yearly Report for MS4's provided by the Macon County Soil & Water Conservation District (see Exhibit B for the flyer and attendance list).
C. Information Collected and Analyzed	There were 44 attendees.
D. Activities for Next Reporting Cycle	Speak at either one educational workshop or Village Board Meeting to inform public of construction site storm water management efforts.

3. BMP A.4 – Community Event

B. Compliance with Permit Conditions	The Village, as a part of the Macon County MS4 communities, continued distribution of the flyer at the Village Hall and held a Stormwater Quality Open House public meeting at the Decatur Public Library. See Exhibit A for the flyer.
C. Information Collected and Analyzed	There were 2 attendees.
D. Activities for Next Reporting Cycle	Continue to distribute fliers at Village Hall and distribute to residents at community events. Hold an annual public meeting in conjunction with the Macon County MS4 working group.

4. BMP A.6 – Other Public Education

B. Compliance with Permit Conditions	The Village, as part of the Macon County MS4 communities and the MCSWCD, maintained the website for storm water issues (www.maconcleanwater.com).
C. Information Collected and Analyzed	Visits to the website totaled 9,133 for the reporting year, including 9,034 unique visitors. Website visits increased by 31% from previous year, see Exhibit C for Views/Month.
D. Activities for Next Reporting Cycle	Continue to update and maintain the current MS4 Community website and work to increase website visits by 10% in conjunction with the Macon County MS4 Community.

Annual Evaluation Statement

To evaluate the effectiveness of our public education efforts, the following will be documented:

Currently, MS4 brochures are available at the SWCD office of the participating Macon County MS4 working group including at the Mt. Zion Village hall. This gives citizens across the county opportunities to pick up the educational materials. Over the year, we will look for other areas to make the brochures available.

This year, the pamphlets were updated to reflect the changes in the MS4 permit, including the creation of a green infrastructure pamphlet, see Exhibit D.

PUBLIC PARTICIPATION / INVOLVEMENT

1. BMP B.3 – Stakeholder Meeting

B. Compliance with Permit Conditions	The Village attended local NPDES coordination meetings every 2 months with other members of the Macon County MS4 community.
C. Information Collected and Analyzed	Meetings attended: April 19, 2016; June 14, 2016; July 19, 2016 October 18, 2016; January 17, 2017; March 22, 2017; April 11, 2017
D. Activities for Next Reporting Cycle	Continue to attend local NPDES coordination meetings.

2. BMP B.4 – Public Hearing

B. Compliance with Permit Conditions	No ordinance changes were implemented during the reporting period and therefore no public hearings were required.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Continue to review the Storm Water Ordinance and present changes to Village Board for approval.

3. BMP B.6 – Program Involvement

B. Compliance with Permit Conditions	The Village attended local NPDES coordination meetings every 2 months with other members of the Macon County MS4 community.
C. Information Collected and Analyzed	Meetings attended: April 19, 2016; June 14, 2016; July 19, 2016 October 18, 2016; January 17, 2017; March 22, 2017; April 11, 2017
D. Activities for Next Reporting Cycle	Continue to attend local NPDES coordination meetings.

Annual Evaluation Statement

To evaluate the effectiveness of our public involvement efforts, the following will be documented:

This year marked the first year we hosted an open house-style meeting to address stormwater quality concerns. We will evaluate overall comments from the meeting, noting direction to take for next year.

To make the meeting more successful next year, we can focus on more advertisement, and bring big county maps to make locating individual's sites easier. Having computers available to easily look up drainage area/site specifics will be investigated.

ILLICIT DISCHARGE DETECTION AND ELIMINATION

1. BMP C.1 – Sewer Map Preparation

B. Compliance with Permit Conditions	No stormwater infrastructure was added to the Village GIS map, however GIS map work has begun.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	The Village will do a complete work up of the town's storm sewer in 2018.

2. BMP C.6 – Program Evaluation and Assessment

B. Compliance with Permit Conditions	Monitoring of Finley Creek was completed using the Illinois River watch site identification form in April 2017.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Finley Creek will continue to be monitored using the Illinois River Watch site identification form as established August 2016. Outfalls will begin to be monitored once mapping is complete.

3. BMP C.7 – Visual Dry Weather Screening

B. Compliance with Permit Conditions	Monitoring of Finley Creek monitored by Illinois River Watch site identification form was completed on April 2017.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Finley Creek will continue to be monitored using the Illinois River Watch site identification form as established August 2016. Outfalls will begin to be monitored once mapping is complete.

Annual Evaluation Statement

To evaluate the effectiveness of our illicit detection efforts, the following will be documented:

This year marked the first year Finley Creek was monitored using the Illinois River watch site identification form. Annual inspection will be compared to identify changes in water quality.

Storm water infrastructure will be mapped in 2018. After outfall locations are documented, 20% of outfall will checked during dry weather annually.

Sewer map

CONSTRUCTION SITE RUNOFF CONTROL

1. BMP D.1 – Regulatory Control Program

B. Compliance with Permit Conditions	The Village's Storm Water Management ordinance was enforced by providing site plan and subdivision plan reviews. The Ordinance sets forth the requirements for the issuance of Land Disturbance Permits, requirements for Construction Site Storm Water discharges, preparation of Storm Water Pollution Prevention Plans, and associated subjects
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Continue site plan reviews by the Village for compliance with local erosion and sediment control rules. The Village will evaluate the need for Stormwater Ordinance Revisions in 2017 and recommend revisions in 2018.

2. BMP D.2 – Erosion and Sediment Control BMPs

B. Compliance with Permit Conditions	The Village provided site plan and subdivision plan reviews, using consultant services for compliance with local erosion and sediment control requirements.
C. Information Collected and Analyzed	Plans Reviewed: 01/12/2017 - **Company asked to not be named** (MSA) 05/20/2016 – Ruff-Inn-It Lodge (Chastain) 6/16/2016 – Mt. Zion High School (Chastain) 6/16/2016 – McAtee (Chastain)
D. Activities for Next Reporting Cycle	Continue site plan reviews by the Village for compliance with local erosion and sediment control rules.

3. BMP D.4 – Site Plan Review Procedures

B. Compliance with Permit Conditions	The Village provided site plan and subdivision plan reviews for compliance with local erosion and sediment control requirements.
C. Information Collected and Analyzed	Plans Reviewed: 01/12/2017 - **Company asked to not be named** (MSA) 05/20/2016 – Ruff-Inn-It Lodge (Chastain) 6/16/2016 – Mt. Zion High School (Chastain) 6/16/2016 – McAtee (Chastain)
D. Activities for Next Reporting Cycle	Continue site plan reviews by the Village for compliance with local erosion and sediment control rules.

4. BMP D.5 – Public Information Handling Procedures

B. Compliance with Permit Conditions	The phone number for the Village Hall is available on the website for the general public to report storm water issues (www.maconcleanwater.com). Complaints were forwarded to Public Works, investigated and

	handled appropriately.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Continue to track and report complaints.

5. BMP D.6 – Site Inspection/Enforcement Procedures

B. Compliance with Permit Conditions	The MCSWCD provided onsite inspections during active construction. Village staff was responsible for follow-up enforcement of the storm water requirements. The Village also conducted independent onsite inspections in collaboration with MCSWCD personnel.
C. Information Collected and Analyzed	Sixteen (16) Land Disturbance permits were opened (see attached report from MCSWCD).
D. Activities for Next Reporting Cycle	Continue to have MCSWCD conduct initial site inspections for developments subject to ILR10 and perform follow-ups as necessary.

Annual Evaluation Statement

To evaluate the effectiveness of our Construction Site controls, the following will be documented in the next reporting cycle:

- Which BMPs are regularly installed correctly and incorrectly. This can guide future trainings. Inlet controls, stabilized construction entrances, and utilizing silt fence above its capabilities is still an issue on many of our sites.
- Evaluate numbers of follow up site inspections. Our goal is to have an overall downward trend.

In 2016-2017, roughly 30-40% of sites have needed follow-up inspections

POST-CONSTRUCTION RUNOFF CONTROL

1. BMP E.2 – Regulatory Control Program

B. Compliance with Permit Conditions	The Village's Storm Water Management ordinance was enforced pertaining to the design, installation and maintenance of post-construction water quality BMPs in accordance with the most current Illinois Urban Manual Standards.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Continue to enforce storm water management technical guidelines as set forth in the Illinois Urban Manual. The Village will evaluate the need for Stormwater Ordinance Revisions in 2017 and recommend revisions in 2018.

2. BMP E.4 – Pre-Construction Review of BMP Designs

B. Compliance with Permit Conditions	The Village provided site plan and subdivision plan reviews to address post- construction storm water BMPs.
C. Information Collected and Analyzed	Plans Reviewed: 01/12/2017 - **Company asked to not be named** (MSA)

	05/20/2016 – Ruff-Inn-It Lodge (Chastain) 6/16/2016 – Mt. Zion High School (Chastain) 6/16/2016 – McAtee (Chastain)
D. Activities for Next Reporting Cycle	Continue to enforce storm water regulations.

3. BMP E.5 – Site Inspections during Construction

B. Compliance with Permit Conditions	The MCSWCD provided onsite inspections during active construction. Village staff was responsible for follow-up enforcement of the storm water requirements. The Village also conducted independent onsite inspections in collaboration with MCSWCD personnel.
C. Information Collected and Analyzed	Sixteen (16) Land Disturbance permits were opened (see attached report from MCSWCD).
D. Activities for Next Reporting Cycle	Continue site inspections by MCSWCD of reported construction sites.

4. BMP E.6 – Post-Construction Inspections

B. Compliance with Permit Conditions	The Macon County Soil and Water Conservation District inspected five detention basins on November 7, 2016, and documented with photos and comments for the Village (see Exhibit E for the report and letters). The Village then required the property to come into compliance according to inspection comments. No stormwater detention/retention basins were added to the map.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Continue evaluation of existing operation and maintenance policies and amend as necessary.

Annual Evaluation Statement

To evaluate the effectiveness of our Post Construction controls, the following will be documented:

The SWCD partners with the Village of Mt Zion, Village of Forsyth, and the City of Decatur to inspect 25% of each municipality's detention basins per year. The most common maintenance issues are: clearing woody vegetation from the dam, and light scour erosion at the outlets. Knowing these items are common may direct future training/education.

POLLUTION PREVENTION / GOOD HOUSEKEEPING

1. BMP F.1 – Employee Training Program

B. Compliance with Permit Conditions	Employee training was conducted on 04/26/2017 at 11:30 am. The following videos were presented: Public Works Housekeeping: https://youtu.be/UxOam2GEVgQ "How to Spot & Report Stormwater Pollution":

	https://youtu.be/hnXMaImmcKo
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Provide employee training regarding one category of BMP.

2. BMP F.3 – Municipal Operations Storm Water Control

B. Compliance with Permit Conditions	The Village continued the practice of washing their vehicles in closed facilities that drain to sanitary sewers.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Continue to enforce the use of the designated wash facilities.

3. BMP F.6 – Other Municipal Operations Control

B. Compliance with Permit Conditions	The Village continued to use salt application devices to regulate salt applied to roads for snow removal. The Village continued to store salt in a covered facility. Catch basin and storm sewer inlet grates were cleaned monthly during the reporting period. Street sweeping was performed four (4) times during the reporting period. Street sweepings were performed 5 times during this year. – April 2016; June 2016; September 2016; November 2016; and March 2017 The Village applies fertilizer at our parks/Village Hall on an "as needed" basis. We read and follow the label that is on the chemical we are using to determine how much to apply, and how frequently to apply it. All fertilizers, pesticides, and herbicides are stored in a closed facility (pole barn), on a pallet to keep it up off the ground.
C. Information Collected and Analyzed	N/A
D. Activities for Next Reporting Cycle	Clean all structures from invert to rim on select roadways. Continue salt storage and application reduction measures, street sweepings, and appropriate use of fertilizers.

Annual Evaluation Statement

To evaluate the effectiveness of our Good Housekeeping controls, the following will be documented:

Employee training: We plan to leave room at every MS4 Work Group Meeting for sharing of new educational resources, information. An effort will be made to share educational items across municipalities.

The Village will encourage employees to notify their supervisor of any housekeeping items to be addressed.

E. PERMIT OBLIGATIONS PERFORMED BY ANOTHER ENTITY

1. The Village of Mt. Zion along with the Village of Forsyth and the City of Decatur has contracted with the Macon

County Soil and Water Conservation District (SWCD) for the collection of permit fees, inspection and enforcement of the Land Disturbance Permit process. Each of the communities has adopted a Land Disturbance Permit Ordinance with similar wording and requirements. The Macon County Soil and Water Conservation District is responsible for onsite inspections and each community is responsible for enforcement of erosion and sedimentation requirements of the NPDES Permit.

F. CONSTRUCTION PROJECTS DURING REPORTING PERIOD

No Village of Mt. Zion construction projects disturbed one or more acres for the reporting year.

G. Monitoring Program

The Village completed a visual observation at two locations of Finley Creek, one upstream where the creek enters the Village and one where the creek exits the Village. See Exhibit F and G for the written site evaluation form.

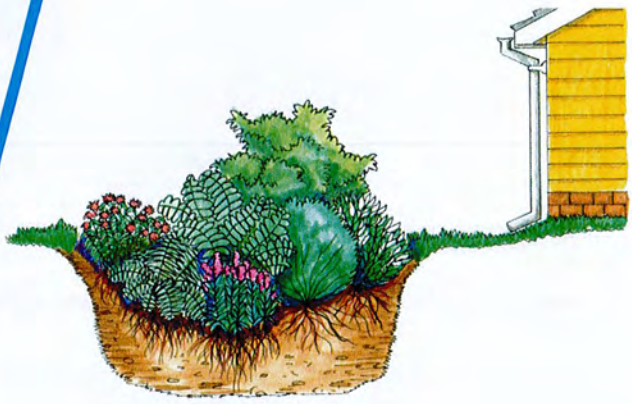
Exhibit A

Stormwater Quality Open House

Wednesday, March 22, 2017
5:30—7:00 PM
Decatur Public Library, Staley Room
130 N. Franklin St. Decatur, IL 62523

Rain water from strong storms runs over roofs and driveways, picking up debris along the way. Stormwater can pollute our streams and Lake Decatur. You can help slow the flow of stormwater and help keep our waterways clean!

Ask municipal staff and engineers from around the county how you can implement Best Management Practices at your home or business. Learn simple design tips for rain barrels, rain gardens, wet detention ponds, and more.



Sponsored by the Macon County MS4 Work Group, working together to protect and improve water quality in Macon County

www.maconcleanwater.com 217-877-5670 x 3

Sign In!

Name	Address	How did you hear about this event?
N. J. Miller	3080 Sangamon Rd 62521	Newspaper
J E [illegible]	629 W. Decatur St	Wife

Exhibit B

JOIN US!

Meeting Today's Stormwater Challenges

Macon County's Annual Stormwater Workshop for Contractors, Engineers, Public Works, and Elected Officials

Stay Informed, Stay Compliant!

Contractors, engineers, and municipalities all have different but equal parts to play in creating a strong stormwater management program in Macon County. This morning workshop offers interesting presentations for all:

Keynote:

New Rainfall Estimates: Dr. Jim Angel, IL State Climatologist

Permit Updates: Cathy Demeroukas & Holly Hirchert, IEPA

Concurrent Sessions:

Phased Construction & BMP Failures: Rich Nowack, PLA

Designing Green: Jim Novak & Jay Womack, Huff & Huff Inc.

The Municipality's Role in Stormwater:

The New Permit: Mary Beth Falsey, Dupage County Stormwater

Auditing Ordinances: Dennis Dreher, Geosyntec

Free breakfast provided at 7:30 AM. Many vendor booths!

WHEN:

Tuesday, October 18, 2016

7:30 AM to 11:30 AM

WHERE:

Nat'l Sequestration Education Center

Richland Community College

1 College Park Decatur, IL 62521

RSVP:

www.maconcleanwater.com

(217) 877-5670 x3

3 PDH Credits Available!

Please RSVP by October 13th

Brought to you by the MS4 Work Group of Macon County, including:

FORSYTH
VILLAGE OF FORSYTH, ILLINOIS

CITY OF DECATUR ILLINOIS

MACON COUNTY SOIL & WATER CONSERVATION

MACON COUNTY, ILLINOIS

VILLAGE OF MT. ZION
Build your story here.

Last	First	Number	Email Address	Concurrent Session
Anderson	Todd	2	todd@romanocompany.com	Construction
Christian	Kyle			
Angel	Jim	1	jimangel@illinois.edu	
Bainbridge	Steve	1	sbainbridge@bgm.associates	Engineer
Baskerville	Megan	1	megan.baskerville@il.nacdnet.net	Construction
Baumann	Steve	1	onsitepe@comcast.net	
Binnion	Angela	1	angela@maconcountyswcd.com	Construction
Bird	Bruce	1		
~~Boyles~~ Boyle,	Bill	1	ABOYLE@MKWOLFER-ASSOCIATES.COM	CONSTRUCTION
Casebeer	Jon	4	jonathon.l.casebeer.nfg@mail.mil	
Caswell	Paul	1	PCaswell@decaturil.gov	Public Works
Cave	Mary	6	jmarler@chastainengineers.com mcave@chas...	Engineering
Scott	Thomas		tscott@chastainengineers.com	"
Ozier	Jonas		jozier@chastainengineers.com	"
Siefert	CHRIS		csiefert@chastainengineers.com	"
Hosier	Cory		Chosier@chastainengineers	"
Rickard	Corey		crickard@chastainengineers.com	"
Cook	Ryan	1	rcook@bwcinc.com	BWC - Engineering
Demeroukas	Cathy	1	Cathy.Demeroukas@illinois.gov	(ROAD)
Dreher	Dennis	1	DDreher@Geosyntec.com	Public Works
Falsey	Mary Beth	1	marybeth.falsey@dupageco.org	Public Works
Forsyth	Village	5		
Cochran Bart	"	1	Lcolon@forsythvillage.us	PUBLIC WORKS
Jones Connie				
Weikle, Wesley		1		Public works
Dunn David		1		
Moretti	ALAN	1	jmoretti@highway.co.macon.il.us	Construction
Foster	Matt	1	mfoster@bgmengineering.com	Public Works

Last	First	Number	Email Address	Concurrent Session
Hall	John	1	jhall@co.champaign.il.us	
Hall	Troy	1	thall@decaturil.gov	Public Works
Hirchert	Holly	1	holly.hirchert@illinois.gov	
Hoffman	Jen	1		JH/PW
Howell	Mark	1	mhowell@xenongeosci.com	~~Engineering~~ PW
Hutchens	Gary	2	garyhutchens1@gmail.com	Public Works
Jacobs	Stephen	2	stephen.jacobs@sksengineers.com	
Jones	Jason	1	jjones14s@illinois.edu	
McDaniel	Pat	1	foryoudec@comcast.net	Public Works
Maddock	Bev	1	beverly.maddock@champaignil.gov	
Mann	Dana	1	mannengr@yahoo.com	ENGINEER
Marley	Rick	1	rmarley@decaturil.gov	Public Works
Mitchell	Leslie	1	leslie.mitchell@champaignil.gov	
Newell	Matt	1	mnewell@decaturil.gov	Public Works
Novak	Jim	1	jnovak@huffnhuff.com	Engineers
Nowack	Richard	1	rnowack@nowackenvironmental.com	Construction
Skelley	Dan	1	daniel.skelley@aecom.com	Engineer
Wauthier	Don	1	DWauthier@bernsclancy.com	Engineer
Wolfer	Mark	1	MWOLFER @ MAWOLFER & ASSOCIATES. COM	CONST.
Womack	Jay	1	jwomack@huffnhuff.com	Engineers
Vendor	Haynes	1		

Morettti Joe

Kisel Robert, Robert.Kisel@hanescompanies.com CONSTRUCTION

Hutton, William, Village of mt. Zion billhutton2000@gmail.com Public Works

John, Larrison, Village of Mt. Zion Public Works

~~Scott, Thomas~~

Exhibit C

Bioswales

Bioswales are storm water runoff conveyance systems that provide an alternative to storm sewers. They can absorb low flows or carry runoff from heavy rains to storm sewer inlets or directly to surface waters. Bioswales improve water quality by infiltrating the first flush of storm water runoff and filtering the large storm flows they convey. The majority of annual precipitation comes from frequent, small rain events. Much of the value of bioswales comes from infiltrating and filtering nearly all of this water.

Who should I contact if I want to know more about these practices?

City of Decatur
217-424-2724

Macon County
217-425-6583

Village of Forsyth
217-433-9597

Village of Mt. Zion
217-864-4811

Green Infrastructure

Prepared by: Macon County Municipal Separate Storm Sewer System (MS4) Communities

What is Green Infrastructure?

Green Infrastructure is a network for solving urban and climatic challenges by building with nature. The main components are stormwater management, climate adaptation, less stress heat, better air quality, and clean water and healthy soils. It also serves to provide an ecological framework for social, economical, and environmental health of the surroundings.

Rain Gardens

Rain Gardens are landscaped areas built in a depression that are designed to capture and filter stormwater runoff from a roof or other impervious surface. The plants and soil of the rain garden provide an easy, natural way of reducing the amount of stormwater runoff from individual residential properties.

Pervious Pavement

Pervious pavement may include paving blocks, grid pavers, or pervious concrete installed according to manufacturer's specifications. Pervious pavement can be used for driveways and patios with a stone reservoir underneath. The reservoir temporarily stores surface runoff before infiltrating it into the soil below the stone reservoir. Runoff is infiltrated directly into the soil and improves water quality.

Green Roofs

A green roof is a roof that is partially or completely covered with vegetation and waterproofing membrane. A green roof's purpose is to absorb rainwater, provide insulation, create habitat for wildlife, and help lower urban air temperatures.

Exhibit D

maconcleanwater.com Views/Month:

Month	Visits	Unique Visitors
From 01-Mar, 2016	731	718
Apr, 2016	1,048	1,039
May, 2016	940	931
Jun, 2016	727	717
Jul, 2016	729	718
Aug, 2016	820	812
Sep, 2016	701	686
Oct, 2016	694	690
Nov, 2016	610	608
Dec, 2016	555	555
Jan, 2017	537	532
Feb, 2017	481	478
Mar, 2017	551	541
31-Apr, 2017	9	9

Exhibit E

Macon County Soil & Water Conservation District
4004 College Park Road Decatur, IL 62521
Ph: 217-877-5670 ext. 3
www.maconcountyswcd.com

November 11, 2016

Village of Mt. Zion
Corey Mckenzie
1400 Mt. Zion Parkway
Mt. Zion, IL 62549

Dear Corey,

An inspection of five detention basins within the Village of Mt. Zion was conducted on November 7, 2016 by the Macon County Soil and Water Conservation District (SWCD), established under the current Memorandum of Understanding between the Village and the SWCD. The purpose of inspecting basins is to ensure their functionality, look for erosion in and around the basin, lack of vegetation, and signs of damage or disrepair. Well-functioning detention basins are necessary for proper stormwater management in Mt. Zion and the county as a whole.

The site inspection identified the following items:

- Dense woody vegetation was seen on both the front and back slopes of the South Lake and Buckhead Estates basins, and should be removed to ensure the longevity of the dam itself. Find attached the operation and maintenance guidelines set out by the Natural Resource Conservation Service (NRCS) for proper care of a dam.
- The basin at Glenwood seems to have both the inlet and outlet obstructed by dense vegetation, and it may be leading to a reduction in the designed storage capacity of the basin.
- The outlet pipe for Silver Leaf's basin seems to have been raised, raising the permanent pool of the pond and leaving little to no additional storage to actually retain stormwater during storm events.
- Hunter's Pointe's basin has great vegetation, but the inlet may be slightly obstructed, and debris could be removed from the outlet rock structure.

Please review the following photo logs for further comments, and feel free to reach out to the SWCD for further assistance. Thank you for working to protect stormwater quality in Macon County!

Sincerely,

MBaskerville

Megan Baskerville
Watershed Specialist

MACON COUNTY SOIL AND WATER CONSERVATION DISTRICT - INSPECTION PHOTOS

Date: 11/7/2016	**Site Name:** **South Lake (Basin A-4)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: No woody vegetation should be allowed on the front or back slopes of the dam.	
Photo #: 01	

Date: 11/7/2016	**Site Name:** **South Lake (Basin A-4)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: Back slope of dam looking east. No woody vegetation should be allowed on the front or back slope of the dam.	
Photo #: 02	

MACON COUNTY SOIL AND WATER CONSERVATION DISTRICT - INSPECTION PHOTOS

Date: 11/7/2016	**Site Name:** **South Lake (Basin A-4)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: Consider some removal of the woody vegetation around the outlet of South Lake's basin, as the vegetation may obstruct the outlet if allowed to grow.	
Photo #: 03	

Date: 11/7/2016	**Site Name:** **Buckhead Estates (Basin A-8)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: Back slope of dam looking east. No woody vegetation (maple saplings) should be allowed on the front or back slope of the dam.	
Photo #: 01	

MACON COUNTY SOIL AND WATER CONSERVATION DISTRICT - INSPECTION PHOTOS

Date: 11/7/2016	**Site Name:** **Buckhead Estates (Basin A-8)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: Front slope of dam looking east. No woody vegetation should be allowed on the front or back slope of the dam. Alternatives to maintain a natural aesthetic near waterline: redtop, or river, American, or green bulrush.	
Photo #: 02	

Date: 11/7/2016	**Site Name:** **Hunters Pointe (Basin A-9)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: Inlet is obstructed.	
Photo #: 01	

MACON COUNTY SOIL AND WATER CONSERVATION DISTRICT - INSPECTION PHOTOS

Date: 11/7/2016	**Site Name:** **Hunters Pointe (Basin A-9)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: Some trash/debris could be cleaned from the outlet.	
Photo #: 02	

Date: 11/7/2016	**Site Name:** **Hunters Pointe (Basin A-9)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: This inlet protection can be removed, as all land upstream is now densely vegetated.	
Photo #: 03	

MACON COUNTY SOIL AND WATER CONSERVATION DISTRICT - INSPECTION PHOTOS

Date: 11/7/2016	**Site Name:** **Glenwood (Basin A-10)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: Both the inlet and outlet are obstructed by dense vegetation. Standing water seen, should be eliminated if this was designed to be a dry detention basin.	
Photo #: 01	

Date: 11/7/2016	**Site Name:** **Glenwood (Basin A-10)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments:	
Photo #: 02	

MACON COUNTY SOIL AND WATER CONSERVATION DISTRICT - INSPECTION PHOTOS

Date: 11/7/2016	**Site Name:** **Silver Leaf (Basin A-13)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: The outlet pipe seems to have been raised, leaving no stormwater storage in the pond. The outlet pipe should be returned to the original design elevation.	
Photo #: 01	

Date: 11/7/2016	**Site Name:** **Silver Leaf (Basin A-13)**
Photo By: Megan Baskerville	
Municipality: Mt. Zion	
Comments: The inlet pipe's culvert attachment is slightly askew, and could be fixed.	
Photo #: 02	

NATURAL RESOURCES CONSERVATION SERVICE

ILLINOIS OPERATION AND MAINTENANCE

POND

Follow the operation and maintenance plan below to keep your pond functioning as intended:

- Inspect after significant storm events and at least twice a year to identify repair and maintenance needs.
- Inspect the downstream face of the embankment annually. Wet areas, indicated by seeps, wetland plants or unusually vigorous vegetation the downstream face of an embankment could indicate a serious problem.
- Clear accumulated trash away from water control infrastructure, including pipe inlets, rock riprap, and vegetated spillways. Remove debris that may accumulate in the pond and immediately upstream or downstream from the pond.
- Inspect control gates (if any) for proper functioning. Guards must remain in place to keep structures operating as planned. Promptly repair or replace damaged or inoperable components.
- Repair any settlement or erosion that occurs along the pipe. If this problem persists, evaluate the pipe for leakage and erosion of the fill material into or along the pipe.
- Fill rills and gullies that occur on the embankments and in the vegetated spillway. Reseed the filled areas. Repair erosion at pipe outlets promptly.
- Eradicate or otherwise remove all rodents or burrowing animals. Immediately repair any damage caused by their activity.
- Immediately repair any vandalism, vehicular, or livestock damage to any earthfills, spillways, outlets or other appurtenances.
- Repair spalls, cracks and weathered areas in concrete surfaces. Repair or replace rusted or damaged metal. Replace any displaced rock riprap to constructed grade.
- Protect the structure from damage by farm equipment and livestock. Repair or replace damaged fences to keep livestock out of the pond, where applicable.
- Maintain vigorous growth of desirable vegetative coverings. This includes reseeding, fertilization, and mowing as needed. Use caution during mowing operations so as not to tip or rollover mowing equipment and cause injury or loss of life. When applying fertilizer to vegetative cover, use caution to prevent degradation to water quality.
- Prevent woody vegetation from growing on or around the embankment, abutment, or vegetated spillway areas. Control tree and bush growth by hand cutting, mowing, or chemicals. Avoid damaging grass or aquatic vegetation with herbicide sprays.
- Maintain a riparian filter around the perimeter of the pond to trap sediment, where applicable.

Additional Details:

_____

_____

NRCS, Illinois

February 2012

VILLAGE OF
MT. ZION
Build your story here.

COPY

March 22, 2017

The Glenwood
PO Box 771
Effingham, IL 62401

RE: Detention Basin Inspection – 1635 N. Baltimore Road, Mt. Zion, Illinois

To Whom It May Concern:

Recently, the Macon County Soil and Water Conservation District inspected, on behalf of the Village of Mt. Zion, retention/detention basins within the Village of Mt. Zion. Upon inspection, the detention basin for The Glenwood, both the inlet and outlet were found to be obstructed by dense vegetation along with visible standing water. The detention basin was designed as a dry basin, therefore it needs to be maintained as such. I have attached a copy of the photos supplied to the Village of Mt. Zion.

The Village of Mt. Zion is requesting that the detention basin be maintained in accordance with Village of Mt. Zion Ordinances and State of Illinois Regulations. Attached is an operation and maintenance plan that can be followed to bring the detention basin back into compliance. The Village of Mt. Zion will inspect the basin in 60 days for compliance. If you have any questions, or if an extension is necessary, please don't hesitate to contact me.

Thank you for your attention to this matter.

Sincerely,

Julie Miller
Village Administrator

1400 Mt. Zion Parkway
Mt. Zion, Illinois 62549
217-864-5424
217-864-5935 Fax
www.mtzion.com

VILLAGE OF
MT. ZION
Build your story here.

COPY

March 23, 2017

James and Cynthia Neff
2235 Buckhead
Decatur, IL 62521

RE: Detention Basin Inspection

Mr. & Mrs. Neff:

Recently, the Macon County Soil and Water Conservation District inspected, on behalf of the Village of Mt. Zion, retention/detention basins within the Village of Mt. Zion. Upon inspection, the detention basin section which is part of your property was found to be in violation of Village Ordinances regarding storm water rules and regulations. The back slope and front slope of the dam contains woody vegetation. The woody vegetation on the front and back slopes of the dam can compromise the integrity of the dam. As noted by Ms. Baskerville, there is alternative vegetation that can be planted if a natural aesthetic look is desired. I have attached a copy of the photos supplied to the Village of Mt. Zion.

The Village of Mt. Zion is requesting that the detention basin be maintained in accordance with Village of Mt. Zion Ordinances and State of Illinois Regulations. Attached is an operation and maintenance plan that can be followed to bring the detention basin back into compliance. The Village of Mt. Zion will inspect the basin in 60 days for compliance. If you have any questions, or if an extension is necessary, please don't hesitate to contact me.

Thank you for your attention to this matter.

Sincerely,

Julie Miller
Village Administrator

1400 Mt. Zion Parkway
Mt. Zion, Illinois 62549
217-864-5424
217-864-5935 Fax
www.mtzion.com

VILLAGE OF
MT. ZION
Build your story here.

March 23, 2017

Don & Anna McNeill
2590 Lake Reunion Parkway
Decatur, IL 62521

RE: Detention Basin Inspection

Mr. & Mrs. McNeill:

Recently, the Macon County Soil and Water Conservation District inspected, on behalf of the Village of Mt. Zion, retention/detention basins within the Village of Mt. Zion. Upon inspection, the detention basin section which is part of your property was found to be in violation of Village Ordinances regarding storm water rules and regulations. The back slope and front slope of the dam contains woody vegetation. The woody vegetation on the front and back slopes of the dam can compromise the integrity of the dam. I have attached a copy of the photos supplied to the Village of Mt. Zion.

The Village of Mt. Zion is requesting that the detention basin be maintained in accordance with Village of Mt. Zion Ordinances and State of Illinois Regulations. Attached is an operation and maintenance plan that can be followed to bring the detention basin back into compliance. The Village of Mt. Zion will inspect the basin in 60 days for compliance. If you have any questions, or if an extension is necessary, please don't hesitate to contact me.

Thank you for your attention to this matter.

Sincerely,

Julie Miller
Village Administrator

1400 Mt. Zion Parkway
Mt. Zion, Illinois 62549
217-864-5424
217-864-5935 Fax
www.mtzion.com

Exhibit F

Illinois RiverWatch Network
SITE IDENTIFICATION FORM

1. **WATERBODY NAME:** Finley Creek
   Use the name of the waterbody (stream/river) as it appears on a USGS 7 ½ minute topographic map, or some other reliable map. If the name of the waterbody is unknown, write "UNKNOWN," or ask someone who lives near the site if they know the name.

2. **WATERSHED NAME:** Sangamon River
   List the watershed in which your stream site lies. Use the names of the 10 watershed recognized by the RiverWatch Program (see list and map below).

3. **COUNTY:** Macon
   Write the name of the county in which the stream site lies.

4. **NEAREST TOWN/CITY:** Mt. Zion
   Write the name of the town/city in which the stream site lies.

5. **LOCATION DESCRIPTION:** _____
   Provide a brief statement on the direction and distance of the site from a stationary landmark that can be identified on a road map or topographic map. A stationary landmark can be defined as a town, church, school, bridge, road or road crossing. For example, a location description for a stream site would be written as: ½ MILE SOUTH OF THE INTERSECTION OF CR 1200 E AND CR 800 N.

6. **LATITUDE:** 39.7689 **LONGITUDE:** -88.8860
   Latitude and longitude coordinates are to be written as decimal degrees to 4 decimal places. For example: 20.0075°

   How did you acquire the longitude/latitude coordinates? (Circle one) GPS Topo Map ArcView Unknown

7. **TOPOGRAPHIC MAP NAME:** _____
   Write the name of the USGS 7 ½ minute topographic map that was used to determine the legal description of the site. The name of the map can be found in the upper and lower right hand corners of the map.

8. **RANGE:** 3E **TOWNSHIP:** 15 N **SECTION:** 9 **QUARTER SECTION:** NW
   Write the range, township, section and quarter section values in the banks above.

9. **COMPLETED BY:** Corey Rickard
   Print full name.

WATERSHED NAMES USED BY RIVERWATCH:

1. Rock River
2. Fox and DesPlaines Rivers
3. Kankakee, Mackinaw, and Vermilion Rivers
4. Spoon River
5. Sangamon River
6. LaMoine River
7. Kaskaskia River
8. Embarras and Vermilion Rivers
9. Little Wabash River
10. Big Muddy, Saline, and Cache Rivers

Illinois RiverWatch Network
SITE EVALUATION FORM

Waterbody: Findley Creek Evaluation Date: April 26, 2017

Completed By: Corey Rickard

1. **Owner / Manager Property Access Permission.** ☐ YES ☐ NO
An X in the YES space indicates that a PROPERTY ACCESS PERMISSION form has been signed and completed for this site. The signed permission form must accompany the registration materials prepared for this site.

Landowner's Name: _____ Phone Number: _____

2. **Protected Areas. Please check one.**

☐ The site is located in an Illinois Natural Preserve / Illinois Land and Water Reserve.

NAME OF PRESERVE / RESERVE: _____
NOTE: If the potential site is located within an Illinois Nature Preserve or an Illinois Land and Water Reserve, a permit MUST be requested from the Illinois Preserve Commission. A permit may take up to, or more than, 30 days to receive. Permit application does not guarantee permission to monitor.

☐ The site is NOT located within an Illinois Nature Preserve nor an Illinois Land and Water Reserve.

3. **Directions to Site.** Provide directions to the stream site. Be specific in your directions. You may include travel routes and any obvious landmarks. Indicate where and how far one would walk or drive from an obvious reference point. For example: Travel south on St. Hwy. 105 to Old Farm Road. Turn left. The stream is located underneath the third bridge crossing. You will see a foot bridge downstream. The beginning of the 200 ft site is marked by a large rock located 100 ft downstream from the foot bridge. Use the rock as you zero point and measure 200 ft downstream.

Travel South from the intersection of US 36 and Baltimore Ave. for 3.3 mi. Then head east on main st. for 0.3 mi turn right onto Carrington Ave. and travel south for 0.4 mi. Then walk east for 500 ft.

4. **Suitability of Site.** Evaluate the site according to the physical criteria listed below.

PHYSICAL SUITABILITY

☐ Location	If the site is located at a bridge crossing, the site must be located a minimum of 100 ft upstream or downstream from the bridge.
☐ Depth	The site must be wadeable; knee deep or less across most of the entire site at time of monitoring.
☐ Stream flow	An estimate of the stream flow must not exceed 9 ft^2/sec at the time of monitoring. If the product of the depth (feet) and velocity (feet/second) exceeds nine, the stream flow is generally considered unsafe for monitoring.

SAFETY

☐ Safe access	The site must be safely accessed for monitoring activities and be located in an area free of dangerous waste, debris and other threats to personal safety. Parking availability must allow ample space for the safe loading and unloading of monitoring equipment. Bank stability and slope must be sufficient to allow safe, easy access to the stream from at least two points along the study reach.
☐ Parking	Location of parking and the number of cars that may be parked in this area: _____

Illinois RiverWatch Network
SITE EVALUATION FORM

Site Name: Finley Creek downstream

5. **General Observations.** Provide any information in the space below that you feel is necessary to prove that the site is suitable or unsuitable for monitoring. This information may include notes and/or drawings. Note the presence of any possible hazardous condition and include any additional directions or observations about the location or condition of this site which may be of assistance to someone monitoring it for the first time. These notes may also include information concerning parking or finding the site.

The site was not near a bridge. At the site, the Creek was wadable with a flow less than 9 ft^2/sec. No dangerous material identified at site.

Illinois RiverWatch Network
PROPERTY ACCESS PERMISSION FORM

_____
Site ID Number (where applicable)

I, _____, agree to allow the National Great Rivers Research and
(property owner or manager)
Education Center (NGRREC[SM]) and _____ to access my
(individual or group name)
property listed under "Site Address" below for activities related to NGRREC's Illinois RiverWatch Network* training, clean-up and/or monitoring events. I also understand that habitat and biological data collected from my stream will be made available online for public access and research.

The above named individual or group has access to my property between the hours of _____ am/pm and _____ am/pm on the date or dates indicated under "Access Dates" below. The size of the group is not to exceed _____ people. I would prefer the group park at _____
_____ and access the site by _____.

I understand that this is a voluntary and non-binding agreement, that I am not responsible for any damages or injuries that occur during training, clean-up and/or monitoring activities, and reserve my right as the legal owner/manager of the property to revoke this agreement at any time. I also understand that Illinois RiverWatch Network and/or the individual or group contact listed below are responsible for informing all participants of the terms of this agreement and for ensuring adherence to those terms. Further, it is understood that the individual or group contact below is responsible for notifying me at least twenty-four hours prior to accessing the property.

To be completed by land owner or manager

_____
Full name of property owner or manager

_____
Signature of property owner or manager

_____
Site Address (street address)

_____
Site Address (city, state, zip code)

_____
Phone number

_____
Access Dates

To be completed by individual or group accessing property

_____
Individual or group contact (name)

_____
Signature of individual or group leader

_____
Address of individual or group leader (street address)

_____
Address (city, state, zip code)

_____
Phone number

_____
Today's Date

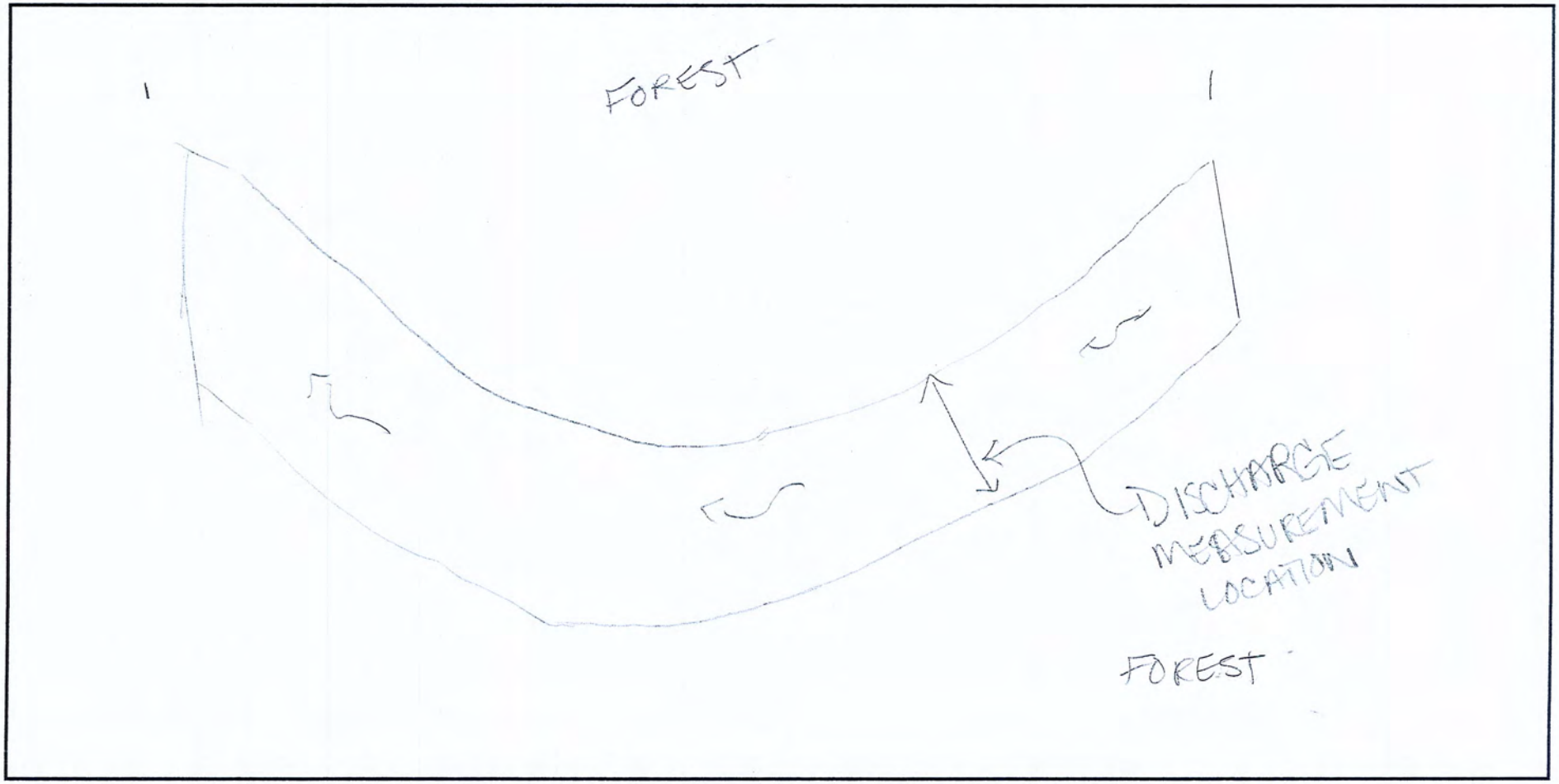
* The Illinois RiverWatch Network is a volunteer stream monitoring program administered by The National Great Rivers Research & Education Center.

RiverWatch

Site Sketch Sheet

SITE ID #: _____
STREAM: Finley Creek
DATE: ~~April~~ 2017
COUNTY: Macon
WATERSHED: Sangamon
RIVERWATCH TEAM: _____
(if applicable)

Sketch an aerial view of your 200 foot stream site every year. **Indicate the direction of North and the direction of stream flow.** Indicate features such as riffles, runs, pools, ditches, wetlands, dams, riprap, tributaries, landscape features, vegetation, and roads. **Indicate the types of habitat and locations where macroinvertebrates were collected. Also include the location where discharge was measured.** Include any notes you feel are necessary. (pgs 31 and 44)



RiverWatch

Habitat Survey Sheet

SITE ID #: _____
STREAM: Finley Creek
DATE: April 2017

Names of trained volunteers: Corey Rickard
Count of untrained volunteers: 1

Start Time 8 : ___ (am) pm *Please circle the correct time period* **End Time** ___ : ___ am pm

Present Weather (pg 32)
- ___ Clear/Sunny
- X Overcast
- ___ Showers (intermittent rain)
- ___ Rain (steady rain)
- ___ Storm (heavy rain)

Worst Weather in past 48 hrs. (pg 32)
- ___ Clear/Sunny
- X Overcast
- ___ Showers (intermittent rain)
- ___ Rain (steady rain)
- ___ Storm (heavy rain)

Temperature (pg 32)
Air 67 (°F) °C
Water 61 (°F) °C
Circle unit of measurement

Water Appearance (pg 32)
- X Clear
- ___ Milky
- ___ Foamy
- ___ Dark Brown
- ___ Oily Sheen
- ___ Reddish
- ___ Green
- ___ Other_____

Water Odor (pg 33)
- X None
- ___ Sewage
- ___ Chlorine
- ___ Fishy
- ___ Rotten Eggs
- ___ Petroleum
- ___ Other _____

Turbidity (pg 33)
- X Clear
- ___ Slight
- ___ Medium
- ___ Heavy

Canopy Cover (pg 34) ☐ 0% ☐ 1-5% ☐ 6-25% ☒ 26-50% ☐ 51-75% ☐ 76-100%

Algal Growth (pg 34) ☐ 0% ☐ 1-5% ☐ 6-25% ☒ 26-50% ☐ 51-75% ☐ 76-100%

Substrate Siltation Coverage (pg 35) Estimate the percentage of the stream bed that is covered by silt.

☐ 0% ☐ 1-5% ☐ 6-25% ☐ 26-50% ☒ 51-75% ☐ 76-100%

Are there Submerged Aquatic Plants? (pg 36) YES NO Must be vascular plant (has stem), not moss, grass, algae
If Yes, types? _____

List the types of **riparian (stream side) vegetation** present at your site. (pg 36) Trees grasses

Bottom Substrate (pg 36) Using the percent codes below, record the percentage of each of the materials that make up the stream bottom by writing the percent code letter in the blank next to the bottom substrate type. If the substrate is not present at the site, write letter A in the blank.

Percent cover codes: A = 0%, B = 1 - 5% C = 6 - 25%, D = 26 - 50%, E = 51 - 75%, F = 76 - 100%

- ___ Bedrock
- ___ Boulder (> 10 in)
- ___ Hard Pan Clay
- ___ Cobble (2.5 in. - 10 in.)
- ___ Gravel (0.1 in – 2.5 in.)
- ___ Other _____ (describe other substrate)
- E Sand (< 0.1 in.)
- D Silt

Exhibit G

Illinois RiverWatch Network
SITE IDENTIFICATION FORM

1. **WATERBODY NAME:** Finley Creek
Use the name of the waterbody (stream/river) as it appears on a USGS 7 ½ minute topographic map, or some other reliable map. If the name of the waterbody is unknown, write "UNKNOWN," or ask someone who lives near the site if they know the name.

2. **WATERSHED NAME:** Sangamon River
List the watershed in which your stream site lies. Use the names of the 10 watershed recognized by the RiverWatch Program (see list and map below).

3. **COUNTY:** Macon
Write the name of the county in which the stream site lies.

4. **NEAREST TOWN/CITY:** Mt. Zion
Write the name of the town/city in which the stream site lies.

5. **LOCATION DESCRIPTION:** ¼ mile South of the Intersection of Baltimore Ave. and Bentonville Rd.
Provide a brief statement on the direction and distance of the site from a stationary landmark that can be identified on a road map or topographic map. A stationary landmark can be defined as a town, church, school, bridge, road or road crossing. For example, a location description for a stream site would be written as: ½ MILE SOUTH OF THE INTERSECTION OF CR 1200 E AND CR 800 N.

6. **LATITUDE:** 39.7931 **LONGITUDE:** -88.8856
Latitude and longitude coordinates are to be written as decimal degrees to 4 decimal places. For example: 20.0075°

How did you acquire the longitude/latitude coordinates? (Circle one) GPS Topo Map (ArcView) Unknown

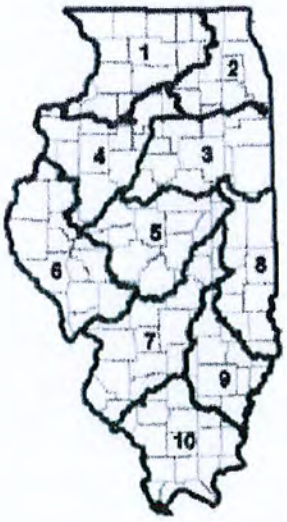
7. **TOPOGRAPHIC MAP NAME:** _____
Write the name of the USGS 7 ½ minute topographic map that was used to determine the legal description of the site. The name of the map can be found in the upper and lower right hand corners of the map.

8. **RANGE:** 3E **TOWNSHIP:** 16 **SECTION:** 32 **QUARTER SECTION:** SW
Write the range, township, section and quarter section values in the banks above.

9. **COMPLETED BY:** Corey Rickard
Print full name.

WATERSHED NAMES USED BY RIVERWATCH:

1. Rock River
2. Fox and DesPlaines Rivers
3. Kankakee, Mackinaw, and Vermilion Rivers
4. Spoon River
5. Sangamon River
6. LaMoine River
7. Kaskaskia River
8. Embarras and Vermilion Rivers
9. Little Wabash River
10. Big Muddy, Saline, and Cache Rivers



Illinois RiverWatch Network
SITE EVALUATION FORM

Waterbody: Finley Creek Evaluation Date: April 26, 2017

Completed By: Corey Rickard

1. **Owner / Manager Property Access Permission.** ☐ YES ☐ NO
An X in the YES space indicates that a PROPERTY ACCESS PERMISSION form has been signed and completed for this site. The signed permission form must accompany the registration materials prepared for this site.

Landowner's Name: _____ Phone Number: _____

2. **Protected Areas. Please check one.**

☐ The site is located in an Illinois Natural Preserve / Illinois Land and Water Reserve.

NAME OF PRESERVE / RESERVE: _____
NOTE: If the potential site is located within an Illinois Nature Preserve or an Illinois Land and Water Reserve, a permit MUST be requested from the Illinois Preserve Commission. A permit may take up to, or more than, 30 days to receive. Permit application does not guarantee permission to monitor.

☐ The site is NOT located within an Illinois Nature Preserve nor an Illinois Land and Water Reserve.

3. **Directions to Site.** Provide directions to the stream site. Be specific in your directions. You may include travel routes and any obvious landmarks. Indicate where and how far one would walk or drive from an obvious reference point. For example: Travel south on St. Hwy. 105 to Old Farm Road. Turn left. The stream is located underneath the third bridge crossing. You will see a foot bridge downstream. The beginning of the 200 ft site is marked by a large rock located 100 ft downstream from the foot bridge. Use the rock as you zero point and measure 200 ft downstream.

Travel south from the intersection US 36 and Baltimore Ave. for 2.2 miles, then travel east on Bakeridge Place for 0.2 mi. and walk 630 ft. north.

4. **Suitability of Site.** Evaluate the site according to the physical criteria listed below.

PHYSICAL SUITABILITY

☐ Location	If the site is located at a bridge crossing, the site must be located a minimum of 100 ft upstream or downstream from the bridge.
☐ Depth	The site must be wadeable; knee deep or less across most of the entire site at time of monitoring.
☐ Stream flow	An estimate of the stream flow must not exceed 9 ft^2/sec at the time of monitoring. If the product of the depth (feet) and velocity (feet/second) exceeds nine, the stream flow is generally considered unsafe for monitoring.

SAFETY

☐ Safe access	The site must be safely accessed for monitoring activities and be located in an area free of dangerous waste, debris and other threats to personal safety. Parking availability must allow ample space for the safe loading and unloading of monitoring equipment. Bank stability and slope must be sufficient to allow safe, easy access to the stream from at least two points along the study reach.
☐ Parking	Location of parking and the number of cars that may be parked in this area: _____

Illinois RiverWatch Network
SITE EVALUATION FORM

Site Name: Finley Creek upstream

5. **General Observations.** Provide any information in the space below that you feel is necessary to prove that the site is suitable or unsuitable for monitoring. This information may include notes and/or drawings. Note the presence of any possible hazardous condition and include any additional directions or observations about the location or condition of this site which may be of assistance to someone monitoring it for the first time. These notes may also include information concerning parking or finding the site.

The bridge near the site is 1,600' upstream. The creek is wadable with a flow less than 9 ft^2/sec, and no dangerous materials are identified at the site.

Illinois RiverWatch Network
PROPERTY ACCESS PERMISSION FORM

_____
Site ID Number (where applicable)

I, _____, agree to allow the National Great Rivers Research and
(property owner or manager)
Education Center (NGRREC[SM]) and _____ to access my
(individual or group name)
property listed under "Site Address" below for activities related to NGRREC's Illinois RiverWatch Network* training, clean-up and/or monitoring events. I also understand that habitat and biological data collected from my stream will be made available online for public access and research.

The above named individual or group has access to my property between the hours of _____ am/pm and _____ am/pm on the date or dates indicated under "Access Dates" below. The size of the group is not to exceed _____ people. I would prefer the group park at _____
_____ and access the site by _____.

I understand that this is a voluntary and non-binding agreement, that I am not responsible for any damages or injuries that occur during training, clean-up and/or monitoring activities, and reserve my right as the legal owner/manager of the property to revoke this agreement at any time. I also understand that Illinois RiverWatch Network and/or the individual or group contact listed below are responsible for informing all participants of the terms of this agreement and for ensuring adherence to those terms. Further, it is understood that the individual or group contact below is responsible for notifying me at least twenty-four hours prior to accessing the property.

To be completed by land owner or manager

_____
Full name of property owner or manager

_____
Signature of property owner or manager

_____
Site Address (street address)

_____
Site Address (city, state, zip code)

_____
Phone number

_____
Access Dates

To be completed by individual or group accessing property

_____
Individual or group contact (name)

_____
Signature of individual or group leader

_____
Address of individual or group leader (street address)

_____
Address (city, state, zip code)

_____
Phone number

_____
Today's Date

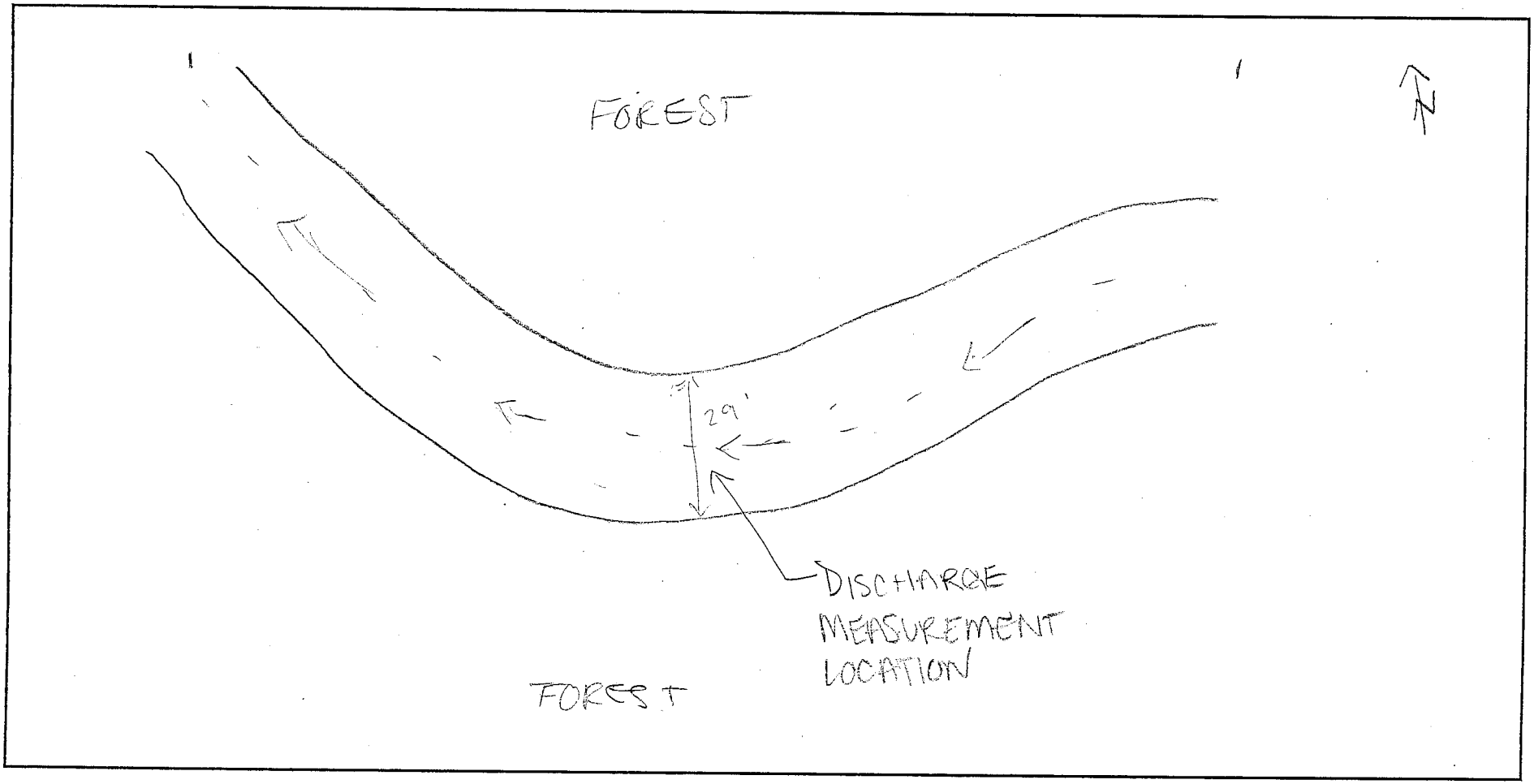
* The Illinois RiverWatch Network is a volunteer stream monitoring program administered by The National Great Rivers Research & Education Center.

RiverWatch

Site Sketch Sheet

SITE ID #: Upstream
STREAM: Finley Creek
DATE: April 2017
COUNTY: Macon
WATERSHED: Sangamon
RIVERWATCH TEAM:
(if applicable)

Sketch an aerial view of your 200 foot stream site every year. **Indicate the direction of North and the direction of stream flow.** Indicate features such as riffles, runs, pools, ditches, wetlands, dams, riprap, tributaries, landscape features, vegetation, and roads. **Indicate the types of habitat and locations where macroinvertebrates were collected. Also include the location where discharge was measured.** Include any notes you feel are necessary. (pgs 31 and 43)



Stream Discharge Estimate (pgs 38-39)

Stream Width: 29 (A) feet (ft)

If you can only record two depth or velocity measurements, please calculate the average by dividing the sum by 2.
If only one measurement is taken, use the single value as the average.

Depth Measurements:
1. 1.45 ft
2. 2.10 ft
3. 1.0 ft

Average Depth 1.7 (B) feet

Velocity Calculations:
10 ft ÷ 70 seconds = 0.14 ft/sec
10 ft ÷ 45 seconds = 0.22 ft/sec
10 ft ÷ 49 seconds = 0.20 ft/sec

Average Velocity 0.19 (C) ft/sec

Discharge (width x depth x velocity) 29 (A) ft x 1.7 (B) ft x 0.19 (C) ft/sec = 9.37 ft^3/sec

Land Uses (pgs 40-41)

Record all visible land uses occurring upstream and on either side of the stream site. Indicate which land uses are **dominant (D)** and which **affect small areas (X)**. If a listed land use is not present, leave blank.

D	Forest (W1)		Logging (W2)		Golf Course (W3)
	Grassland and Ungrazed Field (W4)		Commercial (W6)		Scattered Residential (W7)
X	High Density Residential/Urban (W8)		Cropland (W9) Type? (W9T)		Sewage Treatment (W10)
	Park (W11)		Mining (W12) Type? (W12T)		Sanitary Landfill (W13)
	Livestock Pasture (W14)		Construction (W15) Type? (W15T)		Industrial (W16)
	Other (W17)				

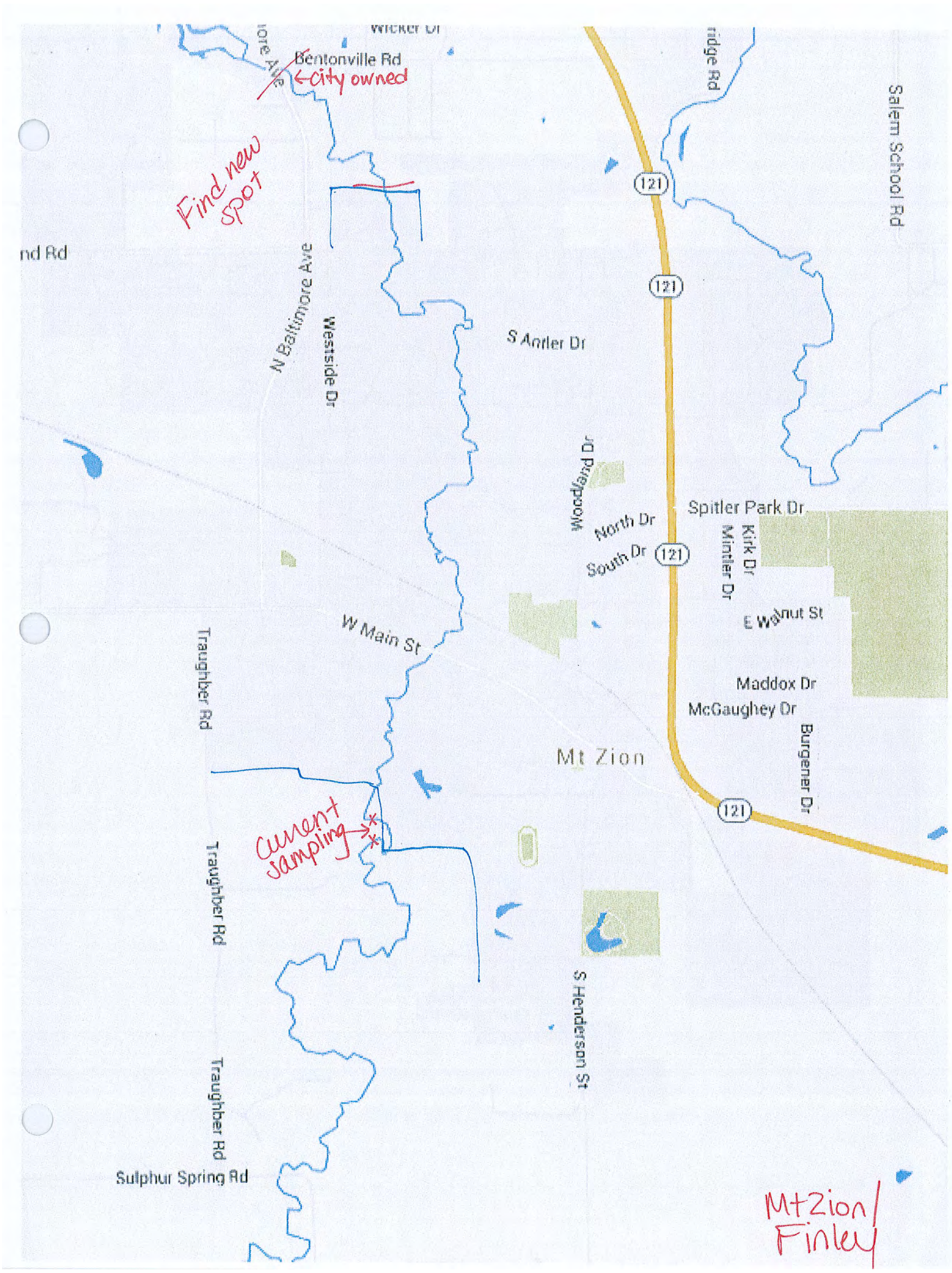
Please circle Yes or No and provide the necessary information to answer the following questions:

1. **Upstream Dam?** (including beaver dams) YES (NO)
   If Yes, approximately how far upstream is the dam from the site? _____
2. **Wastewater treatment discharge upstream?** YES NO
   If Yes, approximately how far upstream is the discharge from the site? _____
3. **Any pipes emptying directly into or near your study site?** YES NO
4. **Channel Alteration.** Has the stream been channelized (straightened) at your site? YES NO
   If Yes, what percentage of your site has been channelized? _____%

Habitat Survey Notes (include sediment odors, appearance, and/or the presence of silt, watershed features present but not listed on this data sheet, and any other information you feel is important or interesting to mention):

****PLEASE VERIFY YOUR DATA SHEETS****

CITIZEN SCIENTIST INITIALS _____ DATE _____
CITIZEN SCIENTIST INITIALS _____ DATE _____
CITIZEN SCIENTIST INITIALS _____ DATE _____
RW STAFF INITIALS _____ DATE _____


Bentonville Rd
city owned
Find new spot
N Baltimore Ave
Westside Dr
S Antler Dr
Salem School Rd
121
Spitler Park Dr
North Dr
South Dr
Kirk Dr
Mintler Dr
W Main St
Traughber Rd
Mt Zion
current sampling
Maddox Dr
McGaughey Dr
Burgener Dr
S Henderson St
Sulphur Spring Rd
Mt Zion/ Finley