

DEPARTMENT OF PUBLIC WORKS CONSISTS OF 4 DIVISIONS WITH 7 BUDGET LINE ITEMS:

- GENERAL FUND: 4 Budgets
 - Highway (cemetery, parks, roadways, street signs)
 - o Transfer Station
 - Street Lighting
 - Snow and Ice
- SEWER ENTERPRISE FUND
- WATER ENTERPRISE FUND
- STORMWATER ENTERPRISE FUND

The requested budget for FY21 is \$4,665,224.00

TOWN OF MILLIS Form #3 **FISCAL YEAR 2021 BUDGET** STAFFING HISTORY **Department: Department of Public Works** General Water Sewer Storm TS Total **Position** FTE FTE FTE FTE **FTE** FTE 142251 6100051 6000051 6300051 143651 James McKay - Director 0.17 0.41 0.24 0.18 1.00 Deirdre Gilmore - Dept Asst III 0.11 0.44 0.32 0.13 1.00 Marie Gallagher - Dept Asst II 0.15 0.15 0.30 David Rachmaciej - Gen Foreman 0.16 0.42 0.24 0.18 1.00 Ron McKenney - Water Sewer Tech 0.50 0.50 1.00 Kevin Kandola - Mechanic 0.24 0.33 1.00 0.33 0.10 Jon Wanders - HEO/Laborer - Mechanic 0.75 0.25 1.00 Steve Main - HEO/Laborer 0.75 0.25 1.00 Eric Earl - HEO/Laborer 0.75 0.25 1.00 Mark Bussaglia - HEO/Laborer 1.00 1.00 Michael Hillery - HEO/Laborer 0.50 1.00 0.50 Ryan Wagner - HEO/Laborer 0.50 0.50 1.00 Matthew Donavan - HEO/Laborer 0.50 0.50 1.00 Jonathan Lovett HEO/Laborer 0.24 0.33 0.33 1.00 0.10 Kyle Lopez - HEO/Laborer 0.10 0.50 0.40 1.00

SUBTOTAL/TOTAL

3.27

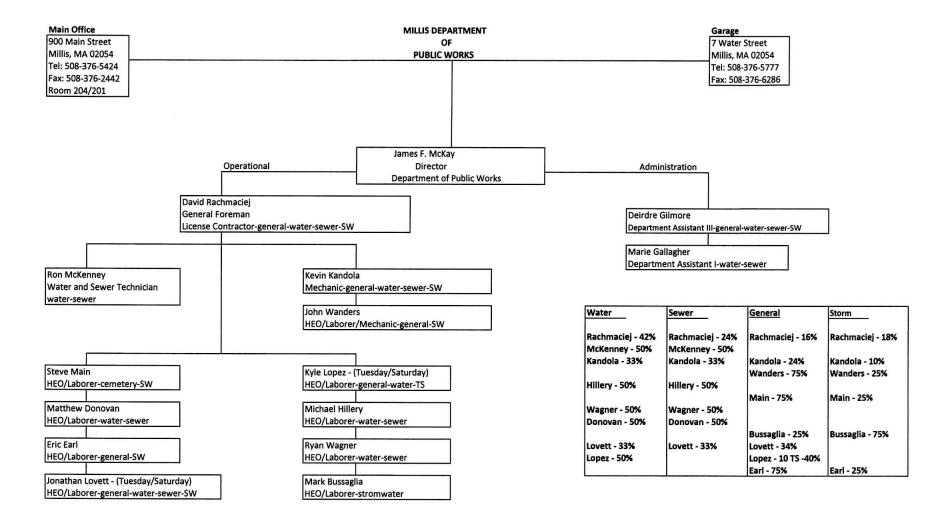
4.58

3.61

2.44

0.40

14.30



updated 1/13/2020

Town Of Millis - DPW
Capital Budget Replacement Schedule

<u> Unit #:</u>	Year:	Make:	Model:	Condition	Replacement Year:	Original Price	Replacement Cost:
1	2017	Ford	Explorer	Good	2027	\$31,682.00	\$40,000.00
2	2012	Chevy 3500	Dump Truck	Good	2022	\$41,120.00	\$52,000.00
3	2005	International	Dump Truck	Good	2025	\$90,000.00	\$173,770.00
4	1995	International	Dump Truck	Poor	2015	\$62,000.00	\$173,770.00
5	1999	Volvo	Dump Truck	Fair	2019	\$85,000.00	\$173,777.00
6	2005	Volvo L70E	Front End Loader	Good	2035	\$130,000.00	\$182,000.00
8	2008	John Deere	Skidsteer	Good	2038	\$35,000.00	\$45,000.00
9	1994	John Deere	410D Backhoe	Poor	2024	\$65,000.00	\$120,000.00
10	2017	Johnston	Street Sweeper	Good	2032	\$206,208.00	\$238,000.00
11	2013	Chevy 3500	Utility Truck	Good	2024	\$64,387.00	\$70,000.00
13	2012	Chevy 2500	Pickup	Good	2022	\$33,050.00	\$35,000.00
14	2016	Chevy 3500	Dump Truck	Good	2026	\$47,100.53	\$50,000.00
17	1978	Ford 2600	Farm Tractor	Poor	2014	?	\$52,000.00
18	2013	Chevy 3500	Dump Truck	Good	2023	\$43,661.00	\$52,000.00
20	2018	DEERE	624KII	Good	2038	\$182,000.00	\$20,000.00
24	2014	Case	Backhoe	Good	2034	\$115,000.00	\$130,000.00
27	2017	Freightliner	10-Wheel Dump truck	Good	2037	\$202,545.00	\$215,000.00
29	2011	Holder 9700	Multi-use	Good	2031	\$126,500.00	\$140,000.00
30	2019	Chevy 2500	Pickup	Good	2029	\$42,667.96	\$49,000.00
31	2002	Bobcat	Skidsteer	Good	2032	\$16,500.00	\$35,600.00
50	2018	Freightliner	Roll-off	Good	2028	\$173,750.00	\$200,000.00
52	2011	Chevy Van	Express Van	Good	2026	\$23,500.00	\$25,000.00
54	2020	Freightliner	Dump Truck	Good	2040	\$173,770.00	\$185,000.00
	2012	Trailer	Utility Trailer	Good	2037	\$8,500.00	\$10,000.00
53	2002	Ford	Explorer	Good	2020	\$35,000.00	\$40,000.00
	2015	Skid Steer 326E	Multi-use	Good		\$62,000.00	\$72,000.00

Town Of Millis - DPW Capital Budget Replacement Schedule

<u>Sewer</u>

Building	<u>Heating</u>	Roof	<u>Door</u>	<u>Generators</u>	
Norfolk Road Sewer	Fair	Good	FY13 Replace	Good	
Timberline Road Sewer	Good	Good	Fair	Good	
Dover Road Sewer	Good	NA	Good	Good	
Middlesex St. Sewer	Good	NA	Good	Good	
Town Park	NO	Fair	Good	NA	
7 Water Street	Good	NA	Good	Good	

<u>Water</u>

Wells #1 & 2 Treatment	Good	Poor	fair	Good
Well #1 Pump Building	Good	Good	fair	
Well #2 Pump Building	Good	Good	fair	
Well #3 Pump Building	Good	Poor	Good	Good
Well #3 Treatment	Good	Poor	Good	
Well #4	Good	Poor	Good	Fair
Wells #5 & 6 Treatment	Good	Good	fair	Good
Well #5 Pump Building	Good	Good	good	Good both wells
Well #6 Pump Building	Good	Good	good	

Town Of Millis - DPW Capital Budget Replacement Schedule

Mowers

Replacement Year:

Original Price

Replacement Cost:

//14/20

Condition

Year: Make:

Model:

2001	Husqvarna	Zero Turn Mower	poor	2013	\$4,500.00	\$6,000.00
2008	John Deere	Zero Turn Mower	poor	2014	\$8,500.00	\$10,000.00
2008	Husqvarna	Zero Turn Mower	Fair	2014	\$5,500.00	\$6,000.00
2012	Husqvarna	Zero Turn Mower	New	2018	\$5,850.00	\$6,000.00
2013	John Deere	Zero Turn Mower	New	2019	\$8,825.39	\$10,000.00
2013	Roller	Asphalt Roller	Good	2023	\$15,038.10	\$20,000.00
				-		
			<u>Sanders</u>			
Year:	Make:	Model:	Condition	Replacement Year:	Original Price	Replacement Cost:
2005	Truck #3		Good	2025	purchased with truck	
1995	Truck #4		Good	2015	purchased with truck	
1999	Truck #5		Good	2019	purchased with truck	
2004	Truck #18		Poor	2024	\$4,500.00	\$7,000.00
1994	Truck #27		Good	2037	purchased with truck	
2012	Truck #2		Poor	2022	\$5,950.00	\$7,000.00
2012	Truck #14		Poor	2022	\$5,950.00	\$7,000.00
2020	Truck #54		Good	2040		
			<u>Plows</u>			
Year:	Make:	Model:	Condition	Replacement Year:	Original Price	Replacement Cost:
2012	Truck #2		Good	2022	Purchase new with truck	Same
2005	Truck #3		Fair	2025	Purchase new with truck	Same
1995	Truck #4		Fair	2015	Purchase new with truck	Same
1999	Truck #5	,	Fair	2019	Purchase new with truck	Same
2013	Truck #11		Good	2023	Purchase new with truck	Same
2012	Truck #13		Good	2022	Purchase new with truck	Same

Town Of Millis - DPW

Capital Budget Replacement Schedule

			THE PERSON OF THE PERSON OF THE PROPERTY OF THE PERSON OF		
2016	Truck #14	Good	2026	Purchase new with truck Same	
2013	Truck #18	Good	2023	Purchase new with truck Same	
2017	Truck #27	Good	2037	Purchase new with truck Same	
2019	Truck #30	Good	2029	Purchase new with truck Same	

TOWN OF MILLIS FISCAL YEAR 2021 BUDGET

Form #3

STAFFING HISTORY

Department:	General	142251
-------------	---------	--------

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Position	FTE	FTE	FTE	FTE	FTE	FTE
Director					0.17	0.17
Department Asst III					0.11	0.11
General Foreman					0.16	0.16
Mehanic					0.24	0.24
HEO/Laborer					0.75	0.75
HEO/Laborer					0.75	0.75
HEO/Laborer					0.75	0.75
HEO/Laborer					0.24	0.24
HEO/Laborer					0.10	0.10
SUBTOTAL/TOTAL					3.27	3.27

		FY2015 ACTUAL	FY2016 ACTUAL	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 ACTUAL	FY2020 TM ADOPTED	FY2021 FY2021 REQUESTS PROPOSED
HIGHWAY DIVISION	014220							
Personnel Services								
7 G/Gorman Convided	Salary Department Head		\$33,495	\$34,743	\$36,551	\$20,304	\$21,345.95	\$22,497.88
	Salaries Clerical	\$6,092	\$6,126	\$6,270	\$5,066	\$6,191	\$6,191.00	\$6,692.88
	Wages	\$230,695	\$205,895	\$191,213	\$209,843	\$148,810	\$162,340.00	\$180,280.72
	Wages Overtime	\$21,457	\$21,618	\$37,247	\$45,225	\$37,551	\$35,000.00	\$35,000.00
	Summer Help	\$12,021	\$11,436	\$7,608	\$7,836	\$16,522	\$12,669.00	\$30,000.00
	Longevity	\$2,121	\$3,033	\$3,158	\$3,360	\$750	\$1,813.00	\$1,885.00
	Total	\$272.386	\$281,603	\$280,239	\$307,881	\$230,128	\$239,358.95	\$276,356.48 \$0.00

FY2017

FY2018

FY2019

FY2020

FY2016

FY2015

Expenses

	1 12010	1 12010	1 12017			1 12020	
	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	TM ADOPTED	REQUESTS PROPOSED
Engineering Services	\$2,817	\$17,373	\$7,596	\$5,458	\$4,932	\$8,000.00	\$8,000.00
Physical Exams	\$410	\$445	\$155	\$425	\$410	\$2,000.00	\$2,000.00
Police Details	\$19,383	\$15,767	\$16,546	\$26,144	\$29,794	\$19,000.00	\$19,000.00
Office Cleaning	\$3,502	\$3,478	\$4,376	\$3,848	\$7,200	\$5,000.00	\$7,500.00
Equipment Hired	\$26,236		\$3,997	\$2,160	\$5,975	\$8,000.00	\$8,000.00
Land Fill Monitoring),			\$0	\$0	\$15,000.00	\$15,000.00
Catch Basin Cleaning	\$13,856	\$16,172	\$15,874	\$0	\$0		
Tree Care	\$12,380	\$13,893	\$15,197	\$18,050	\$26,600	\$25,000.00	\$25,000.00
Traffic Lines	\$25,882	\$24,725	\$28,793	\$19,500	\$23,984	\$30,000.00	\$30,000.00
Road Maintenance Supplies	\$15,818	\$6,492	\$5,697	\$20,829	\$11,597	\$20,000.00	\$70,000.00
Asphalt Products	\$27,465	\$16,649	\$20,847	\$43,171	\$47,352	\$35,000.00	\$35,000.00
Gravel and Sand	\$3,030	\$2,829	\$5,724	\$10,549	\$5,910	\$4,000.00	\$4,000.00
Street Signs	\$5,664	\$3,189	\$4,287	\$8,739	\$2,909	\$8,000.00	\$8,000.00
Shop Supplies	\$11,447	\$12,670	\$15,642	\$15,673	\$15,298	\$13,000.00	\$13,000.00
Supplies and Expenses	\$17,476	\$41,681	\$23,940	\$21,612	\$16,046	\$20,132.00	\$20,132.00
Heat and Fuel	\$6,194	\$27		\$0	\$0	\$10,000.00	\$10,000.00
Telephone	\$1,021	\$1,203	\$1,072	\$1,412	\$1,564	\$3,716.00	\$3,716.00
Electricity	\$7,889	\$10,640	\$10,463	\$9,815	\$10,066	\$12,905.00	\$12,905.00
Postage	\$121	\$97	\$138	\$123	\$129	\$250.00	\$250.00
Meal Allowance	\$4,160	\$1,870	\$2,570	\$4,112	\$4,116	\$3,000.00	\$3,000.00
Clothing	\$3,015	\$3,723	\$3,009	\$3,202	\$2,789	\$4,757.00	\$4,757.00
Park Expenses	\$30,806	\$50,290	\$270	\$0	\$0	\$0.00	
Cemetery Expenses	\$6,987	\$4,407	\$13,770	\$4,632	\$5,867	\$19,500.00	\$19,500.00
Advertising	\$0		\$671	\$0	\$238	\$1,000.00	\$1,000.00
Equipment Repairs	\$20,134	\$14,924	\$22,558	\$23,886	\$27,462	\$25,000.00	\$25,000.00
Vehicle Supply and Repair	\$20,940	\$21,956	\$25,276	\$21,959	\$29,452	\$20,000.00	\$20,000.00
Gasoline/Oil	\$47,638	\$35,214	\$32,082	\$41,569	\$43,061	\$39,000.00	\$39,000.00
Diesel Fuel	\$2,575		\$1,323	\$0	\$0	71	
Fields Applications			\$3,847	\$5,434	\$3,062	\$7,000.00	\$7,000.00
Fields Irrigation			\$2,123	\$1,506	\$700	\$1,000.00	\$1,000.00
Fields Miscellaneous Expenses			\$2,740	\$9,137	\$8,832	\$750.00	\$750.00
Fields Lighting	9		14-11-12	\$0	\$0	\$2,311.00	\$2,311.00
Fields Water	-		\$33,454	\$10,368	\$34,903	\$20,000.00	\$20,000.00
Water/Sewer	-		\$1,017	\$1,234	\$7,387	+	
Stormwater	i		4.10.11	¥ 1,=0 1	\$34,986	\$33,374.00	\$37,422.00
					175.1555	1400/01 1100	401,122.00
Total	\$336,844	\$319,716	\$325,054	\$334,545	\$412,623	\$415,695.00	\$472,243.00 \$0.00
0.4.7.4.118.4	0000 004	0004.005	1005 005	mo 10 100	00.40.770	Jaoss 050 55	
Sub-Total Highway	\$609,231	\$601,320	\$605,293	\$642,426	\$642,752	\$655,053.95	\$748,599.48 \$0.00

FY2021 FY2021

TOWN OF MILLIS FISCAL YEAR 2021 BUDGET

Form #3

STAFFING HISTORY

Department: Transfer Station 01/300

Department: Transfer Station 014	390					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Position	FTE	FTE	FTE	FTE	FTE	FTE
HEO/Laborer					0.40	0.40
SUBTOTAL/TOTAL					0.40	0.40

		FY2015 ACTUAL	FY2016 ACTUAL	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 ACTUAL	FY2020 TM ADOPTED	FY2021 FY2021 REQUESTS PROPOSED
TRANSFER STATIO	N 014390							
Personnel Services								
	Wages	\$20,611	\$20,836	\$21,095	\$21,623	\$18,862	\$18,789.37	\$20,350.27
	Wages Overtime	\$4,572	\$5,336	\$8,358	\$4,878	\$8,356	\$6,032.00	\$6,032.00
	Longevity	\$0	\$400	\$400	\$100	\$0	\$400.00	
	Stipends	\$0			\$0	\$0	\$960.00	\$1,065.00
	Total	\$25,183	\$26,572	\$29,853	\$26,601	\$27,218	\$26,181.37	\$27,447.27 \$0.00
Expenses								
Lxpenses	Recycling	\$2,555	\$3,443	\$3,182	\$2,930	\$8,615	\$5,000.00	\$7,000.00
	Contract Hauling	\$0			\$1,346	\$6,734	\$3,000.00	\$3,000.00
	Tipping Fees	\$33,455	\$30,506	\$28,815	\$29,059	\$28,402	\$30,600.00	\$30,600.00
	Pumping Services	\$158	,		\$0	\$0	\$500.00	\$500.00
	Supplies and Expenses	\$7,487	\$22,043	\$13,734	\$6,566	\$19,578	\$12,069.00	\$12,069.00
	Telephone	\$0			\$0	\$0	\$110.00	\$110.00
	Electricity	\$3,070	\$2,319	\$2,664	\$2,738	\$3,306	\$4,538.00	\$4,538.00
	Clothing	\$267		\$280	\$300	\$293	\$140.00	\$140.00
	Advertising	\$395	\$1,338	\$1,475	\$419	\$1,107	\$200.00	\$200.00
	Equipment Repairs	\$11,782	\$8,900	\$14,878	\$13,183	\$8,824	\$11,000.00	\$11,000.00
	Diesel Fuel	\$9,363	\$6,573	\$5,543	\$4,761	\$5,449	\$8,505.00	\$8,505.00
	Miscellaneous Expenses	\$1,200						
	Total	\$69,733	\$75,121	\$70,572	\$61,300	\$82,307	\$75,662.00	\$77,662.00 \$0.00
TOTAL BUDGET		\$94,916	\$101,694	\$100,425	\$87,901	\$109,526	\$101,843.37	\$105,109.27 \$0.00

DPW

FY2017

ACTUAL

FY2018

ACTUAL

\$416,319

FY2016

ACTUAL

\$242,161

FY2015

ACTUAL

\$431,736

TOTAL BUDGET

FY2019

ACTUAL

\$290,057

FY2020

TM ADOPTED

\$218,727.00

FY2021 FY2021

REQUESTS PROPOSED

\$225,649.00 \$0.00

SNOW & ICE 014230								
Personnel Services								
	Salaries Overtime	\$99,374	\$39,628	\$58,649	\$108,770	\$80,004	\$48,000.00	\$51,461.00
	Snow Stipend							\$3,461.00
Expenses								
•	Other Charges/Expenses	\$332,361	\$202,534	\$271,096	\$307,549	\$210,053	\$170,727.00	\$170,727.00
	Total	\$431,736	\$242,161	\$329,745	\$416,319	\$290,057	\$218,727.00	\$225,649.00 \$0.00
		· · ·						

\$329,745

DPW

		FY2015 ACTUAL	FY2016 ACTUAL	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 ACTUAL	FY2020 TM ADOPTED	FY2021 FY2021 REQUESTS PROPOSED
STREETLIGHTING	014240							
Expenses								
	Electricity Signals	\$2,674	\$2,835	\$3,915	\$4,840	\$4,661	\$10,000.00	\$10,000.00
	Street Lighting	\$34,524	\$38,769	\$34,190	\$22,035	\$22,539	\$20,850.00	\$20,850.00
	Repair Signals	\$6,457	\$6,538	\$9,222	\$12,907	\$12,769	\$10,000.00	\$13,000.00
TOTAL BUDGET		\$43,654	\$48,142	\$47,326	\$39,781	\$39,970	\$40,850.00	\$43,850.00 \$0.00



GENERAL FUND FY21 Budget Request:

Highway

Wages

Expenses

Transfer Station

Wages

Expenses

· Snow and Ice

Wages

Expenses

Street Lighting

Expenses

\$276,356.48 increase - \$36,997.53 (3-year SEIU 2-year AFCSME)

\$472,243.00 =\$748,599.48

\$ 27,447.27 increase - \$1,560.90 (2-year AFSCME)

\$ 77,662.00 =\$105,109.27

\$ 54,922.00 increase - \$3461.00 (snow Stipend)

\$170,727.00=\$225,649.00

\$ 43,850.00

Total: \$1,123,208.00



GENERAL FUND FY21 Budget Request:

Highway Salaries

Highway Expenses

Office Cleaning

Road Maintenance

• Stormwater

Highway Total

Transfer Station

Salaries

Transfer Station Expenses

Recycling

Transfer Station Total

Snow and Ice

Total Highway Increase:

Increase \$36,998.00

Increase \$ 2,500.00

Increase \$50,000.00 (form 6)

Increase \$ 4,048.00 (new Clyde Brown school)

Increase \$56,548.00

Increase \$ 1,560.90 decrease longevity \$400.00

\$ 1,160.90

Increase \$ 2,000.00

Increase \$ 3,161.00

Increase \$ 3,461.00

Increase \$ 99,768.00



Capital Project:

The Department of Public Works communication (2-way radio) system is operating on a low wave frequency. The company that has maintained the radio system has closed and the department can not find a new vendor to maintain the low frequency system. (form7)

State Bid Amount \$55,004.00 (water, Sewer, General)

Budget Request Above Level Service:

Request that line item supplies road maintenance be increased \$50,000.00 from \$20,000.00 to \$70,00.00. The increase would be used in conjunction with yearly chapter 90 funds. During the yearly approval process for chapter 90 expenditures the Director would report were the funds will be allocated. (form6)

CAPITAL PROJECT DETAIL SHEET

Project Title: DPW 2-Way Rac	dio Replace	ment						
Department: Department of P			1					
Description and Justification:				Category:				
The Department of Public Works commu wave frequency. The company that has a department can not find a new vendor to	nication (2-wa maintained the maintain the	y radios) syste e radio system low frequency	m is operating has closed and system.	on a low the		rease send a photo	o depicting the fi odepicting the first	he. Do
The department has not installed any rad radios are in need of repairs and or replace	lios in last 5 ne	ew vehicles and	d a number of t	he older			depictionate	REITH
The School Department has had the same already replaced the communication for the same already replaced the communication for the same already replaced the same already repla	their systems.					a Phot	as a seriotiv	
Please see the attached quote that I have communication systems and the quote is	from Com Tro under a state	onics they spec contract #1TT5	ialize in this ty	pe of		e send reques	ropit	
The funds will come as a three way split w					र	lease not c		
RECOMMENDED FINANCING								
	Source	Total		Estimated Expenditures by Fiscal Year				
	of Funds	Six -Year Cost	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
A. Feasibility Study								
B. Design								
C. Land Acquisition								
D. Construction								
E. Furnishings/Equipment	(6)(7)(8)		\$55,004					
F. Departmental Equipment			,					
G. Contingency								
H. Other								
TOTAL		\$55,004	\$55,004					
Source of Funds Legend								
(1) Operating Revenues	(3) State Ai	id	(5) EMS Rev	olving Fun	d Fees	(7) Sewer En	nternrice Fur	od Eggs
(2) Municipal GO Bonds	(4) Trust Fu		(6) Free Cash	_	a 1 000	(8) Water En		200 PA 200



Prepared By:

Kevin Jay

Date:

February 26, 2020

CyberComm Inc.

Prepared For:

Millis Highway Department

900 Main Street Millis, Ma 02054

Attention:

James McKay

BUDGETARY PROPOSAL ONLY / MA STATE ITT57 CONTRACT

MOTOROLA MOTOTRBO GPS DIGITAL SYSTEM

ITEM

QTY

DESCRIPTION

PRICE

\$989.00

EXTENDED

CYBER COMM INC. PROUDLY SERVICING TOWN OF MILLIS SCHOOL & PUBLIC SAFETY DEPARTMENTS.

MOTOROLA MOTOTRBO GPS DIGITAL SYSTEM

Motorola SLR8000 100 Watt Repeater

- Site Farm Street Water Tank

1	1
---	---

Motorola SLR8000 Repeater

\$8,204.00

8,204.00

1,978.00

- UHF Frequency
- Internal 100 Watt Amplifier
- 100% Continuous Duty
- Supports Two Simultaneous Voice Paths in Digital TDMA Mode.
- Internal Power Supply
- Five Year Warranty

SLR8000 Site Equipment

2	1	6db Gain Omni-directional Antenna	\$1,341.00	\$ 1,341.00
3	1	190' of 7/8"cable with connectors	\$1,240.00	\$ 1,240.00
4	3	Grounding kits (electrical protection)	\$45.00	\$ 135.00
5	1	Polyphaser (electrical protection)	\$110.00	\$ 110.00
6	2	Jumper Kits	\$75.00	\$ 150.00
7	1	Grounding Bar (electrical protection)	\$110.00	\$ 110.00

Motorola XPR7550 Portable Radio

2 Motorola XPR7550 Portable

- UHF Frequency
- 1000 Channels
- Antenna
- Colored Display
- GPS / Bluetooth
- Rapid Rate Charger
- Five Year Warranty

Motorola XPR5550 Control Station Radio

- Located at Town Hall Office, Water Street Garage & Millis Police Dispatch.

9	2	Malarata VDB 5550 O. I. LOL III. D. III		_	
,	2	Motorola XPR 5550 Control Station Radio - UHF Frequency	\$1,359.00	\$	2,718.00
		- 1000 Channel			
		- 25 -45 watts			
		 Operates in Analog or Digital Mode. Alphanumeric Display 			
		- Power Supply			
		- Desk Microphone			
		- Five Year Parts Warranty			
10	2	Magnet Mount Antenna	\$85.00	\$	170.00
		 Located at Water Street Garage & Town Hall 			
11	2	Desktop Extended Local Controller	\$840.00	s	1,680,00
		& Tone Remote Adapter		7	.,
		Material VDD5550 A VDD5050 ODC Mail Wall was			
		Motorola XPR5550 & XPR5350 GPS Mobile Radio - Service Vehicles			
		- Service Verilicies			
12	2	Motorola XPR 5550 GPS Mobile Radio	\$913.00	\$	1,826.00
		- UHF Frequency			
		- 1000 Channel - 25 -45 watts			
		- Operates in Analog or Digital Mode.			
		- Alphanumeric Colored Display			
		- 1/4 Wave Antenna			
		- Ignition Cable			
		- Five Year Parts Warranty			
13	26	Motorola XPR 5350 GPS Mobile Radio	\$874.00	\$	22,724.00
		- UHF Frequency			
		- 32 Channel - 25 -45 watts			
		- Operates in Analog or Digital Mode.			
		- Numeric Display			
		- 1/4 Wave Antenna			
		- Ignition Cable			
		- Five Year Parts Warranty			

NOTES:

- A) Pricing based upon equipment listed above.
- B) Town of Millis to provide power and grounding at site location.
- Budgetary Only Pricing, does not include GPS options.
- D) Equipment listed based upon frequency allocation.
- E) INCLUDED SERVICES:
 - Programming Services: \$25 / unit
 - Mobile Installation Services: \$175 /unit
 - Mobile Removal Existing Radios Services: \$125/unit
- F) Pricing does not include any promotions or trade in pricing.
- G) Municipal leasing & financing available.







XPR5550 GPS Mobile (Control Station & Supervisor)



SLR8000 Repeater

XPR7550 GPS Portable

XPR5350 GPS Mobile (Service Vehicles)

BUDGETARY PROPOSAL ONLY / MA STATE ITT57 CONTRACT MOTOROLA MOTOTRBO GPS DIGITAL SYSTEM

TOTAL:

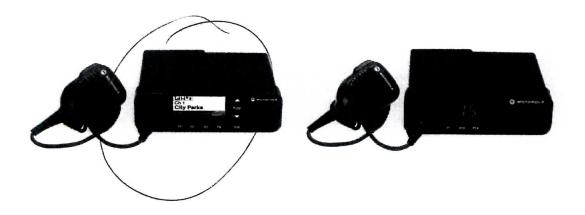
Please allow 3-4 weeks for delivery of equipment.

Equipment: \$ 42,386.00
Tax: EXEMPT
Labor/Install: \$ 11,793.00
Program: \$ 825.00
Shipping: \$ -

55,004.00

FINACING AND LEASING AVAILABLE UPON REQUEST. PROPOSAL VALID FOR 60 DAYS FROM ABOVE DATE.





YOUR MOBILE VOICE JUST GOT STRONGER

MOTOTRBO™ XPR™ 5000 SERIES DIGITAL TWO-WAY MOBILE RADIOS

From the delivery driver crisscrossing the city to the sanitation crew clearing streets, MOTOTRBO™ can transform your enterprise and make employee interactions smarter and safer. Our best-in-class audio and exceptional data capabilities empower people like never before.

Versatile and powerful, MOTOTRBO combines the best of two-way radio functionality with the latest digital technology. XPR 5000 Series radios integrate voice and data seamlessly, offer enhanced features that are easy to use, and deliver operations-critical advantages like integrated Bluetooth® and Intelligent Audio.

The XPR 5000 Series can remaster your workplace and the way people collaborate to help you achieve even greater efficiency.

AUDIO BEYOND EXPECTATIONS

When it comes to exceptional audio clarity, the quality of digital can't be denied. With the XPR 5000 Series mobiles, you get digital quality plus unique features to help your employees hear and speak clearly, wherever they work.

With Intelligent Audio, the radio volume automatically adjusts to compensate for background noise so workers don't have to adjust their radio volume to avoid missing a call in loud situations or disturbing others when they move into quiet places. Increased background noise suppression filters out unwanted external clamor — from road traffic to the roar of engines.

Bluetooth® audio, embedded right in the radio, provides voice communication with exceptional clarity — giving your people the freedom to move without wires. Also, IMPRES™ audio accessories enhance noise suppression and improve voice intelligibility for smarter audio than they've ever experienced before.

INDUSTRY-LEADING DATA

XPR 5000 Series radios feature integrated GPS that enables location tracking of mobile work teams and text messaging to enable communication when voice isn't feasible, and the large, full-color display operates in day or night mode, for easy viewing of contact lists, text messages and work order tickets even in bright sunlight. These radios also feature integrated Bluetooth®, enabling the radio to wirelessly interface with Bluetooth®-enabled devices such as barcode scanners and magnetic card readers to facilitate the collection of critical information in the field.

MOTOTRBO's Application Developer program offers customized data applications that allow you to adapt your radios to your business challenges. With the industry's largest developer program, data applications answer your objectives — from work order ticket management to telephony integration, and more.

HIGH-POWERED PERFORMANCE

Because MOTOTRBO uses TDMA digital technology, you get integrated voice and data, twice the calling capacity and clearer voice communications. Also, the smart IMPRES™ technology in our high-powered accessories enables easier communications — everywhere your people travel.

RICH FUNCTIONALITY

XPR 5000 Series radios offer plenty of features your business seeks — including enhanced call signaling, basic and enhanced privacy-scrambling, option board expandability, the transmit interrupt suite to prioritize critical communication the moment you need it and compatibility with SCADA solutions for utility and public service monitoring and alarms. Programmable button features appear on the display for easy viewing and quick access. And when workers can't be distracted, customizable voice announcement provides audible confirmation of channel and zone changes as well as programmable button features, eliminating the need to view the display.



EXPANDED CAPACITY AND COVERAGE

Your work crews are on the go — picking up loads, dropping off cargo, repairing roads or restoring power after a storm. That's why you need the far-reaching performance of MOTOTRBO.

IP Site Connect helps to dramatically improve customer service and productivity by using the Internet to extend coverage to create a wide area network, enhance single site coverage or link geographically dispersed locations. Capacity Plus single-site trunking expands capacity to over 1,000 users without adding new frequencies. Linked Capacity Plus leverages the high capacity of Capacity Plus, with the wide area coverage capabilities of IP Site Connect to keep your staff at up to 15 sites connected with an affordable wide area trunking solution. Other multi-site digital trunking solutions, such as Connect Plus, will be supported in a future release. So whether you want expanded coverage at a single site or across multiple ones, MOTOTRBO can be scaled to your needs.

MIGRATE AT YOUR OWN PACE

Keeping operations running smoothly during a change in communication systems is vital to business. It's easy to migrate to digital with XPR 5000 Series radios because they operate in analog and digital mode while the dynamic mixed mode repeater functionality streamlines automatic switching between analog and digital calls. So you can begin using MOTOTRBO radios and repeaters on your existing analog system, and when your time and budget allow, move to digital at your own pace.

DAY-IN, DAY-OUT DURABILITY

XPR 5000 Series mobile radios are backed by a two-year Standard Warranty, one-year Repair Service Advantage (U.S.)/Extended Warranty (Canada) and at least a one-year warranty for accessories.



XPR 5550/XPR 5350 SERIES SPECIFICATIONS

GENER/	AL SPECIFICA	ATIONS					
			XPR 5550			XPR 5350	
		VHF	UHF Band 1	UHF Band 2	VHF	UHF Band 1	UHF Band 2
Channel C	apacity	Up to 1,000	Up to 1,000	Up to 1,000	32	32	32
Typical RF	Low Power	1-25 W	1-25 W		1-25 W	1-25 W	
Output	High Power	25-45 W	25-40 W	1-40 W	25-45 W	25-40 W	1-40 W
Dimension	is (H x W x L)	2.1 x 6.	9 x 8.1 in (53.3 x 175.3 x 20	5.7 mm)	2.1 x 6.	9 x 8.1 in (53.3 x 175.3 x 20	5.7 mm)
Weight		3.9 lbs (1.8 kg)	3.9 lbs (1.8 kg)	3.9 lbs (1.8 kg)	3.9 lbs (1.8 kg)	3.9 lbs (1.8 kg)	3.9 lbs (1.8 kg)
	Standby	0.81 A max	0.81 A max	0.81 A max	0.81 A max	0.81 A max	0.81 A max
Current Drain	Rx @ Rated Audio	2 A max	2 A max	2 A max	2 A max	2 A max	2 A max
THE STREET	Transmit	1-25 W: 11.0 A max 25-45 W: 14.5 A max	1-25 W: 11.0 A max 25-40 W: 14.5 A max	1-40 W: 14.5 A max (11.0 A max < 25 W)	1-25 W: 11.0 A max 25-45 W: 14.5 A max	1-25 W: 11.0 A max 25-40 W: 14.5 A max	1-40 W: 14.5 A max (11.0 A max < 25 W)
		1-25 W: ABZ99FT3086	1-25 W: ABZ99FT4087	The state of the s	1-25 W: ABZ99FT3086	1-25 W: ABZ99FT4087	
FCC Description		25-45 W: ABZ99FT3087	25-40 W: ABZ99FT4088	1-40 W: ABZ99FT4085	25-45 W: ABZ99FT3087	25-40 W: ABZ99FT4088	1-40 W: ABZ99FT4085
C Description		1-25 W: 109AB- 99FT3086	1-25 W: 109AB- 99FT4087	1-40 W:	1-25 W: 109AB- 99FT3086	1-25 W: 109AB- 99FT4087	1-40 W:
		25-45 W: 109AB- 99FT3087	25-40 W: 109AB- 99FT4088	109AB-99FT4085	25-45 W: 109AB- 99FT3087	25-40 W: 109AB- 99FT4088	109AB-99FT4085

RECEIVER: XPR 55	50 & XPR 5350				
	VHF	UHF Band 1	UHF Band 2		
Frequencies	136-174 MHz	403-470 MHz	450-512 MHz		
Channel Spacing	12.5 kHz / 25 kHz*	12.5 kHz / 25 kHz*	12.5 kHz / 25 kHz*		
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm	± 0.5 ppm	± 0.5 ppm		
Analog Sensitivity (12dB SINAD)		0.3uV, 0.22uV (typical)		
Digital Sensitivity	5% BE	R @ 0.25uV (0.19uV t	ypical)		
Intermodulation (TIA603D)	78 dB	75 dB	75 dB		
Adjacent Channel Selectivity (TIA603D)	50 dB @ 12.5 kHz 80 dB @ 25 kHz*	50 dB @ 12.5 kHz 75 dB @ 25 kHz*	50 dB @ 12.5 kHz 75 dB @ 25 kHz*		
Spurious Rejection (TIA603D)	80 dB	75 dB	75 dB		
Rated Audio		rnal), 7.5 W (External 3 W (External - 4 ohm:			
Audio Distortion @ Rated Audio	3% (typical)	3% (typical)	3% (typical)		
Hum and Noise	-40 dB @	2 12.5 kHz/-45 dB @ :	25 kHz*		
Audio Response	TIA603D	TIA603D	TIA603D		
Conducted Spurious Emission (TIA603D)	-57dBm	-57dBm	-57dBm		

	VHF	UHF Band 1	UHF Band 2					
Frequencies	136-174 MHz	403-470 MHz	450-512 MHz					
Channel Spacing	12.5 kHz / 25 kHz*	12.5 kHz / 25 kHz*	12.5 kHz / 25 kHz¹					
Frequency Stability (-30°C, +60°C, +25°C Ref)	± 0.5 ppm	± 0.5 ppm	± 0.5 ppm					
Low Power Output	1-25 W							
High Power Output	25-45 W		1-40 W					
Modulation Limiting	± 2.5 kHz @ 12.5 kHz/± 5.0 kHz @ 25 kHz*							
FM Hum and Noise	-40 dB @ 12.5 kHz/-45 dB @ 25 kHz*							
Conducted/Radiated Emission	-36 dBm < 1 GHz/-30 dBm > 1 GHz							
Adjacent Channel Power	60 dB @ 12.5 kHz/70 dB @ 25 kHz*							
Audio Response	TIA603D	TIA603D	TIA603D					
Audio Distortion	3%	3%	3%					
FM Modulation	12.5 kHz: 11K0F3E / 25 kHz*: 16K0F3E							
	12.5 kHz Data: 7K60F1D & 7K60FXD							
4FSK Digital Modulation	12.5 kHz Voice: 7K60F1E & 7K60FXE							
	Combination of 12.5 kHz Voice & Data: 7K60F1W							
Digital Vocoder Type	AMBE+2™	AMBE+2™	AMBE+2™					
Digital Protocol	ETSI TS 102 361-1, -2, -3							

*25 or zilis NOT execlante in the USA. FCC normwoodbodg rules do not allow operation of this model on 25 kHz contrgication in fact 90 VHI, UHF inequences.



		810C		810D		810E		810F		810G
APPLICABLE MIL-STD	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES	METHOD	PROCEDURES
Low Pressure	500.1	1	500.2	11	500.3		500.4	II	500.5	ll ll
High Temperature	501.1	1, 11	501.2	I/A1,II/A1	501.3	I/A1,II/A1	501.4	I/Hot, II/Hot	501.5	I/A1, II
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II
Temperature Shock	503.1	-	503.2	I/A1/C3	503.3	I/A1/C3	503.4	1	503.5	I/C
Solar Radiation	505.1	ll .	505.2	l	505.3	1	505.4	1	505.5	I/A1
Rain	506.1	1, 11	506.2	1, 11	506.3	1, 11	506.4	1, 111	506.5	I, III
Humidity	507.1	II	507.2	11	507.3		507.4	-	507.5	II - Aggravated
Salt fog	509.1	-	509.2	-	509.3	-	509.4	-	509.5	-
Dust	510.1	L	510.2	I	510.3		510.4	ı	510.5	1
Vibration	514.2	VIII/F, Curve-W	514.3	1/10, 11/3	514.4	I/10, II/3	514.5	1/24	514.6	1/24
Shock	516.2	1, 11	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV, V, VI

GPS: XPR 5550 & XPR 5350					
Accuracy specs are for long-term 5 satellites visible at a nominal -1	tracking (95th percentile values > 30 dBm signal strength)				
TTFF (Time To First Fix) Cold Start	< 1 minute				
TTFF (Time To First Fix) Hot Start	< 10 seconds				
Horizontal Accuracy	< 5 meters				

BLUET00TH: XPR 5550 & XPR 5350				
Version	Supports Bluetooth® 2.1 + EDR Specification			
Profiles Supported	Bluetooth Headset Profile (HSP), Serial Port Profile (SPP), Motorola fast push-to-talk.			
Devices Supported	Radio supports 1 Bluetooth audio accessory and 1 Bluetooth data device simultaneously			
Range	Class 2, 10 meters			

ENVIRONMENTAL SPECIFICATIONS: XPR 5550 & XPR 5350					
Operating Temperature	-30° C / +60° C				
Storage Temperature	-40° C / +85° C				
Thermal Shock	Per MIL-STD				
Humidity	Per MIL-STD				
ESD	IEC 61000-4-2 Level 3				
Dust and Water Intrusion	IP54, MIL-STD				
Packaging test	MIL-STD 810C, D, E, F, and G				

Specifications subject to change without notice. All specifications shown are typical.

Partio meets applicable regulatory requirements. Version 1 07/11

For more information on how to strengthen your mobile voice, visit motorolasolutions.com/mototrbo

Motorola Solutions, Inc. 1301 East Algonquin Road Schaumburg, Illinois 60196, U.S.A. 800-367-2346 **motorolasolutions.com**

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2012 Motorola Solutions, Inc. All rights reserved. R3-1-2050

MOTO**TRBO** DIGITAL REMASTERED.





MOTOTRBO™ XPR™ 7000e SERIES

YOU'RE COMPLETELY CONNECTED

With this dynamic evolution of MOTOTRBO digital two-way radios, you're better connected, safer and more productive. The XPR 7000e Series is designed for the skilled professional who refuses to compromise. With high performance integrated voice and data, and advanced features for efficient operation, these next-generation radios deliver complete connectivity to your organization.

CONNECTED

The MOTOTRBO XPR 7000e Series is a family of DMR-standard digital radios that delivers operations-critical voice and data communications. Bluetooth® audio lets you talk without wires, integrated Wi-Fi® enables remote software updates, and indoor and outdoor location-tracking capabilities give you total visibility of your resources. With support for trunking as well as legacy analog technology, you can keep your organization connected as it grows.

SAFE

Safeguard your staff with responsive push-to-talk technology. The prominent orange emergency button on XPR 7000e Series radios summons help with one touch, using Transmit Interrupt to clear a channel when necessary. An integrated accelerometer senses if you've fallen, and can initiate a call for assistance. The radio is tested tough to military standards and is waterproof to IP68. It won't let you down.

PRODUCTIVE

Text messaging and Work Order Ticketing simplify complex communications, and data capabilities support advanced applications. Featuring a powerful audio amplifier, these radios deliver loud, clear speech, with industrial noise cancellation for better intelligibility. The latest energy technology delivers up to 29 hours of battery life for 3-shift working, and an improved receiver boosts range by up to 8%.



WHAT'S NEW IN THESE NEXT GENERATION RADIOS

- Integrated accelerometer
- Sherron
- · Indoor location tracking
- Integrated Wi-Fire
- Twee-the-air set (ware
- · Enhanced audio quality
- Improved exposulability
 Better hotsery life (up to
- · Letter range (iii) to
- Berter water proofing





	F	ull Keypad (FKP) Mod	del	No Keypad (NKP) Model			
Model Number	XPR	7550e	XPR 7580e	XPR	XPR 7380e		
Band	VHF	UHF	800/900	VHF	UHF	800/900	
GENERAL SPECIFICATIONS			THE STREET	MILE SEASON		の一般を対する	
Frequency	136-174 MHz	403-527 MHz	806-825 MHz, 851-870 MHz, 896-902 MHz, 935-941 MHz	136-174 MHz	403-527 MHz	806-825 MHz, 851 -870 MHz, 896-902 MHz, 935-941 MHz	
High Power Output	5 W	4 W	2.5 W	5 W	4 W	2.5 W	
Low Power Output	1 W	1 W 1 W 1 W		1 W	1 W	1 W	
Channel Spacing			12.5, 2	25* kHz			
Channel Capacity		1000		32			
Dimensions (H x W x D), Radio + Slim Battery	5.1 x	2.2 x 1.4 in (130 x 55 x 3	86 mm)	5.1 x 2.2 x 1.3 in (130 x 55 x 34 mm)			
Weight, Radio + Slim Battery		11 oz (315 g)		10 oz (290 g)			
Dimensions (H x W x D), Radio + High Capacity Battery	5.1 x	2.2 x 1.6 in (130 x 55 x 4	11 mm)	5.1 x 2.2 x 1.6 in (130 x 55 x 40 mm)			
Weight, Radio + High Capacity Battery		12 oz (347 g)			11 oz (322 g)		
FCC Description	AZ489FT7066	AZ489FT7065	AZ489FT7067	AZ489FT7066	AZ489FT7065	AZ489FT7067	
IC Description	109U-89FT7066	109U-89FT7065	109U-89FT7067	109U-89FT7066	109U-89FT7065	109U-89FT7067	
Digital / Analog Battery Life ¹ , Slim 2100 mAh Battery	20.0 / 15.0 hrs	19.0 / 14.5 hrs	19.0 / 15.5 hrs	20.0 / 15.0 hrs	19.0 / 14.5 hrs	19.0 / 15.5 hrs	
Digital / Analog Battery Life ¹ , High Capacity 3000 mAh Battery	29.0 / 22.0 hrs	28.0 / 21.5 hrs	28.0 / 23.0 hrs	29.0 / 22.0 hrs	28.0 / 21.5 hrs	28.0 / 23.0 hrs	
Power Supply (Nominal)			7.5	iν			



PRODUCT DATA SHEET | MOTOTRBO $^{\text{IM}}$ XPR $^{\text{IM}}$ 7000e SERIES DIGITAL TWO-WAY RADIOS

ALL MODELS

Channel Spacing	12.5, 25* kHz
4FSK Digital Modulation	12.5 kHz Data: 7K60F1D and 7K60FXD. 12.5 kHz Voice: 7K60F1E and 7K60FXE. Combination of 12.5 kHz Voice and Data 7K60F1W
Digital Protocol	ETSI TS 102 361**
Conducted/Radiated Emissions (TIA603D)	-36 dBm < 1GHz, -30 dBm > 1GHz
Adjacent Channel Power	60dB (12.5 kHz channel), 70dB (25* kHz channel)
Frequency Stability	± 0.5 ppm
RECEIVER SPECIFICATIONS	
Analog Sensitivity (12dB SINAD)	0.16 uV (0.22 uV for 800/900 band)
Digital Sensitivity (5% BER)	0.14 uV (0.19 uV for 800/900 band)
Intermodulation (TIA603D)	70 dB
Adjacent Channel Selectivity, (TIA603A)-1T	60 dB (12.5 kHz channel), 70 dB (25* kHz channel)
Adjacent Channel Selectivity, (TIA603D)-2T	45 dB (12.5 kHz channel), 70 dB (25* kHz channel)
Spurious Rejection (TIA603D)	70 dB
AUDIO SPECIFICATIONS	
Digital Vocoder Type	AMBE+2™
Audio Response	TIA603D
Rated Audio	0.5 W
Audio Distortion at Rated Audio	3%
Hum and Noise	-40 dB (12.5 kHz channel), -45 dB (25* kHz channel)
Conducted Spurious Emissions (TIA603D)	-57 dBm

V	l	Н	t	S
1		r.		

Typical battery life, 5/5/90 profile at maximum transmitter power with GNSS, Bluetcoth, Wi-Fi and Option Board applications disabled. Actual observed runtimes may vary.
 Specialized low-temperature battery required for operation below 14 °F (-10 °C).

Specifications are subject to change without notice. All specifications shown are typical values.

Version	4.0
~	4.0
Range	Class 2, 33 ft (10 m)
Supported Profiles	Bluetooth Headset Profile (HSP), Serial Po Profile (SPP), Motorola fast push-to-talk.
Simultaneous Connections	1 x audio accessory and 1 x data device
Permanent Discoverable Mode	Standard
GNSS SPECIFICATIONS	
Constellation Support	(GPS)
Time To First Fix, Cold Start	605
Time To First Fix, Hot Start	< 10 s
Horizontal Accuracy	< 16.5 ft (< 5 m)
WI-FI SPECIFICATIONS	
Standards Supported	IEEE 802.11b, 802.11g, 802.11n
Security Protocol Supported	WPA, WPA-2, WEP
Maximum Number of SSIDs	128 (64 for NKP Models)
ENVIRONMENTAL SPECIFICAT	TIONS
Operating Temperature ²	-22 °F to 140 °F (-30 °C to +60 °C)
Storage Temperature	-40 °F to 185 °F (-40 °C to +85 °C)
Thermal Shock	Per MIL-STD
Humidity	Per MIL-STD
Electrostatic Discharge	IEC 61000-4-2 Level 4
Dust and Water Intrusion	IEC 60529 - IP68, 6.6 ft (2 m) for 2 hrs
Salt Fog	5% NaCl for 8 hrs at 35 °C, 16 hrs standing
Packaging Test	MIL-STD 810D and E

HAZLOC CERTIFICATION

When properly equipped with Motorola UL-Approved battery, XPR 7000e Series radios are UL Approved to TIA-4950 for use in Hazardous Locations. Division 1, Class I, II, III, Groups C,D,E, F, G; Division 2, Class 1, Groups A,B,C,D, T3C. Tamb = -25 °C to +60 °C.

MANAGEMENT

Emergency Button

CONNECTION VHF Band, 5 W UHF Band, 4 W 800/900 Band, 2.5 W FKP Model: Full Keypad, Color Screen, 1000 Channels NKP Model: No Keypad or Screen, 32 Channels Analog and Digital Voice and Data Integrated Wi-Fi Canned Text Messaging Freeform Text Messaging (FKP)

Text to Speech Work Order Ticketing Indoor Location Tracking Event-Driven Location Update

Bluetooth Audio Bluetoth Data Voice Announcement Home Channel Reminder Option Board

Intelligent Audio IMPRES Audio

CUSTOMIZATION Wide Range of Accessories GCAI Accessory Connector Multi-Button PTT 6 Programmable Buttons (FKP) 4 Programmable Buttons (NKP) Day/Night Screen Mode (FKP)

Acoustic Feedback Suppressor Microphone Distortion Control User-Selectable Audio Profiles Trill Enhancement SINC+ Noise Cancellation

AUDIO

- Radio Management
- Over-the-Air Programming
- Over-the-Air Software Update
- IMPRES Energy
- **IMPRES** Battery Mgt
- Over-the-Air Battery Mgt

SAFETY

- · Integrated Accelerometer Man Down
- Lone Worker
- Basic and Enhanced Privacy
- Transmit Interrupt
- Digital Emergency
- **Emergency Search Tone**
- Remote Monitor
- Radio Disable / Enable
- Waterproof to IP68
- Rugged to MIL-STD 810
- HazLoc Certification

SYSTEMS

- · Dual Capacity Direct Mode
- Conventional
- IP Site Connect
- Capacity Plus Single/Multi-Site
- Capacity Max Connect Plus
- o Optional

	MIL-STD 8	310C	MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G	
	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE	METHOD	PROCEDURE
Low Pressure	500.1	1	500.2	II	500.3	II	500.4	П	500.5	ll ll
High Temp	501.1	1, 11	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot	501.5	I/A1, II/A1
Low Temp	502.1	1	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temp Shock	503.1	1	503.2	I/A1/C3	503.3	A1/C3	503.4	1	503.5	I-C
Solar Radiation	505.1	II	505.2	I/Hot-Dry	505.3	I/Hot-Dry	505.4	I/Hot-Dry	505.5	I-A1
Rain	506.1	1, 11	506.2	1, 11	506.3	1, 11	506.4	1, 111	506.5	1, 111
Humidity	507.1	11	507.2	II/Hot-Humid	507.3	II/Hot-Humid	507.4		507.5	II/Hot-Humid
Salt Fog	509.1	1	509.2	1	509.3	1	509.4	-	509.5	
Dust	510.1	1, 11	510.2	1, 11	510.3	1, 11	510.4	I, II	510.5	1, 11
Vibration	514.2	VIII/F, W, XI	514.3	1/10, 11/3	514.4	I/10, II/3	514.5	1/24, 11/5	514.6	1/24, 11/5
Shock	516.2	11	516.3	I, IV	516.4	I, IV	516.5	I, IV	516.6	I, IV

 ²⁵ kHz channels not available in USA.
 DMR Operation Mode | Tier II / III

LUETOOTH

Connect to your radio without wires, for extra comfort and safety. A full portfolio of Bluetooth headsets and earpieces is available.



REMOTE SPEAKER MICROPHONE

Improve usability with a Remote Speaker Microphone (RSM). Choose from standard, heavy duty and noisecancelling models, with or without secondary earpiece connector.



MART ENERGY

Motorola's patented IMPRES™ Energy technology gives you smart batteries to keep your radio powered for longer. Choose from a range of batteries, chargers, and management tools.



EARPIECES

For all-day comfort, choose from our range of earpieces. Lightweight or heavy duty, discreet or rugged, with or without built-in hearing protection.



ARRY SOLUTIONS

However you choose to wear or carry your radio, we have a solution for you. From leather cases to belts and belt clips to bags, straps and pouches.



HEADSETS

In a noisy workplace, you need to protect your workers' hearing. Whether it's heavy duty noise reduction or innovative temple transducer technology, our headsets can help.



SCREEN PROTECTORS

In ultra-harsh environments, your radio's screen can get scratched and abraded. Keep it clear and readable with these durable pre-cut screen protectors.



VIBRATING BELTCLIP

When it's unacceptable to miss calls in a noisy environment, equip your radios with a powerful vibrating belt clip for an extra physical alert.



For more details on XPR 7000e accessories, please download the MOTOTRBO Professional Accessories Catalog.

 $^{ o}$ o get connected with MOTOTRBO, please contact your local Motorola representative or visit motorolasolutions.com/MOTOTRBO

Motorola Solutions, Inc. 1301 East Algonquin Road Schaumburg, Illinois 60196, U.S.A. 800-367-2346 motorolasolutions.com

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. Wi-Fi is a registered trademark of the Wi-Fi Alliance®. All other trademarks are the property of their respective owners. ©2016 Motorola, Inc. All rights reserved. 05-2016

MOTO**TRBO**™ DIGITAL REMASTERED.



FISCAL YEAR 2021 BUDGET

Form #6

DEPARTMENT: Department of Public Works

Budget Request Above Level Service

Title:

Supplies Road Maintenance

Description of Request:

The Department of Public Works is requesting that the 0142252-540050 supplies road maintenance budget be increased \$50,000.00.

Detailed Cost Impact:

0142252-540050: Supplies Road Maintenance FY20 Budget \$20,000.00

0142252-540050: Supplies Road Maintenance FY21 Budget \$70,000.00

Justification for Request

The increase of \$50,000.00 would be used in conjunction with chapter 90 funds each year.

In the first year the \$50,000.00 will be used to pave 2 sections of Main Street,

- 1- Main Street from Plain Street to Park Road.
- 2- Main Street from Park Road to Exchange Street.

The requested areas have a section of newly paved road from the school project between them. The two sections would not be covered under chapter 90 funds they don't meet the minimal criteria for paving a roadway.

During the yearly approval process for chapter 90 expenditures the Director would report were the \$50,000.00 will be allocated for the upcoming fiscal year.

TOWN OF MILLIS FISCAL YEAR 2021 BUDGET

Form #3

STAFFING HISTORY

Department:	Water	6100051
--------------------	-------	---------

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Position	FTE	FTE	FTE	FTE	FTE	FTE
Director					0.41	0.41
Department Asst III					0.44	0.44
Department Asst II					0.15	0.15
General Foreman					0.42	0.42
Water & Sewer Tech					0.50	0.50
Mechanic					0.33	0.33
HEO/Laborer					0.50	0.50
HEO/Laborer					0.50	0.50
HEO/Laborer					0.50	0.50
HEO/Laborer					0.50	0.50
HEO/Laborer					0.33	0.33
SUBTOTAL/TOTAL					4.58	4.58

Personnel Services

Expenses

	FY2015 ACTUAL	FY2016 ACTUAL	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 ACTUAL	FY2020 TM ADOPTED	FY2021 REQUESTS	FY202 PROPOSEI
	ACTUAL	ACTUAL	ACTOAL	ACTUAL	ACTOAL	TWIADOLIED	REQUESTS	T NOT COL
Salary Department Head		\$39,236	\$40,699	\$42,817	\$48,967	\$51,446	\$54,259	
Salaries Clerical	\$28,820	\$29,013	\$29,583	\$29,715	\$30,026	\$30,410	\$33,033	
Salaries Clerical	\$1,804	\$1,168	\$2,918	\$1,996	\$1,954	\$3,000	\$3,000	
Wages		\$177,143	\$164,687	\$190,010	\$204,280	\$199,808	\$225,537	
DPW License Fee	\$1,305	\$1,305	\$5,770	\$7,665	\$7,626	\$0	\$220,007	
Wages Overtime		\$33,221	\$34,082	\$45,693	\$63,087	\$40,000	\$50,000	
		\$2,417	\$1,878	\$1,458	\$0	\$2,096	\$2,541	
Longevity Stipends	\$6,545	\$6,645	\$8,094	\$8,970	\$9,163	\$17,775	\$17,810	
Superios	\$0,545	\$0,045	\$6,094	\$0,970	\$9,103	\$17,770	\$17,010	
Total	\$302,492	\$290,147	\$287,710	\$328,323	\$365,102	\$344,535	\$386,178	\$
Testing Water	\$10,466	\$8,880	\$9,255	\$9,310	\$9,069	\$14,000	\$14,000	
Town Counsel				\$4,500	\$0			
Services Engineering	\$20,000	\$10,374	\$30,112	\$15,694	\$14,485	\$30,000	\$30,000	
Police Details	\$7,168	\$3,543	\$3,839	\$5,119	\$5,524	\$9,000	\$9,000	
Training		\$1,680	\$4,510	\$470	\$2,240	\$3,000	\$4,000	
Inspections	\$0	\$0	\$0	\$0	\$170	\$4,000	\$4,000	
Equipment Hired	\$52,232	\$37,173	\$20,620	\$28,785	\$38,883	\$33,000	\$33,000	
Supplies & Expenses	\$106,623	\$107,763	\$133,281	\$111,717	\$129,506	\$90,622	\$100,000	
Propane Gas	\$6,292	\$4,675	\$4,134	\$5,632	\$5,851	\$7,331	\$7,331	
Stormwater					\$3,744			
Water/Sewer			\$584	\$612	\$661			
Telephone	\$5,312	\$4,613	\$3,960	\$5,036	\$4,839	\$6,462	\$7,000	
Electricity		\$95,472	\$93,728	\$106,764	\$97,156	\$106,551	\$106,551	
Postage	\$3,706	\$1,867	\$2,367	\$1,948	\$2,683	\$4,450	\$4,450	
Clothing	\$2,656	\$2,111	\$2,589	\$2,986	\$3,917	\$3,075	\$4,000	
Advertising	\$494	\$1,817	\$1,455	\$557	\$1,068	\$2,000	\$2,000	
Membership	\$863	\$963	\$770	\$770	\$895	\$1,000	\$1,000	
Equipment	\$5,369	\$16,226	\$27,292	\$7,708	\$11,996	\$22,000	\$22,000	
Vehicle Supply/Repair	\$4,690	\$3,636	\$3,719	\$9,367	\$4,742	\$12,000	\$12,000	
Diesel Fuel	\$15,748	\$5,877	\$5,866	\$5,484	\$10,744	\$5,203	\$5,203	
Miscellaneous Expense	\$16,928	\$13,971	\$19,511	\$23,168	\$22,088	\$28,958	\$28,958	
Water LTD Principal	\$173,148	\$173,148	\$263,483	\$287,645	\$292,080	\$392,843	\$418,000	
Water STD Principal	\$47,800	\$47,033	\$8,500	\$50,000	\$0			
Water LTD Interest	\$69,859	\$63,570	\$85,690	\$91,581	\$83,902	\$186,132	\$174,189	
Water STD Interest	\$2,419	\$1,690	\$85	\$13,110	\$0	\$32,013	\$4,833	
Transfer to General		\$206,687	\$0		\$241,436	\$247,840	\$254,036	
Transfer to Capital	\$250,000				\$14,389			
7								
Total	\$894,189	\$812,770	\$725,350	\$787,962	\$1,002,070	\$1,241,479	\$1,245,551	\$



 FY21 Salaries 	\$ 386,178.00

FY21 Expenses \$1,245,551.00 FY21 Totals \$1,631,729.00

Water Salaries
 Increase \$ 41,643.00

Water Expenses

•	Training	Increase \$	1,000.00
---	----------	-------------	----------

• Supplies & Expenses Increase \$ 9,378.00

• Telephone Increase \$ 538.00

Clothing Increase \$ 925.00

Water LTD Principal
 Increase \$ 25,157.00

• Water LTD Interest Decrease \$11,943.00

Water STD Interest Decrease \$27,180.00

• Transfer to General Fund Increase \$ 6,196.00

Total Water Increase: Increase \$ 45,714.00



- The Millis Water Department services a population of 8,782 (2019 census and 2019 ASR).
- The Millis Water Department has 2975 accounts (2019 bill run).
- The Millis Water Department operates with 6 wells and 4 Treatment plants and can yield a daily flow of 4 MGD (million gallons per day).
- Capital Project:
- The Department is seeking to implement a proactive asset management and preventive maintenance program for the Farm Street and Walnut Street tanks over the next 15 years at a cost of \$1,193,615.00. (form 7 or 6)
- The Department is requesting that a Risk Resilience assessment be conducted at a cost of \$40,000.00. (form 7)
 - 1 Natural hazards and malevolent acts
- 2 Resilience of water facility infrastructure

3 – Monitoring practices

- 4 Financial systems
- 5 Chemical storage and handling
- 6 Operation and handling
- **The deadline for the assessment must be completed by June 30, 2021, if serving a population between 3,301 to 49,999.

CAPITAL PROJECT DETAIL SHEET

		CAPITAL PR	COJECT DE	TAIL SHEE	7 I			
Project Title: DPW Asset Mana	igement As	siment for the	Farm Street	and Walnu	t Street Tank	S		<u> </u>
Department: Department of Pu	ıblic Work	s Water		Category:				9
Description and Justification:								
Millis is seeking to implement a proactive with a single point tank professional for the	asset manage he purpose or	ement and preven maintaining the I	ntive maintenar Millis tank asse	nce program ts.			ag the file.	Do Do
The prescribed scope of work offers correct assessments. Through initial renovation elevel of service for safety, security, sanitar and local rules and AWWA guidelines. The tank in compliance and in best condition of tank professional. SUEZ provides risk mit efforts and helps reduce the overall life cy plan. Maintenance prevents failure and elemanage program follows the core principle sustainability of the assets for the communications.	ction of all de fforts in YEAF y, structure a e prescribed r yver 15 -20 ye igation throu /cle cost of the xtraordinary les of Asset M Inity today an	ficiencies identifie R 1, the tanks will and coatings in acc maintenance and s gars under agree gh proactive, prev e assets while esta costs. The tank main lanagement and had d tomorrow.	ed in the condit be brought up cordance with E service schedul ent with a sing rentive mainter ablishing a sour laintenance and elps establish	ion to best PA, OSHA e keeps the le point nance nd financial I asset	QV.	ase send a photo capital reduct	dedicting the file. designed as a separate file.	Ŋ.
RECOMMENDED FINANCING								
	Source	Total		Estim	nated Expenditu	res by Fiscal	Year	
	of	Six -Year	FY	FY		FY	FY	FY
	Funds	Cost	2021	2022	FY 2023	2024	2025	2026
A. Feasibility Study								
B. Design								
C. Land Acquisition								
D. Construction								
E. Furnishings/Equipment	8		\$199,921	\$199,921	\$199,921	\$199,921	\$147,517	\$81,976
F. Departmental Equipment								
G. Contingency								
H. Other								
TOTAL		\$1,029,177	\$199,921	\$199,921	\$199,921	\$199,921	\$147,517	\$81,97
	(3) State Ai		(5) EMS Rev	volving Fund	Fees	• •	nterprise Fund	

(6) Free Cash / Other

(8) Water Enterprise Fund Fees

(2) Municipal GO Bonds

(4) Trust Funds

Water Tank Inventory - Millis MA

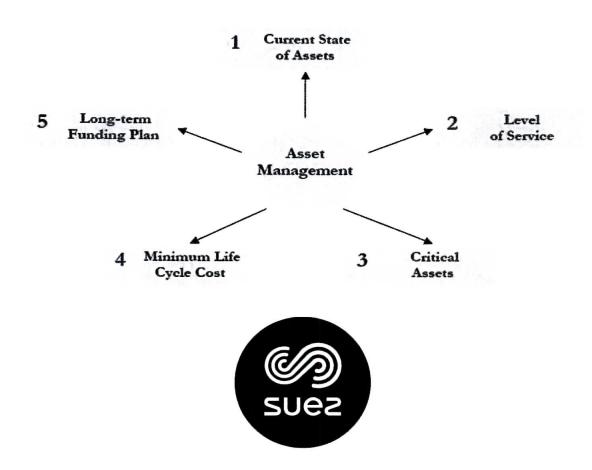
Tank Asset	Capacity	Material	Dimensions	Туре	Built	Last Inspected	Last Interior	Last Exterio
Farm St Tank	940KG	R.Steel	H 100'; D 40'	Standpipe	1927	10/15/2018	2015	2015
Walnut St Tank	550KG	W.Steel	H 67'; D 36'	Standpipe	1967	10/15/2018	2004	2004

TANK MAINTENANCE AND ASSET MANAGEMENT

The prescribed scope of work offers correction of all deficiencies identified in the condition assessment. Through initial renovation efforts, the tank will be brought up to best level of service for *safety, security, sanitary, structure and coatings* in accordance with <u>EPA, OSHA and local rules and AWWA</u> guidelines. The prescribed maintenance and service schedule keeps the tank in compliance and in best condition over 15 -20 years under agreement with a single point tank professional. SUEZ provides risk mitigation through proactive, preventive maintenance efforts and helps reduce the overall life cycle cost of the assets while establishing a sound financial plan. Maintenance prevents failure and extraordinary costs. The tank maintenance and asset manage program follows the core principles of **Asset Management** and helps establish sustainability of the assets for the community today and tomorrow.

EPA's Asset Management: A Best Practices Guide

Flow Chart: The Five Core Questions of Asset Management Framework



Tank Inventory Scope of Work - Millis MA



Farm St 940KG Standpipe SCOPE OF WORK - YEAR 1 & 5 (Upfront Renovation Cost: \$360,091)

Safet

- Replace tombstone style roof hatch on roof that's not in compliance of current sanitary standards as the neck is not tall enough, w/ a 30" square hinged lid hatch
- · Replace several retention bolts and assembly on the access ladder. (YEAR 1)
- Replace shell access ladder tube notched safety climb w/ a flexible cable type system. (YEAR 1)

Sanitary

- Install PAX mixer (eliminate stratification and prevent ice damage). (YEAR 1)
- Routine chemical cleaning every 5 years. (water quality management and coating protection)

Structure

• Caulk around the inside roof perimeter once delaminated coatings have been removed. (YEAR 1)

Coating Renovations & Maintenance (2015 coatings)

- Exterior Maintenance: Routine pressure washing of exterior surfaces in Year 1 and every 5 years.
- Exterior Maintenance: Pressure wash, localized hand and/or power tool prep, spot prime, 1-coat overcoat every 10 years. Adhesion is good.
- Interior: Brush blast SP7 to complete interior. Special attention to blast off any blistered area. Apply 2 coats of a high build epoxy. Top coat 8ft out on interior rivets & seams from where seepage leaks are visible along the exterior w/ TNEMEC 264 Elastoshield (CIM material) on riveted & seam areas. (YEAR 1-5)
- Interior Maintenance: Routine chemical cleaning every 5 years.
- Interior Maintenance: Rig & touchup interior coatings as needed w/ 100% solids epoxy & SP11 power tool to bare metal spot prep during washout years.

Walnut St 550KG Standpipe SCOPE OF WORK - YEAR 1 (Upfront Renovation Cost: \$217,405)

Safety

• Relocate the antenna mounted to the top of the safety climb on the access ladder to the roof edge handrail as this is against OSHA regulations. The coax for this antenna should be moved to the ladder side rail by the conduit.

Sanitary

- Replace old style vent with new modern technology pallet frost and insect proof vent. (YEAR 1)
- Install PAX mixer (eliminate stratification and prevent ice damage). (YEAR 1)
- Routine chemical cleaning every 5 years. (water quality management and coating protection)

Coating Renovations and Maintenance (2004 coatings, 15 years old)

- Exterior: Pressure wash, localized hand and/or power tool prep, spot prime, overcoat (YEAR 1/ASAP) ADHESION IS FAIR
- Exterior Maintenance: Routine pressure washing of exterior surfaces every 5 years. Overcoat again in 10.
- Interior: Chemically clean tank interior (floor and sidewalls) to remove Biofilm and staining and better assess coatings, rig & touchup as needed w/ 100% solids epoxy & SP11 power tool to bare metal spot prep. Include weir box interior. (YEAR 1)
- · Interior Maintenance: Routine chemical cleaning every 5 years.
- Interior Maintenance: Rig & touchup interior coatings as needed w/ 100% solids epoxy & SP11 power tool to bare metal spot prep during washout years.
- Vault Pipes: SP6 blast all piping & valves in the vault including the vault hatch lid & neck, coat w/ 2 coat epoxy, hatch neck & lid top coat w/ acrylic polyurethane (YEAR 1)

All renovation work to be performed in YEAR 1 of agreement (2020)

EXPERIENCE, SAFETY, QUALITY, & SERVICE

SUEZ has 600+ employees, 35+ NACE inspectors, 30+ service crews, 100+ in-house paint crews, 60+ SSPC-3 certified lead supervisors, 40+ welders, and 40+ Water System Consultants across the United States. SUEZ performs over 6000 tank inspections and 1000+ tank renovations and 100+ lead abatements annually.

All work, surface preparations, and coatings applied are completed in accordance with:

- -Manufacturer's recommendations
- -OSHA (Occupational Safety & Health Administration) regulations
- -SSPC (Society of Protective Coatings) standards
- -AWWA D100 & AWWA D102 specifications
- -ANSI/NSF Standard 61 requirements

All work will be completed in adherence with all federal and state OSHA, NSF, EPA, and AWWA standards, as well as all State of Vermont rules and regulations pertaining to potable water storage tanks and safe drinking water.

Additionally, Advanced Solutions division of SUEZ North America proudly holds the ISO 9001:2015 certificate from Bureau Veritas. This certificate affirms the company's operation and quality management systems adhere to the requirements as set forth by the International Organization for Standardization (ISO 9001:2015).

We work in a dangerous environment and recognize safety is critical to our success and to the well-being of our employees. At SUEZ, safety is the top priority for our management team.

All employees climbing and working on any tanks are required to both attend our 40-hour annual training program and pass thorough examinations on the following topics:

- Confined Space
- CPR Techniques
- Electrical Safety
- Fall Protection
- First Aid
- Flammable Liquids
- Hazard Communication
- Lead Exposure
- Noise Protection
- Radio Frequency Safety
- Respiratory Protection
- Vehicle & Equipment Safety
- Toxic Metal Health Hazards Working over Water



The SUEZ Safety Program is a 300+ page document is available upon request. SUEZ Experience Modification Rate (EMR) letter with 5 years of EMR below .75 available upon request.

References, reference letters and video testimonials in the United States and New England are available upon request.

Maintenance Schedule of Services - Millis MA Tank Inventory



YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Major Upfront and Future Renovations	PW Exterior & Remedial Repairs, Interior SP7 Renovation, Minor Repairs, Mixer					PW Exterior, Chemical Clean Interior, Touchups				PW & Overcoat Exterior, Chemical Clean Interior, Interior Touchups					PW Exterior, Chemica Clean Interior, Touchups
Annual Inspections	CC WASHOUT	VISUAL	ROV	VISUAL	ROV	CC WASHOUT	VISUAL	ROV	VISUAL	CC WASHOUT	VISUAL	ROV	VISUAL	ROV	CC WASHOUT
Ongoing Services	CLEANING, T	OUCHUP	& COA	TING PRO	TECTION, EMERGENCY S	SERVICES, MAINTAIN COM	PLIANCE	OR SAFE	TY & SEC	URITY, PRESERVE STRU	CTURE, R	ISK MIT	IGATION	, CONS	ULTATION

C- YEST - A			W	/alnut	St 550KG Tank	Prescribed Tank R	enovatio	n and I	Mainte	nance Plan	A Partie	59			
YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Major Upfront and Future Renovations	PW & <u>Overcoat</u> Exterior, Interior Chemical Clean & Remedial Repairs, Mixer, Minor Repairs				PW Exterior, Chemical Clean Interior, Touchup					PW & <u>Overcoat</u> Exterior, Chemical Clean Interior					PW Exterior, Chemical Clean Interior, Touchup
Annual Inspections	CC WASHOUT	VISUAL	ROV	VISUAL	CC WASHOUT	VISUAL	ROV	VISUAL	ROV	CC WASHOUT	VISUAL	ROV	VISUAL	ROV	CC WASHOUT
Ongoing Services	CLEANING, T	OUCHUP	& COA	TING PRO	TECTION, EMERGENCY S	ERVICES, MAINTAIN CO	MPLIANCE	FOR SAFE	TY & SEC	CURITY, PRESERVE STRU	CTURE, R	ISK MIT	IGATION	, cons	ULTATION

SERVICES



clean & paint

cleaning only

visual inspections

ROV inspections

chemical cleaning with inspections

ROUTINE MAINTENANCE, COATING PROTECTION AND INSPECTION SERVICES

- a.) Annual inspections for safety, security, sanitary, structure and coatings management.
- b.) Power wash exterior surfaces every five (5) years.
- NSF approved chemical cleaning of interior floor and sidewalls every (5) years.
- Permits for inspections and renovation work as required.
- e.) Overcoat exterior every 10 years or when necessary to preserve coatings.
- f.) 20 year coating management and protection plan.

- g.) Protection and correction of any coating failure or sanitary deficiencies.
- h.) Maintain tank in good working order & sanitary condition so tank does not depreciate.
- i.) Maintain the tank in safe, secure, sanitary and aesthetically appealing condition.
- j.) Professional maintenance provider is responsible for all aspects of tank repair.
- k.) Shift risk and responsibility including repairs due to emergencies, leaks or vandalism.
- I.) Professional tank consultation.

Financial Plan - Millis MA



BUDGETARY

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Tank Asset	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
		\$123,944			\$123,944										
Walnut St 550KG Tank	\$ 75,977	\$ 75,977	\$ 75,977	\$ 75,977	\$ 23,573	\$24,407	\$25,271	\$26,165	\$27,092	\$28,051	\$23,159	\$23,979	\$24,828	\$25,707	\$26,617
Annual Totals	\$199,921	\$199,921	\$199,921	\$199,921	\$147,517	\$81,976	\$84,878	\$87,882	\$90,993	\$94,214	\$72,526	\$75,094	\$77,752	\$80,504	\$83,354

Cost to Customers	Based on an estimated 2470 connections the cost of maintenance for the two tanks per customer.
-------------------	--

COSt to dubtoille	 	 			 			 	•					 _	_		
Annually	\$ 80.94	\$ 80.94	\$ 80.94	\$ 80.94	\$ 59.72	\$ 33.19	\$ 34.36	\$ 35.58	\$	36.84	\$ 38.14	\$ 29.36	\$ 30.40	\$ 31.48	\$	32.59	\$ 33.75
Quarterly	\$ 20.23	\$ 20.23	\$ 20.23	\$ 20.23	\$ 14.93	\$ 8.30	\$ 8.59	\$ 8.89	\$	9.21	\$ 9.54	\$ 7.34	\$ 7.60	\$ 7.87	\$	8.15	\$ 8.44
Monthly	\$ 6.74	\$ 6.74	\$ 6.74	\$ 6.74	\$ 4.98	\$ 2.77	\$ 2.86	\$ 2.96	\$	3.07	\$ 3.18	\$ 2.45	\$ 2.53	\$ 2.62	\$	2.72	\$ 2.81

FINANCIAL PLANNING

A key component of asset management is financial planning. SUEZ works with communities to help establish a payment structure to take care of the current needs of a tank asset and establishes flat, known maintenance fees that become part of the annual budget. SUEZ has the flexibility to work with a community and work within budget constraints and limitations. We offer assistance and consultation how to implement a plan so that it is affordable while reducing the overall life cycle costs of the assets. Proactive, preventive maintenance saves money in the long run.

1,193,615



Asset Management: A Best Practices Guide

	Introduction
Purpose	 This guide will help you understand: What asset management means. The benefits of asset management. Best practices in asset management. How to implement an asset management program.
Target Audience	This guide is intended for owners, managers, and operators of water systems, local officials, technical assistance providers, and state personnel.

Asset Management

Asset management is maintaining a desired level of service for what you want your assets to provide at the lowest life cycle cost. Lowest life cycle cost refers to the best appropriate cost for rehabilitating, repairing or replacing an asset. Asset management is implemented through an asset management program and typically includes a written asset management plan.

Challenges faced by Water Systems

- Determining the best (or optimal) time to rehabilitate/repair/replace aging
- Increasing demand for services.
- Overcoming resistance to rate increases.
- Diminishing resources.
- Rising service expectations of customers.
- Increasingly stringent regulatory requirements.
- Responding to emergencies as a result of asset failures.
- Protecting assets.

Benefits of Asset Management

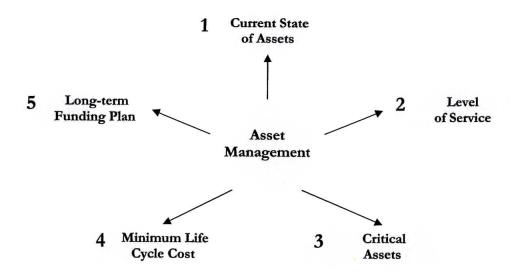
- Prolonging asset life and aiding in rehabilitate/repair/replacement decisions through efficient and focused operations and maintenance.
- Meeting consumer demands with a focus on system sustainability.
- Setting rates based on sound operational and financial planning.
- Budgeting focused on activities critical to sustained performance.
- Meeting service expectations and regulatory requirements.
- Improving response to emergencies.
- Improving security and safety of assets.

Implementing Asset Management: Five Core Questions Framework

A good starting point for any size water system is the five core questions framework for asset management. This framework walks you through all of the major activities associated with asset management and can be implemented at the level of sophistication reasonable for a given system. These five core framework questions provide the foundation for many asset management best practices. Several asset management best practices are listed for each core question on the following pages. Keep in mind that these best practices are constantly being improved upon.



Flow Chart: The Five Core Questions of Asset Management Framework



This flow chart shows the relationships and dependencies between each core framework question.

1. What is the current state of my system's assets?

The first step in managing your assets is knowing their current state. Because some of this information may be difficult to find, you should use estimates when necessary. Over time, as assets are rehabilitated, repaired or replaced, your inventory will become more accurate.

You should ask:

- What do I own?
- Where is it?
- What is its condition?
- What is its useful life?
- What is its value?

Best practices include:

- Preparing an asset inventory and system map.
- Developing a condition assessment and rating system.
- Assessing remaining useful life by consulting projected-useful-life tables or decay curves.
- Determining asset values and replacement costs.

2. What is my required "sustainable" level of service?

Knowing your required "sustainable" level of service will help you implement an asset management program and communicate to stakeholders what you are doing. Quality, quantity, reliability, and environmental standards are elements that can define level of service and associated system performance goals, both short- and long-term. You can use information about customer demand, data from utility commissions or boards, and information from other stakeholders to develop your level of service requirements. Your level of service requirements can be updated to account for changes due to growth, regulatory requirements, and technology improvements.

You should ask:

- What level of service do my stakeholders and customers demand?
- What do the regulators require?
- What is my actual performance?
- What are the physical capabilities of my assets?

Best practices include:

- Analyzing current and anticipated customer demand and satisfaction with the system.
- Understanding current and anticipated regulatory requirements.
- Writing and communicating to the public a level of service "agreement" that describes your system's performance targets.
- Using level of service standards to track system performance over time.

3. Which assets are critical to sustained performance?

Because assets fail, how you manage the consequences of failure is vital. Not every asset presents the same failure risk, or is equally critical to your water system's operations. Therefore, it is important to know which assets are required to sustain your water system's performance. Critical assets are those you decide have a high risk of failing (old, poor condition, etc.) and major consequences if they do fail (major expense, system failure, safety concerns, etc.). You can decide how critical each asset is and rank them accordingly. Many water systems may have already accomplished this type of analysis in vulnerability assessments.

You should ask:

- How can assets fail?
- How do assets fail?
- What are the likelihoods (probabilities) and consequences of asset failure?
- What does it cost to repair the asset?
- What are the other costs (social, environmental, etc.) that are associated with asset failure?

Best practices include:

- Listing assets according to how critical they are to system operations.
- Conducting a failure analysis (root cause analysis, failure mode analysis).
- Determining the probability of failure and listing assets by failure type.
- Analyzing failure risk and consequences.
- Using asset decay curves.
- Reviewing and updating your system's vulnerability assessment (if your system has one).

4. What are my minimum life cycle costs?

Operations and maintenance (O&M), personnel, and the capital budget account for an estimated 85 percent of a typical water system's expenses. Asset management enables a system to determine the lowest cost options for providing the highest level of service over time. You want to optimize the work O&M crews are doing, where they are doing it, and why. An asset management program helps make risk-based decisions by choosing the right project, at the right time, for the right reason.

You should ask:

- What alternative strategies exist for managing O&M, personnel, and capital budget accounts?
- What strategies are the most feasible for my organization?
- What are the costs of rehabilitation, repair, and replacement for critical assets?

Best practices include:

- Moving from reactive maintenance to predictive maintenance.
- · Knowing the costs and benefits of rehabilitation versus replacement.
- Looking at lifecycle costs, especially for critical assets.
- Deploying resources based on asset conditions.
- Analyzing the causes of asset failure to develop specific response plans.

5. What is my best long-term funding strategy?

Sound financial decisions and developing an effective long-term funding strategy are critical to the implementation of an asset management program. Knowing the full economic costs and revenues generated by your water system will enable you to determine your system's financial forecast. Your system's financial forecast can then help you decide what changes need to be made to your system's long-term funding strategy.

You should ask:

- Do we have enough funding to maintain our assets for our required level of service?
- Is our rate structure sustainable for our system's long-term needs?

Some strategies to consider:

- Revising the rate structure.
- Funding a dedicated reserve from current revenues (i.e., creating an asset annuity).
- Financing asset rehabilitation, repair, and replacement through borrowing or other financial assistance.

Implementing Asset Management: Follow-up and Continuing Steps

The five core questions framework for asset management is the starting point for asset management. Beyond planning, asset management should be implemented to achieve continual improvements through a series of "plan, do, check, act" steps.

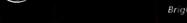
- Plan: Five core questions framework (short-term), revise asset management plan (long-term).
- Do: Implement asset management program.
- Check: Evaluate progress, changing factors and new best practices.
- Act: Take action based on review results.

For additional information: Call the Safe Drinking Water Hotline at 1-800-426-4791, visit the EPA Web site at http://www.epa.gov/safewater/smallsystems or contact your state drinking water representative.

CAPITAL PROJECT DETAIL SHEET

Project Title: DPW Risk and R	Resilience A	ssessment						
Department: Department of P	ublic Work	s Water		Category:				1
Description and Justification:								_
The deapartment requestes that a Risk ar	nd Resilience	assessment be	conducted In F	Y21.			ting the	ie. Do
When completed the Emergency Respons		(AT-)	22.				depict arate	EHIL
Both are new requirements for communi	ty Drinking W	ater Utilities.				0	or ser this	
(please see the attached hand-out)					Ŕ	lease send a photographic least send a photographic lease send a photo	o depeting the fi sas a separate fi say it in to this t	
RECOMMENDED FINANCING								
	Source	Total		Estim	ated Expend	itures by Fisca	l Year	
	of Funds	Six -Year Cost	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
A. Feasibility Study								
B. Design								
C. Land Acquisition								
D. Construction								
E. Furnishings/Equipment								
F. Departmental Equipment								
G. Contingency								
H. Other (engineering services)	8	\$40,000	\$40,000					
TOTAL		\$40,000	\$40,000					
Source of Funds Legend								
(1) Operating Revenues(2) Municipal GO Bonds	(3) State A (4) Trust F		(5) EMS Re ² (6) Free Cas	_	d Fees	(7) Sewer E (8) Water E	nterprise Fu nterprise Fu	The second secon





KLEINFELDER

CHANGES ARE COMING

New Requirements for Community Drinking Water Utilities

Section 2013 of America's Water Infrastructure Act of 2018 (AWIA), signed into law in October of last year, requires that community water systems serving more than 3,300 people complete a **Risk and Resilience Assessment** and develop an **Emergency Response Plan**. Kleinfelder's Water Team has the training and expertise to help water utilities complete these new AWIA requirements.



The Risk and Resilience Assessment must consider:

- Natural hazards and malevolent acts
- Resilience of water facility infrastructure (including pipes, physical barriers, water sources and collection, treatment, storage and distribution, and electronic, computer and other automated systems)
- Monitoring practices
- Financial systems
- · Chemical storage and handling
- Operation and maintenance

Communities must certify the completion of the Risk and Resilience Assessment by the following deadline:

- If serving ≥100,000 people: March 31, 2020
- If serving 50,000 to 99,999 people: December 31, 2020
- If serving 3,301 to 49,999 people: June 30, 2021

Within six months of the recertification for the **Risk and Resilience Assessment**, communities must certify they have reviewed, or updated, the Emergency Response Plan to include:

- Strategies and resources to improve resilience, including physical security and cybersecurity.
- Plans and procedures for responding to a natural hazard or malevolent act that threatens safe drinking water.
- Actions and equipment to lessen the impact of a malevolent act or natural hazard, including alternative water sources, relocating intakes and flood protection barriers.
- Strategies to detect malevolent acts or natural hazards that threaten the system.



For guidance, questions and more information, contact Kirsten Ryan, Northeast Drinking Water Practice Lead: krvan@kleinfelder.com, 617-498-4778.

EPA has developed tools and resources to help communities meet the AWIA guidelines. Click here for EPA's AWIA fact sheet.

TOWN OF MILLIS Form #3 **FISCAL YEAR 2021 BUDGET STAFFING HISTORY** Department: Sewer 60000051 FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 **Position** FTE FTE FTE FTE FTE FTE Director 0.24 0.24 Department Asst III 0.32 0.32 Department Asst II 0.15 0.15 General Foreman 0.24 0.24 Water & Sewer Tech 0.50 0.50 Mehanic 0.33 0.33 HEO/Laborer 0.50 0.50 HEO/Laborer 0.50 0.50 HEO/Laborer 0.50 0.50 HEO/Laborer 0.33 0.33

SUBTOTAL/TOTAL

3.61

3.61

Sewer Enterprise 6000

		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2021
ENTERDRO	_	ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	TM ADOPTED	REQUESTS	PROPOSED
SEWER ENTERPRIS	<u> </u>								
Personnel Services	<u> </u>								
	Salary Department Head		\$22,968	\$23,824	\$25,064	\$28,664	\$30,115	\$31,761	
	Salaries Clerical	\$22,601	\$22,771	\$23,377	\$22,398	\$23,272	\$23,667	\$25,731	
	Salaries Clerical Overtime	\$1,388	\$733	\$1,436	\$1,305	\$1,460	\$1,000	\$1,000	
	Wages	\$174,266	\$140,791	\$137,118	\$158,982	\$168,798	\$164,148	\$182,074	
	Wages Overtime	\$12,611	\$12,306	\$11,445	\$12,762	\$13,350	\$15,392	\$15,392	
	Longevity	\$206	\$1,550	\$1,280	\$832	\$750	\$1,252	\$2,121	
	Stipends	\$6,545	\$6,645	\$7,694	\$8,220	\$9,163	\$8,070	\$8,070	
	Total	\$217,617	\$207,764	\$206,175	\$229,563	\$245,457	\$243,644	\$266,150	
penses									
periodo	Town Counsel				\$0	\$0			
	Services Engineering	\$0	\$3,025	\$945	\$14,686	\$11,011	\$24,000	\$24,000	
	Maintenance Contract	\$0	\$0	\$0	\$0	\$3,583	\$12,000	\$12,000	
	Police Details	\$1,016	\$551	\$0	\$0	\$0	\$4,000	\$4,000	
	Sewer Cleaning	\$490	\$0	\$0	\$0	\$0	\$10,175	\$10,175	
	EQUIPMENT HIRED	\$3,592	\$0	\$0	\$3,000	\$0			
	Supplies & Expenses	\$55,277	\$23,233	\$31,410	\$36,658	\$19,419	\$24,251	\$24,251	
	Stormwater					\$1,085			
	Water/Sewer	\$0	\$0	\$584	\$612	\$661			
	Telephone	\$2,985	\$3,035	\$2,253	\$2,996	\$3,316	\$3,569	\$4,000	
	Electricity	\$16,086	\$17,384	\$15,727	\$18,933	\$20,608	\$21,850	\$21,850	
	Postage	\$121	\$1,867	\$1,873	\$1,948	\$1,934	\$2,000	\$2,000	
	Clothing	\$2,193	\$1,920	\$2,120	\$2,349	\$2,813	\$3,075	\$3,075	
	Equipment	\$0	\$0	\$0	\$6,999	\$995	\$3,741	\$3,741	
	Equipment Repairs & Maintenance	\$5,954	\$27,193	\$9,002	\$1,608	\$1,629	\$13,620	\$13,620	DEVELOP L
	Diesel Fuel	\$0	\$0	\$4,028	\$0	\$323	\$2,000	\$2,000	NAME OF THE OWNER, OWNE
	CRPCD O&M Costs	\$246,570	\$276,390	\$207,420	\$247,728	\$312,300	\$285,000	\$309,800	
	CRPCD Assessment	\$104,090	\$190,480	\$250,560	\$228,279	\$241,880	\$240,000	\$200,700	
	Sewer LTD Principal	\$235,000	\$235,000	\$230,000	\$244,000	\$195,000	\$253,290	\$240,000	
	Sewer STD Principal	\$16,334	\$66,645	\$12,678	\$12,677	\$0	, , , , , , , , , , , , , , , , , , , ,		
	Sewer LTD Interest	\$67,648	\$59,988	\$64,614	\$158	\$61,075	\$68,140	\$51,975	
	Sewer STD Interest	\$163	\$4,229	\$190	\$67,465	\$0	\$30,110	\$4,833	
	Miscellaneous Expenses	\$0	\$0	\$0	\$0			V-1,000	
	Transfer to Capital	\$100,000	\$0	\$0	\$0	\$183,691			
	Transfer to General Fund	Ψ100,000	\$157,568	\$165,447	\$173,719	\$197,539	\$202,778	\$207,847	
	Total	\$857,519	\$1,068,509	\$998,851	\$1,063,816	\$1,258,862	\$1,173,489	\$1,139,867	
	_								
	TOTAL BUDGET	\$1,282,753	\$1,314,332	\$1,335,932	\$1,322,882	\$1,504,318	\$1,417,133	\$1,406,017	



Sewer Enterprise Fund FY21 Budget:

•	FY21 Salaries	\$ 266,150.00
•	FY21 Expenses	<u>\$1,139,867.00</u>
	FY21 Totals	\$1,406,017.00

•	Sewer Salaries	Increase \$ 22,506.00
---	----------------	-----------------------

Sewer Expenses

ev	ver expenses	
•	Telephone	Increase \$ 431.00
•	CRPCD O&M Costs	Increase \$24,800.00
•	CRPCD Assessment	Decrease \$39,300.00
•	Sewer LTD Principal	Decrease \$13,290.00
•	Sewer LTD Interest	Decrease \$16,165.00
•	Sewer STD Interest	Increase \$ 4,833.00
•	Transfer to General Fund	Increase \$ 5,069.00
	Total Sewer Increase:	Decrease \$11,116.00



- The Millis Sewer Department services a population of 8,782 (2019 census and 2019 ASR).
- The Millis Sewer Department has 1,404 accounts (2019 bill run).
- The Millis Sewer Department operates with 4 sewer lift stations and 3 offsite metering stations.
- The Millis Sewer Department is a customer of the Charles River Pollution Control District (CRPCD) and is
 permitted to discharge 628,000 GPD. With the daily flow + permitted + promised flow the department has gone
 over the contracted flow by approximately 6 GPD. The Sewer Commissioners along with the DPW are looking at
 alternative plans for future sewer demands for the Town.
- Budget Request Above Level Service:
- None

TOWN OF MILLIS FISCAL YEAR 2021 BUDGET

Form #3

STAFFING HISTORY

Department: Stormwater 6300051

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Position	FTE	FTE	FTE	FTE	FTE	FTE
Director					0.18	0.18
Department Asst III					0.13	0.13
General Foreman					0.18	0.18
Mechanic					0.10	0.10
HEO/Laborer-Mechanic					0.25	0.25
HEO/Laborer					1.00	1.00
HEO/Laborer					0.25	0.25
HEO/Laborer					0.25	0.25
HEO/Laborer					0.10	0.10
	-					
SUBTOTAL/TOTA	.L				2.44	2.44

		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2021
		ACTUAL	ACTUAL	ACTUAL	ACTUAL	ACTUAL	TM ADOPTED	REQUESTS	PROPOSED
Personnel Services	Calari Danadarant Haad					\$21,498	\$22,586	\$23,821	
	Salary Department Head					\$7,317	\$7,317	\$7,910	
	Salaries Clerical				_	\$103,398	\$112,321	\$117,926	
	Wages	8				\$2,357	\$25,000	\$23,000	
	Wages Overtime	Name of the second seco				\$0	\$1,000	\$1,000	
	Longevity	9		+		\$0	\$1,000	\$2,000	
	Clerical O/T	2				ĮΦU		\$2,000	
	Total				T	\$134,570	\$168,224	\$175,656	1\$0
	Total					ψ104,070	φ100,221	\$170,000	-
Expenses									
ZAPONOGO	Town Counsel					\$0			
	SERVICES ENGINEERING					\$34,005	\$74,000	\$74,000	
	POLICE DETAILS					\$2,761	\$3,000	\$3,000	
	TRAINING					\$5,825	\$4,000	\$4,000	
	INSPECTIONS	•				\$6,594	\$23,000	\$23,000	
	EQUIPMENT HIRED					\$22,688	\$24,080	\$24,080	
	SUPPLIES & EXPENSES					\$9,579	\$500	\$10,000	
	HEAT & FUEL					\$0	\$9,563	\$9,563	
	POSTAGE					\$2,510	\$2,500	\$2,500	
	UNIFORM/CLEANING					\$1,517	\$750	\$1,600	
	PUBLIC ED & OUTREACH					\$20,501	\$12,000	\$12,000	
	VEHICLE SUPPLY/REPAIR					\$8,206	\$25,000	\$25,000	
	MISCELLANEOUS EXPENSE					\$2,493	\$4,298	\$4,298	
	TRANSFER TO GENERAL FUND	5				\$129,272	\$132,266	\$135,573	
							•		
	Total	\$0	\$0	\$0	\$0	\$245,951	\$314,957	\$328,614	\$0
	TOTAL BUDGET	\$0	\$0	\$0	\$0	\$380,521	\$600,000	\$504,270	\$0



Stormwater Enterprise Fund FY21 Budget:

•	FY21 Salaries	\$175,656.00
•	FY21 Expenses	<u>\$328,614.00</u>
	FY21 Totals	\$504,270.00

• Stormwater Salaries Increase \$ 7,432.00

• Stormwater Expenses

Supplies Expenses Increase \$ 9,500.00
 Uniforms Increase \$ 850.00
 Transfer to General Fund Increase \$ 3,307.00 \$13,657.00

Total Stormwater Increase \$ 21,089.00



- The Millis Stormwater Department services a population of 8,782 (2019 census and 2019 ASR).
- The Millis Stormwater Department has 2,975 accounts (2019 bill run).
- Capital Project:
- The Department is in the process of finalizing a plan to eliminate the flooding on Village Street. The cost is not available at the time of this presentation. (form 7)

CAPITAL PROJECT DETAIL SHEET

Project Title: DPW Village-Bi	rch Street D	rainage upgra	des								
Department: Department of I	ublic Work	s Stormwater		Category:					1		
Description and Justification:						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
Village Street -Birch Street drainage syst	em improveme	inte						the	.Do xe.		
(please see attached document)	ciii iiiipi oveiiie	1113.						eting te fir	mplat		
(prosection)					send a photo	depicting the file as a separate file file file file file file file fil	r				
	Back and the Second					PIE.	capital rockit				
RECOMMENDED FINANCING											
	Source	Total		Esti	mated E	ated Expenditures by Fiscal Year					
	of Funds	Six -Year Cost	FY 2021	FY 2022	FY	2023	FY 2024	FY 2025	FY 2026		
A. Feasibility Study											
B. Design											
C. Land Acquisition											
D. Construction	Stormwater	\$588,880.98									
E. Furnishings/Equipment											
F. Departmental Equipment											
G. Contingency											
H. Other											
TOTAL	_	\$588,881									
Source of Funds Legend											
(1) Operating Revenues (3) State Aid			(5) EMS Revolving Fund Fees				(7) Sewer Enterprise Fund Fees				
(2) Municipal GO Bonds	(4) Trust Funds (6) Free Cash / Other (8) Water Enterprise Fund						nd Fees				

Village-Birch Street Dragon e System Evaluation - Millis, MA Opinion of Probable Cost

Alternative 2 - Drainage Improvement

DESCRIPTION	DESCRIPTION QNTY UNITS UNIT		UNIT PRICE	IIT PRICE COST			SUMMARY COST	
MOBILIZATION AND OFFICE OVERHEAD COSTS (10%)	1	LS	\$	27,700.00			\$	27,700.00
SITE PREPARATION	1	LS	\$	27,076.80			\$	27,076.80
OLD PAVEMENT EXCAVATION	240	SY	\$	35.00	\$	8,400.00		
SAWCUTTING ASPHALT PAVEMENT	1600	FT	\$	3.36		5,376.00		
DRAINAGE STRUCTURE REMOVED	3	EA	\$	600.00	\$	1,800.00		
CALCIUM CHLORIDE FOR ROADWAY DUST CONTROL	2177	LB	\$	0.40		870.80		
STRAW WADDLE	1000	FT	\$	5.00		5,000.00		
SEDIMENTATION FENCE	1000	FT	\$	5.63	_	5,630.00		
DODOGED DRAINAGE SYSTEM	200102	1.0	_	F4 022 00	8		Ś	F4 022 00
PROPOSED DRAINAGE SYSTEM	1	LS	\$	54,932.00	_		۶	54,932.00
GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES	130	CY	\$	50.00	Te. 77 Tax.	6,500.00	-	
SPECIAL CATCH BASIN	4	EA	\$	The second second second	\$	24,000.00	<u> </u>	
12-inch CORRUGATED PLASTIC DRAIN PIPE	480	FT	\$	50.90	\$	24,432.00		4
SURFACE RESTORATION	500	SY	\$	19.03			<u> </u>	\$9,514.00
GRAVEL BORROW	50	CY	-	\$45.00		\$2,250.00	_	
LOAM BORROW	50	CY	\$	55.28	20100	2,764.00	_	
SEEDING	500	SY	\$	2.00		1,000.00	_	
MATTING FOR EROSION CONTROL	500	SY	\$	7.00	\$	3,500.00	_	45.607.70
PROPOSED ROADWAY PAVEMENT	870	LF	\$	52.45	_		\$	45,627.70
SAWING & SEALING JOINTS IN ASPHALT PAVEMENT	1600	FT	\$	9.33		14,928.00	_	
(8") DENSE GRADED CRUSHED STONE FOR SUB-BASE	80	CY	\$	75.00	_	6,000.00	_	
ASPHALT MIXTURES FOR TEMPORARY WORK	30	TON		\$216.05		6,481.50		
HOT MIX ASPHALT - FINAL	80	ton			\$	17,284.00		
HOT MIX ASPHALT BERM, TYPE A - MODIFIED	60	FT	\$	12.37	State of the last	742.20		
ASPHALT EMULSION FOR TACK COAT	24	GAL	\$	8.00	\$	192.00	_	
STORMWATER INFILTRATION SYSTEMS	1	LS	\$	139,410.00			\$	139,410.00
CULTEC SW UNIT 280HD	135	EA	\$	211.00	\$	28,485.00		
CRUSHED STONE	590	TON		\$50.00	\$	29,500.00		
EARTH EXCAVATION (labor and equipment)	1165	CY	\$	35.00	\$	40,775.00		
HAULING	1165	CY	\$	15.00	\$	17,475.00		
DISPOSAL	1165	CY	\$	15.00	-	17,475.00		
GEOTEXTILE FABRIC FOR SEPERATION (material only)	950	SY	\$	6.00	\$	5,700.00		
			menum	Labor and N	/lat	erial Subtotal	\$	304,260.50
Gener	al Conditi	ons & Conf	tracto	or Supervision		15%		\$45,639.0
			C	ontractor Fee		10%		\$34,989.9
			Co	ntractor Bond	Magazia	2%	en e	\$7,697.7
		Т	otal (Construction C	ost			\$392,587.3
			Manage	Contingency		50%		\$196,293.66
			74000000	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAME	-	THE RESERVE TO SERVE THE PARTY OF THE PARTY	THE RESERVE TO SHAPE THE PERSON NAMED IN	THE RESERVE THE PERSON NAMED IN

Total Construction Cost (with Contingency)

\$588,880.98



• Budget Request Above Level Service:

The Department of Public Works is going through a reorganization, as part of the reorg we have looked at the overall responsibilities of all employees.

The following is my recommendation,

Change the job classification of the Department Assistant III to be the Department of Public Works Office Manager.

Increase the Department Assistant II hours form 7 hours per week to 19 hours a week. (form 6)

FISCAL YEAR 2021 BUDGET

Form #6

DEPARTMENT: Department of Public Works

Budget Request Above Level Service

Title:

Budget and Procurement Manager

Description of Request:

The Department of Public Works is going through a reorganization, as part of the reorg we have looked at the overall responsibilities of all employees.

The following is my recommendation,

Change the job classification of the Department Assistant III to be the Department of Public Works Budget and Procurement Manager.

Increase the Department Assistant I hours form 12 hours per week to 19 hours a week (increase of 7 hours).

The Budget and Procurement Manager, under the supervision of the Director, Public Works, oversees the administrative activities of the department, and supports complex and multi-departmental budgeting. Responsible for procurement of goods and services that supports all DPW activities. Position is a key part of the Management Team and participates in management meetings and decision making. Performs professional work in analyzing budgetary data, requests, and reports.

Detailed Cost Impact:

The new position will be covered under the SEIU pay scale and will have the same job classification/rating as the Town Accountant.

The additional hours for the Department Assistant I: $$141.75 \times 52 = $7,371.00$

Both increases will be shared by the water, sewer, stormwater and general funds.

Justification for Request

Attach copies of reports, master plans, or supporting documentation)

Please see attached job description for the Budget and Procurement Manager and cost analysis for both upgrades.

The increase hours for the Department Assistant I will take over all the departments payables and will have office hours at the new DPW facility.

TOWN OF MILLIS



DEPARTMENT OF PUBLIC WORKS

Veterans Memorial Building 900 Main Street Millis, Massachusetts 02054

F	u	n	d	in	g	fo	r	th	e	sa	lar	ies	

Budget and Procurement Manager:

Department Assistant I:

0142252-520180 Services Engineering, General Fund:

\$4,000.00

\$2,000.00

6000052-520180 Services Engineering, Sewer:

\$5,000.00

\$2,000.00

6100052-520120 Services Engineering, Water:

\$5,000.00

\$2,000.00

6300052-520180 Services Engineering, Stormwater:

\$8,000.00

\$2,000.00

Total: \$22,000.00

\$8,000.00

Savings:

DPW Overtime 2019 -2020

\$6,500.00

GCG Associates – Yearly Paving Contract:

\$4,900.00

Kleinfelder – Tasks were used primarily to support the abatement, appeal,

and credit processes:

FY19 \$10,000.00**

FY20 \$15,000.00

Tighe & Bond – Yearly Water and Sewer Rates:

\$5,000.00

(**not included)

Total: \$31,400.00

FEMA Reimbursement claims:

FEMA – January 2005:	\$49,737.50
FEMA – Hurricane Irene 2011:	\$72,828.88
FEMA – Superstorm Sandy 2012:	\$28,087.14
FEMA-4110 – Blizzard 2013:	\$86,192.14
EMA-4214 – Blizzard 2015:	\$89,145.56
FEMA-4379 – Blizzard 2018:	\$81,768.10

Total: \$407,737.50

TOWN OF MILLIS

TITLE: Budget and Procurement Manager Job No

DEPARTMENT: Public Works

Grade: Review Date: 1/21/20

Reviewed By:

Budget and Procurement Manager

Under the supervision of the Director, Public Works, oversees the administrative activities of the department, and supports complex and multi-departmental budgeting. Responsible for procurement of goods and services that supports all DPW activities. Position is a key part of the Management Team and participates in management meetings and decision making. Performs professional work in analyzing budgetary data, requests, and reports.

Essential Functions include:

- Supervises and coordinates overall administrative activities for the Public Works Department, ensuring high level of customer service.
- Plans and participates in the development of the complex department budget, including regular monitoring of department expenditures, funds, and communicating status to management.
- Ensures accuracy of transactions posted to budget accounts.
- Develops and maintains budget monitoring models, and oversees production of ongoing reporting.
- Researches and responds to budget inquiries.
- Participates in the development, acquisition, awarding and administration of contracts for services and supplies that follow State and Town regulations and laws that supports all divisions within the DPW.
- Supervises the administrative staff in accord with policies and collective bargaining agreement, if applicable.
- Oversees accuracy of recurring payroll and accounts payable processing.
- Conducts periodic spot checks of contractor payments.
- Manages activities related to the departments maintenance of the facilities, office equipment, and systems.
- Undertakes and completes special assignments and projects on behalf of the Director.
- May be required to attend night meetings

- Understands and overseas all State and Federal "reimbursable" accounts that the DPW receives and is eligible from MassDOT, DEP, EPA and FEMA Required Knowledge, Skills and Abilities:
- · Good planning and organizational skills
- Well-developed interpersonal and communication skills
- Demonstrated supervisory skills
- Ability to negotiate effectively
- Familiar with, and able to extract data from, current accounting, payroll and purchasing software.
- Understanding of payroll, state purchasing regulations, and accounts payable.
- Knowledge of Public Works administrative practices and clerical procedures.
- Ability to:
- Assists the Director with recommending the rates for all enterprise funds.
 - o Analyze complex problems and suggest appropriate solutions
 - o Develop, implement, and evaluate administrative plans.
 - o Effectively manage human, fiscal, and material resources
 - o Communicate effectively verbally and in writing
 - Establish and maintain effective work relationships with employees, municipal officials, vendors, contractors, and the general public
 - o Follow written and verbal instructions

Required Qualifications:

- Demonstrated expertise with budgeting.
- Excellent communications skills
- Demonstrated attention to detail for financial planning and transactions.
- Considerable knowledge of applicable State Statutes, Human Resource policies and regulation.
- Ability to learn and apply local bylaws quickly and effectively.
- Skill with current office technology and ability to stay up to date as systems change.
- College degree in Public Administration, Business Administration, or Finance preferred.