



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appleton.org

Meeting Agenda - Final Utilities Committee

Tuesday, March 7, 2017

5:30 PM

Council Chambers, 6th Floor

1. Call meeting to order

2. Roll call of membership

3. Approval of minutes from previous meeting

[17-269](#)

Approval of the February 23, 2017 Utilities Committee meeting minutes.

Attachments: [February 23, 2017 Utilities Committee Meeting Minutes.pdf](#)

4. **Public Hearings/Apearances**

5. **Action Items**

[17-270](#)

Accept the 2016 Annual Stormwater Report for submittal to the Wisconsin Department of Natural Resources.

Attachments: [2016 Annual Report.pdf](#)

[17-271](#)

Award of Unit K-17 Native Landscape Management Contract to Applied Ecological Services, Inc. in an amount not to exceed \$143,307.83.

Attachments: [K-17 Contract Award Util Memo.pdf](#)

[17-273](#)

Award engineering contract for Appleton Wastewater Iron Salt Chemical Room Rehabilitation and Improvements to McMahon in the amount of \$72,594 with a 10% contingency of \$7,255 for a project total not to exceed \$79,849.

Attachments: [F2 Chemical Storage Room Improvements Contract Award_McMahon.pdf](#)

[17-274](#)

Award Sole Source Phosphorus Analyzer and Filter System to Hach Company in the amount of \$24,120.

Attachments: [Hach analyzer purchase.pdf](#)

6. **Information Items**

[17-272](#) Update on an upcoming event "You and the River - a conversation about clean water" at Tempest Coffee Collective on March 22, 2017.

[17-275](#) Update on Water Leak Policy and Water Usage Monitoring Procedure.

7. Adjournment

Notice is hereby given that a quorum of the Common Council may be present during this meeting, although no Council action will be taken.

Reasonable Accommodations for Persons with Disabilities will be made upon Request and if Feasible.

For questions on the agenda, contact Chris Shaw at 920-832-5945 or Paula Vandehey at 920-832-6474.



City of Appleton

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Meeting Minutes Utilities Committee

Thursday, February 23, 2017

4:30 PM

Council Chambers, 6th Floor

1. Call meeting to order

Chairperson Dannecker called the Utilities Committee meeting to order at 4:30 p.m.

Present: 5 - Dannecker, Baranowski, Meltzer, Reed and Jirschele

2. Roll call of membership

Present: 5 - Dannecker, Baranowski, Meltzer, Reed and Jirschele

3. Approval of minutes from previous meeting

[17-189](#)

Approval of the February 7, 2017 Utilities Committee meeting minutes.

Baranowski moved, seconded by Meltzer, that the Minutes be approved. Roll Call. Motion carried by the following vote:

Aye: 5 - Dannecker, Baranowski, Meltzer, Reed and Jirschele

4. Public Hearings/Appearances

5. Action Items

[17-190](#)

Approve Agreement with Outagamie County for public/private utilities associated with their downtown campus expansion project.

Baranowski moved, seconded by Jirschele, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 5 - Dannecker, Baranowski, Meltzer, Reed and Jirschele

6. Information Items

[17-191](#)

Department of Utilities Strategic Plan Presentation.

Reviewed.

[17-192](#)

Department of Public Works End of Year Performance Indicators.

Reviewed.

[17-193](#)

Monthly Reports for January 2017

- Water Distribution and Meter Team Monthly Report

Reviewed.

7. Adjournment

Baranowski moved, seconded by Meltzer, that the Utilities Committee Meeting be adjourned at 5:15 p.m. Roll Call. Motion carried by the following vote:

Aye: 5 - Dannecker, Baranowski, Meltzer, Reed and Jirschele



City of Appleton, WI

City of Appleton SWMP 2016-2020: FIN 31098

January 01, 2016 To January 31, 2017

This program consists of the following 11 Minimum Control Measure(s).

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Pollutant Control
5. Post-Construction Storm Water Management
6. Pollution Prevention
7. Storm Water Quality Management
8. Storm Sewer System Map
9. Annual Report
10. Cooperation
11. Permit Section 1.5 Impaired Waterbodies and TMDL

1 Public Education and Outreach

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Public Education and Outreach is Section 2.1 of the Permit and contains the following requirements:

2.1 Public Education and Outreach – The permittee shall maintain its public education and outreach program to increase the awareness of stormwater pollution impacts on waters of the state and to encourage changes in public behavior to reduce such impacts. The program shall have measurable goals and, at a minimum, include the following elements:

2.1.1 Promote detection and elimination of illicit discharges and water quality impacts associated with such discharges from municipal separate storm sewer systems.

2.1.2 Inform and educate the public about the proper management of materials that may cause stormwater pollution from sources including automobiles, pet waste, household hazardous waste and household practices.

2.1.3 Promote beneficial onsite reuse of leaves and grass clippings and proper use of lawn and garden fertilizers and pesticides.

2.1.4 Promote the management of streambanks and shorelines by riparian landowners to minimize erosion and restore and enhance the ecological value of waterways.

2.1.5 Promote infiltration of residential storm water runoff from rooftop downspouts, driveways and sidewalks.

2.1.6 Inform and where appropriate educate those responsible for the design, installation, and maintenance of construction site erosion control practices and stormwater management facilities on how to design, install and maintain the practices.

2.1.7 Identify businesses and activities that may pose a stormwater contamination concern, and where appropriate, educate specific audiences on methods of stormwater pollution prevention.

2.1.8 Promote environmentally sensitive land development designs by developers and designers, including green infrastructure and low impact development.

Best Management Practices

1.1 Public Education and Outreach Plan

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Required Yes

Description

The City of Appleton Public Education and Outreach and Public Involvement and Participation Program was updated in May 2016. These programs are documented together because many activities in these programs overlap. This document will be kept in the Engineering Division of the Department of Public Works located on the fifth floor of City Center, 100 N. Appleton Street, Appleton, Wisconsin.

All costs associated with this program are funded through the City of Appleton Stormwater Utility.

The City is an active member of the Northeast Wisconsin Stormwater Consortium (NEWSC), which is a division of the Fox Wolf Watershed Alliance (FWWA). Both organizations provide public stormwater education and involvement activities throughout the watershed, such as exhibiting at community events, making presentations for organizations and schools, holding the Fox River Cleanup, and hosting various training for municipal staff and an annual watershed conference. NEWSC has a Facebook page and frequently provides new postings. The City has "liked" the NEWSC Facebook page so messages are shared. The City uses the educational products created by NEWSC, such as the "Renew Our Waters" signs posted at various parks and facilities within the City.

Public Works staff work with NEWSC/FWWA staff to prepare short articles that are submitted to the Mayor's office for consideration and possible inclusion into the City Guide newsletter, which is mailed twice per year to all City residents. Working together with NEWSC/FWWA helps to send consistent messages to the public.

The City Guide includes a variety of information on proper disposal of tires, carpet, lumber, household hazardous waste, large items, and major appliances, as well as street cleaning, sewer backups, fall leaf collection, compost, and yard waste.

In 2015 the City created a new website. Public Works staff will request additional information be added to the stormwater page of the website.

Most of the illicit discharge education provided to the public is through one-on-one communication from the Inspections Division of Public Works, which includes two Plumbing Inspectors, who respond to any reports of spills or other potential illicit discharges. One-on-one education for illicit discharge is also provided by the Operations Division of Public Works. Problems such as grass in the street or leaking vehicles receive a door hang tag noting the problem. If problems persist at a specific location, they are reported to the Inspections Division for further action. The consultant contracted to perform the on-going field screening has informational flyers to hand out to the public if questions are raised during field work.

For most ponds and some of the waterways in Appleton, the City of Appleton is the riparian property owner. The city will continue to work with property owners along city owned ponds and waterways to educate them on the natural vegetation planted by the city through neighborhood meetings and one-on-one communication.

Infiltration in the City of Appleton is limited due to clay soils. Rain Gardens and Rain Barrels are two options to help meet the intention of infiltration. In 2015, the City reimbursed part of the cost for residents who participate in a FWWA rain barrel workshop. In 2016, the City revised its Stormwater Utility Credit Policy to provide monetary credit for rain barrels and rain gardens, as well as a pledge program that provides a variety of stormwater education. It now applies to all properties, not just commercial properties.

Erosion Control and Post-Construction Stormwater education is provided during project meetings, plan review, field inspections and through the FWWA Annual Watershed Conference.

Community Development and Public Works staff will continue to meet with developers and designers on a project by project basis and encourage green infrastructure and low impact development during this process.

The City will take advantage of opportunities to work with community groups, such as those requesting to perform storm drain stenciling, by providing maps showing areas of construction (areas to avoid) and spray paint and speaking to community and neighborhood groups on any of the items listed throughout the permit.

Committee and Council meetings are publicly and properly noticed by the City Clerk. All committee and council meetings have a publicly posted agenda and an opportunity for any interested person to comment on the agenda items at the meeting.

The City of Appleton will continue current activities such as updating the Utilities Committee (elected officials) during the year and supporting the regional public involvement and participation activities of NEWSC and FWWA. Since the elected officials knowledge of stormwater has increased considerably since the beginning of this program, updates to the Utilities Committee will be reduced to approximately twice per year. However, additional updates will be provided as appropriate for projects, regulation changes, or elected official changes.

In 2020-2021, the city will update its Citywide Stormwater Management Plan again. Input on this plan update will be requested from the Utilities Committee and the Stormwater Advisory Committee. The Advisory Committee will include members from organizations such as the Appleton Area School District, Lawrence University, the Valley Homebuilders Association, local site designers and developers, adjacent communities and the general public.

Goals

1.1.1 Overall Plan document

Responsible Staff / Position:

Sue Olson
Staff Engineer
(920) 832-6473

Description

Review the Public Education and Outreach and Public Participation Program document approximately every five years and update it as necessary. If necessary changes are identified prior to the scheduled update, the plan will be modified at that time.

Planned: 2016 2021

Complete: 2016

Activity Date

Name

05/26/2016

2016 Plan

Description

City of Appleton document describing the program for permit items 2.1 and 2.2.

File Attachment [Public Education and Involvement 2016 final.doc](#)

1.1.2 Utilities Committee

Responsible Staff / Position:

Sue Olson
Staff Engineer
(920) 832-6473

Description

Provide stormwater project and regulatory updates to the Utilities Committee approximately twice per year.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
01/12/2016	2016 Pollution Prevention Plan
Description	
The Utilities Committee reviewed and discussed the 2015 update to the city-wide Pollution Prevention Plan.	
01/12/2016	2016 Spartan Drive SW Practices
Description	
The Utilities Committee reviewed and discussed the stormwater requirements and proposed practices for the Spartan Drive and Haymeadow Avenue development area as part of the approval process for the Brown and Caldwell design contract.	
06/01/2016	2016 Stormwater Utility Credit Policy Review
Description	
The Department of Public Works staff revised the Stormwater Utility Credit Policy (See 1.1.10 for details) and it was discussed at the Utilities Committee on May 10 and May 24. It was approved by the Common Council on June 1, 2016. The Policy includes a pledge supporter form with information on managing stormwater at home.	
06/24/2016	2016 Regulatory Updates
Description	
Presentations to and discussions with the Utilities Committee were held during the updates to the Post-Construction Stormwater Management and Erosion and Sediment Control ordinance updates. See Sections 4 and 5 for further detail.	
10/11/2016	2016 Cotter Pond
Description	
Utilities Committee reviewed multiple alternatives for stormwater practices to address quantity and quality control in the Cotter Street area, selecting a wet pond to serve both City needs and private redevelopment.	
12/13/2016	2016 Leona Pond
Description	
The Utilities Committee discussed the stormwater requirements, wetland rules and the proposed Leona Street Pond project, including five alternative designs, as part of approving a contract amendment for design.	

1.1.3 NEWSC membership

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Continue membership and active participation in NEWSC.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
11/07/2016	2016 NEWSC Membership

Description

In 2016, the City of Appleton paid \$3000 in dues and Sue Olson served as Chair of the General Public Education Committee (2 in person meetings and activities completed via email), served on the Leadership Council (4 meetings and additional activities completed via email) and attended the two full membership meetings. Pete Neuberger and Sue Olson also worked with the Municipal Committee of NEWSC to develop and host the Pond Maintenance Workshop on September 30, 2016.

1.1.4 Environmentally Sensitive Designs

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Continue to promote environmentally sensitive designs, including green infrastructure and low impact development, in our Subdivision Development, Stormwater Management, Erosion Control and Site Plan Review processes on a case by case basis.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
10/26/2016	2016 Projects

Description

Worked with individual developers to promote environmentally sensitive designs and LID practices on various projects. Significant projects in 2016 included Erb Park and Pool, the Exposition Center and Jones Park, Riverheath Marriott, and Eagle Point Senior Housing.

1.1.5 FWWA and NEWSC events

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Continue to support various FWWA and NEWSC events, such as Fox River Cleanup, rain barrel workshops, and the annual Watershed Conference.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
03/09/2016	2016 FWWA Stormwater Conference

Description

In 2016 the City sponsored the conference with \$1000 in support and provided a staff member for conference planning and moderating.

04/23/2016	2016 FWWA Fox River Clean Up
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Description

In 2016 the City supported the FWWA Fox River Cleanup with volunteers, trash collection and \$2500 in support.

06/16/2016	2016 FWWA Rain Barrel Workshop
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Description

In 2016 the City Parks, Recreation and Facilities Management Department worked with FWWA to promote a rain barrel workshop and the Department of Public Works provided \$10 reimbursement to City residents who attended the workshop.

09/30/2016	2016 NEWSC Stormwater Pond Maintenance Workshop
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Description

In 2016 the City hosted the NEWSC Stormwater Pond Maintenance Workshop at the Scheig Center in Memorial Park, participated in planning the workshop, and Pete Neuberger presented part of the program.

12/30/2016 2017 FWWA Conference Planning

Description

In 2016 the City of Appleton participated in planning efforts for the 2017 FWWA Watershed Conference.

1.1.6 City Guide

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Continue to submit articles for consideration for the City Guide newsletter.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
03/01/2016	Spring 2016 City Guide

Description

The City Guide provides information on recycling, household hazardous waste and other pollution prevention topics.

File Attachment [2016 March to Sept CityGuide.pdf](#)

09/01/2016 Fall 2016 City Guide

Description

The City Guide contains articles for proper leaf collection, recycling and other household activities.

File Attachment [2016 Sept to March 2017CityGuide.pdf](#)

11/29/2016 2016 Submitted Articles

Description

In 2016 DPW Engineering staff submitted articles in May and November for consideration for including in the City Guide publication.

File Attachment [2016 COA fall newsletter article 5_18_16.docx](#)

File Attachment [Spring 2017 - city guide article.docx](#)

1.1.7 NEWSC Sign Campaign

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Continue to post the NEWSC signs at various Park locations in the City.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
06/30/2016	2016 Signs in Parks

Description

Renew Our Waters signs from NEWSC were posted at various parks around the City by the Parks, Recreation and Facilities Management Department (PRFMD).

1.1.8 City Website

Responsible Staff / Position:	Sue Olson Staff Engineer (920) 832-6473
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Description

Request additional information be placed on the stormwater page on the City of Appleton website.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
09/01/2016	2016 Available Information

Description

The stormwater page on the City's website includes previous annual reports and can be found at <http://www.appleton.org/government/public-works/stormwater/reports>.

10/03/2016	2016 Credit Policy
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Description

In 2016 the City added the updated Stormwater Utility Credit Policy to the website. It can be found at <http://www.appleton.org/home/showdocument?id=10807> and is also attached below.

File Attachment [2016 Revised Stormwater Utility Credit Policy 06-08-2016 COMBINED FINAL \(002\).pdf](#)

1.1.9 Community Groups

Responsible Staff / Position:	Sue Olson Staff Engineer (920) 832-6473
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Description

Work with community groups as opportunities present.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
10/05/2016	Evergreen Credit Union 2016

Description

The Director of Public Works presented an educational session for employees of Evergreen Credit Union. Discussions also started for a March 2017 follow up session, including FWWA speakers and a rain barrel workshop.

File Attachment [2016 annual report evergreen credit.pdf](#)

1.1.10 Other activities

Responsible Staff / Position:

Ross Buetow
City Engineer
(920) 832-6474

Description

This section lists other activities which are not anticipated or specifically listed in the plan and may only occur once during the permit period.

Activity Date

Name

08/24/2016

2016 Summer Camp

Description

In 2016 the City contracted with FWWA to teach one session per week of Summer Camp, a program at Appleton Memorial Park for 6 to 15 years olds.

File Attachment [Summer Camp Summary 2016.pdf](#)

12/30/2016

2016 Facebook

Description

In 2016, the Department of Public Works shared information from the Fox Wolf Watershed Alliance and distributed information via Facebook on the following topics: Participation in the Fox River Clean-up, Only Rain Down the Drain, Grass Clippings in the street, Proper Car Washing, Clean Streets Appleton, Tymco Sweeper article.

12/30/2016

2016 Stormwater Utility Credit Policy

Description

In 2016 the City finished the update to the Stormwater Utility Credit Policy and received Common Council approval to implement. This project was identified in the 2016 Public Education Program update, but the completion date was unknown at that time. The policy includes a Pledge Supporter section with information on managing stormwater at home. Approximately 16 single family owners received credits in 2016.

File Attachment [2016 Revised Stormwater Utility Credit Policy 06-08-2016 COMBINED FINAL \(002\).pdf](#)

File Attachment [2016 Stormwater Utility Credit Log.xlsx](#)

2 Public Involvement and Participation

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Public Involvement and Participation is Section 2.2 of the Permit and contains the following requirements:

2.2 The permittee shall maintain its program to notify the public of activities required by this permit and to encourage input and participation from the public regarding these activities. This program shall have measurable goals for public involvement and participation and comply with applicable state and local public notice requirements.

Best Management Practices

2.1 Public Involvement and Participation

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required Yes

Description

See Section 1 of this report, Public Education and Outreach, for the combined program document and additional measurable goals and activities.

Goals

2.1.1 Meeting Notices

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Properly notice Utilities Committee and Common Council meetings and allow public input at these meetings.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/15/2016	2016 Committee and Council

Description

In 2016 all Utilities Committee and Common Council meetings were properly noticed by the Appleton City Clerk. Public input is allowed at these meetings.

3 Illicit Discharge Detection and Elimination

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

The permittee shall continue to implement and enforce its program to detect and remove illicit connections and discharges to the MS4. The program shall have measurable goals and include all of the following:

1. An ordinance or other regulatory mechanism to prevent and eliminate illicit discharges and connections to the MS4.
2. On-going dry weather field screening of outfalls during the term of the permit. Field screening shall be conducted at selected outfalls on an annual basis. Consideration shall be given to hydrological conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area and land use types when selecting outfalls for annual field screening. However, field screening shall be conducted at all major outfalls at least once during the term of the permit.
3. Procedures for responding to known or suspected illicit discharges.
4. The permittee shall take appropriate action to remove illicit discharges from its MS4 system as soon as possible. If it will take more than 30 days to remove an illicit connection, the Department shall be contacted to discuss an appropriate action and/or timeframe for removal.
5. In the case of interconnected MS4s, the permittee shall notify the appropriate municipality within one working day of either of the following: (1) An illicit discharge that originates from the permittee's permitted area that discharges directly to a municipal separate storm sewer or property under the jurisdiction of another municipality. (2) An illicit discharge that has been tracked upstream to the interconnection point with or outfall from another municipality.
6. The name, title and phone number of the individual(s) responsible for responding to reports of illicit discharges and spills shall be included in the illicit discharge response procedure.

The City anticipates reviewing and updating the Response Procedures and overall IDDE Program in 2017.

Best Management Practices

3.1 IDDE Regulatory Mechanism

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Required Yes

Description

An ordinance or other regulatory mechanism to prevent and eliminate illicit discharges and connections to the MS4. At a minimum, the ordinance or other regulatory mechanism shall:

1. Prohibit the discharge, spilling or dumping of non-storm water substances or materials into waters of the state or the MS4.
2. Identify non-storm water discharges or flows that are not considered illicit discharges. Non-storm water discharges that are not considered illicit discharges include water line flushing, landscape irrigation, diverted stream flows, uncontaminated groundwater infiltration, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, fire-fighting and discharges authorized under a WPDES permit. However, the occurrence of a discharge listed above may be considered an illicit discharge on a case-by-case basis if the permittee or Department identifies it as a significant source of a pollutant to the waters of the state.
3. Establish inspection and enforcement authority.

The City updated its Illicit Discharge ordinance in 2015 and included it with the 2015 Annual Report to DNR. It can be found on the City's website as Article VII of Chapter 20 of the Municipal Code at <http://www.appleton.org/home/showdocument?id=482>.

Goals

3.1.1 IDDE Ordinance and Updates

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

The City will review and update the Illicit Discharge ordinance approximately every five years, unless issues arise requiring an update at an earlier date.

Planned: 2020

Complete:

Activity Date	Name
12/29/2016	2016 Update

Description

No issues occurred in enforcing the Illicit Discharge ordinance in 2016 and no updates were found to be needed.

3.1.2 Enforce Ordinance Requirements

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

The City will repond to reports of illicit discharges and enforce the provisions of the Illicit Discharge oridnace.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Response and Enforcement

Description

In 2016 the City responded to 20 potential illicit discharges. 19 cases were closed during the year. The remaining open report occurred on December 29, 2016 and will be addressed in 2017.

File Attachment [2016 Illicit Discharge Complaints.xls](#)

3.2 On-Going Dry Weather Field Screening

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required Yes

Description

The permittee shall continue on-going dry weather field screening of outfalls during the term of the permit. Field screening shall be conducted at selected outfalls on an annual basis. Consideration shall be given to hydrological conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area and land use types when selecting outfalls for annual field screening. However, field screening shall be conducted at all major outfalls at least once during the term of the permit. At a minimum, field screening shall be documented and include:

1. Visual Observation - A narrative description of visual observations including color, odor, turbidity, oil sheen or surface scum, flow rate and any other relevant observations regarding the potential presence of non-storm water discharges or illicit dumping.

2. Field Analysis - If flow is observed, a field analysis shall be conducted to determine the presence of illicit non-storm water discharges or illicit dumping. The field analysis shall include sampling for pH, total chlorine, total copper, total phenol and detergents, unless the permittee elects instead to use detergent, ammonia, potassium and fluoride as the indicator parameters. Other alternative indicator parameters may be authorized by the Department in writing.

a. Field screening points shall, where possible, be located downstream of any source of suspected illicit activity.

b. Field screening points shall be located where practicable at the farthest manhole or other accessible location downstream in the system. Safety of personnel and accessibility of the location shall be considered in making this determination.

Goals

3.2.1 Annual Field Screening Program

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Implement the dry weather field screening program in accordance with the current program.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/08/2016	2016 Field Screening

Description

In 2016 the City contracted with McMahon Associates to perform the on-going dry weather field screening. 75 outfalls were screened, 67 were characterized as not likely to have an illicit discharge, 8 were characterized as potential, suspect or obvious illicit discharge, no notifications were needed to adjacent municipalities.

File Attachment [2016 Illicit Discharge Detection & Elimination Report.pdf](#)

12/22/2016

2016 WWTP Site

Description

In 2016 the relocation of the public storm sewer through the Wastewater Treatment Plant was completed, including bulkheading and abandoning the old storm sewer under the berm. The field screening detected ammonia after this project was complete and two existing manholes were found with leaking joints. These manholes were not part of the reconstruction project and the joints were sealed by a contractor in December 2016. Testing will occur again in 2017.

3.3 Illicit Discharge Response

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Required Yes

Description

Procedures for responding to known or suspected illicit discharges. At a minimum, procedures shall be established for:

1. As soon as possible, investigating portions of the MS4 that, based on the results of field screening or other information, indicate a reasonable potential for containing illicit discharges or other sources of non-storm water discharges.
2. Responding to spills that discharge into and/ or from the MS4 including tracking and locating the source of the spill if unknown.
3. Preventing and containing spills that may discharge into or are already within the MS4.
4. Notifying the Department immediately in accordance with ch. NR 706, Wis. Adm. Code, in the event that the permittee identifies a spill or release of a hazardous substance, which has resulted or may result in the discharge of pollutants into waters of the state. The Department shall be notified via the 24-hour toll free spill hotline at 1-800-943-0003. The permittee shall cooperate with the Department in efforts to investigate and prevent such discharges from polluting waters of the state.
5. Detecting and eliminating cross-connections and leakage from sanitary conveyance systems into the MS4.
6. Providing the Department with advance notice of the time and location of dye testing within an MS4. Department notification prior to dye testing is required due to the likelihood that dye observed in waterways will be reported to the Department as an illicit discharge or spill.

In the City of Appleton, the initial response to the report of an illicit discharge is by a Plumbing Inspector. The Response Procedures include the Inspections, Operations, and Engineering Divisions of Public Works, the consultant on retainer for on-going field screening for the year, and the Fire Department (including Hazmat Team).

Goals

3.3.1 Maintain Illicit Discharge Response Procedures

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

Maintain procedures for response to illicit discharges. Review the procedures periodically and revise as necessary to maintain effectiveness and permit compliance.

Planned: 2017 2020

Complete:

Activity Date	Name
12/30/2016	2016 Procedures

Description

In 2016 no problems were noted with the existing Illicit Discharge Response Procedures.

3.4 Contact WDNR for Illicit Discharge Removal

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Required No

Description

The permittee shall take appropriate action to remove illicit discharges from its MS4 system as soon as possible. If it will take more than 30 days to remove an illicit connection, the WDNR shall be contacted to discuss an appropriate action and/or time frame for removal.

Goals

3.4.1 Contact WDNR for ID removal

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

The City will contact the WDNR if it will take more than 30 days to remove an illicit connection.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/29/2016	2016 Activity

Description

No illicit discharges required contacting WDNR.

3.5 Interconnected MS4 Notification

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Required Yes

Description

In the case of interconnected MS4s, the permittee shall notify the appropriate municipality within one working day of either of the following:

1. An illicit discharge that originates from the permittee's permitted area that discharges directly to a municipal separate storm sewer or property under the jurisdiction of another municipality.
2. An illicit discharge that has been tracked upstream to the interconnection point with or outfall from another municipality.

Goals

3.5.1 Interconnected MS4 Illicit Discharge Reports

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Summarize incidence of notifications made to other MS4s of illicit discharges passing into a neighboring MS4 or discovered entering into the permitted MS4 from an adjacent MS4.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Activity

Description

In 2016 there were no reports of illicit discharges crossing municipal boundaries.

3.6 IDDE Responsible Person

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Required Yes

Description

The name, title and phone number of the individual(s) responsible for responding to reports of illicit discharges and spills shall be included in the illicit discharge response procedure.

Goals

3.6.1 IDDE Responsible Person

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

Identify the person or person(s) responsible for responding to reports of illicit discharges and spills in the MS4.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Responsible Person

Description

In 2016 the IDDE Responsible Person remained Kurt Craanen, Inspections Supervisor. 920-832-6411

4 Construction Site Pollutant Control

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

The permittee shall continue to implement and enforce its program to reduce the discharge of sediment and construction materials from construction sites. The program shall have measurable goals.

Best Management Practices

4.1 Construction Site Pollutant Control Program

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Required Yes

Description

Since 1998, the City of Appleton has progressively addressed erosion control issues. The City has an Erosion and Sediment Control Ordinance, an established program and a full-time erosion control inspector assigned to administer the program. The following information, as updated in the written Construction Site Pollutant Control Program in May 2016, describes the program as required in the Phase II Stormwater Permit from the Wisconsin Department of Natural Resources (WDNR).

All costs associated with this program are funded through the City of Appleton Stormwater Utility.

The program document will be kept in the Inspections Division of the Department of Public Works located on the fifth floor of City Center, 100 N. Appleton Street, Appleton, Wisconsin.

2.4.1 Erosion Control Ordinance An ordinance or other regulatory mechanism to require erosion and sediment control at construction sites and establish sanctions to ensure compliance. At a minimum, the ordinance or other regulatory mechanism shall establish or include:

2.4.1.1 Applicability and jurisdiction

2.4.1.2 Requirements for design and implementation of erosion and sediment control practices consistent with the criteria of those approved by the Department.

2.4.1.3 Construction site performance standards equivalent to those in ss. NR 151.11(6m) and 151.23(4m) Wis. Adm. Code.

2.4.1.4 Erosion and sediment control plan requirements for landowners of construction sites equivalent to those contained in s. NR 216.46 Wis. Adm. Code.

2.4.1.5 Inspection and enforcement authority.

2.4.1.6 Requirements for construction site operators to manage waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site so as to reduce adverse impacts to waters of the state.

A. The City of Appleton Erosion and Sediment Control Ordinance was originally effective January 1, 1999 and subsequently updated January 1, 2005 and January 1, 2012. Ordinance updates followed the model WDNR ordinance available at the time. The 2016 ordinance update reflects the WDNR model ordinance released in April 2015 and meets the criteria outlined in permit sections 2.4.1.1 through 2.4.1.6. In addition, the ordinance has always been more stringent than the WDNR model ordinance, requiring permits for disturbed areas of two thousand (2,000) square feet or larger. The ordinance is Chapter 24 of the Municipal code and can be located on the city's website:

<http://www.appleton.org/home/showdocument?id=482>

The ordinance is also available at the Department of Public Works, Inspections Division and is attached to this document in Section 4.1.7.

B. The City of Appleton is located in three counties: Outagamie, Winnebago, and Calumet. These counties also have Erosion Control ordinances that initially went into effect between September 2003 and October 2008. For properties that are annexed from these counties after the effective date of the applicable county or town ordinance, the City of Appleton enforces the most stringent requirements from the city, town and county ordinances.

C. Appleton has specifications for Erosion Control and Vegetative Restoration that are based on the WDNR technical standards. These specifications are included in Public Works bid documents.

2.4.2 Procedures for construction site inspection and enforcement of erosion and sediment control measures. At a minimum, the procedures shall establish:

2.4.2.1 Municipal Departments or staff responsible for construction site inspections and enforcement.

The Inspections Division of the Department of Public Works is responsible for inspection and enforcement of the Erosion and Sediment Control Ordinance. A full time Erosion Control Inspector position has been in place and staffed since 1999.

This position prepares erosion control plans and specifications for Appleton Public Works projects, reviews erosion control plans submitted to the city for activities covered under the ordinance, and performs field inspections.

2.4.2.2 Construction Site Inspection Frequency

A. Commercial/Non-Residential: Routine inspections, monthly when possible, are performed to ensure compliance with the ordinance. Priority is given to sensitive or high environmental risk areas, with the size of the site not necessarily corresponding to the risk. Inspections will continue until final site stabilization occurs.

B. Residential Sites: At a minimum, erosion control inspections are made concurrent with other related construction inspections (footing & foundation inspection, rough inspection, insulation inspection, and final inspection). Additional inspections are made as time permits. Inspections will continue until final site stabilization occurs.

2.4.2.3 Construction Site Inspection Documentation Inspection and enforcement is documented on PermiTrack, an internet based erosion and sediment control computer tracking program, for all permitted sites, except City of Appleton Public Works projects, for which tracking is via the city AS-400 computer system. All inspections are entered, along with the inspection date, address of site, reason for inspection, permit number, whether it passed or failed, and details of any violations or miscellaneous information.

2.4.2.4 Enforcement Mechanisms that will be used to obtain compliance.

The stepped enforcement process is as follows:

1. Verbal notice is immediately given to the construction manager along with the list of required corrections and the date of compliance. A formal written notice of non-compliance is issued to the owner of the property with a copy to the construction manager. The compliance date and required corrections are listed on the notice. The compliance time may vary from immediate action to typically 2 or 3 days depending on the severity of the violation or impending weather.

2. A re-inspection will take place to determine if adequate corrections have been made, and one of the following will occur:

a. The corrections are made and approved – case will be closed.

b. If no corrective action has been made, a stop work order will be issued. If corrections still have not been made within 1 week of the Stop Work Order, or a weather event has caused sediment runoff offsite, a citation will be issued. Further citations will be issued until corrective action is taken and approved.

c. If a significant amount of time has passed and the corrections still are not made, the City of Appleton may make the required corrections and assess the costs to the property owner in order to bring the site into compliance.

2.4.3 Procedures for receipt and consideration of information submitted by the public

In 2007 the Department of Public Works began a Customer Service Complaint Log within the City's Asset Management Program on the AS 400 computer system. Complaint calls from the public are logged into the system according to the type of complaint. They are then routed to the appropriate staff for a site inspection and

any necessary follow up action. Inspection notes and follow up activities are documented in the computer system.

2.4.4 Procedures for construction site plan review which incorporate consideration of potential water quality impacts.

Erosion and sediment control permits are required for all land disturbing activities exposing 2000 sq. ft. or more of the soil surface, including but not limited to, clearing/grubbing, demolition, excavating, filling and grading activities, with the exception of one and two family construction, where permits are required only when land disturbance is one acre or more. Permit applications are available at the Department of Public Works (DPW) - Inspection Division, the Community & Economic Development Department – Planning Division, and on the City of Appleton website. The City of Appleton Erosion Control Inspector is responsible for reviewing all plans requiring a permit. Plans are submitted to the Community & Economic Development Department – Planning Division when the project is required to go through the city site plan review process, and directly to the Department of Public Works - Inspection Division when no site plan is required.

Once a plan is received by the DPW - Inspections Division, the plan review process is as follows:

A. The plan submittal is reviewed by the Erosion Control Inspector for conformance with the erosion and sediment control ordinance plan requirements within 20 working days of receipt and either:

1. Contacts the applicant (by letter) and requests revisions necessary for approval. Re-submittals are reviewed within 20 working days of receipt.
2. Approves the plan, assigns permit number, and signs the permit application and enters plan information into the PermiTrack computer program for erosion & sediment control project tracking.
3. The Community & Economic Development Department – Planning Division is notified of the erosion & sediment plan approval when the plan is part of the city site plan review process. The permit applicant is notified of approval when the city site plan is not required.
4. A copy of the approved permit application is returned to the applicant, which indicates the plan and permit has been approved.
5. The duration of the permit is for a period of one (1) year, or the length of any corresponding building permit, whichever is longer, from the date of issuance.

B. Plans for Department of Public Works - Engineering projects requiring a permit are prepared by the Project Engineer with the assistance of the Erosion Control Inspector in accordance with the erosion and sediment control ordinance. Permits are issued to the city for the project, and permit information is entered into the AS-400 computer system for tracking.

2.4.5 Procedures for the administration of the construction site pollutant control program, including the process for obtaining local approval, managing and responding to complaints, and tracking regulated construction sites.

A. Administration of the erosion & sediment control program is by the Department of Public Works – Inspections Division under the authority and requirements of Chapter 24 of the City of Appleton Municipal Code (Erosion & sediment Control Ordinance). All revisions to the ordinance are reviewed and approved by the Utilities Committee and Common Council.

B. The provisions for plan and permit approval are noted in Section 2.4.4.

C. As noted in section 2.4.3, complaints are logged into the AS 400 computer system, routed to the erosion control inspector for a site inspection and any necessary follow up action. Inspection notes and follow up activities are documented in the AS-400 system.

D. As noted in section 2.4.2.3 construction sites regulated under the city ordinance are tracked on either PermiTrack or the AS-400 computer system. Non-compliance orders are entered on the AS-400 system and tracked through weekly code enforcement meetings.

Goals

4.1.1 Review program document

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

Review this Program document approximately every five (5) years and update it as necessary. If necessary changes are identified prior the scheduled update, the plan will be modified at that time.

Planned: 2016 2021

Complete: 2016

Activity Date	Name
05/24/2016	2016 Program Update

Description

In 2016 the City's Erosion and Sediment Control program was updated.

File Attachment [Erosion Control Program 2016 Update final clean.docx](#)

4.1.2 Erosion and Sediment Control Specificaions

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Updating the Erosion Control and Vegetative Restoration Specifications typically occurs in November of odd numbered years and is published in even number years. Any changes needed between standard specification updates are placed in the Special Provisions of each contract.

Planned: 2017 2019 2021

Complete:

Activity Date	Name	Description
None		

4.1.3 NEWSC Membership

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Continue membership and active participation in the Northeast Wisconsin Stormwater Consortium (NEWSC).

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
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11/07/2016

2016 NEWSC Membership

Description

In 2016, the City of Appleton paid \$3000 in dues and Sue Olson served as Chair of the General Public Education Committee (2 meetings and activities completed via email), served on the Leadership Council (4 meetings and activities completed via email) and attended the two full membership meetings. Pete Neuberger and Sue Olson also worked with the Municipal Committee to develop and host the Pond Maintenance Workshop on September 30, 2016.

4.1.4 Fund Erosion Control Inspector

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Continue to fund the Erosion Control Inspector position through the Stormwater Utility.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016 2017

Activity Date	Name
01/04/2016	2016 Funding

Description

On November 11, 2015, the Council adopted the 2016 budget which including funding for a full time Erosion Control Inspector.

11/09/2016	2017 Funding
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Description

On November 9, 2016 the Common Council approved the 2017 budget, which included funding for the Erosion Control Inspector.

4.1.5 Number of Inspections

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

Annually report the number and type of Erosion and Sediment Control inspections.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Inspections

Description

In 2016 there were 174 inspections under the ordinance (commercial), 306 residential inspections, 7 inspections due to complaints.

File Attachment [2016 EC Inspection Enforcement Report.doc](#)

4.1.6 Number of Enforcement Actions

Responsible Staff / Position: Kurt Craanen
Inspections Supervisor
(920) 832-6411

Description

Annually report the number and type of enforcement actions for erosion and sediment control.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Enforcement Actions

Description

Under the ordinance (commercial), there were 60 verbal notices, 13 written notices, and no stop work orders or citations. For residential sites, there were 70 verbal notices, 18 written notices and no stop work orders or citations.

File Attachment [2016 EC Inspection Enforcement Report.doc](#)

4.1.7 Update Ordinance

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Update the Erosion and Sediment Control Ordinance. The ordinance can be found on the City's website as Chapter 24 of the municipal code at <http://www.appleton.org/home/showdocument?id=482>

Planned: 2016 2021

Complete: 2016

Activity Date	Name
06/21/2016	2016 Ordinance Update

Description

Chapter 24 of the Municipal Code for Erosion and Sediment Control was revised and became effective June 21, 2016. Staff presented the revised ordinance and discussed changes and comparison to WDNR requirements to the Utilities Committee on May 10, 2016. It was further reviewed and approved by the Utilities Committee on May 24, 2016 and the Common Council on June 1, 2016.

File Attachment [2016 Ord 49-16 \(Erosion Sediment Control\).pdf](#)

5 Post-Construction Storm Water Management

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

The permittee shall continue to implement and enforce its program to require control of the quality of discharges from areas of new development and redevelopment, after construction is completed. The program shall include measurable goals.

Best Management Practices

5.1 Post-Construction Stormwater Management Program

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required Yes

Description

Since 2003 the City of Appleton has progressively addressed post-construction stormwater management. The City has a post construction stormwater management ordinance and an established program. The following information, as updated in the written Post-Construction Stormwater Management Program updated in May 2016, describes the program as required in the Phase II Stormwater Permit from the Wisconsin Department of Natural Resources (WDNR).

All costs associated with this program are funded through the City of Appleton Stormwater Utility.

The program document will be kept in the Engineering Division of the Department of Public Works located on the fifth floor of City Center, 100 N. Appleton Street, Appleton, Wisconsin.

The permittee shall continue to implement and enforce its program to require control of the quality of discharges from areas of new development and redevelopment, after construction is completed. The program shall have measurable goals and include:

2.5.1 An ordinance or other regulatory mechanism to regulate post-construction stormwater discharges from new development and redevelopment. At a minimum, the ordinance or other regulatory mechanism shall establish or include:

2.5.1.1 Applicability and jurisdiction that shall apply to construction sites with one acre or more of land disturbance, and sites of less than one acre if they are part of a larger common plan of development or sale under the jurisdiction of the permittee.

2.5.1.2 Requirements for design and implementation of post-construction storm water management control practices consistent with the criteria of those approved by the WDNR.

2.5.1.3 For new development and infill, post-construction performance standards equivalent to those in ss. NR 151.122 through 151.126 and 151.242 through 151.246, Wis. Adm. Code. Post-construction performance standards for new development and infill may be more restrictive than those required in this section if necessary to comply with federally approved TMDL.

2.5.1.4 For redevelopment, post-construction performance standards equivalent to or more restrictive than those in ss. NR 151.122 through 151.126 and 151.242 through 151.246, Wis. Adm. Code.

2.5.1.5 Stormwater plan requirements for landowners of construction sites equivalent to those contained in s. NR 216.47, Wis. Adm. Code.

2.5.1.6 Long-term maintenance requirements for landowners and other persons responsible for long-term maintenance of post-construction stormwater control measures, including requirements for routine inspection and maintenance of privately owned post-construction stormwater control measures that discharge to the MS4 to maintain their pollutant removal efficiency.

2.5.1.7 Inspection and enforcement authority.

The first City of Appleton post construction stormwater management ordinance became effective January 1, 2004. The ordinance was updated in 2015-2016, becoming effective May 1, 2016. The ordinance follows NR 151 and the model WDNR ordinance and also includes provisions for flood control. The ordinance is available at the Department of Public Works and in the on-line Municipal Code as Article VI of Chapter 20:

<http://www.appleton.org/home/showdocument?id=482>

It is also available at the Department of Public Works Engineering Division and is attached to this report in Section 5.1.2.

The water quality requirements of the ordinance are more stringent than the WDNR model ordinance, requiring 80% Total Suspended Solids removal for redevelopment sites with over 5 acres of disturbed area.

The City of Appleton is located in three counties: Outagamie, Winnebago, and Calumet. These counties also have stormwater management ordinances that originally went into effect between September 2003 and October 2008. For properties that are annexed after the effective date of the applicable county or town ordinance, the City of Appleton enforces the most stringent requirements from the city, town and county ordinances.

Appleton contracts with a consultant to review stormwater management plans for site plans and subdivisions submitted under the ordinance.

2.5.2 Procedures that will be used by the permittee to ensure long-term maintenance of stormwater facilities.

The Appleton City Attorney has developed two templates for Operation and Maintenance Agreements - one for tax-exempt properties and one for non-exempt properties. The agreements are between property owners and the City of Appleton to ensure long term maintenance of stormwater facilities designed and constructed under the stormwater management ordinance. The applicant is responsible for providing a legal description for the agreement that is acceptable for recording at the appropriate County. This requirement is included on the application form signed by the owner and applicant.

Stormwater Management Plans include Operation and Maintenance (O & M) Plans and are reviewed for engineering standards by the consultant. The legal description for the agreement is reviewed by the City Surveyor. Once a plan is approved, the O & M Plan and agreement, with approved legal description, are sent to the City Attorney's office for processing, which includes obtaining signatures from the property owner and the City of Appleton and recording the document at the appropriate county. The City records the agreement to ensure it is completed in a timely manner. If the property owner does not sign and return the Agreement in the allotted time, the City uses additional enforcement measures, such as Stop Work Orders and Notice of Non-compliance, to ensure the agreements are signed.

Engineering and Inspection staff visit approximately four (4) properties each summer to inspect the condition of on-site practices and review inspection and maintenance records. If an on-site practice is in disrepair, or records are not up to date, a Notice of Non-compliance may be issued. If on-site staff are not aware of their stormwater practice or unsure what is required, copies of the Operation and Maintenance Plan and Agreement, approved drawings, and additional education are also provided.

Residential subdivisions are governed by development agreements between the City and the Developer that cover all aspects of the development, not just stormwater management. All residential subdivisions that have developed since 2004 have used wet ponds to meet the ordinance requirements. Through the development agreements, the City of Appleton has taken over ownership and long term maintenance of these stormwater ponds after they have been constructed and stabilized per the approved vegetation plan. The details of the city's stormwater pond maintenance program are covered in the City of Appleton Pollution Prevention Program.

2.5.3 Procedures for the administration of the post-construction stormwater management program, including the process for obtaining local approval, managing and responding to complaints, and tracking regulated post-construction sites.

The post-construction stormwater management program is administered by the Engineering Division of the Department of Public Works, with assistance from the Inspections Division of the Department of Public Works. The Utilities Committee, comprised of 5 alderpersons, and the Common Council govern the stormwater program.

The process for obtaining a Post-Construction Stormwater permit in the City of Appleton is outlined in the attached flowchart.

Since 2004, the Department of Public Works has received very few complaints regarding the post-construction stormwater management program. Complaints are directed first to a staff engineer assigned to the program. Unresolved issues are then discussed with the Director of Public Works. If issues remain unresolved,

they can be appealed to the Utilities Committee and Common Council. Beginning with this program update, a category has been established in the Customer Service Record computer application to document any complaints received related to this program.

Post-construction sites with stormwater management requirements are tracked by staff engineers on an Excel spreadsheet located on a Department of Public Works common drive, available to all staff with access. The spreadsheet follows the project from initial submittal through plan review and approval, recording of the Operation and Maintenance Agreement, billing for review fees, and receipt of record drawings and certification.

Site visits resulting in a Notice of Non-compliance are logged into the Inspections Division AS400 tracking system. This system tracks compliance dates and triggers additional follow up notices as necessary. Beginning with this program update, site visits not resulting in a Notice of Non-compliance will be tracked in a separate Excel spreadsheet, available in the same location as the permit spreadsheet.

Hard copy files are maintained for all projects since the beginning of the program in 2004. In the near future, it is anticipated that project files will be kept electronically.

Goals

5.1.1 Review Program Document

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Review this Program document approximately every five years and update it as necessary. If necessary changes are identified prior to the scheduled update, the plan will be modified at that time.

Planned: 2016 2021

Complete: 2016

Activity Date	Name
05/04/2016	2016 Updated Program

Description

The program was updated in 2016 per the new permit and the updated City ordinance.

File Attachment [Post Construction Program update May 2016 final clean.docx](#)

File Attachment [Stormwater Permit Process 2016.xls](#)

12/29/2016	2016 Program Complaints
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Description

In 2016 the City received complaints regarding the time between project approval and billing for review fees. The process was explained and the DPW increased the frequency of billing from twice per year to quarterly.

5.1.2 Update Ordinance

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Review and update the ordinance as necessary per any code or permit changes. At a minimum, ordinance review will take place every five (5) years. Any changes will be reviewed and approved by the Utilities Committee and the Common Council. The Stormwater Management Standards and Planning ordinance is attached below and can be found on the City's website as Article VI of the Municipal Code at <http://www.appleton.org/home/showdocument?id=482>

Planned: 2016 2021

Complete: 2016

Activity Date	Name
05/01/2016	Ordinance update

Description

Article VI of Chapter 20 of the Municipal Code was revised and became effective May 1, 2016. The revisions and a comparison to WDNR requirements were presented to the Utilities Committee as an information item on February 23, 2016. The Utilities Committee further reviewed and approved the revisions on March 8, 2016 and the Common Council approved them on March 16, 2016.

File Attachment [*Stormwater Ord \(Post Construction\).pdf*](#)

5.1.3 Review Post-Construction Stormwater plans

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Continue to contract with a qualified consultant to review stormwater management plans submitted under the ordinance.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016 2017

Activity Date	Name
01/04/2016	2016 Consultant Contract

Description

In 2016 the City contracted with RA Smith National to perform Stormwater Management Plan reviews for subdivisions and site plans.

11/16/2016	2017 Consultant
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Description

On November 16, 2016 the Common Council approved the 2017 contract with RA Smith National to perform stormwater plan reviews for site plans and subdivisions.

12/30/2016	2016 Plans
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Description

The City accepted 23 stormwater management plans for review in 2016. A summary prepared by RA Smith is attached.

File Attachment [*RA Smith Plan reviews 2016 Pollutant Loads.xlsx*](#)

5.1.4 NEWSC Membership

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Continue membership and active participation in NEWSC to stay informed of new information regarding post-construction stormwater management.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
11/07/2016	2016 NEWSC Membership

Description

In 2016, the City of Appleton paid \$3000 in dues and Sue Olson served as Chair of the General Public Education Committee (2 meetings and activities completed via email), served on the Leadership Council (4 meetings and activities completed via email) and attended the two full membership meetings. Pete Neuberger and Sue Olson also worked with the Municipal Committee to develop and host the Pond Maintenance Workshop on September 30, 2016.

5.1.5 Audit Private BMP's

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Audit four (4) properties annually to ensure facilities are being properly maintained. At least three of the properties will be those for which the city is taking credit toward the Total Suspended Solids removal goal.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/29/2016	2016 Site Visits

Description

In 2016 City staff continued to work with Walgreens on Northland Avenue to complete repairs to their biofilters and also worked with Mills Fleet Farm, St. Elizabeth Hospital, and We Energies to verify inspection and maintenance practices. Walgreens, Mills, and We Energies require follow up in 2017. Additional information is shown on the attached table.

File Attachment [2016 Stormwater Permit Site Audits.xlsx](#)

5.1.6 Update O & M Templates

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

By the end of 2017, review and update the Operation and Maintenance Agreement templates

Planned: 2017

Complete:

Activity Date	Name	Description
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None		
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5.1.7 Populate website

Responsible Staff / Position:

Ross Buetow
City Engineer
(920) 832-6474

Description

By the end of 2017, provide additional information and forms available on the City's website for this program.

Planned: 2017

Complete:

Activity Date	Name	Description
None		

6 Pollution Prevention

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

The permittee shall continue to implement its pollution prevention program. The program shall have measurable goals.

Best Management Practices

6.1 Pollution Prevention Program

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Required Yes

Description

This document describes the City of Appleton Pollution Prevention Program as required in the Stormwater Permit from the Wisconsin Department of Natural Resources (WDNR). The program includes specific procedures intended to prevent pollution from City of Appleton operations conducted by several departments. Bold text is from the permit. The following City of Appleton departments and divisions are involved in this program:

1. Department of Public Works - Engineering Division
2. Department of Public Works – Operations Division
3. Department of Public Works – Parking Division
4. Parks, Recreation and Facilities Management Department
5. Fire Department
6. Utilities Department
7. Valley Transit

One copy of this document will be kept in the Engineering Division of the Department of Public Works located on the fifth floor of City Center, 100 N. Appleton Street, Appleton, Wisconsin 54911. All questions regarding this document should be directed to Paula Vandehey, Director of Public Works, at the above address, paula.vandehey@appleton.org or (920)-832-6474. Portions of this document will also be kept with other City of Appleton departments and divisions. Individual departments and divisions may elect to establish an alternate format of this plan for ease of implementation and monitoring or to fit within existing operations manuals.

Each department that is responsible for implementing a section(s) of this plan is also responsible for updating the plan as needed and training department staff on the plan requirements. Supporting documentation for activities by individual departments and divisions will be kept with those departments and divisions. Individual department and division updates will be collected by the Department of Public Works Engineering Division every five years, beginning in 2020, for an overall plan update. This updated plan will be brought to the Utilities Committee and Common Council for review and approval prior to submitting the plan to the WDNR.

Costs associated with this program are generally funded through the budget of each responsible department or division. Some costs associated with this program are funded through the City of Appleton Stormwater Utility.

2.6 Pollution Prevention – The permittee shall continue to implement its pollution prevention program. The program shall have measurable goals and include:

2.6.1 An inventory of municipally owned or operated structural stormwater management facilities.

As of December 2015, the Department of Public Works was responsible for:

- 39 wet stormwater ponds
- 90 manholes and curb inlets with sumps (Hydrodynamic Separation Device – HSD)
- 9 dry ponds
- One Nutrient Separating Baffle Box (NSBB)
- Numerous ditches and ravines
- Four Biofilters
- One “Stormceptor” (HSD)

As of December 2015 the Parks, Recreation and Facilities Management Department was responsible for:

- Two biofilters at the Police Station

- Two biofilters at Valley Transit
- One biofilter at Lutz Park
- Two biofilters at Telulah Park

This inventory is continually changing as the city and private developers construct new stormwater ponds, biofilters, water quality manholes and inlets with sumps and other stormwater management practices. The City of Appleton typically takes ownership of stormwater ponds in residential developments after the pond has been stabilized and the vegetation is established to ensure long term maintenance of the ponds. Changes to this inventory will be included in the annual report.

2.6.2 Routine inspection and maintenance of municipally owned or operated structural stormwater management facilities to maintain their pollution removal efficiency.

This section is the responsibility of the Department of Public Works, Engineering and Operations Divisions, and the Parks, Recreation, and Facilities Management Department.

Many of the City owned and maintained ponds have “Adaptive Management Plans” on file at the City of Appleton Department of Public Works located on the fifth floor of City Center, 100 N. Appleton Street, Appleton, WI 54911. The plans identify goals and priorities that help staff to establish the yearly inspection and maintenance activities. Engineering and Operations staff inspect as many of the ponds and biofilters in the DPW inventory for erosion and structural problems each spring as time permits.

Approximately half of the ditches and ravines are also inspected each year and are monitored for erosion and other damage. A prioritized spreadsheet is maintained that shows all needed repairs at ponds, ditches and ravines. City Operations staff perform most of the maintenance.

The City of Appleton contracts for muskrat trapping that occurs each spring and fall. Muskrats are known to damage vegetation and embankments at stormwater ponds. City staff collapse the dens and repair the embankments. Vegetation is replanted as necessary. The city has a horticulturist on staff and also contracts on a three year basis with a qualified firm for native wetland and prairie vegetation management at the ponds and biofilters. Maintenance plans for the Stormceptor and water quality inlets and manholes (HSD) provide measure down depths to determine when cleaning is needed. The Stormceptor is cleaned each year by the “Sewer TV and Cleaning” contractor. The City of Appleton Sewer Crew checks the other structures each year and removes sediment annually.

City crews have designed and installed baskets in the inlets in the downtown area to capture cigarettes and trash. These baskets are cleaned weekly.

The City of Appleton also cleans and televises the storm sewer system on approximately a 10-year cycle to ensure pipe integrity and monitor for improper connections.

The Parks, Recreation, and Facilities Management Department inspects and maintains the biofilters in their inventory per the Operation and Maintenance Plans developed with the project designs.

2.6.3 Routine Street Sweeping and cleaning of catch basins with sumps where appropriate.

This section is the responsibility of the Department of Public Works, Operations Division.

The Department of Public Works Operations Division currently owns two (2) mechanical sweepers, one (1) high efficiency street sweeper (HESS) and one Vac-All. Although the entire City is swept, additional efforts are focused on areas that are not tributary to regional stormwater ponds.

The Parking Division also owns a vacuum sweeper that is smaller than a street sweeper, appropriately sized to operate inside the parking ramps.

The downtown is swept twice a week with half mechanical sweeping and half high efficiency sweeping. Arterial streets and industrial areas are swept once every two weeks with the Vac-All or the HESS sweeper. The remaining areas are generally swept on a four week cycle. The first sweeping in the spring is completed prior to hydrant flushing activities. City parking ramps are swept daily and two downtown public parking lots are swept weekly by the Parking Division.

The Parks, Recreation and Facilities Management parking lot is swept every two weeks by the Operations Division of Public Works. The Municipal Services Building parking lot is swept weekly. Telulah Park parking lot is swept once per month. All parks, the Wastewater Treatment Plant and the Water Filtration Plant parking lots are swept once per year during spring cleanup.

All sweeping is subject to weather conditions and staff and equipment availability. Per the 2014 Stormwater Management Plan Update, the City will work to improve sweeping frequency for areas not in the downtown, industrial areas or arterial streets to a three week frequency, as labor and equipment are available. The City will also evaluate supplementing efforts with private street sweepers and upgrading mechanical sweepers to high efficiency sweepers at the time of replacement.

Maintenance plans for the Stormceptor and water quality inlets and manholes (HSD) provide measure down depths to determine when cleaning is needed. The Stormceptor is cleaned each year by the "Sewer TV and Cleaning" contractor. The City of Appleton Sewer Crew checks the other structures each year and removes sediment annually.

2.6.4 Proper disposal of street sweeping and catch basin cleaning waste.

This section is the responsibility of the Department of Public Works, Operations Division.

Street sweeping and storm sewer cleaning waste collected by the Operations Division is currently disposed of at the Outagamie County Landfill. Alternative methods of disposal are continually being sought to reduce the cost associated with tipping fees. Sweepings collected by the Parking Division are collected and disposed of by a private hauler.

2.6.4 If road salt or other deicers are applied by the permittee, no more shall be applied than necessary to maintain public safety.

The information provided below is current as of the revision date of this Program document. Any changes that occur before the next official update of this document will be reported with the annual report.

This section is the responsibility of the Department of Public Works, Operations and Parking Divisions and Parks, Recreation and Facilities Management Department.

The Department of Public Works Operations Division has a written "Snow and Ice Control Program" adopted by the Common Council to address winter street maintenance. This program is being updated in 2015/2016. This program does not commit to bare pavement, establishes proper use of chemicals, and sets guidelines for the amount of salt used per lane mile depending on temperature, the type of storm event, and the type of street. It also includes the use of pre-wetting solutions to further reduce salt usage. The equipment used to apply salt is kept in good working condition and calibrated regularly.

A new salt shed was constructed in 2001 at the Municipal Services Building. It was inspected yearly by the State of Wisconsin through 2009. The State did not provide this service in 2010, but resumed inspections in 2011. It is unclear how long this service will be provided.

The Parking Division applies deicer to the parking ramps and lots as needed to ensure pedestrian and vehicle safety. The smaller amounts needed in these areas have allowed city staff to try new, more environmentally friendly products and still monitor the sites for safety. Which products are used on a regular basis is determined by availability and cost.

Parks, Recreation and Facilities Management applies deicers to parking lots, access roads and sidewalks at various city facilities to maintain pedestrian and vehicle safety. They also remove snow from some of the city trails and apply deicers as needed. The smallest effective amount of salt is used.

The Department of Public Works, Operations Division and Parks, Recreation and Facilities Management remove snow and apply deicers on approximately 27.8 miles (2014-2015) of public sidewalk. The smallest effective amount of salt is used.

Information on deicing activities shall be submitted with the annual report required under section 2.9 of this permit beginning with the annual report due March 31, 2016 and annually thereafter and include:

2.6.5.1 Contact information for the individual(s) with overall responsibility for winter roadway maintenance.

The following people are responsible for winter roadway maintenance:

1. Nate Loper, Deputy Director of Public Works – Operations Office 920-832-5804, Cell 920-419-6225, nathan.loper@appleton.org
2. Carl Schultz, Operations Foreman, Department of Public Works Office 920-832-5581, Cell 920-419-6036, carl.schultz@appleton.org
3. Paula Vandehey, Director of Public Works Office 920-832-6474, Cell 920-419-6713, paul.vandehey@appleton.org

The following people are responsible for winter maintenance at parking ramps and downtown city-owned parking lots:

1. Paul De Braal, Parking Utility Manager, Department of Public Works Office 920-832-2330, Cell 920-419-6220, paul.debraal@appleton.org
2. Ross Buetow, Deputy Director of Public Works/City Engineer Office 920-832-6485, Cell 920-419-6408, ross.buetow@appleton.org

The following person is responsible for winter maintenance at city facilities:

1. Dean Gazza, Director of Parks, Recreation and Facilities Management Office 920-832-5572, Cell 920-419-0374, dean.gazza@appleton.org

2.6.5.2 Description of the types of deicing products used.

The Department of Public Works Operations Division (streets) uses the following:

- Granular sodium chloride (road salt)
- Liquid sodium chloride 28%, salt brine, prewet and anti-ice application
- Liquid calcium chloride 42% prewet application

The Department of Public Works Parking Division uses the following:

- “Meteor Melt”
- Chemical components OSHA PEL ACGIH
- Potassium chloride 10 mg/M3 7447-40-7
- Sodium chloride 10 mg/M3 7647-14-5
- Magnesium chloride 7786-30-3
- Calcium chloride

The Parks, Recreation and Facilities Management Department uses the following:

- Calcium chloride
- Granular sodium chloride (road salt)
- Liquid calcium chloride pre-wet for sidewalks and parking lots

2.6.5.3 The amount of deicing product used per month.

This information will be tracked through the City’s inventory system and reported annually.

2.6.5.4 Description of the type of equipment used.

The Department of Public Works Operations Division (streets) operates the following:

- 10 tri-axle plow trucks, wing and plow, tailgate salt spreader with prewet capabilities
- 15 single axle plow trucks, wing and plow, tailgate salt spreader with prewet capabilities
- 6 front end loaders with a wing and plow
- 2 road graders with a wing and plow
- 2 one ton plow trucks with a salt spreader
- 3 sidewalk snow plows with a salt spreader

The Department of Public Works Parking Division uses the following:

- 1 truck spreader
- By hand with scoops

The Parks, Recreation and Facilities Management Department operates the following:

- Four ¾ ton plow trucks with inbox salt spreaders
- Six Toro mower to snow conversion units with salt spreaders for sidewalk use
- One Liquid calcium chloride spray unit for sidewalks and parking lots

2.6.5.5 Snow disposal locations, if applicable

- South side of the intersection of E. Glendale Avenue and N. Sandra Street
- Southeast corner of E. Milis Drive and S. Quest Drive
- 701 S. Whitman Drive N.
- Kalata Place (Parking Division)

2.6.5.6 Anti-icing, equipment calibration and salt reduction strategies considered.

The Department of Public Works Operations Division (streets) considered all available technologies, currently owned equipment, locations of critical sites and available staff in the development of the current strategy. The current strategy is as follows:

The City applies liquid salt brine as an anti-ice agent prior to snow/ice storms and forecasted frost events on hills, bridges, curves and four lane roads. All equipment having a material spreader is equipped with prewet capabilities and an on-board computer system which regulates material application. This equipment is calibrated annually. The City also developed a snow and ice matrix that is used to evaluate impending storm conditions and helps determine the proper methodology for combating the snow event. The matrix is attached to this document. The City also subscribes to a weather service that helps establish duration, intensity and timing of a storm. In addition, the service forecasts present and future air and pavement temperatures and recommends material spreading applications.

The Department of Public Works Parking Division strategy includes plowing and scraping snow with a skid steer and also using a snow blower and hand shovels. Salt is typically only applied in areas prone to ice formation or where ice is present.

The Parks, Recreation, and Facilities Management Department strategy is similar to the DPW Parking Division strategy.

2.6.5.7 Other measurable data or information that the permittee used to evaluate its deicing activities.

The Department of Public Works Operations Division (streets): The primary focus of the program is to anti-ice instead of de-ice as much as possible. City staff stay current with the latest snow and ice technology by networking with vendors and other communities, attending American Public Works Association training on the topic, and sending various staff to UW-Madison and NEWSC sponsored classes regularly. New employees are trained on the program every fall. The City believes that it is using the latest technology.

The Department of Public Works Parking Division uses deicing materials on an as-needed basis only.

The Parks, Recreation and Facilities Management Department uses deicing materials on an as-needed basis only.

2.6.6 Proper management of leaves and grass clippings, which may include on-site beneficial reuse as opposed to collection.

This section is the responsibility of the Department of Public Works Operations Division, Fire Department, the Parks and Recreation and Facilities Management Department. Parks, Recreation and Facilities Management is responsible for yard care at approximately 144 public terraces and outlots, the Wastewater and Water Treatment Plants all City owned parks, Valley Transit, the Witzke Blvd Parks, Recreation and Facilities Management office, the Police Station and Fire Station 6. Fire Stations 1 through 5 have mulching mowers and leaf collection is addressed under the City-wide leaf collection program.

Parks, Recreation and Facilities Management uses mulching mowers in the parks, public terraces, and at other city facilities that they maintain. No leaves or grass clippings are removed from these sites. At Reid Golf Course all material is mulched or composted and kept on-site.

Appleton has two yard waste drop off sites that collect grass clippings, brush, and yard waste from residents. A fee is charged for each bag of grass clippings as an incentive to mulch grass or compost at home.

Leaves are collected by the Department of Public Works Operations Division in the fall in approximately three (3) cycles through the city. Some leaves are ground and made available to residents as mulch. Other leaves are applied to farm fields, provided to landscapers and provided to the compost pilot program with Outagamie County and Appleton Utilities Department Biosolids Program. Grass clippings are currently mixed with other ground yard waste and taken to the compost project or provided to the public.

2.6.7 Stormwater pollution prevention planning for municipal garages, storage areas, and other sources of stormwater pollution from municipal facilities. Information on stormwater pollution prevention activities for municipal garages, storage areas, and other sources of stormwater pollution prevention from municipal facilities shall be submitted with the annual report under section 2.9 of this permit beginning with the annual report due March 31, 2016 and annually thereafter and include the information in sections 2.6.7.1 through 2.6.7.7. The Department may waive the requirements of this section on a case-by-case basis for a municipal facility provided the permittee certifies that the facility qualifies for a conditional no exposure exclusion pursuant to s. NR 216.21(3), Wis. Adm. Code and with the Department's written concurrence.

Information on stormwater pollution prevention activities shall include:

2.6.7.1 Location of each facility and contact information for the individual(s) with overall responsibility for each facility.

2.6.7.2 A map of each facility, drawn to scale, and including the following features:

2.6.7.2.1 The locations of major activities and storage areas.

2.6.7.2.2 Identification of drainage patterns, potential sources of stormwater contamination, and discharge points.

2.6.7.2.3 Identification of nearby receiving waters or wetlands.

2.6.7.2.4 Identification of connections to the permittee's MS4.

2.6.7.3 A description of good housekeeping activities and any best management practices installed to reduce or eliminate stormwater contamination.

2.6.7.4 Recommendations for improvements to current stormwater management practices at the facility and a timeline for installation and/or implementation of these recommendations.

2.6.7.5 Information on inspections of the facility to identify and address potential sources of stormwater

contamination.

2.6.7.6 Employee training on stormwater pollution prevention at the facility.

2.6.7.7 Spills prevention and response procedures.

Earth Tech, Inc. prepared nine (9) site specific Stormwater Management Plans for the following City of Appleton facilities:

- Valley Transit (2004)
- Whitman Yard Waste Site (Department of Public Works - Operations Division) (2005)
- Municipal Services Building (Department of Public Works - Operations Division) (2005)
- Water Treatment Plant (Utilities Department) (2005)
- Wastewater Treatment Plant (Utilities Department) (2005)
- Fire Station No. 1 (2007)
- Fire Station No. 6 (2007)
- Facilities and Grounds Operations Center on Witzke Blvd (formerly Parks and Recreation Department Office and Storage yard) (2007)
- Reid Golf Course Maintenance Yard (Parks, Recreation, and Facilities Management Department) (2007)

These plans are separate documents and not included in this program document. Each department is responsible for implementing the stormwater plan for their facilities, including: physical site changes, plan updates and amendments, facility inspections, and staff training. Earth Tech, Inc. provided training to each department on their completed plans. Department of Public Works Engineering staff provide additional training to each department if requested. Beginning in 2016, the Department of Public Works will be performing site inspections for Parks, Recreation, and Facilities Management sites and assisting them with any necessary plan updates.

2.6.7 Application of turf and garden fertilizers on municipally controlled properties, with pervious surfaces over 5 acres each, in accordance with site-specific nutrient application schedule based on appropriate soil tests.

City owned properties with over 5 acres of pervious area include most city parks, Reid Golf Course, the Water Treatment Plant (WTP) and the Wastewater Treatment Plant (WWTP). The city also owns property with over 5 acres of pervious surface that is leased by USA Youth Sports.

This section is the responsibility of The Parks, Recreation and Facilities Management Department.

The City has a Turf Management Policy for city parks and other City owned properties, except Reid Golf Course. There are also completed soil tests and Nutrient Management Plans for all city parks, Reid Golf Course, and the Water and Wastewater Treatment Plants. The site specific Nutrient Management Plans fall under the Turf Management Policy. Reid Golf Course has a stand-alone Nutrient Management Plan, not under the Turf Management Policy. Reid Golf Course and Parks, Recreation and Facilities Management staff are certified for the proper application of lawn and garden fertilizers and follow the Nutrient Management Plans. The plans will be updated every five (5) years following new soil tests.

Lease agreement with USA Youth Sports includes this requirement.

2.6.9 Consideration of environmentally sensitive land development designs for municipal projects, including green infrastructure and low impact development.

The Parks, Recreation and Facilities Management Department will add this requirement to Requests for Proposals for designs of municipal building projects.

The Department of Public Works evaluates street width for every reconstruction project. Streets are narrowed, increasing terrace width for trees and grass, whenever possible. The Department is also evaluating the various new pervious pavement technologies, including installation of two "Pavedrain" test areas, one in 2015 and one in 2016.

2.6.10 Education of appropriate municipal and other personnel involved in implementing this program.

Each Department impacted by this section of the Permit is required to provide training to their own personnel regarding the implementation of this plan. However, some of the topics may be applicable to multiple departments and combined training efforts will be used whenever the time and topic are appropriate. Training will be incorporated into existing training programs. Staff from DPW Engineering and Operations and PRFMD meet monthly at Stormwater Workgroup to discuss regulation changes, training, new project construction and maintenance activities.

2.6.11 Measures to reduce municipal sources of stormwater contamination within source water protection areas.

Small portions of the city are tributary to a Freedom municipal well, a Town of Menasha municipal well, and Lake Winnebago. The city will continue current practices within known source water protection areas.

Goals

6.1.1 BMP inventory changes

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Description

Annually track any changes to the City's BMP inventory.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 BMP Inventory Changes

Description

Made the following changes to City's BMP inventory:

- Added 4 HSDs - 8 ft diameter manholes with sumps in public streets
- Added 1 Dry Pond to the public inventory that was existing, but originally thought to be private

6.1.2 Update GIS system

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Description

Annually add new DPW and DOT practices to the DPW GIS system.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 GIS Updates

Description

GIS system has been updated to reflect changes to BMPs.

- Added 4 HSDs
- Added 1 Dry Pond

6.1.3 Inspect City-owned ponds

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Description

Inspect 50% of the City-owned ponds annually (Y/N).

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Pond Inspections and Maintenance

Description

In 2016, all City-owned ponds were inspected by Pete Neuberger from Engineering and Mike Michlig from Operations. The attached Inspection and Maintenance spreadsheet shows pond maintenance items completed in 2016.

File Attachment [Stormwater Inspect Maintenance List EOY 2016.pdf](#)

6.1.4 Inspect structures with sumps

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Check sediment and debris accumulation annually in City-owned manholes and inlets with sumps and remove as needed.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
08/11/2016	2016 Stormceptor Clean and TV

Description

The Stormceptor at the Municipal Services Building was cleaned and televised by Green Bay Pipe and TV.

File Attachment [2016 Stormceptor cleaning.pdf](#)

10/11/2016	2016 Annual HSD Inspections
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Description

In 2016, 72 of the structures with sumps were inspected and 43 required cleaning, as documented on the attached spreadsheet.

File Attachment [Copy of 2016 Annual HSD inspection.xlsx](#)

6.1.5 Inspect ditches and ravines

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Description

Inspect 50% of the City-maintained ditches and ravines annually.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Ditch Inspection and Maintenance

Description

In 2016, Pete Neuberger from Engineering and Mike Michlig from Operations inspected 50% of City-maintained ditches, channels, and ravines. The attached Inspection and Maintenance spreadsheet shows ditch maintenance items completed in 2016.

File Attachment [Stormwater Inspect Maintenance List EOY 2016.pdf](#)

6.1.6 Sewer Clean and TV

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Clean and televise 10% of storm system annually

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Sewer Clean and TV

Description

In 2016 the City contracted with Geen Bay Pipe and TV to Clean and televise 10.2% of the storm sewer system.

6.1.7 Total sweeping effort

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Provide 2500 broom hours of street sweeping annually.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/01/2016	2016 Sweeping Totals

Description

In 2016, 3172 broom hours of sweeping were completed, as documented on the attached spreadsheet.

File Attachment [Sweeper report-2016.xls](#)

6.1.8 Downtown Sweeping

Responsible Staff / Position:	Ross Buetow City Engineer (920) 832-6474
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Description

Sweep downtown streets two (2) times per week.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/01/2016	2016 Downtown Sweeping

Description

In 2016 the Downtown Area was swept twice (2x) per week, April to October, as documented on the attached spreadsheet.

File Attachment [Sweeper report-2016.xls](#)

6.1.9 Upgrade sweeping equipment

Responsible Staff / Position:	Ross Buetow City Engineer (920) 832-6474
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Description

Evaluate the replacement of existing mechanical sweepers with high efficiency sweepers per established equipment replacement schedule.

Planned: 2019

Complete:

Activity Date	Name
12/30/2016	2016 Sweeper Replacement Schedule

Description

As of the 2016 annual report, the next street sweeper upgrade is planned for 2020. Evaluation of need for and type of sweeper will occur in 2019. This schedule is subject to change.

6.1.10 Evaluate sweeping frequency changes

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Evaluate supplementing City practices with private street sweeping and/or increasing sweeping frequency to a 3 week cycle by 2020.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
08/25/2016	2016 Sweeping Frequency pilot

Description

Per the report at Stormwater Workgroup, Operations Division scheduled staff and equipment to sweep the areas of the City tributary to stormwater ponds once every 6 weeks and areas not tributary to ponds every three weeks. The pilot project has gone well with very few complaints from the public.

6.1.11 Catch Basin Cleaning

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Check sediment and debris accumulation annually and remove as needed.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
08/11/2016	2016 Stormceptor Clean and TV

Description

The Stormceptor at the Municipal Services Building was cleaned and televised by Green Bay Pipe and TV.

File Attachment [2016 Stormceptor cleaning.pdf](#)

10/31/2016	2016 HSD Cleaning
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Description

In 2016, 72 of the structures with sumps were inspected and 43 required cleaning, as documented on the attached spreadsheet.

File Attachment [2016 Annual HSD inspection.xlsx](#)

6.1.12 Disposal of Street Sweepings

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Maintain regular disposal practices (Y/N) as tracked by tipping fee receipts.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Street sweepings

Description

In 2016, street sweepings were disposed of at the Outagamie County Landfill on a regular basis, as documented in the attached spreadsheet.

File Attachment [Sweepings 2016.pdf](#)

6.1.13 Disposal of Catch Basin waste

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Maintain regular disposal practices (Y/N) as tracked by tipping fee receipts.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	Tipping Fee Receipts

Description

In 2016 catch basin and HSD sump cleaning wastes were disposed of regularly with the street cleaning wastes at the Outagamie County Landfill, as documented on the attached spreadsheet.

File Attachment [2016 Outagamie County-Tipping Fees-Disp...of
Catch Basin Cleaning Wastes.pdf](#)

6.1.14 Snow and Ice Fleet

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Maintain fleet for proper calibrated application, supported by fleet vehicle maintenance records.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Fleet calibration

Description

In 2016 the fleet was calibrated for proper application of salt and sand by December 30, per the attached chart.

File Attachment [Salter Calibration 2016.pdf](#)

6.1.15 Salt Shed

Responsible Staff / Position:	Ross Buetow City Engineer (920) 832-6474
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Description

Annually have the salt shed inspected if this service is provided by WDOT.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
03/18/2016	Salt Shed Inspection

Description

WisDOT inspected the salt shed, liquid Calcium Chloride tank and liquid Brine tank at 2625 E. Glendale Ave. All three areas passed inspection.

File Attachment [2016 Salt Shed Inspections.pdf](#)

6.1.16 Snow and Ice Matrix

Responsible Staff / Position:	Ross Buetow City Engineer (920) 832-6474
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Description

Review Snow and Ice matrix yearly.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
11/30/2016	2016 Snow & Ice Conditions Flow Chart

Description

Nate Loper and Carl Schultz reviewed the Snow & Ice Conditions Flow Chart.

The Pre-Wet Calibration Options were changed as follows:

10 gal/ton changed to 15 gal/ton
20 gal/ton stayed at 20 gal/ton
30 gal/ton changed to 25 gal/ton

File Attachment [Snow and Ice Condition Flow Chart.pdf](#)

6.1.17 Snow and Ice Program

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Review Snow and Ice Program every three years

Planned: 2016 2019

Complete: 2016

Activity Date	Name
11/30/2016	2016 Snow & Ice Program

Description

Nate Loper reviewed the City of Appleton Department of Public Works Snow & Ice Program that is designed to provide snow and ice control for safe travel throughout the City. The objective of the program is to maintain traffic movement on all collector and arterial streets during a storm and includes the following:

1. Plow all streets within 12 hours of the end of a snowstorm and remove accumulated snow from designated haul routes.
2. Investigate and expand contractual services when necessary to meet current level of service.
3. Perform an annual review of regional snow plowing agreements to insure they are current and equitable.
4. Monitor sidewalk snow removal contract to insure quality and timeliness of service.
5. Review snow plow routes and make necessary changes to gain efficiency.
6. Investigate mailbox damage caused by plows and enforce per City policy.
7. Evaluate use of slat brine and other pre-wetting liquids for snow and ice control.
8. Continue low salt usage on newly paved streets to minimize damage on new concrete.

There were no changes in 2016 to the existing program.

File Attachment [Snow and Ice Program.pdf](#)

File Attachment [Types of Snow and Ice.pdf](#)

6.1.18 Leaf collection Program

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Continue public leaf collection program.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Sanitation Budget

Description

On November 11, 2015 the 2016 budget was adopted and included funding for the leaf collection program. The program was implemented and 4 rounds of leaf collection were completed in fall 2016.

File Attachment [2016 Adopted Budget-City of Appleton-Sanitation.pdf](#)

6.1.19 Yard Waste Sites

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Continue operation of yard waste drop-off sites.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/31/2016	2016 Yard Waste Sites

Description

On November 11, 2015, the 2016 budget was adopted and included funding for the yard waste sites. The sites were operated per the attached calendar.

File Attachment [2016 Yard Waste Drop-Off Sites-Staffing Schedule.pdf](#)

6.1.20 PRFM equipment

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Parks, Recreation and Facilities Management will continue to own, operate, and maintain mulching mowers.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
11/30/2016	Mulching Mowers

Description

In 2016 the PRFMD owned and operated all mulching mowers.

File Attachment [Mulching Mowers.pdf](#)

6.1.21 Fire Department equipment

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

The Fire Department will continue to own, operate, and maintain mulching mowers.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date **Name**

12/30/2016 Fire Dept. Mulching Mowers

Description

In 2016 the Fire Department owned and operated mulching mowers.

File Attachment [Fire Mulching Mowers.pdf](#)

6.1.22 SWPPP Inspections

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Perform inspections per prepared plans and report inspections per permit requirements.

Planned: 2016 2017 2018 2019 2020 2021

Complete:

Activity Date **Name**

10/15/2016 2016 Fire Station 1 Inspections

Description

Inspections occurred on April 2, May 29, July 2, August 23, September 10, and October 15. Reports are attached.

File Attachment [Fire Station 1 2016 inspections.pdf](#)

10/26/2016 2016 Fire Station 6 Inspections

Description

Inspections occurred at Fire Station 6 on April 1, May 25, July 9, August 19, September 30, and October 26. Reports are attached.

File Attachment [Fire Station 6 2016 inspections.pdf](#)

12/28/2016 2016 Water Plant Inspections

Description

Inspections at the Water Plant occurred on March 8, April 28, September 27 and December 28. Reports are attached.

File Attachment [2016_Stormwater inspection AWWTP.pdf](#)

12/28/2016 2016 Wastewater Plant Inspections

Description

Inspections occurred on March 8, April 28, September 27, and December 28. Reports are attached.

File Attachment [2016_Stormwater inspectionsAWWTP.pdf](#)

12/30/2016 2016 Inspections by DPW

Description

The Department of Public Works performed inspections for the MSB/Hardstand site, the Witzke Ave main building for PRFMD, Reid Golf Course maintenance building, and the Whitman Yard Waste Site. Inspection reports are attached.

File Attachment [Facilities Quarterly Wet 03 16 16.pdf](#)

File Attachment [Facilities Quarterly Wet 6 23 16.pdf](#)

- File Attachment [Facilities Quarterly Wet 10 5 16.pdf](#)
- File Attachment [MSB Quarterly Wet 6 23 16.pdf](#)
- File Attachment [MSB Quarterly Wet 10 5 16.pdf](#)
- File Attachment [MSB Quarterly Wet Inspection 03 16 16.pdf](#)
- File Attachment [Reid Golf Course Quarterly Wet Inspection 03 16 16.pdf](#)
- File Attachment [Reid Golf Course Quarterly Wet Inspection 6 23 16.pdf](#)
- File Attachment [Reid Golf Course Quarterly Wet Inspection 10 5 16.pdf](#)
- File Attachment [Whitman Yard Site Quarterly Wet Inspection 03 16 16.pdf](#)
- File Attachment [Whitman Yard Site Quarterly Wet 6 23 16.pdf](#)
- File Attachment [Whitman Yard Site Quarterly Wet 10 5 16.pdf](#)

6.1.23 Update SWPPPs

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

By December 31, 2016, complete initial update of all site pollution prevention plans.

Planned: 2016

Complete:

Activity Date	Name
12/21/2016	2016 Whitman Yard Waste Site SWPPP Update

Description

The Stormwater Plan for the Whitman Yard Waste site was updated in 2016. The files are attached.

- File Attachment [Whitman Rpt 2016 Final.docx](#)
- File Attachment [2016 Updated SWPPP DNR Spill reporting.pdf](#)
- File Attachment [2016 Whitman SWPPP figures.pdf](#)
- File Attachment [2016 Whitman SWPPP inspection forms.pdf](#)

12/28/2016	2016 Reid Golf Course SWPPP Update
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Description

In 2016 the SWPPP for the Maintenance Area at the Reid Golf Course was updated. The files are attached. The updated plan proposes to replace an existing parking lot drain with a structure with a sump when the parking lot is repaved in the future.

- File Attachment [Reid Rpt Txt final 2016.docx](#)
- File Attachment [2016 Updated SWPPP DNR Spill reporting.pdf](#)
- File Attachment [2016 Reid Updated inspection forms.pdf](#)
- File Attachment [2016 Reid Updated SWPPP figures.pdf](#)

12/30/2016	Valley Transit SWPPP
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Description

The Valley Transit SWPPP was not updated due to significant staff turnover, but is included here per the permit requirements. These documents are the same as those submitted in 2015.

- File Attachment [Appleton VT SWPPP_Report.pdf](#)

File Attachment [FIGURE2.pdf](#)

File Attachment [FIGURE1.pdf](#)

12/30/2016 Fire Station SWPPP Updates

Description

Due to retirements and staff changes at the Fire Department, the SWPPP updates for Fire Stations 1 and 6 will occur after open positions are filled. The same files provided in 2015 are included here again per permit requirements.

File Attachment [FS-1-Location Map_11x17_Aug.2007.pdf](#)

File Attachment [FS-1-Drainage Map_11x17_June_2008.pdf](#)

File Attachment [Fire Station No. 1 Rpt Txt_FINAL.pdf](#)

File Attachment [Fire Station No. 6 Rpt Txt_Final_v.2.pdf](#)

File Attachment [FS-6-Drainage Map_11x17_June_2008.pdf](#)

File Attachment [FS-6-Location Map_11x17_Aug.2007.pdf](#)

01/18/2017 2016 PRFMD Witzke SWPPP Update

Description

In 2016, DPW staff worked with PRFMD staff to update the SWPPP for the Main Building on Witzke Blvd. The update was completed in January 2017.

File Attachment [2016 PRFMD SWPPP figures.pdf](#)

File Attachment [2016 PRFMD SWPPP updated inspection forms.pdf](#)

File Attachment [2016 Updated SWPPP DNR Spill reporting.pdf](#)

File Attachment [Park Rec FMD Rpt 2016 final.docx](#)

01/20/2017 2017 Water Plant SWPPP Update

Description

In January 2017, the SWPPP for the Wastewater Plant was updated.

File Attachment [170104_RevisedWTF Rpt Txt.doc](#)

File Attachment [Spill reporting 2016_RR560.pdf](#)

File Attachment [Fig2 w_edits 6-9-05.PDF](#)

File Attachment [Figure1_WaterTreatment Facility_location.pdf](#)

File Attachment [WTF_NSWaterDischargeForm.doc](#)

File Attachment [AFSCI_Revised_2014.pdf](#)

File Attachment [AWTF Ann Site Insp Chklist Water Treatment.doc](#)

File Attachment [Menasha Spill Document Form Water Treatment.doc](#)

File Attachment [AWTF Empl Training Record.doc](#)

File Attachment [QVI WTF.pdf](#)

01/20/2017 2017 Wastewater Plant SWPPP Update

Description

In January 2017, the Utilities Department updated WWTP SWPPP.

File Attachment [Revised 170104_WWTP Rpt Txt.doc](#)

File Attachment [AWWTP Updated Site Map 2016.pdf](#)

File Attachment [Figure2_Wastewater Treatment Facility.pdf](#)

File Attachment [170105_Updated_QVI.pdf](#)

File Attachment [AFSCI_Revised_2014.pdf](#)

File Attachment [Empl Training Record Wastewater Facility.doc](#)

File Attachment [Spill Document Form Wastewater Facility.doc](#)

File Attachment [WWTP_NSWaterDischargeForm.doc](#)

File Attachment [Spill reporting 2016_RR560.pdf](#)

01/24/2017 2017 MSB SWPPP Update

Description

The updated to the MSB SWPPP was started in October 2016 and completed in January 2017. The files are attached.

File Attachment [2017 MSB SWPPP figures.pdf](#)

File Attachment [2017 MSB updated SWPPP Inspection forms.pdf](#)

File Attachment [2016 Updated SWPPP DNR Spill reporting.pdf](#)

File Attachment [MSB Hardstand Report 2017 update final.docx](#)

6.1.24 SWPPP training

Responsible Staff / Position:

Ross Buetow
City Engineer
(920) 832-6474

Description

Each department will provide one training opportunity per year for their staff as documented by an attendance sign-in and agenda.

Planned: 2016 2017 2018 2019 2020 2021

Complete:

Activity Date

Name

01/28/2016 2016 Utilities Department

Description

Sue Olson from DPW met with Brian Kreski from Utilities Dept to discuss the SWPPP and the necessary updates to the plan.

03/08/2016 2016 MSB Training

Description

Sue Olson met with newly assigned staff at the MSB to discuss SWPPP inspection requirements at MSB/Hardstand, Whittman Yard Waste Site, PRFMD Witzke Blvd building, and Reid Golf Course Maintenance area.

03/25/2016 2016 Fire Dept Training

Description

In 2016, Sue Olson from Public Works met with Fire Department staff to discuss the requirement of the SWPPPs for Stations 1 and 6.

05/09/2016 2016 PRFMD Training

Description

Staff at the Park, Recreation and Facilities Management Department was trained on cleaning fertilizers and clippings from hard surfaces and proper mower cleaning, as documented on the attached agenda and attendance list.

File Attachment [Witzke Stormater Training.pdf](#)

10/24/2016 2016 Snow & Ice Day Training

Description

DPW Operations staff was trained on snow and ice procedures on the street and at the MSB site, per the attached agenda and attendance list.

File Attachment [10-24-16 Snow Ice Day.pdf](#)

6.1.25 Turf Management Policy

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Review and update Turf Management Policy every 5 years.

Planned: 2018

Complete:

Activity Date	Name	Description
None		

6.1.26 Nutrient Management Plans

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Review and update Nutrient Management Plans every 5 years.

Planned: 2018

Complete:

Activity Date	Name	Description
None		

6.1.27 Follow Turf Policies and Plans

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Follow Turf Management Policy and Nutrient Management Plans.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
11/30/2016	2016 Nutrient Plans

Description

In 2016 PRFMD applied 6200 pounds of Andersons 32-0-8 to City owned properties per the turf and nutrient management plans. Fertilizer forms are attached.

File Attachment [2016 Fertilizer forms.pdf](#)

6.1.28 Monitor leased properties

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Monitor compliance with Nutrient Management Plans for leased property.

Planned: 2016 2017 2018 2019 2020 2021

Complete:

Activity Date	Name	Description
None		

6.1.29 PRFM RFP's

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Include the requirement for consideration of environmentally sensitive designs and green infrastructure practices in RFPs issued by the Parks, Recreation and Facilities Management Department.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 RFPs

Description

In 2016 PRFMD issued RFPs for the Exhibition Center (page 5, item 10), Erb Park (pg 7, Item A5), Jones Park (pg 3), Ellen Korte Park (pg 3) and Memorial Park (pg 4) requiring environmentally sensitive designs and materials. The RFPs are attached.

File Attachment [2016 Erb Park RFP.pdf](#)
File Attachment [2016 Exposition Center RFP.pdf](#)
File Attachment [RFP Ellen Kort Park.doc](#)
File Attachment [2016 RFP Jones Park.doc](#)
File Attachment [2016 RFP Memorial Park.doc](#)

6.1.30 Other Department RFP's

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Public Works will begin discussions with other City departments that may issue RFPs to include consideration of environmentally sensitive designs and green infrastructure practices.

Planned: 2016 2017 2018 2019 2020 2021

Complete:

Activity Date	Name
12/30/2016	2016 RFPs

Description

No other departments issued RFPs in 2016.

6.1.31 Street Projects

Responsible Staff / Position:	Ross Buetow City Engineer (920) 832-6474
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Description

Evaluate each street reconstruction project for pavement narrowing and opportunities for green infrastructure.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
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10/28/2016	2016 Approved Street Designs
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Description

In 2016, the following street reconstruction designs were approved with narrower pavement, increasing green space:

Mary Street (North St – Pacific St)
Catherine Street (Washington St – North St)
Sanders Street (Seymour St – Verbrick St)
Reeve Street (Linwood St – Winnebago St)
Winnebago Street (Linwood – Badger Ave)
Marquette Street (Division St – Oneida St)
Summer Street (Morrison St – Drew St)
Lynndale Drive (Leonard St – Everett St)
Lincoln Street (Olde Oneida St – Madison St)

Construction of these streets is proposed for 2017 or after.

11/01/2016	2016 Construction Projects
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Description

In 2016, the following streets were constructed narrower, increasing green space:

McKinley Street (Oneida St – Ritger St)
Verbrick Street (Bouten St – Wilkie St)
Peabody Street (Verbrick St – Seymour St)
Sampson Street (North St – Atlantic St)

6.1.32 New Technology

Responsible Staff / Position:

Sue Olson
Staff Engineer
(920) 832-6473

Description

DPW staff will evaluate one new green infrastructure technology per year.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date

Name

05/27/2016

Fire Department Pavedrain

Description

The "Pavedrain" system installed in the Fire Station No. 1 parking lot in 2015 failed over winter, with settlement exceeding one inch. "Pavedrain" crews and City Operations staff removed the block, corrected the stone layers, and replaced the block. City Engineering staff will continue to monitor the system's performance.

08/18/2016

Vendor Meeting

Description

City Engineering staff met with County Materials Corporation to learn about their pervious pavement options and a recent installation in the area.

08/24/2016

Conkey Street Pavedrain

Description

The City of Appleton Operations Division installed a 40 foot by 5 foot "Pavedrain" system at Conkey and Sandra Streets. This system includes approximately 4 feet of open graded storage below the bricks. The Operations and Engineering Divisions will monitor the performance of the system for water quantity and quality and durability for snow plowing operations.

6.1.33 DPW Operations Pollution Prevention Training

Responsible Staff / Position:

Ross Buetow
City Engineer
(920) 832-6474

Description

Provide one training opportunity per department per year; document with training records.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date

Name

10/24/2016

2016 Snow & Ice Day Training

Description

DPW conducted annual snow and ice training that included pollution prevention associated with this activity. Agenda and attendance list are attached.

File Attachment [10-24-16 Snow Ice Day.pdf](#)

File Attachment [2016 Snow and Ice Day Agenda.docx](#)

6.1.34 PRFM Pollution Prevention Training

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Provide one training opportunity per department per year; document with training records.

Planned: 2016 2017 2018 2019 2020 2021

Complete:

Activity Date	Name
05/09/2016	2016 PRFDM Training

Description

Staff at the Park, Recreation and Facilities Management Department was trained on cleaning fertilizers and clippings from hard surfaces and proper mower cleaning, as documented on the attached agenda and attendance list.

File Attachment [Witzke Stormater Training.pdf](#)

06/22/2016	2016 Reid Golf Course
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Description

Staff at Reid Golf Course were trained on good housekeeping practices. Agenda and attendance list are attached.

File Attachment [Reid staff training 2016.pdf](#)

6.1.35 DPW Operations Posters

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Acquire and post appropriate information posters.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Posters

Description

In 2016 the Operations Division of Public Works posted NEWSC Renew Our Waters signs near the punch clock and near the employee lunch room.

6.1.36 PRFM Pollution Prevention Posters

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Acquire and post appropriate information posters.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Posters

Description

In 2016 pollution prevention posters were located in the bathrooms and breakroom at PRFMD.

6.1.37 Source Water Protection Areas

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Maintain existing BMP's in source water protection areas.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Source Water protection areas.

Description

All structural and non-structural stormwater practices were continued and maintained in source water protection areas.

6.1.38 Pollution Prevention Program Document

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

This document was updated in 2016 and will be updated every 5 years, beginning in 2020. If necessary changes are identified prior to the scheduled update, the plan will be updated at that time.

Planned: 2016 2020

Complete: 2016

Activity Date	Name
01/20/2016	2016 Document

Description

The Common council approved the updated attached document.

File Attachment [Pollution Prevention Program Dec 2015 Final.docx](#)

6.1.39 Types of Deicing Products used per month

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

Per Section 2.6.5.3 of the Permit, the City will report annually the amount of deicing product used by the Operations Division of Public Works per month.

Planned: 2015 2016 2017 2018 2019 2020 2021

Complete: 2015 2016

Activity Date	Name
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01/15/2016	2015 Salt and Brine Use
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Description

The November and December 2015 City of Appleton Operations Division salt and brine use is shown on the attached table.

File Attachment [Attachment Y 2015 Salt use.pdf](#)

12/31/2016	2016 Salt and Brine use
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Description

In 2016, the City of Appleton Operations Division used approximately 3,575 tons of salt, 3,050 gallons of liquid chloride, and 30,600 gallons of salt brine. The requested breakdown by month is attached.

File Attachment [2016 salt use by month.pdf](#)

7 Storm Water Quality Management

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

The permittee shall continue to implement its municipal storm water quality management program. This program shall maintain compliance with the developed urban area performance standards of s. NR 151.13(2)(b)1., Wis. Adm. Code, for those areas of the municipality that were not subject to the post-construction performance standards of ss. NR 151.12 or 151.24, or ss. NR 151.122 through 151.126 or ss. 151.242 through 151.246, Wis. Adm. Code.

Best Management Practices

7.1 TSS Reduction

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Required Yes

Description

To the maximum extent practicable, implement and maintain storm water management practices necessary to meet the more restrictive total suspended solids reduction of either of the following:

1. Maintain source area controls, structural storm water management facilities, and non-structural storm water best management practices implemented on or before July 1, 2011 to achieve a reduction of 20% or more of total suspended solids carried by storm water runoff from existing development to waters of the state.
2. Reduce the annual average mass of total suspended solids discharging from the MS4 to surface waters of the state by 20% as compared to implementing no storm water management controls. Source area controls, structural storm water management practices, and non-structural control practices implemented to achieve the 20% reduction in total suspended solids shall be maintained.

The City of Appleton has met the 20% TSS reduction standard as documented in the 2014 Citywide Stormwater Management Plan Update submitted to WDNR. It was analyzed in WinSLAMM version 10.0 showing a 38% TSS reduction city-wide.

Goals

7.1.1 Maintain Source Area Controls

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

The City's stormwater runoff is tributary to municipal wells of Freedom and the Village of Fox Crossing, and also to Lake Winnebago. The City has both structural and non-structural stormwater practices in these areas.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Maintenance

Description

In 2016 the City maintained all structural and non-structural stormwater practices in source control areas, as documented in Section 6 of this report.

7.1.2 Maintain Non-Structural Storm Water BMPs

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Description

Non-structural practices in the City include street cleaning and a variety of ordinances.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Non-structural Practices

Description

In 2016 the city continued all non-structural practices, such as street sweeping, as documented in Section 6 of this report.

7.1.3 Structural Practices

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Description

See Section 6 of this report for maintenance of City structural practices. See Section 5 of this report for maintenance of private stormwater practices.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Structural Practices

Description

The City maintained its structural practices as documented in Section 6 of this report. The City verified maintenance of four sites with private stormwater practices which are included in our TSS removal analysis as documented in Section 5 of this report.

8 Storm Sewer System Map

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Description

The permittee shall continue to maintain its MS4 map. The municipal storm sewer system map shall include:

1. Identification of waters of the state, name and classification of receiving water(s), identification of whether the receiving water is an ORW, ERW or listed as an impaired water under s. 303(d) of the Clean Water Act, storm water drainage basin boundaries for each MS4 outfall and municipal separate storm sewer conveyance systems.
2. Identification of any known wetlands, endangered or threatened resources, and historical property, as defined in sections 1.6 through 1.8 of this permit, which might be affected.
3. Identification of all known MS4 outfalls discharging to waters of the state and other MS4s. Major outfalls shall be uniquely identified.
4. Location of any known discharge to the MS4 that has been issued WPDES permit coverage by the Department. A list of WPDES permit holders in the permittee's area may be obtained from the Department.
5. Location of municipally owned or operated structural storm water management facilities including detention basins, infiltration basins, and manufactured treatment devices. If the permittee will be taking total suspended solids credit for pollutant removal from privately-owned facilities, they must be identified.
6. Identification of publicly owned parks, recreational areas and other open lands.
7. Location of municipal garages, storage areas and other public works facilities.
8. Identification of streets.

Best Management Practices

8.1 Storm Sewer System Map Updates

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Required Yes

Description

The Department of Public Works Engineering Division will update the maps on an annual basis and provide the maps and a description of changes with the annual report.

Goals

8.1.1 Storm Sewer System Map Maintenance

Responsible Staff / Position: Peter Neuberger
Project Engineer
(920) 832-6477

Description

Update the storm sewer system in the GIS after each construction season, add any new public or private stormwater practices constructed during the year, verify the current listed of permitted industries, and add any new navigable streams or delineated wetlands.

Planned: 2015 2016 2017 2018 2019 2020 2021

Complete: 2015 2016

Activity Date	Name
03/17/2016	2015 Map maintenance

Description

The 2015 maps were updated and changes were described in the 2015 Annual Report. Maps were submitted to the DNR in March 2016 with the Annual Report.

12/30/2016	2016 Map Maintenance
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Description

No changes to 2.8.1 (streams).

2.8.2 Updated wetlands information in area of Southpoint Commerce Park, per R.A. Smith wetland delineation report dated August 15, 2016 and DNR Artificial Wetland Exemption Determination Letter dated December 2, 2016. Updated wetlands information in area west of Meade Street south of Broadway Drive and north of proposed Spartan Drive, per R.A. Smith wetland delineation report dated May 25, 2016.

2.8.3 (outfalls, 2 sheets) Updated city limit boundaries to reflect annexation of future Spartan Drive and vicinity, east of STH 47 and north of CTH JJ.

2.8.4 and 2.8.54 new public HSD's were added; 4 permitted industrial sites were added, three were removed, and two had name changes; 2 private bmp's were added and one was deleted that was not constructed after approval.

2.8.8 Added new Grinnell Court from Werner Road to cul-de-sac.

File Attachment [2.8.1 Basins.pdf](#)

File Attachment [2.8.1 Streams.pdf](#)

File Attachment [2.8.2.pdf](#)

File Attachment [2.8.4 & 2.8.5.\(ponds\).pdf](#)

File Attachment [2.8.5.pdf](#)

File Attachment [2.8.6 to 2.8.8.pdf](#)

9 Annual Report

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

The permittee shall submit an annual report for each calendar year to the Department by March 31st of the following year. The permittee shall invite the municipal governing body, interest groups and the general public to review and comment on the annual report. The report shall include:

1. The status of implementing the permit requirements, status of meeting measurable program goals and compliance with permit schedules.
2. A fiscal analysis which includes the annual expenditures and budget for the reporting year, and the budget for the next year.
3. A summary of the number and nature of inspections and enforcement actions conducted to ensue compliance with the required ordinances.
4. Identification of any known water quality improvements or degradation in the receiving water to which the permittee's MS4 discharges. Where degradation is identified, identify why and what actions are being taken to improve the water quality of the receiving water.
5. An evaluation of program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. Any program changes made as a result of this evaluation shall be identified and described in the annual report. For any identified deficiencies towards achieving the requirements under section 2 of the permit or lack of progress toward meeting a measurable goal, the permittee shall initiate program changes to improve their effectiveness.
6. If applicable, notice that the permittee is relying on another municipality to satisfy any of the permit requirements and a description of the arrangement where a permit requirement is being met in this manner.
7. A duly authorized representative of the permittee shall sign and certify the annual report and include a statement or resolution that the permittee's governing body or delegated representatives have reviewed or been appraised of the content of the annual report. A signed copy of the annual report and other required reports shall be submitted to the appropriate Wisconsin Department of Natural Resources regional stormwater contact.

Best Management Practices

9.1 Fiscal Analysis

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required Yes

Description

The City of Appleton's stormwater program is funded through both the General Fund and a Stormwater Utility. Adequate revenue is generated to implement the stormwater management program and meet permit requirements. The Stormwater Utility is set up as an enterprise fund. A fee is charged to users for services and that fee must be used to meet operations, debt and/or cost recovery criteria for the Utility. The charge is based on an equivalent runoff unit (ERU). An ERU is defined as 2,368 square feet of impervious area and represents the runoff impact of an average home. Rates are monitored on an annual basis for adjustment based on actual results and projected future costs. The 2016 rate was \$155.00 per ERU per year. The City actively maintains the square footage of impervious surfaces through building permits, site plans, and GIS measurements.

The City of Appleton Stormwater Management Services (stormwater utility) ordinance can be found on the City's website as Article V of Chapter 20 at <http://www.appleton.org/home/showdocument?id=482>.

Activities performed by Parks, Recreation and Facilities Management, Fire, Water, Wastewater and Valley Transit are funded through their General Fund or Enterprise budgets.

Goals

9.1.1 Annual Financial Report

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Provide a fiscal analysis that includes the budget and expenditures for the current year and the budget for the following year.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Financial Report

Description

Attached is the table from the Annual Report form provided by WDNR with budget and actual expenditures.

File Attachment [2016 Financial Table.pdf](#)

9.2 Public review

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required Yes

Description

Each year, the annual report is placed on the City's website, reviewed by the Utilities Committee, and recommended to the Common Council for review and approval. The Utilities Committee and Common Council meetings are publicly posted and are open to the public to speak on agenda items.

Goals

9.2.1 Public Review

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Discuss the Annual Report as an information item and then action as an action item at the Utilities Committee prior to approval by the Common Council.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
03/17/2016	2015 Annual Report

Description

The 2015 Annual Report was posted on the City's website on February 23, 2016; presented to the Utilities Committee on February 23, 2016 as an information item, approved by the Utilities Committee on March 8, 2016 as an action item and approved by the Common Council on March 16, 2016.

12/30/2016	Proposed activity for 2016 Annual Report
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Description

The proposed scheduled for public review of the 2016 Annual Report includes posting it on the City's website by February 27, 2017 on the "news" page; notifying all Alderpersons of its location and availability by February 28, 2017; discussing the report and requesting Utilities Committee approval on March 7, 2017 and requesting Common Council approval on March 15, 2017.

9.3 Annual Reports

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required Yes

Description

Submit an annual report by March 31 of each year, describing the programs and activities of the prior year.

Goals

9.3.1 Submit Annual Report

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Copies of annual reports are available at the City of Appleton Department of Public Works offices.

A duly authorized representative of the permittee shall sign and certify the annual report and include a statement or resolution that the permittee's governing body or delegated representatives have reviewed or been apprised of the content of the annual report.

Submit a signed copy of the annual report and other required reports to the appropriate Department regional storm water contact or to the Wisconsin DNR, Storm Water Program – WT/3, P.O. Box 7921, Madison, WI 53707-7921.

Provide a copy of or reference to the submitted reports as described above each reporting period.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
03/17/2016	2015 Annual Report

Description

The 2015 annual report used the DNR form.

File Attachment [2015 Annual report scanned.pdf](#)

9.4 Water Quality Changes

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required No

Description

Indicate if there were any water quality improvements or any water quality degradation in receiving waters during the reporting period.

Goals

9.4.1 Water Quality Changes

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

Indicate if there were any water quality improvements or any water quality degradation in receiving waters during the reporting period.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Water Quality Changes

Description

The city is not aware of any water quality improvements to the receiving waters during the reporting period. The City is not aware of any water quality degradation to the receiving waters during the reporting period.

10 Cooperation

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

The permittee may rely on another municipality or contract with another entity to satisfy a condition of this permit if all of the following are met:

1. The other municipality or entity implements the required control measure or permit requirement.
2. A particular control measure, or component thereof, is at least as stringent as the corresponding permit requirement.
3. The other municipality or entity agrees to implement a control measure or permit requirement on the permittee's behalf.

Best Management Practices

10.1 Cooperation with other entities

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Required No

Description

The City of Appleton will work with other entities as opportunities arise to complete the requirements of the permit as efficiently and effectively as possible.

Goals

10.1.1 Fox Wolf Watershed Alliance

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

The City will work with the Fox Wolf Watershed Alliance to accomplish activities in support of permit compliance.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Activity

Description

In 2016 the City of Appleton worked with FWWA for education projects, such as the Fox River Cleanup, a Rain Barrel workshop, and the 2016 and 2017 annual watershed conferences, as detailed in Section 1 of this report. The City also contracted with FWWA to teach weekly stormwater session at Summer Camp, an 8 week program by the Appleton Parks, Recreation and Facilities Management Department for 6-15 year olds.

10.1.2 NEWSC

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

The City will work with the Northeast Wisconsin Stormwater Consortium to accomplish activities in support of permit compliance.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Activity

Description

In 2016 the City of Appleton actively participated with NEWSC on a variety of projects, as detailed in Section 1 of this report.

10.1.3 Other Opportunities

Responsible Staff / Position: Ross Buetow
City Engineer
(920) 832-6474

Description

The City of Appleton will work with other entities as opportunities arise to efficiently and effectively achieve compliance with the permit requirements.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Activity

Description

In 2016 the City continued to work with the Wisconsin Department of Transportation on stormwater management practices for the STH 441 and Oneida Street reconstruction projects. Proposed practices include hydrodynamic separators and retrofitting a dry city pond to a wetpond serving both the City and the WDOT project. Construction is anticipated in 2017 and 2018.

11 Permit Section 1.5 Impaired Waterbodies and TMDL

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

WPDES Permit No. WI-S050075-2 requires the following:

1.5.1 Within 90 days after the start date of permit coverage and by March 31 of each odd-numbered year thereafter, the permittee shall determine whether any part of its MS4 discharges to an impaired waterbody listed in accordance with section 303(d)(1) of the Federal Clean Water Act and implementing regulation of the USEPA.

1.5.2 If the permittee's MS4 discharges to an impaired waterbody, include a written section in its stormwater management program that discussed the management practices and control measures it will implement as part of its program to reduce, with the goal of eliminating, the discharge of pollutants of concern that contribute to the impairment of the waterbody. This section of the permittee's program shall specifically identify control measures and practices that will collectively be used to try to eliminate the MS4's discharge of pollutants of concern that contribute to the impairment of the waterbody and explain why these control measures and practices were chosen as opposed to other alternatives.

1.5.3 The permittee may not establish a new MS4 discharge of a pollutant of concern to an impaired waterbody or increase the discharge of a pollutant of concern to an impaired waterbody unless the new or increased discharge causes the receiving water to meet applicable water quality standards, or the Department and the USEPA have approved a TMDL for the impaired waterbody. If there is an approved TMDL for the receiving water, the permittee shall comply with Section 1.5.4.

The City of Appleton is located in the Lower Fox River TMDL, approved by the EPA in 2012. Therefore, the City's requirements and due dates are as follows:

1. Submitted with the Annual Report due by March 31, 2016, an updated storm sewer system map that identifies current municipal boundaries, the TMDL reachshed boundaries within the municipal boundary, the area of each TMDL reachshed within the municipal boundary, the MS4 drainage boundary associated with each TMDL reachshed, and the area in acres of the MS4 drainage boundary associated with each TMDL reachshed.
2. Submitted with the Annual Report due by March 31, 2016, identification of areas on a map and the acreage of those areas within the municipal boundary that the permittee believes should be excluded from its analysis to show compliance with the TMDL wasteload allocation. In addition, provide an explanation of why these areas should not be its responsibility.
3. Submitted with the Annual Report due by March 31, 2018, provide a tabular summary that includes the following for each MS4 drainage boundary associated with each TMDL reachshed for each pollutant of concern:
 - a. The percent reduction needed to comply with the TMDL wasteload allocation from no-controls modeling.
 - b. The modeled MS4 annual average pollutant load without any stormwater control measures.
 - c. The modeled MS4 annual average pollutant load with existing stormwater control measures.
 - d. The percent reduction achieved with existing controls.
 - e. The existing control measures, including type of measure, area treated in acres, pollutant load reduction efficiency, and confirmation of long term maintenance authority.
4. Submitted with the Annual Report due by March 31, 2018, if the summary shows the TMDL wasteload allocations are not being met, provide a written plan describing how the permittee will make progress toward achieving compliance, including:

- a. Recommendations and options for control measures that will be considered to reduce the discharge of each pollutant of concern
- b. A proposed schedule for implementation of the recommendations and options.
- c. A cost effectiveness analysis for implementation.

Best Management Practices

11.1 Impaired Waterbodies

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required No

Description

The City of Appleton will stay current on which waterbodies it drains to are impaired.

Goals

11.1.1 Review Impaired Waterbodies list

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

The City of Appleton will review the 303(d) list of impaired waterbodies to verify the status of those that receive runoff from the city.

Planned: 2016 2018 2020 2021

Complete: 2016

Activity Date	Name
12/30/2016	2016 Impaired Waterbodies

Description

As of this 2016 Annual Report, the City understands that all waterbodies to which it is tributary are impaired per the 303(d) list and the Lower Fox TMDL. These waterbodies include the Lower Fox River, Mud Creek, Apple Creek, Duck Creek, Garners Creek, and Lake Winnebago. This remains consistent with the 2014 City-wide Stormwater Management Plan update.

11.2 City-Wide Stormwater Management Plan

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Required Yes

Description

The City of Appleton will prepare a Stormwater Management Plan meeting the requirements of WPDES Permit No. WI-S050075-2.

Goals

11.2.1 2014 Citywide Stormwater Management Plan Update

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

In 2014, AECOM completed an update to the City of Appleton City-wide Stormwater Management Plan. This update was essentially completed before the permit was reissued in May 2014, so in 2015 AECOM provided the information in the format required under the permit. All necessary information has been previously submitted to WDNR. The City intends to update the plan again in approximately 5 years, to coincide with the next re-issuance of the WPDES permit.

Planned: 2016 2018 2020 2021

Complete: 2016

Activity Date	Name
03/31/2016	2016 compliance deadline

Description

It is the City's understanding that all information required under this section due March 31, 2016 and due March 31, 2018 was submitted to the WDNR in 2014 and 2015. No additional information is provided with the 2016 Annual Report.

12/22/2016	TSS with Counties
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Description

In 2016 the Director of Public Works began discussions with Outagamie County regarding credit for TSS removal on county roads within the City limits. Discussions will continue in 2017.

11.2.2 Continual Strategic Progress

Responsible Staff / Position: Sue Olson
Staff Engineer
(920) 832-6473

Description

The City will continue to make continual strategic progress toward meeting the TMDL goals, per the 2014 City-wide Stormwater Management Plan Update.

Planned: 2016 2017 2018 2019 2020 2021

Complete: 2016

Activity Date	Name
11/30/2016	2016 HSDs

Description

In 2016 the City installed 2 - 8 ft diameter HSDs on Owaissa Street and one on Glendale Avenue as part of sewer reconstruction projects prior to paving. These were identified in individual drainage studies prepared by consultants. An 8 ft diameter structure was also installed on the City storm sewer in Glenhurst Lane by a developer to meet stormwater management requirements. The City will be maintaining all four of these structures.

12/30/2016	2016 Ponds
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Description

In 2016 the City completed the design and permitting of the Northland Avenue Pond, scheduled to be constructed in 2017; evaluated 4 alternatives and approved evaluation of a fifth alternative for the Leona Pond (scheduled for 2019 construction); and approved the wet pond alternative and design contract for Cotter Pond (scheduled for 2017 construction) to serve City Industrial Park streets and a private redevelopment site. The City's consultant continued preliminary design of 7 water quality bmp's (ponds, swales, and biofilters) for the proposed 2018-2019 construction of Spartan Drive. The City worked with a consultant and Outagamie County to design and permit a wet pond for the reconstruction of CTH JJ and the construction of new Lightning Drive. The City continued to work with WDOT on the 441/Oneida Street reconstruction stormwater management plans for reconstructing and expanding the Valley Road dry pond into a wet pond to serve the City and the project.

Due by March 31, 2017

Notice: Pursuant to s. NR 216.07(8), Wis. Adm. Code, an owner or operator of a Municipal Separate Storm Sewer System (MS4) is required to submit an annual report to the Department of Natural Resources (DNR) by March 31 of each year to report on activities for the previous calendar year. This form is being provided by the DNR for the user's convenience. Personal information collected will be used for administrative purposes and may be provided to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

This form is for reporting on activities undertaken in calendar year 2016.

Instructions: Complete each section of the form. If additional space is needed, attach additional pages. Provide descriptions that explain the program actions taken to comply with the general permit. Complete and submit the annual report by March 31, 2017, to the appropriate address indicated on the last page of this form.

Part I. Municipal Information

Name of Municipality City of Appleton		Facility ID No. (FIN) 31098	
Mailing Address 100 N. Appleton Street	City Appleton	State WI	ZIP Code 54911
County(s) in which Municipality is located Calumet, Winnebago, Outagamie	Municipality Type: (select one) <input type="radio"/> County <input checked="" type="radio"/> City <input type="radio"/> Village <input type="radio"/> Town <input type="radio"/> Other (specify)		

Part II. Municipal Contact Information

Name of Municipal Contact Person Paula Vandehey		Title Director of Public Works	
Mailing Address (if different from above)	City	State WI	ZIP Code
Email paula.vandehey@appleton.org	Phone Number (include area code) (920) 832-6474	Fax Number (include area code) (920) 832-6489	
Has the contact person changed in the last year? <input type="radio"/> Yes <input checked="" type="radio"/> No			

Part III. Certification

I hereby certify that I am an authorized representative of the municipality covered under MS4 General Permit No. WI-S050075-2 for which this annual report is being submitted and that the information contained in this document and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.

Authorized Representative Printed Name Paula Vandehey	Authorized Representative Title Director of Public Works	
Signature of Authorized Representative	Date	
Email paula.vandehey@appleton.org	Phone Number (include area code) (920) 832-6474	Fax Number (include area code) (920) 832-6489

Part IV. General Information

a. Describe the municipality's efforts to invite the municipal governing body, interest groups, and general public to review and comment on the annual report.

pg 71 9.2.1

b. Describe how the municipality has kept elected and municipal officials and appropriate staff (such as operators, department heads, and those that interact with the public) informed of the municipal storm water discharge permit and its requirements.

pg 4-5 (1.1.2), pg 42-43, pg 55 (6.1.24), pg 59-60 (6.1.33 and 6.1.34)

c. Has the municipality prepared or updated its own municipal-wide storm water management plan during the reporting year?

☐ Yes ☒ No

If yes, provide the title and date of storm water management plan and list any updates:

If yes, has the information been submitted to the Department?

☐ Yes ☐ No

- d. During the reporting year, has the municipality entered into a written agreement with another municipality or a contract with another entity to perform one or more of the conditions as provided under section 2.10 of the general permit? ☒ Yes ☐ No

If yes, describe these cooperative efforts:

pg 74-76

If yes, has the information been submitted to the Department?

☐ Yes ☒ No

- e. If the municipality has an internet website, is there current information about or links provided to the MS4 general permit and/or the municipality's storm water management program?

☒ Yes ☐ No

If yes, provide web address:

pg 8

Part V. Evaluation of Permit Conditions (Section 2 of General Permit)

Minimum Control Measures: For each of the permit conditions listed below, provide an evaluation of program compliance with the general permit.

1. Public Education and Outreach (Section 2.1 of General Permit)

Description of Program(s)	pg 3-4
Measurable Goal(s)	pg 4-9
Result(s) Achieved	pg 4-9
Describe any planned changes to program.	pg 4 (1.1.1)

2. Public Involvement and Participation (Section 2.2 of General Permit)

Description of Program(s)	pg 3-4
Measurable Goal(s)	pg 4-9 and 11
Result(s) Achieved	pg 4-9 and 11
Describe any planned changes to program.	pg 4

3. Illicit Discharge Detection and Elimination (Section 2.3 of General Permit)

Description of Program(s)	pg 13-20
Measurable Goal(s)	pg 13-20
Result(s) Achieved	pg 13-20
Describe any planned changes to program.	pg 12

4. Construction Site Pollutant Control (Section 2.4 of General Permit)

Description of Program(s)	pg 22-24
Measurable Goal(s)	pg 25-27
Result(s) Achieved	pg 25-27
Describe any planned changes to program.	pg 25 (4.1.1)

5. Post-Construction Storm Water Management (Section 2.5 of General Permit)

Part V. Evaluation of Permit Conditions (continued)

Description of Program(s)	pg 29-31
Measurable Goal(s)	pg 31-34
Result(s) Achieved	pg 31-34
Describe any planned changes to program.	pg 31 (5.1.1)

6. Pollution Prevention (Section 2.6 of General Permit)

Description of Program(s)	pg 36-43
Measurable Goal(s)	pg 43-62
Result(s) Achieved	pg 43-62
Describe any planned changes to program.	pg 61 (6.1.38)

• Storm Water Management Facilities (Section 2.6.1 of General Permit)

List any new municipality owned or operated structural storm water management facilities (ponds, biofilters, etc.) added in the last year.

pg 43 6.1.1

• Routine Inspection and Maintenance (Section 2.6.2 – 2.6.4 of General Permit)

Does the municipality have an inspection and maintenance program for installed structural storm water management facilities?

☒ Yes ☐ No

Describe the inspection and maintenance program and any activities that have occurred for structural storm water management facilities in 2016. If available, attach any additional information on the inspection and maintenance program.

pg 37, pg 44-45 (6.1.3 thru 6.1.6) and pg 47 (6.1.11)

Describe the street sweeping and catch basin cleaning efforts, and the disposal of waste.

pg 37-38, pg 45-48 (6.1.7 thru 6.1.13)

• Winter Road Management Activities (Section 2.6.5 of General Permit)

Provide the name, title, and phone number of the individual(s) with overall responsibility for winter roadway maintenance.

pg 39

Describe the types of products used for winter road management (e.g. deicing, pre-wetting, salting, etc.).

pg 39

Report the amount of product used by month over the last winter season (approx. November 2015 through April 2016).

pg 62 (6.1.39)

Report the snow disposal locations, if applicable.

pg 40

Describe anti-icing, equipment calibration, and salt reduction strategies.

pg 40, pg 48-50 (6.1.14 thru 6.1.17)

Describe any other additional data or information used to evaluate the winter road management activities.

pg 40-41

• Leaf Management (Section 2.6.6 of General Permit)

Describe the management of leaves and grass clippings.

pg 41

• Municipal Pollution Prevention (Section 2.6.7 of General Permit)

Provide the location (street address) of each facility (municipal yards and/or maintenance facilities) and contact information (name, title, and phone number) for the individual(s) with overall responsibility for each facility.

pg 53-55, See Section 1 of each plan

Map(s) included? ☒ Yes ☐ No - Include a map of each facility, drawn to scale and include the following features:

- Location of major activities and storage areas
- Identification of drainage patterns, potential sources of storm contamination and discharge points.
- Identification of nearby receiving waters or wetlands
- Identification of connections to the permittees's MS4

Describe the housekeeping activities and best management practices installed at municipal yards and/or maintenance facilities to reduce or eliminate storm water contamination.

pg 53-55, See Section 5 of each plan

Discuss recommendations for improvements to current storm water management practices at the facility(s) and provide a timeline for installation and/or implementation of these recommendations.

pg 53-55, See Section 5 of each plan

Provide information on facility inspections. Identify and address potential sources of storm water contamination.

pg 52-53

pg 53-55 See Sections 3 and 5 of each plan

Describe the municipal facility(s) employee training on storm water pollution prevention (frequency, duration, objectives, percentage of employees trained this year, etc.).

pg 59-61

Describe the spill prevention and response procedures in place at the municipal facility(s).

pg 53-55 See Section 5 of each plan

Part V. Evaluation of Permit Conditions (continued)

7. Storm Water Quality Management (Section 2.7 of General Permit)

Has the municipality completed a pollutant-loading analysis to assess compliance with the 20% TSS reduction developed urban area performance standard? ☒ Yes ☐ No

If yes, provide the following: Model used pg 63 Version _____ Reduction (%) _____

If no, include a description of any actions the municipality has undertaken during 2016 to help achieve the 20% standard.

8. Storm Sewer System Map (Section 2.8 of General Permit)

Describe any changes or updates to the storm sewer system map made in the reporting year. Provide an updated map if any changes occurred during the reporting year.

pg 67-68

Part VI. Fiscal Analysis

a. Provide a fiscal analysis that includes the annual expenditures for 2016, and the budget for 2016 and 2017. A table to document fiscal information is provided on page 7.

pg 70

b. What financing/fiscal strategy has the municipality implemented to finance the requirements of the general permit?

☒ Storm water utility ☒ General fund ☐ Other _____

c. Is adequate revenue generated to implement the storm water management program and meet permit requirements?

☒ Yes ☐ No

Please provide a brief summary of the municipality's financing/fiscal strategy and any additional information that will assist the Department in understanding how storm water management funds are being generated to implement and administer the storm water management program.

pg 70

Part VII. Inspections and Enforcement Actions

Note: If an ordinance listed below has been submitted to the Department previously and has not been amended since that time, a copy does not need to be submitted again. If the ordinance was previously submitted, indicate such in the space provided.

a. Has the municipality amended its illicit discharge detection and elimination ordinance in accordance with subsection 2.3.1 of the general permit during the reporting year? ☐ Yes ☒ No

If yes, attach copy or provide web link to ordinance:

b. Has the municipality amended its construction site pollutant control ordinance in accordance with subsection 2.4.1 of the general permit during the reporting year? ☒ Yes ☐ No

If yes, attach copy or provide web link to ordinance:

pg 27

c. Has the municipality amended its post-construction storm water management ordinance in accordance with subsection 2.5.1 of the general permit during the reporting year? ☒ Yes ☐ No

If yes, attach copy or provide web link to ordinance:

pg 29

d. Has the municipality adopted any other ordinances it has deemed necessary to implement a program under the general permit (e.g., pet waste ordinance, leaf management/yard waste ordinance, parking restrictions for street cleaning, etc.) during the reporting year? ☐ Yes ☒ No

If yes, attach copy or provide web link to ordinance:

- e. Provide a summary of available information on the number and nature of inspections and enforcement actions conducted during the reporting period to ensure compliance with the ordinances described in a. to d. above.

pg 14, pg 26-27, pg 33

Part VIII. Water Quality Concerns

- a. Does any part of the MS4 discharge to an outstanding resource water (ORW) or exceptional resource water (ERW) listed under s. NR 102.10 or 102.11, Wis. Adm. Code? (A list of ORWs and ERWs may be found on the Department's Internet site at: <http://dnr.wi.gov/topic/surfacewater/orwerw.html>) ☐ Yes ☒ No

If yes, list:

- b. Does any part of the MS4 discharge to an impaired waterbody listed in accordance with section 303(d)(1) of the federal Clean Water Act, 33 USC § 1313(d)(1)(C)? (A list of the most current Wisconsin impaired waterbodies may be found on the Department's Internet site at: <http://dnr.wi.gov/water/impairedsearch.aspx?status=303d>) ☒ Yes ☐ No

If yes, complete the following:

- Impaired waterbody to which the MS4 discharges:
pg 79
- Description of actions municipality has taken to comply with section 1.5.2 of the MS4 general permit for discharges of pollutant(s) of concern to an impaired waterbody:
pg 80-81

- c. Identify any known water quality improvements in the receiving water to which the MS4 discharges during the reporting period.
pg 73

- d. Identify any known water quality degradation in the receiving water to which the MS4 discharges during the reporting period and what actions are being taken to improve the water quality in the receiving water.
pg 73, pg 80-81

- e. Does any part of the MS4 discharge to an approved Total Maximum Daily Load (TMDL) area (Section 1.5.4 of the general permit)? ☒ Yes ☐ No

If yes, fill out below. If no, disregard.

Required reporting for TMDLs approved prior to the effective date of the permit for 2016:

Name of TMDL: pg 77, 80 Date TMDL approved? _____

Map(s) included? ☐ Yes ☒ No - Submit a storm sewer system map (may be the same map submitted under section V.6. of this form), which includes the TMDL reachshed boundaries and associated acreage within the municipality, and the MS4 drainage boundaries and associated acreage within the municipality.

Part IX. Proposed Program Changes

Describe any proposed changes to the storm water management program being considered for 2017 and the schedule for implementing those changes. Proposed program changes must be consistent with the requirements of the general permit.

pg 12

Part X. Other

Any other municipal storm water program information for inclusion in the Annual Report regarding their storm water program may be added here or attached.

Fiscal Analysis Table. Complete the fiscal analysis table provided below.

Program Element	Annual Expenditure 2016	Budget 2016	Budget 2017	Source of Funds
Public Education and Outreach	\$13,100	\$11,000	\$11,000	Stormwater Utility
Public Involvement and Participation	\$4,600	\$5,000	\$5,000	Stormwater Utility
Illicit Discharge Detection and Elimination	\$32,500	\$17,000	\$17,000	Stormwater Utility
Construction Site Pollutant Control	\$1,00,522	\$1,02,272	\$1,04,249	Stormwater Utility
Post-Construction Storm Water Management	\$78,210	\$88,500	\$82,000	Stormwater Utility
Pollution Prevention	\$11,50,933	\$13,34,885	\$13,05,646	Stormwater Utility for DPW Costs, Costs from other departments not available
Storm Water Quality Management (including pollutant-loading analysis)	\$3,76,430	\$6,17,096	\$23,00,120	Stormwater Utility
Storm Sewer System Map	\$1,500	\$1,500	\$1,500	Stormwater Utility
Other: Administration Costs	\$20,156	\$15,000	\$15,000	Stormwater Utility
Other: Total	\$1,777,951	\$2,192,253	\$3,828,015	

NORTHERN REGION COUNTIES			WEST CENTRAL REGION COUNTIES		
Ashland	Langlade	DNR Service Center	Adams	Marathon	DNR Service Center
Barron	Lincoln	Attn: Storm Water Program	Buffalo	Monroe	Attn: Storm Water Program
Bayfield	Oneida	5301 Rib Mountain Rd.	Chippewa	Pepin	5301 Rib Mountain Rd.
Burnett	Polk	Wausau, WI 54401	Clark	Pierce	Wausau, WI 54401
Douglas	Price	Phone: (715) 359-4522	Crawford	Portage	Phone: (715) 359-4522
Florence	Rusk		Dunn	St. Croix	
Forest	Sawyer		Eau Claire	Trempealeau	
Iron	Taylor		Jackson	Vernon	
	Vilas		Juneau	Wood	
	Washburn		La Crosse		

NORTHEAST REGION COUNTIES			SOUTH CENTRAL REGION COUNTIES		
Brown	Marquette	DNR Northeast Region	Columbia	Jefferson	DNR South Central Region
Calumet	Menominee	Attn: Storm Water Program	Dane	LaFayette	Attn: Storm Water Program
Door	Oconto	2984 Shawano Ave.	Dodge	Richland	3911 Fish Hatchery Rd.
Fond du Lac	Outagamie	Green Bay, WI 54313	Grant	Rock	Fitchburg, WI 53711
Green Lake	Shawano	Phone: (920) 662-5100	Green	Sauk	Phone: (608) 275-3266
Kewaunee	Waupaca		Iowa		
Manitowoc	Wausara				
Marinette	Winnebago				

SOUTHEAST REGION COUNTIES		
Kenosha	Sheboygan	DNR Service Center
Milwaukee	Walworth	Attn: Storm Water Program
Ozaukee	Washington	141 NW Barstow Street,
Racine	Waukesha	Room 180
		Waukesha, WI 53188
		(262) 574-2100

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works
Pete Neuberger, Staff Engineer
Tom Duffey, Staff Horticulturist

SUBJECT: Award of Unit K-17 Native Landscape Management Contract to Applied Ecological Services, Inc., in an amount not to exceed \$143,307.83

DATE: February 28, 2017

The Department of Public Works is requesting approval of the Unit K-17 Native Landscape Management Contract to Applied Ecological Services, Inc., in an amount not to exceed \$143,307.83. The 2017 combined capital and maintenance native landscaping budget is \$205,460.

CONTRACT SCOPE

The Department of Public Works maintains an inventory of 60 stormwater ponds and biofilters, along with several miles of drainage channels that have native landscaping. The proposed maintenance activities included in this contract are mowing, cutting, controlled burns, invasive species and algae control, and adding vegetation to sparsely established and eroding areas at stormwater practices operated by both DPW and Facilities. Proposed new installation activities include preparation, seeding and planting in emergent, shoreline, and upland zones on new stormwater facilities.

PROPOSAL SCORING

In February 2017 the Department of Public Works issued a Request for Proposals (RFP) from five firms with significant native landscape management experience. Four proposals were received. The review team initially evaluated each proposal based on the following Technical Scoring criteria:

Technical Scoring (100 Total Possible Points):

- A. Relevant Experience of Firm (Max 30 Points)
- B. Project Team Members (Max 20 Points)
- C. Project Understanding and Approach (Max 35 Points)
- D. Project Schedule (Max 15 Points)

After technical scoring was completed, the review team calculated the Overall Score for each proposal by taking the total bid price of each firm's Cost Proposal and dividing it by its respective Technical Score:

K-17 Native Landscape Management

February 28, 2017

-Page 2-

Overall Score (Price Per Point) = Cost Proposal ÷ Technical Score

Rank	Firm	Technical Score	Cost Proposal	Price Per Point
1.	Applied Ecological Services	97.0	\$138,063	\$1,423
2.	NES	97.0	\$146,881	\$1,514
3.	Cardno	87.0	\$163,037	\$1,874
4.	Lakeshore Cleaners	73.0	\$168,909	\$2,313

As indicated above, Applied Ecological Services (AES) submitted the highest ranked Technical Proposal as well as the least expensive Cost Proposal, and achieved the best Price Per Point. Applied Ecological Services has also served previously as DPW's Native Landscape Management Contractor and has demonstrated the ability to successfully and cost effectively meet DPW's performance goals.

The RFP also encouraged respondents to offer alternative approaches to proposed tasks. The AES proposal identified an alternative approach to the burn strategy at two sites that will result in more burn work in 2017, but which staff believes will decrease maintenance costs in the long term.

Additionally, based on the excellent bid prices, cost proposals came in well below budget, so DPW wishes to contract for an additional 10% herbicide hours above the amount estimated in the RFP and included in the proposals, to allow for greater flexibility. As with all tasks, payment will be based on actual work performed, which may vary from proposal quantities under the adaptive management strategy used by DPW.

DPW anticipates that if the contractor performs according to expectations, DPW will request contracting with AES for similar services through 2021 without an RFP process, subject to Committee's and Council's contract approval in those future years. The AES proposal anticipated a 2% annual cost increase to future year bid prices, subject to standard considerations for unanticipated materials cost increases.

CONCLUSION

The Department of Public Works recommends approval of the K-17 Native Landscape Management Contract to Applied Ecological Services, Inc., in an amount not to exceed \$143,307.83.



"...meeting community needs...enhancing quality of life."

Department of Utilities
Wastewater Treatment Plant
2006 E Newberry Street
Appleton, WI 54915
920-832-5945 tel.
920-832-5949 fax.

TO: Chairperson Greg Dannecker and Members of the Utilities Committee

FROM: Utilities Director Chris Shaw

DATE: March 1, 2017

RE: *Award engineering contract for Appleton Wastewater Iron Salt
Chemical Room Rehabilitation and Improvements to McMahon in the
Amount of \$72,594 with a 10% Contingency of \$7,255 for a Project
Total not to exceed \$79,849*

BACKGROUND:

Phosphorus treatment is a requirement to meet Wisconsin Pollution Discharge Elimination System (WPDES) permit limits for phosphorus. The Appleton Wastewater Treatment Plant (AWWTP) relies upon metal salts (e.g. iron salts) to remove phosphorus from wastewater at strategic points of application within the treatment train. Iron salts in the form of ferric chloride and spent pickle liquor (diluted ferrous sulfate) are the primary chemicals used at this time. These chemicals are corrosive in nature (i.e., acidic) and stored in four 5,000 gallon fiberglass reinforced plastic (FRP) tanks inside the existing F2-Building. The mechanical, electrical, and structural components within the existing chemical storage room were constructed as part of the early 1990's AWWTP upgrades project.

Evidence of deterioration has been observed in the FRP tanks, conveyance pipe fittings, and the underlying secondary containment pit liner. This 2017 Capital Improvement Project (CIP) is intended to rehabilitate the existing chemical storage room after 22 years of continuous use. It will also incorporate improvements to the chemical feed system that will allow for precision chemical dosing necessary to consistently achieve future low-level phosphorus limits.

QUOTATION PROCESS:

The purpose of this request for proposal (RFP) was to select a qualified engineering firm capable of delivering the scope of services (e.g. bidding services, construction management, and construction administration) identified for this project.

The RFP was distributed to five engineering firms with previous wastewater treatment plant chemical systems experience. Representatives from the firms attended a pre-proposal meeting where the project was defined along with the project scope. All five firms provided proposals in accordance with the RFP. The following table identifies the invited engineering firms along with their proposal score and pricing.

COMPANY	Proposal Score	Cost
AECOM	139	\$99,890
Applied Technologies	223	\$117,936
Donohue	220	\$73,095
McMahon	318	\$72,594
Strand Associates	225	\$88,600

The proposal evaluation team completed their review and scoring of the submitted proposals. The evaluation team found that McMahon had scored the highest based on a proposal characteristics which best met the City's needs. McMahon also provided the best overall project pricing and value based on their sealed proposal fee.

The McMahon team is experienced with municipal projects of similar size and complexity. Their proposal demonstrated a comprehensive approach that delivered construction improvement alternatives that addressed the iron salt room needs.

RECOMMENDATION:

I recommend award of the engineering contract for the Appleton Wastewater Iron Salt Chemical Room Rehabilitation and Improvements to McMahon in the amount of \$72,594 with a 10% contingency of \$7,255 and a total not to exceed \$79,849. If you have any questions regarding this project please contact me at ph: 832-5945.



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TO: Chairperson Greg Dannecker and Members of the Utilities Committee

CC: Chris Shaw, Utilities Director
Jeff Fait, Finance Purchasing Manager

FROM: Chris Stempa, Utilities Deputy Director

DATE: March 2, 2017

RE: *Award sole source Phosphorus Analyzer and Filter System to Hach Company in the amount of \$24,120*

BACKGROUND:

Since 2013, the Appleton Wastewater Treatment Plant (AWWTP) has been actively evaluating regulatory alternatives that will satisfy compliance for the Lower Fox River Total Maximum Daily Load (TMDL). It has been a staff objective to conduct appropriate due diligence in advance of the next Wisconsin Pollution Discharge Elimination System (WPDES) permit. Per NR 217, it will be required that a wastewater treatment plant develops and implements a phosphorus discharge optimization plan for their current operation. This is recognized by the DNR as the first step in meeting low-level phosphorus limits as part of the next WPDES permit. Optimizing chemical treatment for phosphorus is one of the primary elements within an optimization plan. It is critical for process control to have the ability to continuously monitor phosphorus concentrations and react to them accordingly in order to consistently comply with future WPDES permit limits.

In March 2014 and December 2015, Common Council approved the sole source purchases of phosphorus analyzers through the Hach Company (Hach). These purchases allowed the wastewater plant to continuously monitor phosphorus (as orthophosphorus or P_2O_5) at strategic points within the treatment "train." The use of online phosphorus analyzers were requisite for data gathering and ongoing full scale chemical treatment demonstrations.

JUSTIFICATION:

The 2017 purchase would involve the acquisition of a second Hach Phosphax and Filtrax unit to monitor orthophosphorus levels in mixed liquor immediately following biological treatment. The additional equipment recommended for purchase in combination with

other planned changes to the existing low level final effluent phosphorus analyzer (Hach 5500sc) are designed to decrease the current dose response time by nearly 60% providing better overall chemical treatment.

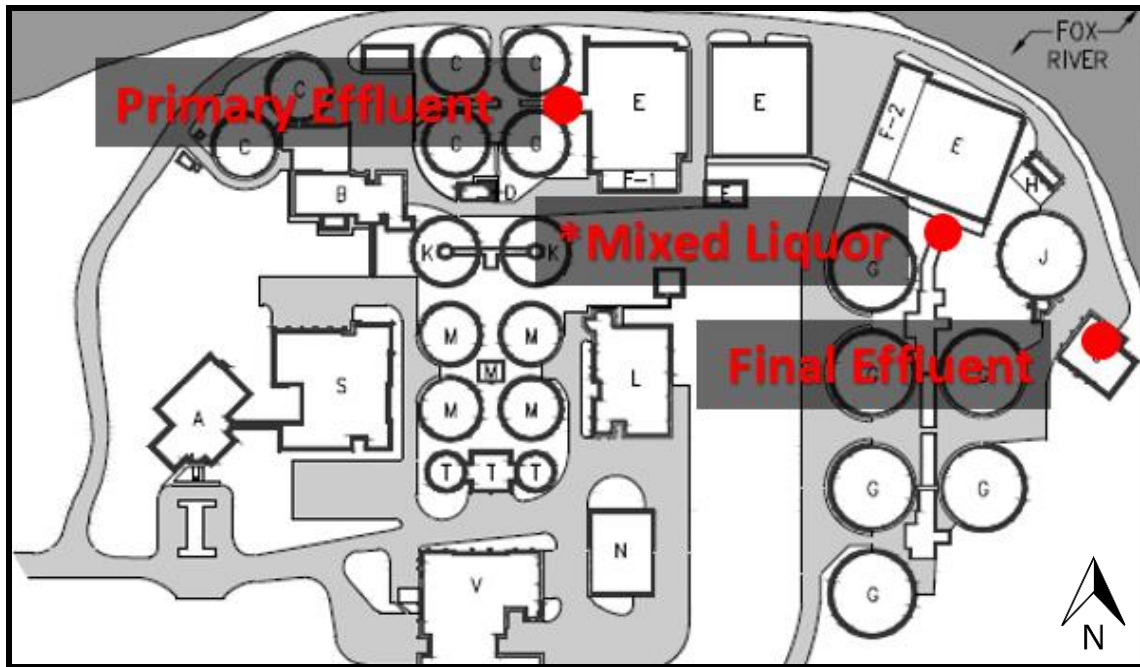


Figure 1 - AWWTP Site Map Depicting Existing and *New Sample Stream Locations (●)

The sole source justification for the Hach equipment purchase remains the same to that stated in the March 7, 2014 Utilities Committee memo. Applied Spectrometry Associates, Inc. (A.S.A. Chemsan) is considered the other reputable manufacturer of proven low-level phosphorus analyzer capabilities within the wastewater treatment industry. The A.S.A. Chemsan equipment is comparably priced (\$1,500 less) to that of Hach. However, the Hach equipment provides greater capability within a single expandable package using control based logic to cost effectively feed phosphorus treatment chemicals. The criteria used for sole source purchase determination are based on the following:

1. Appropriate sensitivity to future proposed permit discharge limits;
2. Robust reliability for sample points being monitored;
3. Compatibility with other existing Hach analyzers/equipment;
4. Expandability for future flow-paced chemical control;
5. Equipment and operator interface familiarity.

RECOMMENDATION:

It is recommended that the Utilities Committee award a sole source to Hach Company for the phosphorus analyzer and filter system in the amount of \$24,120. The funding for this purchase will come from "TMDL Operations Review" within the Utilities O&M budget. If you have any questions regarding this project please contact Chris Stempa ph: 832-5945