DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

WATER UTILITY

Distribution Administration **Business Unit 5351**

Significant 2016 Events:

- Reviewed the small meter installation policy
- Working with the Clerk's Office on sending mass mailing of water installation letters
- Redesigned the water meter hangtag in multiple languages to help communication with diverse populations

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Efficient customer service						
# Cross connection inspections	New measure ------------>		0	6,615	7,000	8,977
# Appointment request letters sent	New measure ------------>		5,265	11,757	10,000	18,367
Strategic Outcomes						
Consistent and current information						
Policies reviewed/updated	0	1	2	1	1	0
Turnover ratio of inventory - Annual	0.76	0.65	0.74	0.72	0.80	0.72
Work Process Outputs						
Reporting & recording keeping						
# of reports generated for PSC	1	1	1	1	1	1

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

WATER UTILITY

Customer Service **Business Unit 5352**

Significant 2016 Events:

- Exceeded the 2016 meter install goal by 33%

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Reliable, accurate water usage						
# of large meters replaced	1	0	0	0	0	0
# of meters tested	1,293	428	4,183	6,981	7,000	9,266
# of defective meters replaced	45	36	17	248	100	436
# of meters in service	27,160	27,383	27,589	27,618	27,650	27,797
Strategic Outcomes						
Implementation of system upgrade						
# of trace batteries replaced	802	122	0	0	0	0
# of new meters replaced		450	4,661	7,090	7,000	9,573
Work Process Output						
Service provided						
# of service calls	1,247	1,472	1,863	1,497	1,800	1,408
System growth						
# of new services installed	177	233	80	120	100	166

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

WATER UTILITY

Distribution Operations and Maintenance — **Business Unit 5353**

Significant 2016 Events:

- In January we implemented the use of iPads and a "Water App" for recording various maintenance activities. This helped to improve accuracy of records, significantly reduced time to update records, and allows for more efficient record inquiries.
- In 2016 there was an increase in the number of valves exercised and number repaired, that is reflected in the reduction curb boxes repaired.

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Reliable source at adequate pressure						
Hydrants						
Replaced/Upgrade	6	4	4	6	5	4
% of hydrants flushed	100%	100%	100%	100%	100%	100%
Water loss reported	8.7%	8.5%	10.0%	9.1%	10%	9.2%
Strategic Outcomes						
Reliability of the system						
# of water main breaks	83	87	141	71	85	92
Work Process Outputs						
Preventive maintenance						
# of services replaced	36	24	11	0	15	19
# of valves exercised	1,010	869	525	796	600	1,506
# of valves replaced	5	4	7	5	10	1
# of curb boxes repaired	331	202	248	427	300	154
# of joint leaks fixed	5	4	1	1	3	0
# of service leaks fixed	4	3	3	0	3	2

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

WATER UTILITY	
Distribution Capital Improvements	**Business Unit 5370**

Significant 2016 Events:

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Reliable and adequate service						
% of reconstructed streets with relay	100.0%	100.0%	100.0%	100.0%	100%	100.0%
% increase of fire flow capacity	0% - 175%	0% - 45%	0% - 245%	0% - 175%	0% - 200%	10% - 225%
# of low flow hydrants eliminated	3	3	5	8	5	5
Strategic Outcomes						
System size						
Miles of mains	373*	375	373*	373	376	374
% of total miles of mains reconstructed	0.63%	0.65%	0.66%	0.90%	0.70%	0.69%
# of hydrants in the City	3,277*	3,295	3,313	3,344	3,300	3,361
# of low flow hydrants in the City	107	104	85	77	80	72
Work Process Outputs						
System expansion and improvement						
Miles of transmission lines added	0.17	0.19	1.08	0.00	0.60	0.35
Miles of existing mains relayed	2.3	2.19	2.47	3.36	2.64	2.58

* Moved from a manual tracking system to a more comprehensive system - GIS

For the Twelve Months Ending December 31, 2016

Description	Year to Date Expense	Encumbered Amount	Total Expended and Encumbered	Full Year Amended Budget	Percent of Amended Budget
Distribution Administration	515,493	0	515,493	545,370	94.5 %
Customer Service	200,030	0	200,030	141,895	141.0 %
Distribution Ops. & Maint.	1,178,848	0	1,178,848	1,355,545	87.0 %
Distribution Capital	3,842,416	0	3,842,416	5,027,446	76.4 %
Total	5,736,787	0	5,736,787	7,070,256	81.1 %

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

WASTEWATER UTILITY

Collection Systems **Business Unit 5427**

Significant 2016 Events:

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Benefit of inspection program						
# of defects identified from TV report	16	13	47**	3**	25	34
Compliance with regulation						
# of protruding taps identified	0	1	9**	0**	6	9
# of cross connections identified	52	70	85	86	80	103
Strategic Outcomes						
Reliability of system maintenance program						
# of trouble calls	39	49	57	28	35	17
# of system blockages removed	7	6	7	3	5	1
% of total system televised	11.6%	12.5%	10.0%	14.1%	10.00%	14.2%
Work Process Outputs						
Maintenance performed						
% of total system cleaned	66.4%	51.2%	48.6%	46.6%	48.0%	49.0%
# of spot repairs made	15	0*	13**	46**	23	0*
Safeguarding health and safety						
# of protruding taps removed	0	0*	4**	3**	5	0*

* Timing of contract pushes work into next calendar year
** Totals vary due to 2014 and 2015 funds were bid in 2014 and were completed in 2015

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

WASTEWATER UTILITY

Public Works Capital Improvements **Business Unit 5431**

Significant 2016 Events:

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Reduction of wastewater treatment cost						
# of manholes-rehab/rebuilt	35	20	39	23	25	34
Distribution section rating from CMAR	A	A	A	A	A	A
# of laterals replaced	181	173	106	198	200	134
Strategic Outcomes						
Improvements to the sanitary sewer system						
Total miles of sanitary sewer	321*	321	320**	323	324	325
% of total miles of sanitary sewer reconstruct	0.55%	0.38%	0.74%	0.46%	0.52%	0.60%
Work Process Outputs						
Restoration of sanitary sewers						
Miles of existing sanitary sewer reconstruct.	1.76	1.24	2.39	1.47	1.68	1.95
Expansion of sanitary sewer system						
Miles of new sanitary sewer added	0.00	0.22	0.09	0.49	1.10	1.04
Reduction of treatment costs						
# of seals installed (I & I)	59	91	75	94	100	94

* Moved from a manual tracking system to a more comprehensive system - GIS

** The total miles of sanitary sewer main within the system decreased due to the City abandoning 2975 feet of sanitary sewer and only installing 494 feet of new sanitary sewer main.

City of Appleton
Wastewater Collection
Summary Budget to Actual Report
For the Twelve Months Ending December 31, 2016

Description	Year to Date Expense	Encumbered Amount	Total Expended and Encumbered	Full Year Amended Budget	Percent of Amended Budget
Wastewater Collection Systems	748,898	0	748,898	870,102	86.1 %
Public Works Capital Improv.	1,904,377	0	1,904,377	2,699,330	70.5 %
Total	2,653,275	0	2,653,275	3,569,432	74.3 %

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

STORMWATER

Administration — **Business Unit 5210**

Significant 2016 Events:

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Economic development						
Master plans completed	5	1	4*	0	0	0
Strategic Outcomes						
Alternative sources of revenue						
# of grants applied for	2	0	0	0	1	1**
Value of grant dollars awarded or applied	$300,000	$0	$0	$0	$150,000	$349,790 **
for future reimbursement						
Safe, reliable future level of service						
Acre feet of storage identified for future use	25	61	0	0	2	.75 ***
# of DNR non-compliance notices received	1	0	0	0	0	0
Work Process Outputs						
Preventive maintenance of system						
Erosion control plans reviewed (permits)	50	30	15	48	25	49

* Bellaire study, Citywide SWMP, Spartan, Flood Hazard Mitigation Plan Update
** Northland Pond DNR Municipal Flood Control Grant
*** Cotter Street Pond

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

STORMWATER

Facility Maintenance — **Business Unit 5220**

Significant 2016 Events:

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Benefit of inspection program						
# of spot repairs identified from TV reports	15	17	38*	5*	18	21
Compliance with regulation						
# of protruding taps identified	12	15	23*	5*	17	15
# of cross connections identified	0	0	0	0	0	0
Strategic Outcomes						
Effectiveness of maintenance program						
# of trouble calls	15	24	0	19	20	28
% of total system televised	9.7%	9.6%	8.3%	9.9%	9%	10.2%
Work Process Outputs						
Preventive maintenance						
Cubic yards of material collected from street sweeping operations	3,884	4,124	3,920	5,565	3,800	4,059
% of total storm sewer system cleaned	13.3%	12.8%	9.2%	11.3%	13.0%	11.1%
Safeguarding health and safety						
# of protruding taps removed	10	0	17*	23*	15	0**
# of spot repairs made	15	0	19*	37*	16	0**

* Totals vary due to 2014 and 2015 funds bid in 2014 and were completed in 2015

** Timing of contract pushes work into next calendar year (2017)

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

STORMWATER

Leaf Collection **Business Unit 5225**

Significant 2016 Events:

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Service provided						
Number of collection cycles	4	4	3.25	5	3	4
Strategic Outcomes						
Cost effective service provided						
Cost/cubic yard collected	$8.10	$12.71	$9.82	$11.00	$10.75	$11.36
Work Process Outputs						
Safer streets and cleaner storm water system						
Cubic yards of leaves collected	41,180	25,510	33,160	37,100	35,000	38,440

DEPARTMENT OF PUBLIC WORKS
YEAR-END REVIEW

All figures through December 31, 2016

STORMWATER

Capital Construction **Business Unit 5230**

Significant 2016 Events:

Performance Data:

Client Benefits/Impacts	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Target 2016	Actual 2016
Solutions to system discrepancies						
Residential mini-sewer/drainage complaints						
Solved	115	99	84	99	100	63
Outstanding	400	360	113*	95*	110	52
Strategic Outcomes						
Improvements to the stormwater system						
Total miles of storm sewer in the city	278.17 **	282	282	292	287	293
% of total miles reconstructed	0.37%	0.23%	0.01%	0.29%	1.07%	0.49%
Acres of new land available	56	0	0	0	0	0
Integrity and growth of the system						
Acre feet of storage developed	0.0	35.0	14.1	3.5***	0.0	0.0
Work Process Outputs						
Restoration of storm sewers						
Miles of storm sewer reconstructed	1.02	0.66	0.35	0.85	2.98	1.42
Expansion of storm sewer system						
Miles of new storm sewer added	0.052	0.66	0.21	0.34	0.16	0.58

* Audited/cleaned up list in 2014 after 2015 Target was developed, 90 on CSR list & 23 on Clearwater inspection list ***Birchwood Pond

** Moved from a manual tracking system to a more comprehensive system - GIS

For the Twelve Months Ending December 31, 2016

Description	Year to Date Expense	Encumbered Amount	Total Expended and Encumbered	Full Year Amended Budget	Percent of Amended Budget
Stormwater Administration	5,503,088	308	5,503,396	5,611,352	98.1 %
Facilities Maintenance	1,292,884	0	1,292,884	1,491,987	86.7 %
Leaf Collection	436,899	0	436,899	427,748	102.1 %
Capital Construction	3,226,349	0	3,226,349	5,074,634	63.6 %
Total	10,459,220	308	10,459,528	12,605,721	83.0 %