

City of Appleton

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

Meeting Agenda - Final Utilities Committee

Tuesday, March 12, 2019	5:00 PM	Council Chambers, 6th Floor

- 1. Call meeting to order
- 2. Roll call of membership
- 3. Approval of minutes from previous meeting

<u>19-0317</u> Approval of the February 12, 2019 Utilities Committee Meeting Minutes.

Attachments: February 12, 2019 Utilities Committee Meeting Minutes.pdf

19-0318 Approval of the March 6, 2019 Special Utilities Committee Meeting

Minutes.

Attachments: March 6, 2019 Special Utilities Committee Meeting Minutes.pdf

4. Public Hearings/Appearances

5. Action Items

19-0319 Approve 2018 Annual Stormwater Report to the Wisconsin Department of

Natural Resources.

Attachments: 2018 Annual Report to UC with attachments.pdf

19-0320 Award of 2019H Consulting Services Contract to NES Ecological Services

for Wetland Delineations in an amount not to exceed \$30,000.

Attachments: 2019H Wetland Delineations Award Memo Final 03-04-2019.pdf

6. Information Items

19-0321 Leona Pond Update on DNR Municipal Flood Control Grant Application

<u>19-0323</u> Monthly Reports for January 2019

- Water Distribution and Meter Team Monthly Report

Attachments: Water Main Breaks January 2019.pdf

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 - Final Utilities Committee

Tuesday, February 12, 2019

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

Chairperson Baranowski called the Utilities Committee Meeting to order at 5:00 p.m.

Present: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

2. Roll call of membership

Present: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

3. Approval of minutes from previous meeting

<u>19-0128</u> Approval of the January 22, 2019 Utilities Committee Meeting Minutes.

Attachments: January 22, 2019 Utilities Committee Meeting Minutes.pdf

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

4. Public Hearings/Appearances

5. Action Items

19-0129

Third Amendment of the 2018 Stormwater Management Plan Review contract with raSmith by an increase of \$7,500 for a total contract amount not to exceed \$117,500.

<u>Attachments:</u> 2018A SWM Plan Review Third Amendment Memo Util Cmte.pdf

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

<u>19-0130</u>	Approval to single source and award 2019M Stormwater Consulting Services contract for Kernan Ravine Preliminary Engineering with Brown and Caldwell in an amount not to exceed \$41,670.
	Attachments: 2019M Kernan Ravine 30% BC Award Memo.pdf
	Meltzer moved, seconded by Reed, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:
	Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch
<u>19-0131</u>	Award Unit R-19 Chemical Root Foaming of Sanitary Sewers to Great Lakes TV Seal, Inc. in an amount not to exceed \$25,000.
	Attachments: R-19 Chemical Root Foaming of Sanitary Sewers.pdf
	Meltzer moved, seconded by Reed, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:
	Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch
19-0132	Award Unit K-19 Native Landscape Management Contract to Applied Ecological Services, Inc. in an amount not to exceed \$181,892.
	Attachments: K-19 contract award util memo FINAL 02-01-2019.pdf
	Meltzer moved, seconded by Raasch, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:
	Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch
<u>19-0133</u>	Award 2019L Leona Pond Construction Related Services Contract to Brown & Caldwell in an amount not to exceed \$32,970.
	Attachments: Brown Caldwell 2019L Leona Pond CRS Contract Util Memo FINAL 02-01-2019.pdf
	Raasch moved, seconded by Meltzer, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:
	Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch
<u>19-0134</u>	Governmental Responsibility Resolution for Runoff Management Grants.
	Attachments: Resolution 2019 Grant Submittal CityofAppleton.pdf
	Meltzer moved, seconded by Reed, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:
	Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

<u>19-0145</u>

Award Geotechnical Service for the Lake Intake Project to Omni Associates in the amount of \$89,695 with a contingency of \$8,900 and a total project cost not to exceed \$98,595.

Attachments: Lake Intake Geotechnical Omni Award 02-01-19 (002).pdf

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

6. Information Items

<u>19-0135</u> 2019 Appleton Wastewater Treatment Plant Biosolids Storage Update

Attachments: Utilities memo 180-day storage.pdf

This item was presented.

7. Adjournment

Reed moved, seconded by Meltzer, that the Utilities Committee Meeting be adjourned at 5:20 p.m. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch



City of Appleton

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Meeting Minutes - Final Utilities Committee

Wednesday, March 6, 2019

6:30 PM

Council Chambers, 6th Floor

SPECIAL MEETING

1. Call meeting to order

Chairperson Baranowski called the Utilities Committee meeting to order at 6:30 p.m.

2. Roll call of membership

Present: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

3. Approval of minutes from previous meeting

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

4. Public Hearings/Appearances

5. Action Items

19-0283

Approval to single source and award 2019J Stormwater Consulting Services Contract for Phase 1 Final Design and Construction documents and 2019 Construction Related Services (CRS) for Spartan Drive with Brown and Caldwell (BC) in an amount not to exceed \$146,740.

<u>Attachments:</u> 2019J Spartan Phase I final design BC Award Memo.pdf

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

19-0284

Approval to single source and award 2019K Stormwater Consulting Services Contract for development of the Stormwater Management Plan and Design for Oneida and Lawrence Streets with McMahon Associates in an amount not to exceed \$42,000.

Attachments: 2019K Oneida St swmp Award Memo.pdf

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

6. Information Items

7. Adjournment

Dvorachek moved, seconded by Reed, that the Utilities Committee Meeting be adjourned at 6:35 p.m. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

City of Appleton Page 2

Submittal of Annual Reports and other Compliance Documents for Municipal Separate Storm Sewer System (MS4) Permits

NOTE: Missing or incomplete fields are highlighted at the bottom of each page. You may save, close and return to your draft permit as often as necessary to complete your application. After 120 days your draft is **deleted.**

Reporting Information

Submittal Type: Annual Report

Project Name: City of Appleton 2018 Annual Report

County: Outagamie

Municipality: Appleton City

Facility Number: 31098
Reporting Year: 2018

Required Attachments and Supplemental Information

Please complete the contents of each tab to submit your MS4 permit compliance document. The information included in this checklist is necessary for a complete submittal. A complete and detailed submittal will help us review about your MS4 permit document. To help us make a decision in the shortest amount of time possible, the following information must be submitted:

Annual Report

- Review related web site and instructions for Municipal storm water permit eReporting [Exit Form]
- Complete all required fields on the annual report form and upload required attachments
- Attach the following items as appropriate using the attachments tab above
 - a. Construction Site Pollution Control Annual Report Summary
 - b. Illicit Discharge Detection and Elimination Annual Report Summary
 - c. Leaf and Yard Waste Management
 - d. Municipal Cooperation Attachment
 - e. Municipal Facility Inspections
 - f. Pollution Prevention Annual Report Summary
 - g. Post-Construction Storm Water Management Annual Report Summary
 - h. Public Education and Outreach Annual Report Summary
 - i. Public Involvement and Participation Annual Report Summary
 - j. Storm Water Consortium/Group Report
 - k. Storm Sewer System Map Annual Report Attachment
 - I. Storm Water Quality Management Annual Report Attachment
 - m. TMDL Attachment
 - n. Winter Road Maintenance
 - o. Other Annual Report Attachment
- Sign and Submit form

Municipal Contact Information- Complete

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 (Department) by March 31 of each year to report on activities for the previous calendar year ("reporting year"). This form is being provided by the Department for the user's convenience for reporting on activities undertaken in each reporting year of the permit term. 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.]. **Note:** Compliance items must be submitted using the Attachments tab.

Municipality Information				
Name of Municipality	Appleton City	Appleton City		
Facility ID # or (FIN):	31098			
Updated Information:	☐ Check to update	mailing address information		
Mailing Address:	100 North Appleto	on Street		
Mailing Address 2:				
City:	Appleton			
State:	Wisconsin			
Zip Code:	54911	xxxxx or xxxxx-xxxx		
Primary Municipal Contact Person	(Authorized Repr	esentative for MS4 Perm	it)	
official that was charged with compliance signature authority for submitting permit Municipal Administrator, Director of Pub	documents to the	Department (i.e., Mayor,	S	
	☐ Select to <i>create new</i> primary contact			
First Name:	Paula			
Last Name:	Vandehey			
	✓ Select to <i>up</i>	date current contact inform	nation	
Title:	DPW Director			
Mailing Address:	100 N. Appleton S	treet		
Mailing Address 2:				
City:	Appleton			
State:	<u>WI</u>			
Zip Code:	54911	xxxxx or xxxxx-xxxx		
Phone Number:	920-832-6474	Ext: xxx-xxx-xxxx		
Email:	paula.vandehey@	appleton.org		
Additional Contacts Information (O	•			
	☐ I&E Program			

☐ IDDE Program

Individual with responsibility for: (Check all that apply)	 □ IDDE Response Procedure Manual □ Municipal-wide Water Quality Plan □ Ordinances □ Pollution Prevention Program □ Post-Construction Program ☑ Winter roadway maintenance 				
First Name:	Nathan				
Last Name:	Loper				
Title:	Deputy DPW Director				
Mailing Address:	2625 E Glendale Ave				
Mailing Address 2:					
City:	Appleton				
State:	<u>WI</u>				
Zip Code:	54911 xxxxx or xxxxx-xxxx				
Phone Number:	920-832-5804 Ext: xxx-xxxx				
Email:	nathan.loper@appleton.org				
Individual with responsibility for: (Check all that apply)	·				
First Name:	Kurt				
Last Name:	Craanen				
Title:	Inspections Supervis				
Mailing Address:	100 N Appleton Street				
Mailing Address 2:					
City:	Appleton				
State:	<u>WI</u>				
Zip Code:	54911 xxxxx or xxxxx-xxxx				
Phone Number:	920-832-6413 Ext: xxx-xxx-xxxx				
Email:	kurt.craanen@appleton.org				

1. Does the municipality rely on another entity to satisfy some of the permit requirements? If yes, enter entity name (government, consultant, group/organization).

● Yes ○ No
Public Education and Outreach: Northeast Wi stormwater consortium and Fox Wolf Watershed Alliance
Public Involvement and Participation: Northeast Wi stormwater consortium (NEWSC) and Fox Wolf Watershed Alliance (FWWA)
✓ Illicit Discharge Detection and Elimination: contracted with McMahon Associates for On-going field screening
☐ Construction Site Pollutant Control:
Post-Construction Storm Water Management: contracted with raSmith for stormwater plan reviews
Pollution Prevention
 2. Has there been any changes to the municipality's participation in group efforts towards permit compliances (i.e the municipality has added or dropped consortium membership)? ○ Yes
Missing Information

Missing Information

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7.

Form 3400-224 (09/17)

Minimum Control Measures- Section 1: Complete

1. Public Education and Outreach

a. Complete the following information on Public Education and Outreach Activities related to storm water. Select the Mechanism that best describes how the topic message was conveyed to your population. Use the **Add Activity** to add multiple Mechanisms. For Quantity, choose the range for the number of Mechanisms chosen (i.e., number of workshops, events).

Topic: Detection and elimination of ill	icit discharg	es	
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)
Direct one-on-one communication	<u>10 - 19</u>	<u>10 - 19</u>	○ Yes ● No
Select all applicable audiences targeted for ☐ Agricultural ☑ Contractors ☐ Genera ☑ Business ☐ Developers ☑ Industries ☐	ıl Public 🗌 P		tesidential 🗌 Scho
Topic: Management of materials that automobiles, pet waste, household ha	•	•	
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)
Active distribution of print media (mailings, newsletters, etc)	1-9	<u>100 +</u>	○ Yes • No
Informational booth at event	<u>1 - 9</u>	<u>100 +</u>	● Yes ○ No
<u>Other</u>	<u>1 - 9</u>	1-9	○ Yes • No
Educational activities (School presentations, summer camps, etc)	10 - 19	<u>100 +</u>	● Yes ○ No
Select all applicable audiences targeted for Agricultural Contractors Genera Business Developers Industries	ıl Public 🗌 P		esidential ⊻ Scho

Topic: Beneficial onsite reuse of leaves and grass clippings/proper use of lawn and							
garden fertilizers and pesticides							
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)				
Active distribution of print media (mailings, newsletters, etc)	1-9	<u>100 +</u>	○ Yes • No				
<u>Other</u>	1-9	<u>1 - 9</u>					

			○ Yes • No
Informational booth at event	<u>1 - 9</u>	<u>100 +</u>	● Yes ○ No
Direct one-on-one communication	<u>1 - 9</u>	1-9	○ Yes • No
Select all applicable audiences targeted for ☐ Agricultural ☐ Contractors ☑ Genera ☐ Business ☐ Developers ☐ Industries	l Public 🗌	• •	Residential 🗌 Scho
Topic: Management of stream banks a minimize erosion and restore and enh		•	
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)
Active distribution of print media (mailings, newsletters, etc)	1-9	100 +	○ Yes ● No
Educational activities (School presentations, summer camps, etc)	<u>1 - 9</u>	<u>100 +</u>	● Yes ○ No
Educational activities (School presentations, summer camps, etc)	<u>1 - 9</u>	<u>50 - 99</u>	○ Yes ● No
Targeted group training (contractors, consultants, etc.)	<u>1 - 9</u>	<u>100 +</u>	● Yes ○ No
Direct one-on-one communication	<u>1 - 9</u>	<u>1 - 9</u>	○ Yes ● No
Informational booth at event	<u>1 - 9</u>	<u>100 +</u>	● Yes ○ No
Select all applicable audiences targeted for ☐ Agricultural ☐ Contractors ☑ General ☐ Business ☑ Developers ☐ Industries ☐ Topic: Infiltration of residential storm driveways and sidewalks	l Public □ □ Restauran	ts 🗌 Other:	
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)
<u>Other</u>	<u>1 - 9</u>	1-9	○ Yes • No
Targeted group training (contractors, consultants, etc.)	<u>1 - 9</u>	<u>100 +</u>	● Yes ○ No
Informational booth at event	<u>1 - 9</u>	<u>100 +</u>	● Yes ○ No
Select all applicable audiences targeted for ☐ Agricultural ☐ Contractors ☑ Genera ☐ Business ☑ Developers ☐ Industries	al Public 🔽		Residential 🗌 Scho

Topic : Inform and where appropriate			=	
installation, and maintenance of const storm water management facilities or		<u>•</u>		
practices	. How to de	oign, motan and man		
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)	
Targeted group training (contractors, consultants, etc.)	1-9	<u>100 +</u>	● Yes ○ No	
Active distribution of print media (mailings, newsletters, etc)	<u>20 - 49</u>	<u>20 - 49</u>	○ Yes • No	
Direct one-on-one communication	<u>50 - 99</u>	<u>20 - 49</u>	○ Yes ● No	
Select all applicable audiences targeted for ☐ Agricultural ☑ Contractors ☐ General ☐ Business ☑ Developers ☐ Industries ☐ Topic: Identify businesses and activities	al Public Restaurar es that may	ots Other: y pose a storm water	contamination	ol Groups
concern, and where appropriate, eduction water pollution prevention	cate specifi	c audiences on meth	ods of storm	
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)	
Passive print media (brochures at front desk, posters, etc.)	<u>20 - 49</u>	<u>20 - 49</u>	Yes ○ No	
Select all applicable audiences targeted for ☐ Agricultural ☐ Contractors ☑ Genera ☑ Business ☐ Developers ☐ Industries	al Public 🔽	• •	Residential 🗌 Scho	ol Groups
Topic : Promote environmentally sensiand designers, including green infrast			•	
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort?	
Direct one-on-one communication	<u> 10 - 19</u>	<u>1 - 9</u>	○ Yes ● No	
Targeted group training (contractors, consultants, etc.)	<u>1 - 9</u>	<u>100 +</u>	Yes ○ No	
Select all applicable audiences targeted for ☐ Agricultural ☑ Contractors ☐ Genera ☑ Business ☑ Developers ☐ Industries	al Public 🗹	• •	Residential 🗌 Scho	ol Groups
Topic: Other (describe):		1		
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)	
Select	Select	Select	○ Yes ○ No	

Select all applicable audiences targeted for this topic. Agricultural Contractors General Public Public Employees Residential School Groups Business Developers Industries Restaurants Other:						
b. Brief Public Education and Outreach your response exceeds the 200 charact page.	. •			•		
"Other" above is for Stormwater Utility NEWSC annual report.	y Credit Poli	cy activity. See attac	hed and			
Missing Information						
		ot close your work until yo	ou SAVE.			
Note: For the minimum control measures, you must	fill out all questi	ons in sections 1 through 7	For	m 3400-224 (09/17)		
Minimum Control Measures - Section	2: Comple	ete				
2. Public Involvement and Participation	on					
a . Describe how the municipality has ke municipal storm water discharge perm	=	_	= = = = = = = = = = = = = = = = = = =	f aware of the		
Elected Officials						
Memos, discussion and presentations	at Utilities C	Committee and Comn	non Council			
Municipal Officials						
All personnel covered as Elected or Sta	nff					
Appropriate Staff (such as operators, E Monthly staff meetings, included with etc), monthly workgroup meetings	-			ublic)		
b . Complete the following information the mechanism that best describes how Add Activity to add multiple mechanism chosen (i.e., number of workshops, every content of the content of th	v the topic r ns. For Quai	nessage was conveye	ed to your popula	ation. Use the		
Topic: Storm Water Management Plan	and/or upd	ates	,			
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort?			
	1 - 9	10 - 19	○ Yes ● No	=		

Government Event (Public Hearing, Council Meeting, etc)				
Select all applicable participants targeted for ☐ Agricultural ☐ Contractors ☑ Genera ☐ Business ☐ Developers ☐ Industries ☐	l Public 🔲 Ρι	• •	sidential 🗌 School	Groups
Topic: Storm water related ordinance	and/or upda	ites		
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)	
Government Event (Public Hearing, Council Meeting, etc)	<u>1 - 9</u>	<u>10 - 19</u>	○ Yes • No	
Select all applicable participants targeted for ☐ Agricultural ☐ Contractors ☑ Genera ☐ Business ☐ Developers ☐ Industries ☐	l Public 🔲 Ρι	• •	sidential 🗌 School	Groups
Topic: MS4 Annual Report				
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)	
Government Event (Public Hearing, Council Meeting, etc)	1-9	10 - 19	○ Yes ● No	'
<u>Website</u>	<u>1 - 9</u>	20 - 49	○ Yes • No	
Select all applicable participants targeted for □ Agricultural □ Contractors ☑ Gener □ Business □ Developers □ Industries	al Public 🗌 I		esidential 🗌 Schoo	ol Groups
Topic: Volunteer Opportunities				
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)	
Clean-up events	<u>1 - 9</u>	<u>100 +</u>	Yes ○ No	
Storm drain stenciling	1-9	<u>10 - 19</u>	○ Yes ● No	
Select all applicable participants targeted for ☐ Agricultural ☐ Contractors ☑ Gener ☐ Business ☐ Developers ☐ Industries	al Public 🗌 I	• •	esidential 🗹 Schoo	ol Groups
Topic: Other (describe) :				
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)	

Se	<u>lect</u>	Select	Select	0	Yes ○No	,
Sel	ect all applicable participants targeted for Agricultural	ral Public 🗆	Dublic Emp	•	ential 🗌 S	chool Groups
lf	Brief Public Involvement and Particip your response exceeds the 200 charachments page.	•	_			•
M	lissing Information					
 Not	e: For the minimum control measures, you must		•	r work until you SA ns 1 through 7		=======================================
M	linimum Control Measures - Section	n 3 · Comi	olete			Form 3400-224 (09/17)
	Illicit Discharge Detection and Elim		510 (C			
	How many total outfalls does the m		/ have?	276	☐ Unst	ure
	How many outfalls did the municipal of their routine ongoing field screen	ning progra	am?	72	☐ Unsu	
	From the municipality's routine screwere confirmed illicit discharges?	eening, ho	w many	22	Unsu	re
d.	How many illicit discharge complair municipality receive?	nts did the		15	Unsu	re
	From the complaint received, how reconfirmed illicit discharges?	many were	ō	13	□Unsu	re
f.	How many of the identified Illicit dis	_	id the	13	Unsu	re
g.	municipality eliminate in the reporting year? g. How many of the following enforcement mechanisms did the municipality use to enforce its illicit discharge ordinance? Check all that apply and enter the number of each used in the reporting year. Uverbal Warning					
	✓ Written Warning (including email)	3				
	✓ Notice of Violation	2				
	✓ Civil Penalty/ Citation	1				
	☐ No Enforcement Action Taken	-				
	Additional Information: Some retested a	and no illicit	discharge			

h. Brief Illicit Discharge Detection and Elimination program information for inclusion in

the Annual Report. If your response exceeds the 200 character limit, attach supplemental information on the attachments page.

On-going field screening contracted with McMahon. Illicit Discharges reported from the public or McMahon are investigated and documented by the Inspections Division of DPW.

N/liccing	Intorm	ation
Missing		ation

Do not close your work until you SAVE.

lata: For the minimum	control moncures	you must fill out all que	stions in sostions	1 through 7
note. For the minimum	Control measures	VOU MUST THE OUT ALL OUE	istions in sections	i inrollen /

Note: For the minimum control measures, you must mi out to	an questions in sections i	tinough 7	Form 3400-224 (09)
Minimum Control Measures - Section 4: C	Complete		
4. Construction Site Pollutant Control			
a. How many total construction sites were a in the reporting year?	ictive at any point	100	☐ Unsure
b. How many construction sites did the mur permits for in the reporting year?	104	☐ Unsure	
c. Do the above numbers include sites <1 ac	cre?	● Yes ○ No ○	Unsure
d. How many erosion control inspections did complete in the reporting year?	522	Unsure	
 e. What types of enforcement actions does to compel compliance with the regulatory apply and enter the number of each used Verbal Warning 	y mechanism? Che	ck all that	□ Unsure
Written Warning (including email)	30		
✓ Notice of Violation	18		
✓ Civil Penalty/ Citation	0		
✓ Stop Work Order	0		
☐ Forfeiture of Deposit			
☐ No Authority			
☐ Other - Describe below			

f. Brief Construction Site Pollutant Control program information for inclusion in the Annual Report. If your response exceeds the 200 character limit, attach supplemental information on the attachments page.

Full time Erosion Control Inspector in the Inspections Division of DPW. Prepares plans for DPW projects, reviews plans for building projects and subdivisions, and inspects sites for compliance.

Missing Information

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (09/17)

V	linimum Control Measures - Section 5: Comp	olete	
5.	Post-Construction Storm Water Managemen	t	
a.	How many new construction sites with new st water management practices* have received approvals? *Structural practices, techniques or devices employed to avoid sediment or pollutants carried in runoff to waters of the state swales, infiltration basins, permeable pavement, catch basins	ocal d or minimize soil, (such as ponds,	11 ☐ Unsure
b.	How many privately owned storm water facility were completed in the reporting year?	ty inspections	□ Unsure
C.	What types of enforcement actions does the ravailable to compel compliance with the regulation Check all that apply and enter the number of exporting year.	latory mechanis	m?
	✓ Verbal Warning	0	
	Written Warning (including email)	18	
	✓ Notice of Violation	0	
	✓ Civil Penalty/ Citation	0	
	✓ Forfeiture of Deposit	0	
	✓ Complete Maintenance	0	
	☑ Bill Responsible Party	0	
	☐ No Authority		
	☐ Other - Describe below		
d.	Brief Post-Construction Storm Water Manager in the Annual Report . If your response excee supplemental information on the attachments	ds the 200 char	
	ntract with raSmith to review SWMPs for developmes for proper maintenance. Issue orders for as-builts		•
V	lissing Information		

Do not close your work until you SAVE.

M	inimum Control Measures - Section 6: Complete
6.	Pollution Prevention
St	orm Water Management Facility Inspections (ponds, biofilters, etc.) Not Applicable
a.	Enter the total number of municipally owned or operated structural storm water facilities ? \Box Unsure
b.	How many new municipally owned storm water facilities were installed in the reporting year ? $\hfill\Box$ Unsure
С.	How many municipally owned storm water devices were inspected $\ \ \ \ \ \ \ \ \ \ \ \ \ $
d.	What elements are looked at during inspections (200 character limit)?
	Inlet and outlet pipes and structures, pond slopes and shoreline, sediment storage areas, vegetation
€.	How many of these facilities required maintenance? 48 ☐ Unsure
Pι	ublic Works Yards & Other Municipally Owned Properties (SWPPP Plan Review) \Box Not Applicabl
	How many inspections of municipal properties been conducted in the reporting year? Have amendments to the SWPPPs been made? ○ Yes ● No ○ Unsure
	If yes, describe what changes have been made (200 character limit):
Co	ollection Services - <i>Street Sweeping / Cleaning Program</i> Not Applicable
•	Did the municipality conduct street sweeping/cleaning during the reporting year? ● Yes ○ No ○ Unsure
	If known, how many tons of material was removed? \Box Unsure
ζ.	Does the municipality have a low hazard exemption for this ○ Yes No material?
•	If street cleaning is identified as a storm water best management practice in the pollutant loading analysis, was street cleaning completed at the assumed frequency? • Yes
	O No - Explain
	O Not Applicable
Co	ollection Services - Catch Basin Sump Cleaning Program Not Applicable
n.	Did the municipality conduct catch basin sump cleaning during the reporting year? ● Yes ○ No ○ Unsure
า.	How many catch basin sumps were cleaned in the reporting year? $\ \ \Box$ Unsure
э.	If known, how many tons of material was collected?
Э.	Does the municipality have a low hazard exemption for this ○Yes ● No

<u>Br</u> y .	Liquids (gallons) (ex. bri	oct o inery calib nel attende y year?	ed salt rec	Dec 14137 he reporting duction stra	Jan 8509 g year? ● Un: tegy ● Un:	Feb 9525 Yes O No	Mar 3443	
<u>Br</u>	Liquids (gallons) (ex. brine Was salt applying mach Have municipal personn training in the reporting If yes, describe what tra	ine) oct inery caliberated attenders year?	Nov 37 rated in the	Dec 14137 he reporting duction stra	Jan 8509 g year? ● Un: tegy ● Un:	Feb 9525 Yes O Nosure Yes O No	3443	
<u>Br</u>	Liquids (gallons) (ex. brine Was salt applying mach Have municipal personr training in the reporting	ine) oct inery caliberated attenders year?	Nov 37 rated in the	Dec 14137 he reporting duction stra	Jan 8509 g year? ● Un: tegy ● Un:	Feb 9525 Yes O Nosure Yes O No	3443	
<u>Br</u>	Liquids (gallons) (ex. brine Was salt applying mach	ine) Oct o inery calib	Nov 37 rated in t	Dec 14137 he reporting	Jan 8509 g year? • Un: tegy •	Feb 9525 Yes O Nosure Yes O No	3443	
<u>Br</u>	Liquids (gallons) (ex. bri ne Was salt applying mach	ine) Oct 0	Nov 37 rated in t	Dec 14137 he reporting	Jan 8509 g year? ● Un:	Feb 9525 Yes O No	3443	
<u>Br</u>	Liquids (gallons) (ex. bri ne	0 ine) Oct	Nov	<i>Dec</i> 14137	<i>Jan</i> 8509	Feb 9525	3443	
	Liquids (gallons) (ex. bri	ine)	Nov	Dec	Jan	Feb		
	Liquids (gallons) (ex. bri	o ine)	Nov	Dec	Jan	Feb		
<u>Sa</u>	<u>t</u>	0	21	1040		1030		
Sa			21	1040		1030		
Sa			21	1040				
	Product	Oct		1040	885	1036	352	
	Johas (toris) (ch. saria, t		Nov	Dec	Jan	Feb	Mar	
۲.	Provide amount of de-ic Solids (tons) (ex. sand, c			у шоши а	si willer S	casuii!		
	responsible for doing sn				ct winter e	oacon ³		
Ν.	How many lane-miles of	•			69	96	☐ Unsure	
	ote: We are requesting info							n.
	inter Road Management				_			
		_						
•	is collection followed by	Sti CEL SWE	-chilig/ cit	zaimig!		sure	,	
	Is collection followed by	street swe	ening/cla	 paning?		Yes O No		
1.	2 times per month	i conection	1:					
	What is the frequency of			,				
	✓ Other - Describe Pile		_					
	☐ Pile on terrace ☑ Pile	e in street	☐ Bags o	n terrace [Unsure			
. •	Where are the residents	directed t	o store th	ne leaves fo	r collection	1?		
•	Does the municipality no	July Hollie	OWITE(S d	υσαι μιτκαμ	-	sure	,	
	Doos the municipality as	atify homo	OWDORC 2	hout nickun		sure Yes 〇 No		
•	Does the municipality co	onduct curl	bside leaf	collection?		Yes O No	\circ	
C	ollection Services - <i>Leaf C</i>	Collection P	Program [☐ Not Appl	icable			
	O Not Applicable							
	No - Explain Sediment	accumulatio	on is less th	nan expected				
	○Yes							
	•						sumeu	
	frequency?	t loading a	ilalysis, w	as cicarining	completed	a at the as	CHIMAN	
] .	•	•				•		

aa. Has training or education on SWPPPs for municipal facilities been held for municipal or other personnel? Unsure	
If yes, describe what training was provided (200 character limit): Multiple departments and divisions. See attached.	
When: Throughout year How many attended: 27	
ab. Brief Pollution Prevention program information for inclusion in the Annual Report. If y response exceeds the 200 character limit, attach supplemental information on the attachment.	your ents page.
Includes staff from Operations, Engineering, Parks, Facilities, Water, Wastewater. Includes good housekeeping practices for all seasons of work.	
Missing Information	
Do not close your work until you SAVE.	
Note: For the minimum control measures, you must fill out all questions in sections 1 through 7 Form 340	00-224 (09/17)
Minimum Control Measures - Section 7: Complete	0 224 (03) 17)
7. Storm Sewer System Map	
a. Did the municipality update their storm sewer map this year? ● Yes ○No ○Unsure	
If yes, check the areas the map items that got updated or changed: ✓ Storm water treatment facilities	
✓ Storm pipes	
☐ Vegetated swales	
✓ Outfalls	
☐ Other - Describe below	
b. Brief Storm Sewer System Map information for inclusion in the Annual Report. If your response exceeds the 200 character limit, attach supplemental information on the attachments page.	
See attached for detail of updates	

Do not close your work until you SAVE.

Form 3400-224 (09/17)

Final Evaluation - Complete

Fiscal Analysis

Complete the fiscal analysis table provided below. For municipalities that do not break out funding into permit program elements, please enter the monetary amount to your best estimate of what funding may be going towards these programs.

Annual Expenditure Reporting Year	Budget Reporting Year	Budget Upcoming Year	Source of Funds
Element: Public	Education and Out	reach	
17,282	11,300	8,000	Storm water utility
Element: Public	Involvement and P	articipation	
5,500	5,000	5,000	Storm water utility
Element: Illicit D	oischarge Detection	and Elimination	1
14,550	15,000	17,000	Storm water utility
Element: Constr	ruction Site Pollutar	nt Control	
97,833	106,597	108,317	Storm water utility
Element: Post-C	Construction Storm	Water Manage	ment
107,393	57,000	82,800	Storm water utility
Element: Polluti	ion Prevention		
Element: Polluti	ion Prevention 1,272,100	1,404,251	Storm water utility
1,211,178			Storm water utility
1,211,178	1,272,100		Storm water utility Storm water utility
1,211,178 Element: Storm 945,465	1,272,100 Water Quality Mar	nagement 967,300	-

Other (describe)

annual fee to DNR	and prepare a	nnual report		
12,755	10,000	10,000	Storm water utility	
Please provide a justifi	ication for a "0"	entered in the Fi	scal Analysis	
Water Quality				
•			ments in the receiving waters t	o which the
municipality's storm	•	-	_	
○Yes ● No ○ Uns	sure If Ye	s, explain below	<i>I</i> :	
b: Were there any k municipality's storm ○ Yes	n sewer syster	. , .	_	which the
c: Have any of the rowaters list during th ○ Yes	e reporting ye		icipality discharges to been ad	ded to the impaired
d : Has the municipa ○ Yes	•	their storm wa	ter practices to reduce the pol	lutants of concern?
Additional Informa	ation			
	n water progra	am. If your res	n evaluation, describe any prop ponse exceeds the 200 charact age.	•
		1: 2040 2020		

All programs will be re-evaluated in 2019-2020 once new permit is issued. See attached for water quality activities in 2018.

Missing	Inform	ation
IVIISSIIIS		ation

Dо	not	t c	lose	your	work	until	you	SAVE.	
----	-----	-----	------	------	------	-------	-----	-------	--

Form 3400-224 (09/17)

Requests for Assistance on Understanding Permit Programs

Would the municipality like the Department to contact them about providing more information on understanding any of the Municipal Separate Storm Sewer Permit programs?

Please select all that apply.
☐ Public Education and Outreach
☐ Public Involvement
☐ Illicit Discharge Detection and Elimination
☐ Construction Site Pollutant Control
\square Post-Construction Storm Water Management
☐ Pollution Prevention
☐ Storm Water Quality Management
☐ Storm Sewer System Map
☐ Water Quality Concerns
☐ Compliance Schedule Items Due
☐ MS4 Program Evaluation

Required Attachments and Supplemental Information

Storm Sewer System Map

Any other MS4 program information for inclusion in the Annual Report may be attached on here. Use the Add Additional Attachments to add multiple documents.

Upload Required Attachments (15 MB per file limit) - <u>Help reduce file size and trouble shoot file uploads</u>
*Required Item

Note: To replace an existing file, use the 'Click here to attach file ' link or press the to delete an item.

-	·	
■ File Attachment	Storm1.pdf	
Attach Documents		
AR_OtherFIN		
■ File Attachment	SnowandIceDay2018Agenda.docx	
AR_OtherFIN		-
File Attachment	2018 SWPPP Training Power Point.pdf	
AR_CSPCFIN		-
	ErosionControlProgram2016Updatefinalclean.docx	
AR_PCSSWFIN		-
File Attachment	PostConstructionProgramupdateMay2016finalclean.docx	
AR OtherFIN		-
File Attachment	On-GoingScreeningReport2018partialtoDNR.pdf	
AR EOFIN		-
File Attachment	2018 Public Education Outreach Involvement Participation. docx	
AR_OtherFIN		-
File Attachment	2018 march-sep Appleton City Guidewith cover. pdf	
		-

AR_OtherFIN File Attachment	2018-19Sept-MarApplesourceFinalDraft.pdf
AR_SWQMFIN ### File Attachment	2018WaterQualityActivities.pdf
AR_SWMapFIN File Attachment	2 8 1Basins pdf.pdf
AR_SWMapFIN File Attachment	2 8 1Streams pdf.pdf
AR SWMapFIN File Attachment	2 8 2 pdf.pdf
AR_SWMapFIN ### File Attachment	2 8 3MS4Outfalls_pdf.pdf
AR_SWMapFIN ### File Attachment	2 8 42 8 5 ponds pdf.pdf
AR_SWMapFIN ### File Attachment	2_8_5_pdf.pdf
AR_SWMapFIN File Attachment	2 8 6to2 8 8 pdf.pdf
AR_SWMapFIN File Attachment	Mapchangesnarrative.docx
AR_OtherFIN File Attachment	2018 Annual Report Delegation forms igned.pdf
AR MuniFacInspFIN File Attachment	StormwaterInspectMaintenanceList2018EOY.pdf

## File Attachment ### File Attachment	Storm2.pdf
AR_SWMapFIN ### File Attachment	Storm3.pdf
AR_SWGroupReportFIN ### File Attachment	NEWSC2018SWMPPlanReport2_10_19_pdf.pdf

(To remove additional items, use your cursor to hover over the attachment section. When the drop down arrow appears, select remove item)

Missing Information

Draft and Share PDF Report with Municipality's Governing Body.

Press the button below to create a PDF. The PDF will be sent to the email address associated with the WAMS ID that is signed in. After the annual report has been approved by the governing body, you will have to come back to the MS4 eReporting system to submit the report to the DNR.

Draft and Share PDF Report with Municipality's Governing Body

Sign and Submit Your Application

Steps to Complete the signature process

1. Read and Accept the Terms and Conditions

include a copy to the final read only version of this application.

2. Press the Submit and Send to the DNR button.

NOTE: For security purposes all email correspondence will be sent to the address you used when registering your WAMS ID. This may be a different email than that provided in the application. For information on your WAMS account click <u>HERE</u>.

Terms and Conditions

Certification: I hereby certify that I am an authorized representative of the municipality covered under Appleton City MS4 Permit for which this annual report or other compliance document is being submitted, and that the information contained in this submittal 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.

Signee (must check current role prior to accepting terms and conditions)
 Authorized municipal contact using WAMS ID.
O Delegation of Signature Authority (Form 3400-220) for agent signing on the behalf of the
authorized municipal contact.
O Agent seeking to share this item with authorized municipal contact (authorized municipal
contact must get WAMS id and complete signature).
Authorized Signature.
☐ I accept the above
terms and conditions.

After providing the final authorized signature, the system will send an email to the authorized party and any agents. This email will

Public Education and Outreach Public Involvement and Participation 2018 MS4 Annual Report

In 2018 the City of Appleton's program included the following:

- Active Participation in NEWSC:
 - Participated on Leadership Council
 - Chair of General Public Education Committee
 - o Participated in planning, hosting and speaking at the July 25 Field Day
 - o Participated in planning, hosting and speaking at the December 6 Filtration Workshop
- Contracted with FWWA to do a weekly session at Summer Camp in Memorial Park (8 weeks)
- Assisted FWWA with permits for the River Clean Up
- Re-established the relationship with the Fox River Academy Environmental Charter School
- Mailed 2 newsletters City-wide (spring and fall) included topics related to the FWWA River Cleanup, Leaf Collection, Residential Pollution Prevention
- Participated on the planning committee for the 2018 and 2019 FWWA Watershed Conferences
- Approved 3 new stormwater credits for the Supporter Pledge
- Approved 1 new residential rain garden credit
- Discussed stormwater management at the Utilities Committee meetings:
 - Throughout the year for specific project awards, such as evaluating the K2A pond for changes in the watershed, evaluating the extension of Lightning Drive, developing the east portion of South Point Commerce Park, urbanizing Evergreen Drive and Alvin Street, obtaining a grant for the next city-wide stormwater management plan, and reconstructing Newberry Street
 - On December 12 for a full stormwater program update, including changes to regulations and guidance, review of benchmarks set in the 2014 city-wide stormwater management plan, and stormwater studies and construction projects
- Expenditures included
 - \$3,300 NEWSC dues
 - \$2,500 to sponsor the FWWA River Cleanup
 - \$800 to sponsor the FWWA Watershed Conference
 - Purchasing a set of storm drain stencils
 - \$2,612.96 to purchase equipment for NEWSC and Fox River Academy to share for stormwater education in the schools

2018 Water Quality Activities

Completed Northland Pond construction

Obtained permits and grants for Leona Pond. Plans out for bid December 31, 2018.

WisDOT substantially completed the stormwater pond at Oneida and 441 serving both WisDOT and the City of Appleton. Long term maintenance agreement for the pond between the City and WisDOT is in place.

Installed structures with sumps per plan and permits for the Evergreen Drive project.

Installed structures with sumps per plan and permits at Lutz Drive and Pierce Avenue.

Issued RFP and awarded contract for water quality evaluation for Newberry Street reconstruction.

Made significant progress toward establishing maintenance responsibilities for stormwater on Outagamie County roads within the City limits. Agreement anticipated to be complete in 2019.

Contributed \$2000 to state-wide leaf collection study.

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works

Pete Neuberger, Staff Engineer Sue Olson, Staff Engineer

DATE: March 4, 2019

RE: Award of 2019H Consulting Services Contract to NES Ecological Services for Wetland

Delineations in an amount not to exceed \$30,000.

The Department of Public Works is requesting approval of the 2019H Consulting Services Contract with NES Ecological Services for 2019 Wetland Delineations in an amount not to exceed \$30,000. Several wetland delineation projects have been identified, and the final scope of work provided may vary based on additional potential wetland evaluations to be determined in 2019. Actual costs will be charged to the City on a not-to-exceed time and material basis. After this contract, \$227,867 will remain in the 2019 stormwater consulting services budget.

CONTRACT SCOPE

As DPW implements its 5-year Capital Improvement Program, it must occasionally investigate potential wetlands to remain compliant with State and Federal wetland regulations. For 2019, several project sites have been identified for the stormwater program. The proposed contract also includes one project site for Community and Economic Development, and the DPW raw water line project. The known project list is below:

- Kernan Ravine Storm Sewer and Stream Stabilization
- Lightning Drive Future Road Extension 600' n/o CTH JJ to Broadway
- French Road Future Urbanization CTH JJ to Broadway
- Raw Water Line Lake to Filtration Plant
- Future NW Industrial Park (Community and Economic Development)

Additional locations may be identified later in 2019. An allowance has been included in the proposed contract for such purposes. The proposed contract costs break down as follows:

•	Stormwater Sites Kernan, Lightning, French (Account 5210)	\$13,196
•	Raw Water Line (Account 5371)	\$5,854
•	Future Industrial Park (Comm/Econ Dev)	\$7,163
•	Allowance for Potential 2019 Sites (Account 5210)	\$3,787

EVALUATION OF PROPOSALS

DPW solicited proposals from five engineering firms: Martenson & Eisele, McMahon, MSA, NES, and raSmith. All five firms have a Wisconsin Assured Delineator on staff, which DPW considers essential to meet its quality, timing, and permitting needs. First, Technical Proposals were rated on a 100-point scale on the following criteria: Project Experience, Project Team, Project Approach, and Schedule. Technical Proposals were evaluated by a City review team consisting of Pete Neuberger, Staff Engineer; and Sue Olson, Staff Engineer.

After technical scoring was complete, the review team determined that four technical proposals met the requirements necessary to assure staff of the minimum desired level of service. For those four firms, the review team ranked the proposals after factoring in cost proposals. The following chart displays those results:

		Technical		Price Per
Rank	Firm	Score	Cost Proposal	Point
1.	NES	95.0	\$26,213	\$275.93
2.	raSmith	98.5	\$28,512	\$289.46
3.	Martenson & Eisele	87.0	\$25,265	\$290.40
4.	MSA	82.0	\$25,820	\$314.88

The City determined the technical score and cost-effectiveness of the proposals and recommends NES for this task for the following reasons:

- NES and raSmith demonstrated very high quality technical proposals, with excellent experience and approach in providing a broad range of services including standard requirements of wetland delineation, as well as supplemental services that may be needed.
- While the four firms listed in the chart above demonstrated strong competency in their project approach, the NES proposal was identified as the most cost-effective once compensation was factored into the technical scoring.

CONCLUSION

Therefore, the firm of NES Ecological Services excelled by effectively demonstrating a project approach that best met staff's expectations for a thorough, cost-effective process for wetland delineation services using their experience, key project staff, and project approach, and has earned DPW's recommendation.

The RFP states that with satisfactory performance in 2019, the selected consultant may be contracted for this same work in 2020-2023 (five year maximum) without an RFP process. Therefore, if approved, and with satisfactory performance by the consultant, DPW staff anticipates contracting with NES for 2020-2023 wetlands delineations, subject to Utilities Committee and Common Council approval at the appropriate times.

WATER MAIN BREAK/JOINT LEAK REPORT JANUARY 2019

YEARLY WATER MAIN BREAK COMPARISON

<u>JAN 18</u>	<u>JAN 19</u>	<u>YTD 18</u>	YTD 19
17	12	17	12

	WORK	TYPE OF				ESTIMATED	ESTIMATED WATER LOSS	DOLLAR VALUE OF WATER REVENUE
LOCATION	ORDER	PIPE	SIZE	YEAR	BREAK	DURATION	IN GALLONS	LOSS**
905 N. Kensington Drive	250679	CIP	8"	1969	1/16" crack	6 hours	106,000	\$644.48
603 E. Goodall Street	250899	CIP	6"	1937	1/16" crack	9 days	644,000	\$3,915.52
425 S. Covenant Lane	250970	DIP	8"	1980	Two 3" holes	5 hours	1,662,698	\$10,109.20
1507 N. Edgewood Avenue	251107	CIP	8"	1961	3/16" crack	6 hours	300,172	\$1,825.05
419 S. Arlington Street	251129	CIP	6"	1961	1/64" crack	17 days	304,125	\$1,849.08
12 Weimar Court	251232	CIP	6"	1936	1/8" crack	4 hours	67,279	\$409.06
2425 N. Division Street	251285	CIP	6"	1957	1/8" crack	4 hours	70,618	\$429.36
2901 Crestview Drive	251287	CIP	8"	1966	4" hole	6 hours	851,023	\$5,174.22

^{**}Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.

WATER MAIN BREAK/JOINT LEAK REPORT JANUARY 2019

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**
Linwood Avenue / Cloverdale Avenue	251411	DIP	8"	1978	1/32" crack	23 days	3,516,918	\$21,382.86
2525 N. Roemer Road	251494	CIP	12"	1969	1/64" crack	24 days	3,137,575	\$19,076.46
Forest Street / Christine Street	251647	CIP	6"	1956	2" crack	3 hours	2,104,356	\$12,794.48
Clara Street / Rail Road	251667	DIP	8"	1977	6" hole	3 hours	1,094,015	\$6,651.61
								\$0.00
								\$0.00
								\$0.00
								\$0.00
								\$0.00
								\$0.00

^{**}Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.