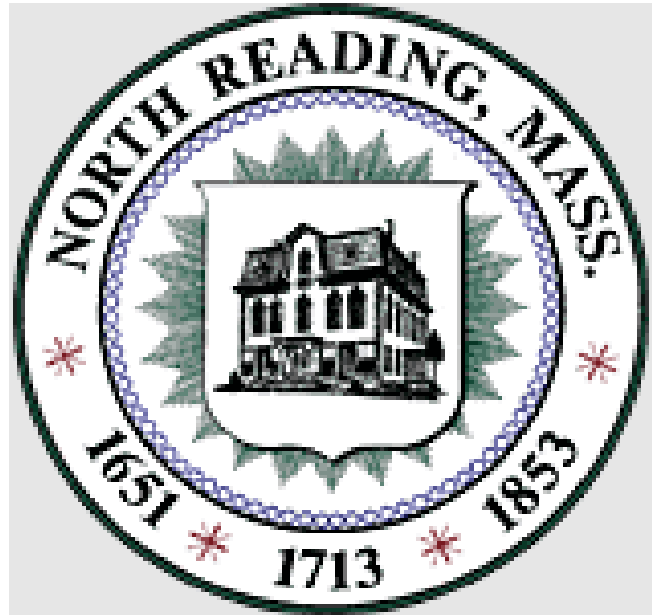


Town of North Reading



FY 2016 Capital Improvement Plan

To: North Reading Board of Selectmen

From: Capital Improvement Planning Committee

Date: April 27, 2014

RE: F/Y 2015 Capital Acquisition Recommendation

The Capital Improvement Planning Committee employed the same evaluation process that we have used in the last two years. Department heads submitted requests for F/Y s 16, 17 and 18 to the Finance Director. The Committee met with each department head and or staff members and where appropriate outside consultants who were advising the department head, to gather more information on the specific requests. We also conducted field trips to the department locations where we deemed that a visual inspection would be helpful in assessing the request. The Committee met on several occasions to discuss each of the requests before we individually ranked each item. There are 32 requests totaling \$3,964,150 from General Government and School departments as well as 9 items from the Water Enterprise totaling \$3,552,500. There were no requests from the other two Enterprise Funds, Hillview Commission or Parks & Recreation.

As shown on the attached Capital Ranking Sheet we are recommending funding 16 requests for General Government and Schools totaling \$1,418,250, and 5 requests from the Water Enterprise in the aggregate amount of \$1,935,500.

The Water Enterprise fund requests will be funded by a combination \$1,850,000 in 10 year bonding and available cash of \$82,500. The largest item in the Water Enterprise request is a \$1.7m for new water meters and reading and billing software. The consultants estimate that we will recover more revenue lost because of the old meters that we will spend on debt service.

The 2016 capital acquisitions for General Government and Schools will be funded by \$154,244 of Free Cash available at the June Town Meeting, an F/Y16 budget appropriation of \$121,000, bonding of \$724,678, for periods ranging from 5 to 15 years, Ambulance Reserve transfer of \$292,000 and \$142,156 of funds previously bonded but unspent.

It is our hope to build on the Free Cash and Budget Appropriation in future years so that there is a dependable source of funds allocated to the much needed capital projects. To further that goal, we have developed, what we believe is, a sustainable long term plan for funding the capital needs of the Town without increasing the annual debt service for non-exempt debt from the current level of \$1.1m.

The plan requires that the Town make the following fiscal commitment:

- Increase the \$125,000 in the current Operating Budget to the Capital Improvement Stabilization Fund (CISF) by \$25,000 in each succeeding year.
- Dedicate \$150,000 of Free Cash to the CISF at the annual June Town Meeting.
- Dedicate \$200,000 of Free Cash to the CISF at the annual October Town Meeting.

The plan as envisioned would gradually increase the funds available for cash purchases of capital items from \$275,000 in F/Y 16 to \$400,000 in F/Y 2021. The importance of this is that we can gradually move from bonding recurring five year capital items to using a pay-as-you go approach which is the desired method in the Capital Improvement Policy. This outcome is demonstrated in the attached table showing the bonding of five year items decreasing from \$142,428 in F/Y 2016 to \$50,000 in F/Y 2021.

The Capital Improvement Stabilization Fund is an important part of this program. The plan is to grow the balance by \$800,000 over

the next five fiscal years. During this period the Fund balances will be used, when necessary, to maintain debt service at the agreed upon maximum limit of \$1.1m per year. Having a meaningful fund will allow the Town to deal with emergency situations and to smooth out the debt service impact of acquisitions of large nonrecurring items.

The Committee's work will continue over the next several months prioritizing the F/Y 17 and 18 items as well as the F/Y 16 requests that could not be recommended at this time because of funding limitations.

We would like to thank the department heads for their cooperation and help in developing North Reading's capital plan.

North Reading Capital Improvements Planning Committee

Donald Kelliher, Chair

Joseph Foti, Vice Chair

Janene Imbriano, Clerk

Michael Connelly

Michael Gilleberto

Abby Hurlbut

Robert Mauceri

Elizabeth Rourke

Department	Project		FY 16 Amount Requested	FY 16 Funding Source	Cash	Total Cash	Bonding	Total Bonding	Borrowing Terms(in years)	AVG
PROPOSED FOR FUNDING:										
IT	Computer/Equipment Replacement Plan		35,000	R&A	35,000	35,000		-	5	4.88
DPW-Highway	Town Road Program		100,000	Bond		35,000	100,000	100,000	15	4.75
Cemetery	Replace 2001 3/4 ton pickup # 14		36,000	R&A	36,000	71,000		100,000	5	4.75
School Department	Hood School Parking Lot Paving Phase 1		50,000	R&A	50,000	121,000		100,000	5	4.50
Fire/DPW	Fire Station Improvements		48,750	Bond		121,000	48,750	148,750	10	4.50
School Department	Special Education Van	Note 1	35,000	R&A/ Free Cash	5,516	126,516		148,750	5	4.38
Cemetery	Replace 1995 & 1999 5 ton dump #40 & #41		176,000	Bond		126,516	176,000	324,750	15	4.38
Stormwater	Drain System Repairs - Town wide		30,000	Bond		126,516	30,000	354,750	10	4.38
Sewer	Fund sewer FEIR		150,000	Bond		126,516	150,000	504,750	10	4.38
Town Buildings	Town Hall- Renovate 2 offices		77,500	Bond		126,516	77,500	582,250	15	4.25
Assessing/CPC/DPW	GIS - New Town Wide Base Map		45,000	Bond		126,516	45,000	627,250	5	4.13
Fire	Engine 5 Pick up		42,000	Free Cash	42,000	168,516		627,250	5	4.13
School Department	Device Initiative		60,000	Bond		168,516	60,000	687,250	5	4.13
Stormwater	GIS Drain System Data Enhancement - EPA Ph II MS4		91,000	Free Cash	91,000	259,516		687,250	10	3.88
DPW-Highway	Replace 2001 Holder multi function tractor # 64	Note 2	150,000	Bond	15,728	275,244		687,250	15	3.63
			1,126,250			275,244		687,250		
Fire	Ambulance Replacement FUND FROM AMBULANCE RESERVE		292,000						8	5.00
	Total Capital Request Recommended By CIPC		1,418,250							
	Note 1 \$29,484 used from previous bonding									
	Note 2 \$134,272 used from previous bonding									
NOT PROPOSED FOR FUNDING:										
DPW-Highway	Sidewalk repairs		50,000						5	3.50
School Department	Multi-Function Activity Bus		45,000			-	-	-	5	3.38
IT	WiFi Upgrade		35,000			-	-	-	5	2.75
DPW-Highway	Purchase anti icing system		46,000			-	-	-	10	2.38
Water	Town Buildings Water Conservation		78,000			-	-	-	5	2.13
School Department	Data Management Software Phase 1		35,000			-	-	-	5	2.00
Cemetery	Phase 3 Area Development		50,000			-	-	-	20	2.00
Stormwater	Drain System Upgrades- upper Elm Street		200,000			-	-	-	30	1.88
Town Buildings	Town Hall - window replacement		124,000			-	-	-	30	1.75
DPW-Highway	Replace 2008 SUV # 6		27,500			-	-	-	5	1.38
Town Buildings	DPW Garage - Cold Storage Expansion		36,000			-	-	-	30	1.38
Veteran's	Vehicle Request		38,000			-	-	-	5	1.25
Veteran's	Vehicle Request		34,000			-	-	-	5	1.13
Fire/Police	Microwave		470,000			-	-	-	10	1.00
Town Buildings	Town Hall- replace HVAC system		868,500			-	-	-	30	0.88
Town Buildings	BoC - replace HVAC system		309,900			-	-	-	30	0.88
Stormwater	GIS Drain System Data Enhancement - EPA Ph II MS4		99,000							
			2,545,900							
Total Capital Requests Submitted			\$ 3,964,150							

Department	Project		FY 16 Request	FY 16 Funding Source	Cash	Total Cash	Bonding	Total Bonding	Borrowing Terms(in years)	AVG
PROPOSED FOR FUNDING:										
Water	Water FEIR		150,000	Bond		-	150,000	150,000	10	4.50
Water	AMR & meter replacement program		1,700,000	Bond		-	1,700,000	1,850,000	10	4.00
Water	Lakeside WTP generator roof repair		25,000	Water Infrastructure Stabilization	25,000	25,000			5	3.75
Water	Replace 2005 SUV # 3		27,500	Water Infrastructure Stabilization	27,500	52,500			5	3.75
Water	Chlorine Residual Evaluation-Study		30,000	Water Infrastructure Stabilization	30,000	82,500			5	3.50
Total Water Enterprise CIPC Recommended Requests			1,932,500			82,500		1,850,000		
NOT PROPOSED FOR FUNDING:										
Water	PH 2 - WTP repairs		1,000,000						5	1.38
Water	Temporary well repairs		500,000						5	2.38
Water	Audit Demand Management Study		50,000			-			5	-
Water	Chlorine Residual Evaluation-Repairs		70,000						5	1.38
Total Water Enterprise Capital Requests Submitted			1,620,000							
Total Water Enterprise Capital Requests Submitted			3,552,500							

Capital Spending		F/Y 16	F/Y 17	F/Y 18	F/Y 19	F/Y 20	F/Y 21
	Cash						
	Transfer From CIFS (FC)	154,244	150,000	150,000	150,000	150,000	150,000
	Transfer From CIFS (R&A)	121,000	150,000	175,000	200,000	225,000	250,000
	Total Available Cash	275,244	300,000	325,000	350,000	375,000	400,000
	Bonding						
	5	105,000	150,000	125,000	100,000	75,000	50,000
	10	228,750	100,000	100,000	100,000	100,000	100,000
	15	353,500	50,000	50,000	50,000	50,000	50,000
	20	-	75,000	75,000	100,000	100,000	100,000
	30	-	200,000	200,000	200,000	200,000	200,000
	Total Bonding	687,250	575,000	550,000	550,000	525,000	500,000
	Total Before CH 90	962,494	875,000	875,000	900,000	900,000	900,000
	Ambulance Replacement from Amb. Reserve	292,000					
	Chapter 90	506,997	506,997	506,997	506,997	506,997	506,997
Total Annual Capital Spending		1,761,491	1,381,997	1,381,997	1,406,997	1,406,997	1,406,997

Capital Improvement Stabilization Fund		F/Y 16	F/Y 17	F/Y 18	F/Y 19	F/Y 20	F/Y 21
	Beginning Balance	777,416	977,172	1,077,172	1,177,172	1,377,172	1,577,172
	June TM						
	Deposits From Free Cash	150,000	150,000	150,000	150,000	150,000	150,000
	R&A June Budget	125,000	150,000	175,000	200,000	225,000	250,000
	Withdrawals						
	Transfer to Capital Spending (FC)	(154,244)	(150,000)	(150,000)	(150,000)	(150,000)	(150,000)
	Transfer to Capital Spending(R&A)	(121,000)	(150,000)	(175,000)	(200,000)	(225,000)	(250,000)
	October TM						
	Deposits From Free Cash	200,000	200,000	200,000	200,000	200,000	200,000
	Withdrawals						
	Transfer to Debt Service	-	(100,000)	(100,000)	-		
	Ending Balance	977,172	1,077,172	1,177,172	1,377,172	1,577,172	1,777,172

Debt Service

		2016	2017	2018	2019	2020	2021
PRE F/Y 2016 DEBT SERVICE	Ending Balance	1,179,646	1,082,710	1,004,831	860,613	614,189	544,638
POST F/Y 2016 DEBT SERVICE							
BANS 1% of next year's bonding		6,873	5,750	5,500	5,500	5,250	5,000
2016 New Bonding	5		24,990	24,150	23,310	22,470	21,630
	10		55,036	30,881	29,966	29,051	28,136
	15		37,471	36,528	35,586	34,643	33,700
	20						
	30		-	-	-	-	-
2017 New Bonding	5			35,700	34,500	33,300	32,100
	10			13,900	13,500	13,100	12,700
	15			5,600	5,167	5,033	4,900
	20			6,713	6,536	6,413	6,263
	30			14,600	14,333	14,067	13,800
2018 New Bonding	5				29,750	28,750	27,750
	10				13,900	13,500	13,100
	15				5,600	5,167	5,033
	20				6,713	6,536	6,413
	30				14,600	14,333	14,067
2019 New Bonding	5					23,800	23,000
	10					13,900	13,500
	15					5,600	5,167
	20					8,950	8,750
	30					14,600	14,333
2020 New Bonding	5						17,580
	10						13,900
	15						5,600
	20						8,950
	30						14,600
2021 New Bonding	5						
	10						
	15						
	20						
	30						
Transfer From CISF		-	(100,000)	(100,000)	-	-	-
POST F/Y 2014 DEBT SERVICE		6,873	23,247	73,573	238,961	298,463	349,973
Total Annual Debt Service		<u>1,186,519</u>	<u>1,105,957</u>	<u>1,078,404</u>	<u>1,099,574</u>	<u>912,652</u>	<u>894,611</u>

Water Enterprise Debt Service

		2016	2017	2018	2019	2020	2021
PRE F/Y 2016 DEBT SERVICE	Ending Balance	523,245	444,566	306,234	253,519	182,856	138,047
POST F/Y 2016 DEBT SERVICE							
BANS 1% of next year's bonding		18,500	-	-	-	-	-
2016 New Bonding	5		-	-	-	-	-
	10		257,150	249,750	242,350	234,950	227,550
	15						
	20						
	30						
POST F/Y 2014 DEBT SERVICE		18,500	257,150	249,750	242,350	234,950	227,550
	Total Annual Debt :	541,745	701,716	555,984	495,869	417,806	365,597
Revenue Capture from new meters			(242,087)	(242,087)	(242,087)	(242,087)	(242,087)
Net Debt Service after Revenue Capture		541,745	459,629	313,897	253,782	175,719	123,510

Bonding Schedule

	5	-					
	10	1,850,000					
	15	-					
	20						
	30	-					
Total Annual New Bonding		1,850,000	-	-	-	-	-

Water Stabilization Fund

Account Balance 6/30/14	715,225
2015 Retained Earnings	108,547
Capital Acquisitions F/Y 16	<u>(82,500)</u>
Account Balance 6/30/15	<u><u>741,272</u></u>

COMPUTER/EQUIPMENT REPLACEMENT PLAN

Eugene Tworek
Director of IT
235 North St.
North Reading, MA 01864
(978) 664-6055
Etworek@northreadingma.gov

Description

Annual Computer replacement plan for aging computers town wide.

Justification

Replace aging computers, laptops, tablets on a 5 year cycle. Replace printers and monitors when they become unserviceable.

Impact

Improve efficiency and productivity of staff.



General Fund		Enterprise Funds	
Operating Budget	35,000.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	35,000.00
Other Grants	0.00		

TOWN ROAD PROGRAM

Richard Carnevale
 Director of Public Works
 235 North St,
 North Reading, MA 01864
 (978) 664-6060
 Rcarnevale@northreadingma.gov

Description

This project provides for the ongoing maintenance and repairs to the Town's roads, and consists of a number of major components, including: 1.) pavement management plan 2.) drainage improvements 3.) road rehabilitation 4.) paving 5.) overlays 6.) micro surfacing 7.) related engineering & survey work/ equipment 8.) curbs & sidewalk adjacent to roads being repaired and 9.) street signage.



Justification

The appropriation under this project is a supplement to the Town's Mass DOT Chapter 90 funding. The actual arterials, collectors and residential streets addressed in any given year is based on total highway funds from the State Chapter 90 funding, local appropriation and grants.

Impact

Improved road surface conditions leads to safer travelling for public.

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	100,000.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	100,000.00
Other Grants	0.00		

CEMETERY— REPLACE 3/4 TON PICKUP TRUCK # 14

Richard Carnevale
 Director of Public Works
 235 North St,
 North Reading, MA 01864
 (978) 664-6060
 Rcarnevale@northreadingma.gov

Description

This project is to replace Truck #14. This vehicle is used year round, specifically in conjunction with cemetery and public grounds maintenance and is responsible for plowing one of the Town's residential snow routes as well as the roads within the cemetery. This project includes the vehicle, equipment to be installed, safety equipment, etc.

Impact

New vehicle with better reliability would assist to maintain high level of service expected by residents

Justification

This vehicle is used year round, specifically in conjunction with road and public grounds maintenance and is responsible for plowing one of the Town's residential snow routes as well as the roads within the cemetery.



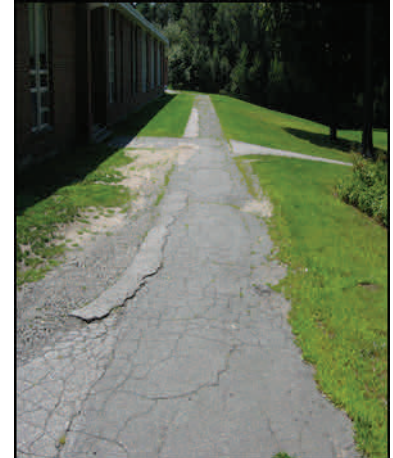
General Fund		Enterprise Funds	
Operating Budget	36,000.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	
Other Grants	0.00		36,000.00

Wayne Hardacker
 Supervisor, Buildings & Grounds
 Sherman Road
 North Reading, MA 01864
 (978) 664-7810
 whardacker@northreading.mec.edu

SCHOOL DEPARTMENT— HOOD SCHOOL PARKING LOT PAVING—PHASE I

Description

The Hood School parking lot and playground area has not been repaved for many years, The request involves a two year phase in project to completely repave the entire lot, including the walkways and play-ground area. The request also includes re-grading and installing new curbing. Economies of scale could be obtained by working cooperatively with the DPW.



Justification

The entire area is showing signs of deterioration resulting in safety concerns.

Impact

If the project is not completed or is delayed, it could result in a safety hazard for students, staff and parents.



General Fund		Enterprise Funds	
Operating Budget	50,000.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	50,000.00
Other Grants	0.00		

PUBLIC SAFETY BUILDING— FIRE STATION IMPROVEMENTS

Richard Carnevale
 Director of Public Works
 235 North St,
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 Rcarnevale@northreadingma.gov

Description

Replace dispatch room flooring with carpet tiles, abate/replace flooring of first floor halls with non-slip tile flooring, abate/replace flooring of first floor offices with either VCT or carpet.

Justification

The current floor coverings are threadbare and worn. They are well beyond the normal lifespan. In addition, current flooring is aesthetically unpleasing

Impact

Lack of action is causing indoor air quality and sanitation issues.



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	48,750.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	
Other Grants	0.00		48,750.00

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 Supervisor, Buildings & Grounds
 Sherman Road
 North Reading, MA 01864
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 whardacker@northreading.mec.edu

SCHOOL DEPARTMENT- SPECIAL EDUCATION VAN

Description

The district currently utilizes three special education vans daily to transport students. The 2005 van is currently used as a spare and is also used to transport athletic teams and activities when appropriate, which has helped reduce athletic transportation costs. The School's capital request involves a replacement plan beginning in FY'16, with the oldest 2005 van and then replacing the 2006 and 2007 vans in subsequent years.

Justification

The 2005 van has over 108,000 miles on it and is in need of replacement. Having a well equipped and reliable vehicle to safely transport students to and from programs on a daily basis is essential. This will ensure the Special Education Department can safely transport students and has an appropriate spare vehicle on hand in the event of emergencies.

Impact

Inaction raises the possibility of a vehicle breakdown which would compromise our ability to safely transport our students with special needs. A special education vehicle would improve our ability to transport student safely and maintain the students routine and schedule.



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	5,516.00	Water Bonds	0.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Re-appropriated Bonds	29,484.00
Chapter 90	0.00	Total Project Funding	35,000.00
Other Grants	0.00		

PUBLIC WORKS—CEMETERY

REPLACE 5 TON DUMP TRUCK

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 235 North St,
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 (978) 664-6060
 Rcarnevale@northreadingma.gov

Description

This project is to replace Trucks # 41 & # 40 (reduce fleet by 1 truck) This vehicle is used year round, specifically in conjunction with road and public grounds maintenance and is responsible for plowing one of the Town's residential snow routes as well as the roads within public property. This project includes vehicles, equipment to be installed, safety equipment, etc.

increase, reliability decreases, reduces ability to provide level of services expected by residents. A new vehicle with better reliability would assist to maintain high level of service expected by residents

Justification

This is the planned replacement of the current Truck # 41, a 1999 IH 5 ton Dump Truck with 52,990 miles as of 12/31/13. Current vehicle condition will become a hazard to both employees and travelling public



Impact

Risks of inaction : salvage price for trade decreases, maintenance cost

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	176,000.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	176,000.00
Other Grants	0.00		

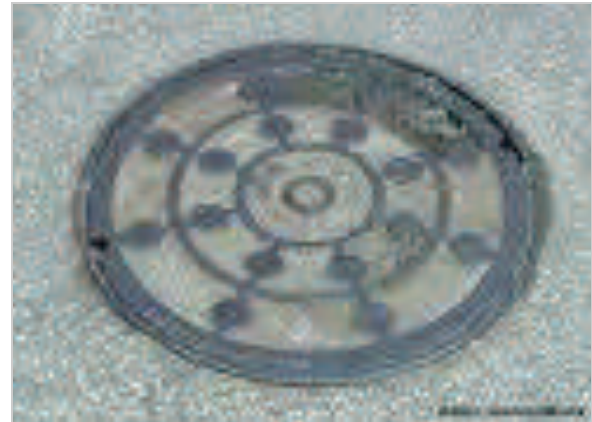
DRAIN SYSTEM REPAIRS

Richard Carnevale
 Director of Public Works
 235 North St,
 North Reading, MA 01864
 (978) 664-6060
 Rcarnevale@northreadingma.gov

Description

See 2006 Storm Water Capital and Improvement Program - PROJECT # 1 - Culvert/ Line cleaning and CCTV - Table 6-2 lists locations

Repair 105 drain structures (7 man-holes & 98 catchbasins) identified by NECE as needing repairs.



Justification

Work has not been performed due to historic resource limitations. Clogged / collapsed drains lead to flooding conditions, property damage and compromised public safety access. Routine maintenance also requirement of EPA Phase II MS 4 Storm Water Permit.



Impact

Improve flow of ground water and prevent property damage.

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	30,000.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	
Other Grants	0.00		30,000.00

DEVELOP SEWER FINAL ENVIRONMENTAL IMPACT REPORT (FEIR)

Richard Carnevale
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 235 North St,
 North Reading, MA 01864
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Description

This project is to develop the Final Environmental Impact Report as part of the permitting required to find a cost-effective means of the disposal of wastewater from within stressed areas of the Town. An analysis of options for wastewater disposal including in-Town and connections to regional facilities will be explored. The work will be focused on the development of data and analysis relative to the Environmental Notification Form that was submitted in November of 2012, the certificate that was issued by the MEPA office, and stakeholder comments from the DEIR. The ENF certificate requires specific analysis to be completed and submitted as a DEIR, which is scheduled for completion in 2015. This project will be conducted in conjunction with the FEIR - Water for optimization of information development and analysis.

determine the optimal method for the collection and disposal of wastewater from stressed areas of the Town. Wastewater from the Town is currently handled by on-site private systems, which in some areas are not adequate to protect the water resources in the Town.

Impact

The project will advance permitting required to allow the development of a Town wastewater system.



Justification

This project will develop information and advance permitting required to

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	150,000.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	150,000.00
Other Grants	0.00		

TOWN HALL— RENOVATE TWO OFFICES

Richard Carnevale
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 (978) 664-6060
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Description

Upgrade the Finance Director’s and Veteran Service so that the walls are floor to ceiling and more sound proof.



Justification

The current offices only have partial walls that do not allow for confidential conversations to take place. General office noise from outside these areas filters into these spaces and makes it difficult to conduct professional conversations in person or on the phone. Current office setup of Veterans’ Office does not afford a waiting area to residents while the director is busy with another person.



Impact

Upgrading the offices will improve customer service and confidentiality.

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	77,500.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	
Other Grants	0.00		77,500.00

GIS—NEW TOWN WIDE BASE MAP

Danielle McKnight
 Community Planning Administrator
 235 North St,
 North Reading, MA 01864
 (978) 664-6050
 dmcknight@northreadingma.gov

Description

The collection of new high-resolution orthophotography is anticipated from a flyover to be conducted in April 2015. Following the flyover, the photography will need to be processed to create a new base map for the Town. CPC, DPW and Assessing are seeking funds to create new planimetrics (building outlines, water features, curbs, etc.) and topographic contour elevations, as well as to cover data-base storage and quality control.

Justification

The current digital base map for the town is based on data that is 11 years old. Good base maps are needed in planning for new development, reviewing development proposals, zoning changes, site selection analysis and mapping environmentally sensitive areas. Accuracy in our interactive GIS website and printed maps is necessary to deliver good customer service, helping the public better understand proposed development plans, property valuations, and surrounding land uses and features.

Impact

Good digital photography supplements property tax valuations and assists the Assessors office in updating records, leading to anticipated increases in revenue. Accurate data also increases efficiency and quality of DPW services and maintenance of town infrastructure. Specifically, the updated base map will assist in DPW's water and wastewater planning by providing accurate representation of the town's roadway system as we lay out potential infrastructure improvements; and updated elevation data will be used to configure and site wastewater infrastructure. Updating the base map also increases the potential for other departments to begin taking advantage of our GIS capabilities who do not currently. The Fire Department would use the system for pre-fire planning for views of commercial buildings, hydrant locations, hazardous materials locations, assistance with accessing brush fires, and other applications. The Police Department has recently begun using GIS to formulate policies regarding sex offender

residency and has indicated interest in mapping vacant properties, street lights, dangerous intersections/crash areas, and drug activity. Planning uses the GIS system daily for a multitude of tasks, including: completing CPC project reviews, providing information to developers and homeowners, evaluating zoning policy changes, and researching vacant properties and available commercial space. Conservation would use updated wetland features to evaluate projects.



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	45,000.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	45,000.00
Other Grants	0.00		

FIRE DEPARTMENT - REPLACE ENGINE 5 PICK UP

Chief William L. Warnock
 Fire Chief
 152 Park Street
 North Reading, MA 01864
 (978) 357-5107
 wlwarnock@northreadingma.gov

Description

Replace Engine 5 , the Fire Department pick up truck, with a 3/4 ton pick up with 6 foot bed and a 8 foot plow and an extended warranty. The equipment will be installed at the dealer or vendor.

Justification

Current vehicle is a 2007 truck. Miles 86069, engine hours are high, rust on frame and body, parts are long out of warranty for motor and drive train.

Impact

Improved service in emergency situations. Decreased maintenance costs and down time.



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	42,000.00	Water Bonds	0.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	42,000.00
Other Grants	0.00		

SCHOOL DEPARTMENT— COMPUTER REPLACEMENT

Patrick Daly
Assistant Superintendent
Sherman Road
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pdaly@north-reading.k12.ma.us

Description

The iPad initiative in North Reading began during the 2010-11 school year when the device was first introduced. Since that time we have increased our capacity to incorporate many mobile devices (Chromebooks, tablets, etc.) into our plans. In order to meet our Digital Learning Goals our schools need additional devices in order to meet the needs of the students. In order to support the students the largest tested grade should have at least one device per student. This should be our goal, minimally, for digital learning. Each Chromebook cart costs just over \$10,000. The \$90,000 request in FY 16 would include the purchase of six additional carts which would be approximately \$62,000. The computer labs at two of the elementary schools will need to be upgraded to support digital learning. This will include a consideration of thin-client solution for machines ca-

pable of handling our needs that will come at a cost savings over purchasing the devices individually. The plan would be to purchase 30 work station for both the Hood and Little School computer lab, the cost of these stations including licensing is \$14,000 per lab or \$28,000 in total. In addition, mobile carts will be considered, four per building, in order to approach that number of one device per student in the largest tested grade.

Justification

The current devices were purchased in 2006 or earlier. These devices are running specifications that are not sufficient for the software and programs we are attempting to utilize in our classrooms. Furthermore, as we will be required to upgrade from Windows XP when it is no longer supported by Microsoft, these devices will not be able to be upgraded.

Impact

Improve efficiency and productivity of staff and students.



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	60,000.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	
Other Grants	0.00		60,000.00

GIS DRAIN SYSTEM DATA ENHANCEMENT

Richard Carnevale
 Director of Public Works
 235 North St,
 North Reading, MA 01864
 (978) 664-6060
 Rcarnevale@northreadingma.gov

Description

Continue to upgrade the existing digital drain map for the town. One requirement of the USEPA Phase II storm water permit is to have an accurate drain map. Our current map does not meet this requirement. The work funded at the fall 2012 town meeting is locating & inspecting all drain manholes and catchbasins, and then importing into the drain layer of the town's GIS. This next phase address drain systems requiring additional inspection, and the inspection of all culverts & outfalls.

data; increased data query, reporting and map production capabilities

5. Increased decision support capabilities and better informed employees and citizens
6. Better customer service



Justification/Impact

1. Federal regulatory requirement from 2003 MS4 permit
2. access to current, accurate digital information; more efficient performance of daily duties
3. Reduction or elimination of data redundancy among departments, decrease operating costs
4. Improved accuracy of existing

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	91,000.00	Water Bonds	0.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	
Other Grants	0.00		91,000.00

PUBLIC WORKS— REPLACE MULTI FUNCTION HOLDER TRACTOR

Richard Carnevale
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 North Reading, MA 01864
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Description

This is the planned replacement of our existing 2001, wheeled Holder tractor. This unit is approaching its economical life & the reliability of this unit has decreased significantly over the last 18 months. This piece of equipment is used year round for duties such as sidewalk plowing on the routes to schools & roadside brush control

Justification

Failure to fund a replacement & the existing equipment's poor reliability may lead to public safety issues with children walking in the streets after snow storms. Also the inability to cut roadside brush adversely affects driving safety as driver sight lines are restricted. This project includes the vehicle, attachments and ancillary

equipment to be installed, safety equipment, etc.

Impact

New vehicle with better reliability would assist to maintain high level of service expected by residents and help improve road safety.



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	15,728.00	Water Bonds	0.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Re- Appropriated Bonds	134,272.00
Chapter 90	0.00	Total Project Funding	150,000.00
Other Grants	0.00		

FIRE DEPARTMENT - AMBULANCE

Chief William L. Warnock
 Fire Chief
 152 Park Street
 North Reading, MA 01864
 (978) 357-5107
 wlwarnock@northreadingma.gov

Description

Replace Rescue 1 which is a 2007 Chevy Ambulance with currently 93,240 miles. Rescue 2 is a 2010 Ford ambulance placed in service in 2/12 which currently has 55,903 miles. This ambulance will become the backup ambulance when Rescue 1 is replaced after 5 years.

because if one ambulance is down, we cannot do more than one transport at a time, which limits revenue.

Justification

The replacement cycle has served us well for the last twenty years. This program reduces maintenance costs and down time for maintenance which allows for one ambulance in service while work is being performed.



Impact

A reliable ambulance is necessary

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	292,000.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	292,000.00
Other Grants	0.00		

FINAL ENVIRONMENTAL IMPACT REPORT (FEIR)

Richard Carnevale
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Description

This project is to develop a Final Environmental Impact Report in the advancement of the permitting required to obtain water supply from the Massachusetts Water Resources Authority. Connecting to the MWRA will provide the Town with a long-term, high quality, and sustainable water supply. The work will be focused on the response to regulatory agencies & stakeholders from the DEIR. This work is anticipated to be complete in 2016-2017 timeframe. This project will be conducted in conjunction with the FEIR - Wastewater for optimization of information development and analysis.

chases water from Andover. These water supply sources individually are unable to provide the Town with all the water required during certain high demand periods. Connecting the Town's water supply to the MWRA can provide the Town with a more stable and consistent supply.

Impact

Improve water flow to all residences and reduce need to rely on Andover water supply.



Justification

This project will develop information and advance permitting required to obtain a long-term, cost-effective source of water for the Town. The Town currently obtains water from the ground and treats as well as pur-

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	150,000.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	
Other Grants	0.00		150,000.00

TOWN WIDE METER REPLACEMENT AND AUTOMATIC READING SYSTEM

Richard Carnevale
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Description

This program would involve the replacement of all water meters in North Reading and the installation of an automatic meter reading system (AMR).

Justification/Impact

This project will provide for the replacement of North Reading's existing residential and commercial water meters and replace the existing meter reading software and hardware with a radio based meter reading system. The benefits of this replacement will be increased accuracy of new water meters, the ability to read meters more frequently (allowing for monthly water billing if desired), and a reduction in the time devoted to water meter reading, allowing this manpower to be used more effectively in other Water Department functions.



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	1,700,000.00
General Obligation Bonds	0.00	Hillview/Parks & Recreation Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	
Other Grants	0.00		1,700,000.00

LAKESIDE WTP GENERATOR ROOF REPAIR

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Description

This project involves the rehab of the Lakeside WTP generator building's roof.

Justification

Initially constructed in the 1960's, the roof has significantly deteriorated

Impact

Failure to repair the roof will cause emergency power generator deterioration, which would lead to it not working when called upon during power failures. Without power, the facility cannot operate.



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	0.00	Water Infrastructure Stabilization Fund	25,000.00
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	25,000.00
Other Grants	0.00		

REPLACE 2005 4x4 SUV

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Description

This is the planned replacement of the current Truck #3, a 2005 4x4, Explorer with 120,000 miles.

Justification

Repair costs are escalating.

Impact

New vehicle with better reliability would assist to maintain high level of service expected by residents



General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	0.00	Water Infrastructure	27,500.00
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	27,500.00
Other Grants	0.00		

CHLORINE RESIDUALS STUDY

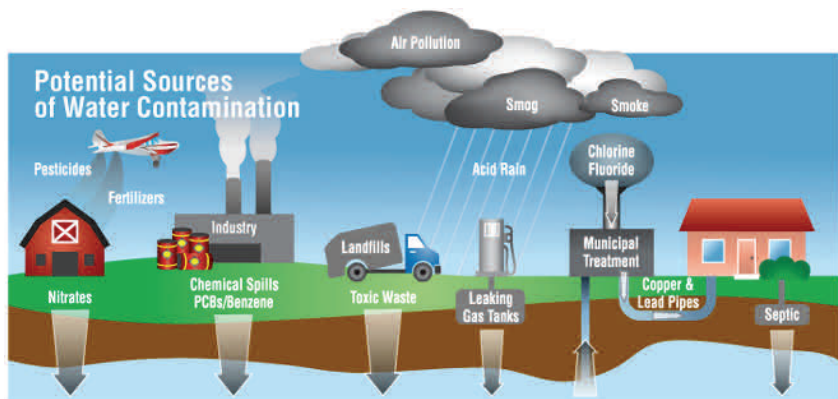
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Description

Study and determine solutions for improving chlorine residual & turnover in the system. It should also include an analysis of water quality under a new source configuration from MWRA to determine impacts of two different disinfection chemistries (Chloramines vs chlorine) mixing in the water distribution system.

Justification

The 2013 total coliform issue & 2014 TTHM issues revealed this issue. There are significant public safety impacts if E.coli water contamination occurs due to disinfection issues.



Impact

Ensures that water meets all Federal and State Standards.

General Fund		Enterprise Funds	
Operating Budget	0.00	Water Fund	
Free Cash Appropriation	0.00	Water Bonds	0.00
General Obligation Bonds	0.00	Water Infrastructure	30,000.00
		Stabilization Fund	
Grants		Bonds	0.00
Chapter 90	0.00	Total Project Funding	30,000.00
Other Grants	0.00		