

City of Appleton

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

Meeting Agenda - Final-revised Utilities Committee

Tuesday, June 22, 2021 5:00 PM Council Chambers, 6th Floor

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

<u>21-0858</u> Approval of the June 8, 2021 Utilities Committee Meeting Minutes.

Attachments: June 8, 2021 Utilities Committee Meeting Minutes.pdf

4. Public Hearings/Appearances

5. Action Items

21-0859 Approval to single source and award 2021G Stormwater Consulting Services contract for design of the stormwater management practices for Oneida, Lawrence, Morrison, and Durkee Streets (south of College Avenue) and the YMCA parking ramp to McMahon Associates in an

amount not to exceed \$40,000.

Attachments: 2021G Bluff Site Area Stormwater Design Award Memo.pdf

6. Information Items

21-0860 Approve wastewater rate adjustment for Holding Tank waste as prepared

by Trilogy Consulting, LLC.

Attachments: June 2021 Septage Rate Adjustment Memo.pdf

Recommended holding tank rates from Trilogy.pdf

<u>21-0795</u> Department of Public Works Proposed Operational Changes.

Attachments: DPW Proposed Operational Changes.pdf

Additional Info DPW Proposed Operational Changes.pdf

21-0861 Monthly Reports for May 2021:

-Water Distribution and Meter Team Monthly Report

Attachments: Water Main Breaks May 2021.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

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

Meeting Minutes - Final Utilities Committee

Tuesday, June 8, 2021 5:00 PM Council Chambers, 6th Floor

1. Call meeting to order

Chairperson Meltzer called the meeting to order at 5:00 p.m.

2. Roll call of membership

Present: 4 - Meltzer, Smith, Doran and Thao

Excused: 1 - Martin

3. Approval of minutes from previous meeting

<u>21-0793</u> Approval of the May 25, 2021 Utilities Committee Meeting Minutes.

Attachments: May 25, 2021 Utilities Committee Meeting Minutes.pdf

Alderperson Smith moved, seconded by Alderperson Thao, that the Minutes of the May 25, 2021 Utilities Committee Meeting be approved. Roll Call. Motion carried by the following vote:

Aye: 4 - Meltzer, Smith, Doran and Thao

Excused: 1 - Martin

4. Public Hearings/Appearances

None

5. Action Items

21-0794 Approve update to Municipal Code Chapter 20, Article II Water Utility,

creating new Section 20-42 Valving.

<u>Attachments:</u> Municipal Code Chapter 20.pdf

Alderperson Smith moved, seconded by Alderperson Thao, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the

following vote:

Aye: 4 - Meltzer, Smith, Doran and Thao

Excused: 1 - Martin

21-0796

Request Approval of the Electronic Compliance Maintenance Annual Report (eCMAR) for 2020 and Request the following Resolution be presented to the Common Council for approval:

Whereas, the City of Appleton manages, operates, and maintains a sewer collection system and wastewater treatment plant; and

Whereas, treatment efforts produce a liquid effluent and a biosolids that are returned to the environment; and

Whereas, the State of Wisconsin evaluates wastewater utilities throughout the State of Wisconsin through an electronic Compliance Maintenance Annual Report (eCMAR); and

Whereas, Appleton received the highest eCMAR score achievable; and

Whereas, the State of Wisconsin requests the Common Council pass a resolution accepting the eCMAR report;

Now, therefore, be it resolved by the City Council that the City of Appleton:

Article 1. Continue supporting the treatment and maintenance programs at the utility

Article 2. Continue planning efforts that will address and promote long term performance results at the facility.

Attachments: 2020 eCMAR UC memo .pdf

2020 eCMAR Validated.pdf

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

Ave: 4 - Meltzer, Smith, Doran and Thao

Excused: 1 - Martin

6. Information Items

<u>21-0795</u> Department of Public Works Proposed Operational Changes.

Attachments: DPW Proposed Operational Changes.pdf

This item was presented

7. Adjournment

The meeting was adjourned at 5:40 p.m.

Alderperson Smith moved, seconded by Alderperson Meltzer, that the meeting be adjourned. Roll Call. Motion carried by the following vote:

Aye: 4 - Meltzer, Smith, Doran and Thao

Excused: 1 - Martin

Department of Public Works – Engineering Division MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works

Sue Olson, Staff Engineer Pete Neuberger, Staff Engineer

DATE: June 15, 2021

RE: Approval to single source and award 2021G stormwater consulting services contract

for design of the stormwater management practices for Oneida, Lawrence, Morrison and Durkee Streets (south of College Avenue) and the YMCA parking ramp to

McMahon Associates in an amount not to exceed \$40,000.

The Department of Public Works is requesting approval to single source and award 2021G stormwater consulting services contract for design of the stormwater management practices for Oneida, Lawrence, Morrison and Durkee Streets (south of College Avenue) to McMahon Associates in an amount not to exceed \$40,000.

Prior to this contract, McMahon Associates was awarded the 2019K contract for stormwater consulting services to develop and evaluate stormwater management alternatives on the referenced streets. Since that time, the City has committed to address the stormwater management requirements for the reconstruction of the YMCA parking ramp, adjacent to these streets. Combining the stormwater management practices for the streets and ramp results in a comprehensive stormwater model requiring less overall modeling and land to ensure efficient stormwater management.

Work under this contract will include:

- Recommend the necessary soil boring locations and criteria for the utility and paving work
- Update the XPSWMM model to evaluate the storm sewer system for peak discharge and surface ponding performance based on final design
- Update the WinSLAMM model to evaluate TSS and TP reductions for stormwater quality practices based on final design
- Evaluate construction feasibility due to other utilities
- Prepare a Stormwater Management Report
- Design the selected stormwater concept
- Prepare CAD drawings of the proposed stormwater management system
- Perform inlet capacity calculations
- Prepare an Operation and Maintenance Plan for the stormwater treatment practices
- Prepare an Erosion Control Plan for the street reconstruction work

- Prepare a WDNR Construction Site Permit application for the street reconstruction work
- Attend meetings and coordinate with various stakeholders

Based on the work McMahon has already completed for Hoffman and the City in this area, and their performance on past projects with the City, staff is recommending award of this project to McMahon Associates.



Finance Department 100 N. Appleton Street Appleton, WI 54912 920-832-6442

TO: Chairperson Vered Meltzer and Members of the Utilities Committee

FROM: Kelli Rindt, Enterprise Fund Accounting Manager

Chris Shaw, Utilities Director

DATE: June 18, 2021

RE: Approve wastewater rate adjustment for Holding Tank waste as

prepared by Trilogy Consulting LLC.

BACKGROUND:

A Wastewater Rate Study was completed in 2020 by Trilogy Consulting LLC that resulted in an overall rate increase of 20% in rates for wastewater services. By State Statues the Wastewater Utility is required to accept and treat hauled sanitary waste. In the past the utility charged the same fee to treat both septage and holding tank waste, however the characteristics of these waste types are much different and the septage waste costs more to process.

Trilogy Consulting has updated the study with rates to better reflect the treatment costs of the different waste types. See attached information from Trilogy Consulting LLC.

RECOMMENDATION:

Approve Wastewater rates modification, effective as of April 1, 2021, of septage waste charged at \$10.20/ton and holding tank waste charged at \$1.75/ton both were previously charged as sanitary waste at \$4.40/ton. Should you have any questions regarding this project please contact me at phone: 832-6316.

Recommended Holding Tank Waste Rates

At present the rates charged to sanitary waste haulers are the same for septage and holding tank waste. The 2020 Sewer Rate Study recommended an overall increase to that rate for 2021, from \$4.40 per ton to \$10.20 per ton. However, the wastestrength for holding tank waste is generally much lower than septage. The following table shows the calculated rates for septage and holding tank waste using wastestrengths that are more typical of each type of waste stream. The adopted 2021 rate of \$10.20 per ton is appropriate for septage. However, a lower rate of \$1.75 per ton is recommended for holding tank waste. This rate equates to \$7.60 per 1,000 gallons. Holding tank rates per 1,000 gallons charged by area utilities range from \$2.91 charged by Neenah-Menasha to \$18.49 per 1,000 gallons charged by Green Bay. The proposed rate is similar to the \$6.58 per 1,000 gallons charged by Oshkosh or the \$8.00 per 1,000 gallons charged by Sheboygan. The projected rates for future years are based on the projected future rate increases of 4% per year.

	Units	2020 Rate	Proposed Rates - 2021	Projected Rates - 2022	Projected Rates - 2023	Projected Rates - 2024	Projected Rates - 2025	Projected Rates - 2026
Sanitary Waste Haul	ers							
Septage	\$/ton	\$4.40	\$10.20	\$10.61	\$11.03	\$11.47	\$11.93	\$12.41
Holding Tank	\$/ton	\$4.40	\$1.75	\$1.82	\$1.89	\$1.97	\$2.05	\$2.13
Per Load		\$9.45	\$11.30	\$11.75	\$12.22	\$12.71	\$13.22	\$13.75
Per Customer	per quarter	\$15.75	\$17.70	\$18.41	\$19.15	\$19.92	\$20.72	\$21.55





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

TO:

Municipal Services Committee

Utilities Committee

FROM:

Paula Vandehey, Director of Public Works

Nate Loper, Deputy Director - Operations

DATE:

June 1, 2021

SUBJECT:

Department of Public Works Proposed Operational Changes

BACKGROUND

The Public Works Department is recommending several operational changes to help meet DNR regulations, match customer expectations, address the loss of reliable contracted services, improve employee safety, and meet our operational goals. All of the changes outlined below work in conjunction with each other and line up well for implementation in 2022. It is important to understand that these recommendations cannot be successfully implemented individually, or in part, but instead need to be implemented as a package.

PROPOSED SERVICE CHANGES

Leaf Collection

The Department of Public Works is proposing to modify our leaf collection and street sweeping practices to move the needle towards our phosphorus reduction goals. Our current practice of placing and collecting leaves in the street creates an environment where phosphorus rich leachate drains into our storm sewer system and ultimately into our waterways. Too much phosphorus can lead to increased growth of algae which can be harmful to both animals and humans. In addition, our current leaf collection process is not supported by the DNR and therefore, does not provide us credit on our stormwater permit for this program.

We have evaluated several options to reduce our phosphorus load by improving our leaf collection program. Some of the options discussed were requiring our customers to bag their leaves, utilizing vacuum equipment, or requiring property owners to dispose of their own leaves. After much research and internal discussion, we have determined the most efficient, sustainable and customer friendly method of collecting leaves would be using vacuum equipment. Leaves would be placed on the terrace by each residential property owner and collected from the terrace with a remote-controlled leaf vacuum tube. Additional benefits of this process change are as follows:

- Provides a very clean end product on the streets
- Eliminates safety concerns with piles of leaves on the street
- Equipment is expected to be less disruptive than existing equipment
- Equipment does not scrape the roadway surface

As far as equipment needs for this process, we would retrofit 6 of our old automated garbage trucks by adding a vacuum unit to each truck. In addition, we would purchase 2 roll off dumpsters and up to 6 trailer vacuum units. We are recommending phasing this new process over 5 years (2022-2026) to help spread out the financial impact to the Stormwater Utility. Below are the estimated costs to implement this new process:

Year	Equipment Purchases	CEA Payments	Total Cost
2022	\$325,000	\$95,400	\$420,400
2023	\$365,000	\$60,240	\$425,240
2024	\$435,000	\$60,660	\$495,660
2025	\$450,000	\$62,856	\$512,856
2026	\$300,000	\$43,344	\$343,344

Brush Collection

The downside to using vacuum equipment is the units will only suck up leaves and dry, light plant material. We could continue providing a brush and yard waste collection service, but it will need to be collected separately, by hand, and will require either adding staff and equipment or modifying existing services to free up staff time and equipment.

Our proposal is to enhance our brush and yard waste collection program for our customers by offering this collection monthly from April through November. Each residential customer would have their bagged and/or bundled yard waste (no grass) collected once per month on a week opposite of their recycling collection, and twice in April. This change will provide our customers with an enhanced level of service since we currently only collect brush four weeks during the spring. It will also provide a more consistent workload for our collection crew. Based on the additional changes proposed below, this enhanced service would not increase our budget and would be done with existing staff, if all recommendations in this memo are approved.

Bulky Item Collection

In order to provide any type of a brush collection service without adding staff, we need to eliminate or modify an existing service. We researched several communities across the State and compared our services to theirs. It appears that we are the only community offering a regular, free bulky item collection. Therefore, we looked at finding a way to align our service level with other municipalities freeing up resources to perform brush collection and winter snow removal.

We are proposing to make a shift from a 12-month, free bulky item collection to a scheduled, paid collection 8 months each year (April through November). Eliminating the bulky item collection during the winter months not only frees up staff for snow and ice services, but also eliminates the most hazardous time of year for staff to provide this service. Each residential property could schedule a collection for up to 5 approved (see attached chart) bulky items at \$10 each, once per month on non-brush collection weeks. We would also propose to add a recycling dumpster at our Glendale Avenue yard site for City residents to utilize for disposing of items that are accepted in their blue cart but do not fit, in addition to the garbage dumpsters that are currently available.

Another reason for making a change to this service is there are several other options for residents to dispose of larger items. Options include paying a mattress or appliance company a small fee to take away an old item when getting a new one delivered, renting a dumpster when remodeling a home or moving out, placing items for sale or "free for the hauling" on social media sites, donating items to the Restore, or hauling items to our yard site or the County Solid Waste facility. If none of these options are favorable to a customer, they can call our office to schedule a bulky item collection with us. Noncompliant items will be removed for a fee, which is being proposed at \$250, to help encourage property

owners to keep their terrace and neighborhood clean and free of garbage. This fee will also help cover part of our costs for removing non-compliant items from the terrace.

	CU	JRRENT	PROPOSED	
Revenues				••••••
Move Out Fee	\$	3,750	\$	-
Appliance Tag Fee	\$	18,000	\$	12,000
Non-Compliant Fee	\$	-	\$	2,500
Bulky Items Fee	\$	-	\$	16,000
TOTAL Revenue	\$	21,750	\$	30,500
Savings				
Truck fuel (Dec-Mar)	\$	-	\$	8,000
Tipping fees (Dec - Mar)	\$	-	\$	13,000
TOTAL Savings	\$	-	\$	21,000
Expenses				
Increase 0.5 FTE to 0.67 FTE		0	\$	8,800
TOTAL Expenses	\$	-	\$	8,800
TOTAL	\$	21,750	\$	42,700
Overall Annual Savings			\$	20,950

This change would take effect April 1, 2022 when we start our new brush collection service. The increase in Sanitation FTE is necessary to provide both the 2 rounds of brush and 1 round of bulky item collection in April each year. Please see the comparison chart attachment for services provided by other municipalities and more details related to our recommendation.

Sidewalk Snow Removal Insourcing

Our current 5-year sidewalk snow removal contract expires in May 2022. For at least 20 years, we have had the same contractor(s) working for us with no other company submitting a bid for this service. When we went out for bids 4 years ago, our contractor was very forthcoming with us and gave us 5 years notice of their retirement and intent to no longer bid on this contract.

Over the past 4 years, we have been trying to figure out how we can generate interest from more bidders to ensure we have a sustainable, reliable snow removal plan in place for many years to come. After reviewing several options, we have determined fall of 2022 is the ideal time for Public Works to insource this work, after our current contract expires. The timing for this is perfect, if the changes above are approved, since we plan to utilize our brush/bulky item collection crew for some of this snow removal work from December through March.

The current contract utilizes two companies responsible for approximately 18 miles of sidewalk and 175 crosswalk, stairwell, and median locations. This is more work than our existing staff can take on internally, so we are proposing the following changes to our sidewalk snow removal program:

- Eliminate sidewalk contract, for a savings of approximately \$180,000 annually
- Purchase 1 large sidewalk tractor, 2 Tool Cat machines and 4 snow blowers, for \$304,000. Payback on these equipment purchases is 8 years.
- Downtown area will remain status quo. This work will continue to be contracted out and the service levels should remain the same.
- Convert our 2 utility locator positions from 0.67 FTE to 1.0 FTE each. They are currently laid off December through March and going full time will align well with our winter snow removal staffing needs and help with employee attraction and retention.

- Continue maintaining all 18 miles of sidewalks that are currently contracted out
- Reduce the crosswalk locations that the City has been clearing from 175 to approximately 60 by:
 - o Continuing to maintain all foot bridges and stairwells
 - o Continuing to maintain all median/island and railroad crossings
 - o Focusing resources on critical crossing guard locations
 - Educating community that property owners are responsible to maintain the handicap access that abuts their property (current City Municipal Code Section 16-10)
 - o Transferring bus shelter responsibility for snow removal back to Valley Transit

	C	URRENT	PROPOSED		
Revenues					
Snow removal special assessment	\$	133,000	\$	133,000	
TOTAL Revenue	\$	133,000	\$	133,000	
Savings				***************************************	
Contracted services	\$	-	\$	180,000	
TOTAL Savings	\$	-	\$	180,000	
Expenses					
Additional CEA	\$	-	\$	55,000	
Additional Equipment O&M			\$	27,000	
Increase 0.67 FTE to 1.0 FTE	\$	-	\$	60,000	
TOTAL Expenses	\$	-	\$	142,000	
TOTAL	\$	133,000	\$	171,000	
Overall Annual Savings			\$	38,000	

SUMMARY

The above outlined plan will help the City of Appleton meet DNR regulations, match customer expectations, address the loss of reliable contracted services, improve employee safety, and meet our operational goals. As a package, the plan has the following customer impacts:

- Reduced phosphorus to our waterways
- Leaf collection from terrace separate from other yardwaste
- Curbside brush collection monthly from May through November and twice in April
- Elimination of free bulky item collection
- More equitable clearing of handicap access ramps across the City
- More reliable, cost-effective snow removal service

All the budget impacts related to the proposed changes in this memo will be included in our 2022 budget requests. Upon final budget approval in November, we will implement a communication and educational strategy to inform our customers about the changes that will be starting in April, 2022. This communication will include social media, our City website and an updated Public Works Guide that will be released in late March, 2022.

Municipal Collection Services Comparison Chart

Curbside Brush & Yard Waste Collection	Spring & Fall	Monthly, April through November. No grass collected curbside.		3 times per year: May, July, and October. No fee. Must schedule and pay fee for collection rest of the year. Charges vary, minimum \$40 fee.	Yardwaste collected 1 week in May and 1 week in November. 10 bags free, then \$2.50/bag. No brush collected.	Fall only. Small amounts of plant material only. No grass, brush, fruits or vegetables collected.	Brush chipping 1 week in May and September. No grass or yard waste collected.	Spring & Fall. No grass collected.	Contract individually with private hauler, if want the service. Brush collected one week in the spring.	Brush collected monthly. Yardwaste collected in the Spring & Fall. Must use paper bags. Grass collected.
Bulky Waste Drop-off Center	Yes	Yes. Appliances, metal, garbage, tires and recycling accepted.		Yes	o _N	Yes	o _N	Yes, 2 drop-off centers. No fee. No construction or contractor debris.	No	o _N
Non-Compliance Collections	\$75	\$250		^Q	Must contact and pay private hauler	o Z	o Z	\$240	O _Z	o Z
Items Not Collected	Pool tables, pianos, other very heavy items	Appliances, electronics mattresses, sofa sleepers, construction/rem odeling/building materials, glass doors, bay windows, hot tubs, pools, trampolines, exercise equipment, hoops, tractor tires.		Construction materials and debris, freon appliances, bagged trash.	Must contact and pay private hauler	Tires and freon require additional fee.	Appliances, construction materials, bagged trash,	Appliances, construction/remo del materials (including carpet), move out debris	No appliances or construction materials.	¥Z.
Items Collected	Large items that don't fit in cart.	Typical home furniture, recliner, couch, bed frames, doors (not patio), tables, TV stands, rugs, carapets (cut to 4 feet and bundled), small metal (4 foot or less), tires. Weigh less than 50 pounds.	-	Furniture, carpet, doors, metal, windows, doors.	Must contact and pay private hauler	Appliances, furniture, bagged trash	Furniture, carpet (4' sections), tables.	Furniture (indoor & outdoor), metal objects, etc.	Furniture, etc.	Large items or bags of trash with stickers.
Curbside Bulky Item Policy	Yes, collected bi-weekly on regular garbage day; opposite week of recycling. Fee for appliance collection. No construction or contractor debris.	Monthly, April through November. 5 items max per month. \$10 per item, paid and scheduled in advance.		Yes, 1 week in June and 1 week in September. Must schedule and pay fee for collection other 50 weeks of the year. Charges vary, minimum \$40 fee.	Must contact and pay private hauler	Yes, \$40 minimum charge plus charges for appliances, tires, etc. Extra charges for non-scheduled items.	4 collections per year provided by private hauler.	Yes, 2 scheduled weeks per year, 2 CY max. Other 50 weeks of the year, \$80 minimum charge per trip up to \$240.	Once per year in Spring. 5 items max. Other weeks must contact and pay private hauler.	Yes, each residential property gets 5 bulky item tags per year. Additional tags cost \$15 each. Freon appliance collection is \$15.
Curbside Overflow Bagged Trash Policy	Yes, \$4.00 disposal sticker must be affixed to each bag taken	Yes, \$4.00 disposal sticker must be affixed to each bag taken		Yes, extra bags taken outside the cart during traditional holiday weeks. Rest of year, \$2.00 overflow tag must be affixed to each bag taken.	Per individual contract with waste hauler.	Bags outside cart are only collected as bulky items for a minimum \$40 fee.	No bags outside of cart will be collected.	Yes, up to 4 extra bags taken outside the cart during 4 scheduled weeks per year.	Yes, must schedule. Fees apply.	Yes, \$1.00 overflow sticker must be affixed to each bag collected
Method	Automated	Automated		Automated	Property owner required to contract required to contract individually with approved waste hauler	Automated	Contractor Automated	Automated	Automated	Automated
Trash	City	City		City	Contractor	City	Contractor	City	Contractor	City
Community	Appleton - Current	Appleton - Proposed		DePere	Eau Claire	Fond du Lac	Grand Chute	Green Bay	LaCrosse	Menasha

Municipal Collection Services Comparison Chart

Brush collected monthly, June through November. Yard wasted colleced spring and fall. No grass collected. Must be bagged or bundled.	Monthly, April through December. 3" diameter brush or smaller. No grass collected.	Spring and Fall only. May bring to City yard waste facility year-round.		
Yes. \$25 punch card good for 5 items per year.	o Z	≺es		
Dumpster rentals	\$240 each. Do less than 10 enforcements per No year. College City with lots of rentals.	. ON		
Appliances, bagged trash.	NA	Construction materials, toilets, cabinets, sinks, countrers, windows, doors. No appliances, metal, electronics or tires.		
Furniture, carpeting, doors, windows.	Furniture, appliances, metal, NA carpeting	Constructi materials, cabinets, s' ltems too large to counters, fft in cart. No appliar metal, elemental, elem		
Yes, no charge during even numbered months. Residents must contact City to request collection. Dumpster rental or \$105 minimum charge for other months.	Yes, with scheduled pick-up. \$13 metal items; \$23 appliances; no electronics. Items without paid sticker will be tagged. Items still not removed will be collected for \$240 fee.	5 bulky items per collection with a sticker on each.		
	ow sticker to each bag	ch week		
No program Yes, \$10 overflow sticker must be affixed to each bag collected.		3 extra bags each week		
Automated	Automated	Semi-automated; rear-loader		
City	City	City		
Neenah	Oshkosh	Racine		

Sec. 16-9. Obstructing passage.

- (a) No unauthorized person shall stand, sit, lie, remain or otherwise occupy any street, sidewalk or other public way open for pedestrian or vehicular travel in such a manner as to annoy or molest any pedestrian thereon, or so as to obstruct or unreasonably interfere with the free passage of pedestrians, motor vehicles or other modes of travel. No person shall stand or remain at or near the entrance to any public or private building in such a manner as to annoy persons entering or leaving or passing such entrance. No person shall stand, sit, lie, remain or otherwise occupy any motor vehicle without permission of the owner.
- (b) No kiosk, bulletin board or other decorative object shall be placed upon the street right-of-way except upon benches or other seating facilities provided for such purposes by the City.
- (c) Sandwich board/temporary signs may be placed in the street right-of-way in conformance with the City of Appleton Sandwich Board/Temporary Sign Policy. (Code 1965, §5.07(1)(d), Ord 164-07, §1, 12-25-07)

 Cross reference(s) Citation for violation of certain ordinances, §1-17; schedule of deposits for citation, §1-18

Sec. 16-10. Snow and ice removal.

- (a) Every person shall, no later than thirty-six (36) hours following cessation of a snowfall, remove all snow and/or ice from the entire width of the sidewalk along the entire perimeter of the premises owned or occupied by him, including any handicap access ramps along the perimeter of the premises; provided that, immediately after the accumulation of ice on such sidewalk, it shall be treated with sand, salt or other substance to prevent it from being slippery. The ice shall continue to be so treated in such a manner as to prevent the ice from being dangerous until it can be removed and shall then be promptly removed. If the owner or occupant of such premises shall fail to remove and keep removed, such snow and ice or to sprinkle a sidewalk as required, the work shall be done under the direction of the Common Council and the expenses thereof made a special tax upon the lot along the entire perimeter of where such work was done.
- (b) No person shall remove or cause to be removed any snow or ice from his premises, residence, parking lot, parking area, business property or other area onto any public right-of-way or property. Snow removed from public sidewalks shall not be stored in any manner which will obstruct or limit vehicular or pedestrian vision, movement or access. Snow accumulations on sidewalks and handicap ramps resulting from street snow plowing operations shall be removed by the owner of the abutting premises in accordance with the provisions of this section.

In those instances where insufficient space exists between the sidewalk and street for the storage of all snow removed, it shall be stored on the abutting premises. (Ord 25-17, §1, 3-21-17)

(c) The deposit of any snow or ice upon any sidewalk alley or street of the city contrary to the provisions of this section is a nuisance, and in addition to the penalty provided for violation of this chapter, the City may summarily remove any snow or ice so deposited and cause the cost of the removal to be charged to the owner of the property from which the snow or ice has been removed. (Code 1965, §5.10; Ord 155-10, §1, 10-26-10; Ord 98-13, §1, 11-26-13)

Cross reference(s) – Citation for violation of certain ordinances, §1-17; schedule of deposits for citation, §1-18.

Sec. 16-11. Compliance with City plans and specifications.

All streets and alleys shall be graded, graveled, paved or improved, all sidewalks shall be constructed or rebuilt, and all underground utilities in public streets, alleys and public grounds, all bridges, and all other public works of any kind whatever shall be built, constructed, erected or completed according to the plans and specifications kept on file in the office of the Director of Public Works. Such work shall be done in a manner and of the materials the specifications prescribe. Said work shall be completed in accordance with the requirements set forth in the City's Temporary Traffic Control Manual for Street Construction and Maintenance Operations in the City of Appleton, latest edition.

(Code 1965, §5.06; Ord 143-05, §1, 12-13-05)

Sec. 16-12. Work in public right-of-way – permit.

(a) *Administrative authority*. Permits shall be issued by the Engineering Division of the Department of Public Works.

(b) Fee; commencement of work without permit.

- (1) An established permit fee in the amount which is on file in the Department of Public Works shall be paid for each permit issued under this section. If work is commenced before a permit is obtained and the permit request is denied, the Director of Public Works shall order the work ceased or the condition removed until a permit is obtained, for which the applicant shall pay a fee of four (4) times the established fee.
- (2) If a permit is denied, the Director of Public Works or the Common Council may cause any offending conditions to be removed or

MEMO

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

TO:

Municipal Services Committee

FROM:

Paula Vandehey, Director of Public Works

Nathan Loper, Deputy Director Operations

DATE:

June 17, 2021

SUBJECT:

Additional information pertaining to proposed changes to DPW operations,

along with proposed MODIFIED plan.

Following is additional information as requested by the members of the Municipal Services and Utilities Committees regarding the Department of Public Works proposed changes to operations, along with a proposed MODIFIED plan:

1. Under the proposed plan, will there be a designated week once a month residents will get brush collection?

Yes, there would be a designated week each month May through November, plus 4 weeks in April.

- 2. Could a second brush collection be scheduled for October or November like April has? Only if we don't collect overflow since this is the same truck and crew picking both items.
- 3. If we don't do the monthly yardwaste collection as proposed between the spring and fall collections, what would this staff be assigned to do?

They would be picking bulky items if not picking brush. See Modified Plan at end of memo.

4. What if we find that monthly yard waste pickup volumes wane substantially during the late summer? Would/could we reduce that offering and if so, what impact might that have on staff, equipment and any additional costs or savings?

Our determination is this collection will be fairly consistent all season, which is what other communities have experienced. This allows customers to do their trimming and yard work on their own schedule. If the volume turns out to be really low, we could pull the crew off towards the end of the week and assign them to other tasks.

5. What are the impacts if we do not change our method of leaf collection?

Our Stormwater Management Permit through the Wisconsin Department of Natural Resources (WisDNR) requires that we develop a plan to reduce our phosphorus load to ultimately meet our Total Maximum Daily Load Target per drainage area or "reachshed." Each reachshed has a different target as established by WisDNR (see attached Exhibits 1 & 2). One method to help us work towards meeting our target goal is to collect leaves from the terrace instead of placing them in the street. If we continue to collect our leaves as we are, then we will need to find additional ways to work towards meeting our target goal.

Because phosphorus causes excessive algae growth which can destroy other life forms found in our waterways, we should do everything we can as a community to help keep our waterways clean and healthy.

6. For leaf pickup, do we incur any additional costs anywhere for not being in compliance with the DNR on our phosphorus levels?

No. Our permit requires us to show a plan towards continuous improvement. Converting to terrace collection versus street collection is part of our current City-Wide Stormwater Management Plan update being developed at this time. However, not showing continuous improvement could reduce our grant opportunities.

7. Does WisDNR have any programs to help with the costs of going away from putting leaves in the road?

None that we are aware of. However, we continuously apply for WisDNR grants as they become available so we will watch for any opportunities for funding.

8. For 2022 and the next few years, will leaf collection be a hybrid claw and vacuum collection until all of the proposed vacuum units are purchased?

Yes, we anticipate a 5-year phase in plan to convert entire City to vacuum collection.

9. How do the CEA payments come into play for each of the years of equipment purchase? Does that mean the CEA contributes that much from its budget toward those purchases?

CEA payments are from stormwater budget to CEA to fund the next leaf collection unit(s).

Year	Equipment Purchases	CEA Payments	Total Cost
2022	\$325,000	\$95,400	\$420,400
2023	\$365,000	\$60,240	\$425,240
2024	\$435,000	\$60,660	\$495,660
2025	\$450,000	\$62,856	\$512,856
2026	\$300,000	\$43,344	\$343,344

10. The purchase prices vary for each of the five years of proposed buying. Is that due to differing amounts of equipment purchased in each of those years?

We are purchasing different types and amounts of equipment throughout the 5 years. To save money, we are converting our old automated garbage trucks for the first 6 units. Then we plan to purchase 2 roll-off units for our 2 roll-off trucks and then will purchase trailer units after that.

11. What happens to the claw attachments when we no longer need them for leaf collection? Do we sell them or do they have other uses?

We will continue using these for cleaning up large amounts of storm debris, large Christmas trees in January and may pick some larger leaf piles off the terrace with them.

12. Would the cost of having people bag their leaves and having staff pick up those bags be higher or lower than the cost of vacuuming them off the terrace?

Cost would be lower since we would not have to purchase and maintain the leaf vacuum equipment. The process of collection would be slower since it would be a manual collection and we only have 3 trucks to load the bags into. We would only be able to do 2 rounds instead of 3 per year.

13. Can you guess how much of fall leaf collection is actually not debris the vacuum could collect?

We currently only keep track of the volume of leaves collected. We estimate less than 10% of the volume collected is not leaves.

14. Any concerns about some debris being just large enough to be sucked in and damage the equipment?

No, if the vacuum can lift it, it will make it into the truck.

15. Would there be additional savings if the City only collected leaves in fall and residents hauled other yardwaste to the sites?

There would not be realized savings as we would assign this staff to other tasks.

16. What would be the cost to continue clearing all crosswalk locations?

The additional cost to clear all crosswalk locations on our list (which is a small percentage of the crosswalks citywide) would be \$100,650 for 4 part-time employees and associated trucks and snow blowers. This would be a very challenging option as part-time, reliable labor is extremely difficult to find at this time.

17. What would be the additional cost to keep status quo with sidewalk snow removal and bulky overflow?

If we don't change bulky item collection and continue this service in the winter, we won't have a crew to clear the 18 miles of sidewalks during the winter months (December through March). If we continue picking these items (bulky items, appliances, metal, non-compliance piles, etc.) during the winter months, we need to add 2 additional employees during the winter.

- o Cost for labor is \$60,000. This is in addition to the \$100,650 for clearing crosswalks
- o Challenges with hiring, retaining and training part-time staff, especially for operating this larger equipment and needing to be available 24/7 all winter.

18. How will Valley Transit handle snow removal at the bus shelters?

We discussed the change with Valley Transit and they will address the snow removal as they deem most appropriate for their operations.

19. Does WisDNR ding us at all for salt in the storm water?

No. However, as part of our Stormwater Permit, we are required to report the amount of salt, brine, etc. we use monthly, and to document that our salt applying machinery is calibrated. As you can see from the attached Exhibit 3, we are doing a great job of reducing salt usage over the past 20 years.

20. Has the City looked into using beet juice instead of road salt?

Yes, the City has researched the use of beet juice. Because there is not a local supply, the product is more expensive and not any more effective than road salt.

21. What would be the anticipated cost comparison if we hired a contractor for the snow removal services and paid them a guaranteed amount regardless if there is snow to remove or not?

Because this option relies on receiving quotes (and we have not had any competition in over 20 years) it is difficult to estimate a cost. However, our current contract for snow removal services has a laborer (shoveling) rate of \$54.47/hour and a snowblower rate of \$84.99/hour (see attached Exhibit 4 for entire list of costs). In comparison, the top end hourly rate for our Operator II's is \$32.10.

In addition, a significant benefit of paying City staff is we get other work tasks (tree trimming, street maintenance, etc.) accomplished versus paying a contracted service to stay home.

22. Is staff considering increasing the fines for non-snow removal compliance?

No, we are not considering any changes at this time.

23. How much overflow do we collect in a year?

2018 -- 1374 tons (2,748,000 pounds)

2019 -- 1420 tons (2,840,000 pounds)

2020 -- 1631 tons (3,262,000 pounds)

24. Why did DPW settle on a \$10 charge vs. \$5 or \$20 for example?

This seemed like a minimal expense to get rid of a large item. It is half the cost of a trailer rental and less than someone would pay to dispose of an old mattress with a furniture delivery. \$5 did not seem like it would deter enough people. \$20 seemed too high.

25. The bulky item collection fee of \$10 per item is a common amount for other communities to charge, but do we know why they charge \$10? Is it related to their costs to provide the service or just a number that a number of places picked because it was more than zero but small enough to not be too punitive?

The \$10 fee does not come close to covering our costs, but it is an amount to promote finding alternatives to throwing the items away without the cost becoming unaffordable.

26. How will DPW administer the \$10 bulky item fee?

Customer will call our office to pay for and schedule the collection. Our front office staff will enter this into our sanitation app and our collection crew will see the paid customer addresses on their field iPad.

27. Do we expect to see the proposed \$10 fee reduce the amount of items we will collect?

Yes, that is the desired outcome. We can't collect the current annual volume in fewer collections, so we need to incentivize people into finding other means of re-use or collection instead of putting items out for us to collect and bring to the landfill.

28. In the memo, you stated that the collection fee for non-compliant items will be \$250. But in the chart it shows \$2,500. Just wanted to clarify which one it is.

The chart shows the anticipated revenue of \$2,500. We are only estimating 10 collections at the \$250 rate.

29. Currently DPW allows residents to drop off garbage/bulky items at the Glendale yard waste site. But if residents can load it up and haul it to the yard waste site, why not just make them go a mile further and take to the landfill? Wouldn't that save DPW some staff work and wear on equipment?

This would save us about 4 hours per week hauling dumpsters. The equipment is operated daily so it would still be utilized. Also, the County landfill drop-off hours are very limited.

30. What would be the additional costs if we don't change our bulky overflow collection and also collect yardwaste April through November?

The additional cost would be \$192,000. \$152,000 for 2 employees and \$40,000 for truck operation and maintenance. We already have a rear load truck that could be used so no new equipment needed.

In addition to cost, the goal of reducing tonnage going to the landfill will most likely not be realized as there is no incentive to change behavior.

31. What would be the ramifications of keeping bulky overflow status quo and only collecting yard waste in spring and fall?

We would not have the necessary staff to insource the sidewalk snow removal services. See question 17 above.

32. Is there a way to create a tiered system for non-compliance overflow fees?

A tiered system for fees would be difficult to manage and administer, and would add additional trips to the property to check on compliance for the next step in the tier. We also recommend the non-compliance fee to be high enough to promote compliance. One option would be to give the property owner one week to come into compliance after the "Oops" notice was issued instead of 48 hours.

33. For bulky item collection, if we were to not do yard waste pick up at all, would we be able to keep collecting bulky items as we do today?

See Modified Plan described at end of this memo.

Based on the questions and feedback received regarding our Proposed Plan, we have developed a Modified Plan that includes the following elements (See Exhibit 5 for comparison of plans):

- Offer <u>free</u> overflow April through <u>September</u>, opposite of each recycling week (vs. monthly April through November for a \$10 fee)
 - o Max of 2 items per collection (approved items only as highlighted on Exhibit 6)
 - o No move outs
 - No bulky collection October and November to allow this crew to pick yard waste
 - No bulky collection December through March to allow this crew to assist with snow removal
- Brush and yard waste collection 4 weeks in April
 - o Must be bagged and bundled properly
- Brush and yard waste collection for all weeks of fall leaf collection
 - o Each customer should get 3 rounds of collection, the same week as their leaves
 - o Must be properly bagged and bundled
 - O No pumpkins must go in black garbage cart

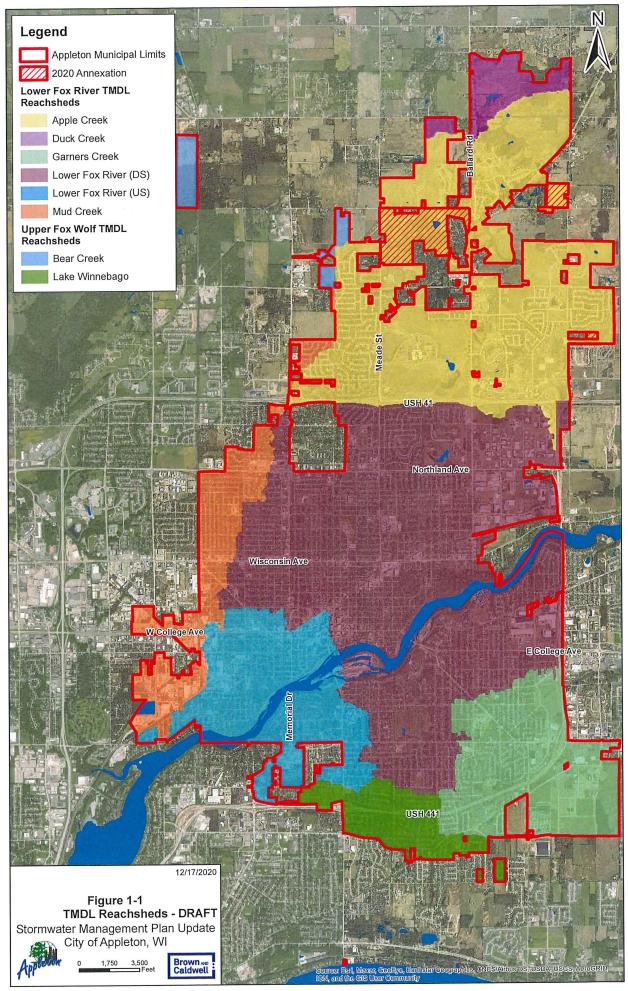
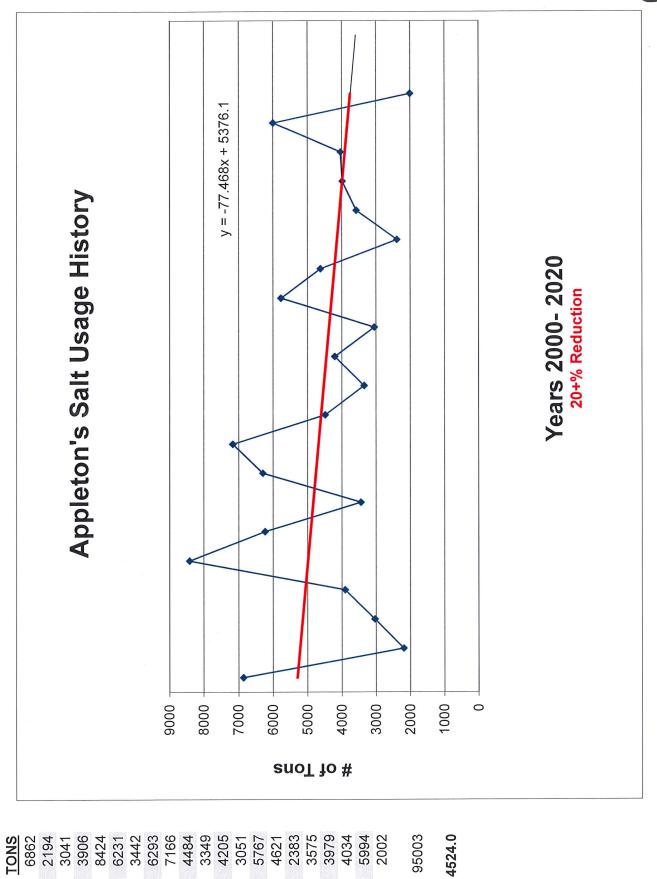


		Table 3-8, With-C	Table 3-8. With-Controls TP Reduction Results - DRAFT	sults - DRAFT			
		Stormwater	Stormwater Management Plan Update				
		Cit	City of Appleton, WI				
		Low	Lower Fox River TMDL				
						With-Controls TP	
		Total Treated Area	No-Controls TP Load	With-Controls TP Load	TMDL Target TP Load	Reduction %	Is TP Load Reduction
Reachshed	GIS Name	(acres)	(tons/vear)	Reduction (tons/year)	Reduction %	(compared to no-	Target Met?
		j				controls total load)	
Apple Creek	Apple Creek	3,388	2,277.2	1,107.9	40.5%	48.6%	Yes
Duck Creek	Duck Creek	57	33.7	16.4	40.5%	48.5%	Yes
Gamers Creek	Gamers Creek	1,576	1,280.0	717.3	%9:89	26.0%	No
Lower Fox River Mainstem (DS)	Lower Fox River (DS)	5,966	5,015.6	1,179.9	40.5%	23.5%	No
Lower Fox River Mainstem (US)	Lower Fox River (US)	1,506	1,281.0	168.5	40.5%	13.2%	No
Mud Creek	Mud Creek	1,055	868.0	326.5	48.2%	37.6%	No
Totals		13,548	10,755.5	3,516.3		32.7%	
		Upr	Upper Fox-Wolf TMDL				
						With-Controls TP	; ;
		Total Treated Area	No-Controls TP Load	With-Controls TP Load	TMDL Target TP Load	Reduction %	Is IP Load Keduction
Reachshed		(acres)	(tons/year)	Reduction (tons/year)	Reduction %	(compared to no- controls total load)	Target Met?
Bear Creek	Bear Creek	137	46.9	5.4	85.6%	11.4%	No
Lake Winnebago	Lake Winnebago	586	456.1	98.3	85.6%	21.6%	No
Totale		723	503.0	103.7		20.6%	
280							

Exhibit 3



Average:



9/8/2017

PROPOSAL SIDEWALK & CROSSWALK SNOW REMOVAL SERVICES

Description	WINTER 2017-2018	WINTER 2018-2019	WINTER 2019-2020	WINTER 2020-2021	WINTER 2021-2022
*Tractor/Skid Steer	\$87.14/hr.	§ 88-38 /hr.	\$91.54 /hr.	\$93.00 /hr.	\$96.00 /hr.
*Snowblower	\$ 72,10 /hr.	\$73.54 /hr,	\$ 75.74 /hr.	\$77.94 /hr.	\$84,94 /hr.
*Tri-Axle Dump Truck	\$67.50 /hr.	\$68.90 /hr.	\$ 72.00 /hr.	\$75.00 /hr.	\$76.00 /hr.
*Salt Truck	s 86,50 /hr.	\$ 88.50 /hr.	\$ 90.50 /hr.	\$92.00 /hr.	\$ 94.00 /hr.
Laborer (Shoveling/Flagging)	\$ 48.41 /hr.	\$ 49.96 /hr.	\$51.35 /hr.	\$52.89 /hr.	\$59.97 /hr.
Foreman	\$.58. 71 /hr.	\$60.47 /hr.	\$67.21 /hr.	\$64.07 /hr.	\$65.99 /hr.
Pickup Truck Miles	\$,92 /mile	\$,94 /mile	\$.96 /mile	\$.98 /mile	\$1.00 /mile
* Hourly rates including operator	*				
OTHER EQUIPMENT					
V- Plow Trick (Description)	\$75.21 /hr.	\$77.46 /hr.	\$79.46 /hr.	\$81.46 /hr.	\$83.90 /hr.
(Description)	\$79.93 /hr.	\$82.34 /hr.	\$ 84.50 /hr.	\$ 87.50 /hr.	\$89.50 /hr.
(Description)	\$ /hr.	\$ /hr.	<u>\$</u> /hr,	\$ /hr.	\$ /hr.
BIDDER:	Lake Sho	re Cleaner	2 Inc.		
MAILING ADDRESS:	4623 A	J. Richman			
PHYSICAL ADDRESS:	*		1.		
CITY, STATE, ZIP:	Appleton	, wz 54	913		
BY:	Meis	and			
PRINT:	Borald	G. World	, Zv -		
TITLE:	Presido	<u> </u>			
TELEPHONE:		54-0757			
FAX:		0-2822			
DATE:	9-8-17				

CITY OF APPLETON

DEPARTMENT OF PUBLIC WORKS

Adderdon #1 Newsaur



Department of Public Works Proposed Operational Changes

6/16/2021

CURRENT

PROPOSED

MODIFIED

January		Free Bulky Overflow	Previously Contracted Snow Removal		æ	Previously Contracted Snow Removal		
February		Free Bulky Overflow	Previously Contracted Snow Removal			Previously Contracted Snow Removal		
March		Free Bulky Overflow	Previously Contracted Snow Removal			Previously Contracted Snow Removal		
April	Spring Yard Waste Dates TBD	Free Bulky Overflow		Weekly Yard Waste	Once/Month Bulky \$10/item	,	Spring Yard Waste Dates TBD	Every Other Week Bulky 2 Items FREE
May		Free Bulky Overflow		Once/Month Yard Waste	Once/Month Bulky \$10/item			Every Other Week Bulky 2 Items FREE
June		Free Bulky Overflow		Once/Month Yard Waste	Once/Month Bulky \$10/item			Every Other Week Bulky 2 Items FREE
July		Free Bulky Overflow		Once/Month Yard Waste	Once/Month Bulky \$10/item			Every Other Week Bulky 2 Items FREE
August		Free Bulky Overflow		Once/Month Yard Waste	Once/Month Bulky \$10/item			Every Other Week Bulky 2 Items FREE
September		Free Bulky Overflow		Once/Month Yard Waste	Once/Month Bulky \$10/item			Every Other Week Bulky 2 Items FREE
October	Yard Waste & Leaves	Free Bulky Overflow	Previously Contracted Snow Removal	Once/Month Yard Waste plus Leaves	Once/Month Bulky \$10/item	Previously Contracted Snow Removal	Every Other Week Yard Waste & Leaves	
November	Yard Waste & Leaves	Free Bulky Overflow	Previously Contracted Snow Removal	Once/Month Yard Waste plus Leaves	Once/Month Bulky \$10/item	Previously Contracted Snow Removal	Every Other Week Yard Waste & Leaves	
December		Free Bulky Overflow	Previously Contracted Snow Removal			Previously Contracted Snow Removal		



								000	
Curbside Brush & Yard Waste Collection	Spring & Fall	Monthly, April through November. No grass collected curbside.	3 times per year: May, July, and October. No fee. Must schedule and pay fee for collection rest of the year. Charges vary, minimum \$40 fee.	Yardwaste collected 1 week in May and 1 week in November. 10 bags free, then \$2.50/bag. No brush collected.	Fall only. Small amounts of plant material only. No grass, brush, fruits or vegetables collected.	Brush chipping 1 week in May and September. No grass or yard waste collected.	Spring & Fall. No grass collected.	Contract Individually with private hauler, if want the service. Brush collected one week in the spring.	Brush collected monthly. Yardwaste collected in the Spring & Fall. Must use paper bags. Grass collected.
Bulky Waste Drop-off Center	Yes	Yes. Appliances, metal, garbage, tires and recycling accepted.	Yes	ON.	Yes	ON	Yes, 2 drop-off centers. No fee. No construction or contractor debris.	No	o Z
Non-Compliance Collections	\$75	\$250	No.	Must contact and pay private hauler	O _N	ON O	\$240	No	°Z
Items Not Collected	Pool tables, pianos, other very heavy items	Appliances, electronics mattresses, sofa sleepers, construction/rem odeling/building materials, glass doors, bay windows, hot tubs, pools, trampolines, exercise equipment, blasketball hoops, tractor tires.	Construction materials and debris, freon appliances, bagged trash.	Must contact and pay private hauler	Tires and freon require additional fee.	Appliances, construction materials, bagged trash,		No appliances or construction materials.	¥.
Items Collected	Large items that don't fit in cart.	Typical home furniture, couch, bed frames, doors (not patio), tables, TV stands, rugs, carpets (cut to 4 feet and bundled), small metal (4 foot or less), tires. Weigh less than 50 pounds.	Furniture, carpet, doors, metal, windows, doors.	Must contact and pay private hauler	Appliances, furniture, bagged trash	Furniture, carpet (4' sections), tables.	Furniture (indoor & outdoor), metal objects, etc.	Furniture, etc.	Large Items or bags of trash with stickers.
Curbside Bulky Item Policy	Yes, collected bi-weekly on regular garbage day; opposite week of recycling. Fee for appliance collection. No construction or contrador debris.	Monthly, April through November. 5 items max per month. \$10 per item, paid and scheduled in advance.	Yes, 1 week in June and 1 week in September. Must schedule and pay fee for collection other 50 weeks of the year. Charges vary, minimum \$40 fee.	Must contact and pay private hauler	Yes, \$40 minimum charge plus charges for appliances, tires, etc. Extra charges for non-scheduled items.	4 collections per year provided by private hauler.	Yes, 2 scheduled weeks per year, 2 CY max. Other 50 weeks of the year, \$80 minimum charge per trip up to \$240.	Once per year in Spring. 5 Items max. Other weeks must contact and pay private hauler.	Yes, each residential property gets 5 bulky item tags per year. Additional tags cost \$15 each. Freon appliance collection is \$15.
Curbside Overflow Bagged Trash Policy	Yes, \$4.00 disposal sticker must be affixed to each bag taken	Yes, \$4.00 disposal sticker must be affixed to each bag taken	Yes, extra bags taken outside the cart during traditional holiday weeks. Rest of year, \$2.00 overflow tag must be affixed to each bag taken.	Property owner required to contract Per individual contract with individually with waste hauler.	Bags outside cart are only collected as bulky items for a minimum \$40 fee.	No bags outside of cart will be collected.	Yes, up to 4 extra bags taken outside the cart durling 4 scheduled weeks per year.	Yes, must schedule. Fees apply.	Yes, \$1.00 overflow sticker must be affixed to each bag collected
Method	Automated	Automated	Automated		Automated	Contractor Automated	Automated	Automated	Automated
Trash	City	Oity	City	Contractor	City	Contractor	City	Contractor	City
Community	Appleton - Current	Appleton - Proposed	DePere	Eau Claire	Fond du Lac	Grand Chute	Green Bay	LaCrosse	Menasha

Exhibit 6

WATER MAIN BREAK/ JOINT LEAK REPORT - MAY 2021

YEARLY WATER MAIN BREAK COMPARISON

MAY 20	MAY 21	YTD 20	<u>YTD 21</u>
3	6	40	56

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**		
710 E. Summer St. 285630 DIP 12" 1976 16" Split 30 Days 60,525,000 \$367,992.00 NOTES: Break was found as water was in the road and with the correlator. Duration is based on ground saturation. Water was following a trench and entering the sewer some where.										
Schaefer Cir. & Eric Dr.		DIP as in the road	8" . Duration is I	1979 based time	1/4" Hole of call and soil satu	14 Days ration.	212,725	\$1,293.37		
1716 E. Calumet St.	286050 lled in by th	CIP ne PD. Duratio	12" on is based o	1965 n time of ca	6" Hole Il until it was fixed.	4 Hours	1,271,654	\$7,731.66		
712 E. Summer St.	286051 ed by APD.	DIP Duration is b	12" ased on time	1976 of call until	2" Hole it was fixed.	3 Hours	142,045	\$863.63		

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

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**	
511 S. Kensington Dr.	286274	DIP	12"	1980	3" Hole	4 Hours	415,700	\$2,527.46	
NOTES: Break was found as water was bubbling out of the road. Duration is based on time of call until it was turned off.									
2509 E. Crestview Dr. NOTES: Break was called	286499 in by a resi	CIP dent. Duration	8" n is based on	1966 the amount	4" Hole t of water in area a	6 Hours	972,458 ration.	\$5,912.54	

In addition to the dollar value of water revenue lost, there is an average cost of \$9,000 to repair each water main break (including final restoration) and an average cost of \$630 to produce the lost water for each main break.

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