Pennichuck Water Works, Inc. DW 19-029 Schedule A - Modified Revenue Requirement per DW-16-806 Computation of QCPAC Surcharge 2/9/2019, 6/17/2019 Revised per Tech Session DR1 Revised per Staff email of 6/24/2019 Reflects Sept 30, 2019 Update. Updated for 19-084 requested revenues

	St	6-806 Approved tep Revenue juirements (11)	Fe	quested QCPAC or 2017 Capital itions pro formas	Requested Surcharge Capital Ac	for 2017	Projected QCPAC For 2018 Capital Additions pro formas (7,8,14)	Surcha	•	DW19-084 PWW requested rate increase	QCPAC Capital A pro form	dditions	QCPAC Surcharge for 2019 Capital Additions	Capital	AC For 2020 Additions pro rmas (7,8)	QCPAC Surcharge for 2020 Capital Additions	QCPAC For 2021 Capital Additions pro formas (7,8)	QCPAC Surcharge for 2021 Capital Additions
City Bond Fixed Revenue Requirement (CBFRR)		\$7,729,032			\$	7,729,032	\$ -	\$	7,729,032 \$	7,729,032	\$	- 5	7,729,032	\$	-	\$ 7,729,032	\$ - \$	7,729,032
Operating Expense Revenue Requirement		\$16,442,012	(1)(11) \$	122,079 (4)	\$ 1	5,564,090	\$ 198,464	\$	16,762,554 \$	19,597,616 (11)(1	5) \$	481,139	20,078,755	\$	262,509	\$ 20,341,263	\$ 267,440 \$	20,608,703
Annual Principal and Interest Payments		\$6,218,648	(2)	\$365,418 (5)(10)	\$	6,584,066	\$490,843	\$	7,074,908 \$	6,999,023		\$985,663	7,984,685		\$662,207	\$ 8,646,893	\$743,061 \$	9,389,954
Principal and Interest Coverage Requirement		1.10	(3)			1.10			1.10	1.10			1.10			1.10		1.10
Principal and Interest Revenue Requirement	\$	6,840,513			\$	7,242,472		\$	7,782,399 \$	7,698,925		5	8,783,154			\$ 9,511,582	S	10,328,949
Proposed Revenue Requirement	\$	31,011,556			\$,535,594		\$	32,273,985 \$	35,025,573		5	36,590,941			\$ 37,581,877	S	38,666,684
Current Water Revenues excluding CBFRR		\$20,694,038			\$ 2	3,282,524		\$	23,806,562			\$	28,861,909			\$ 29,852,845	\$	30,937,652
Add: City Bond Fixed Revenue Requirement		\$7,729,032			\$	7,729,032		\$	7,729,032			\$	7,729,032			\$ 7,729,032	\$	7,729,032
Current Water Revenues with CBFRR	\$	28,423,070			\$,011,556		\$	31,535,594			\$	36,590,941			\$ 37,581,877	\$	38,666,684
Percent QCPAC Surcharge (9)						1.69%			2.38%				4.47% (16)		2.83%		3.10%
Cumulative QCPAC Surcharge (13)									4.07%				4.47%			7.30%		10.40%
Cumulative QCPAC monthly increase in average single family residential bill	1				\$	0.91		\$	2.20				2.46			\$ 4.02	s	5.72
Average monthly single family residential bill with QCPAC					\$	54.90		\$	56.18				57.48			\$ 58.00	s	59.70

Notes:

(1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses approved in DW16-806

(2) Annual Principal and interest payments for PWW debt associated with all plant in service as approved in DW16-806

(3) Principal and interest coverage of 1.10 is as approved in DW16-806

(4) Reflects the net increase in property taxes associated with the plant placed in service between 1/1/2017 and 12/31/2017 that was not included in DW16-806.

(5) Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2017 and 12/31/2017 based on a 30 year bond with an actual total all in interest rate of 4 898453% that was not recovered in DW16-806 (7) QCPAC operating expenses are based on the property taxes for plant added during the year

(8) QCPAC Principal and Interest expenses are based on 30 year bond with interest rate of 5.00% for 2019 through 2021 Capital Expenditures unless funding is via an SRF/DWGTF financing.

(9) QCPAC percent revenue surcharges based on increase in revenues from the step revenues granted in DW16-806

767,357 for 2017 work completed on Amherst Street project based on the fact that (10) Portion of QCPAC Principal and Interest associated with SRF loan of \$ S 27,746.00 of P&I was recovered in DW16-8 \$ 25,178.00 of remaining P&I on this SRF loan to be collected via the QCPAC surcharge. The remaining P&I is based on the amortization schedule for this loan provided by the NHDES and is the P&I payment due the State in 2018 after principal forgiveness.

3 38%

(11) Reduction in revenues associated with fixed contracts as follows: Hudson Annual Fixed Chg 32,800 Milford Annual Fixed Chg \$ 81,000.00 A-B Annual Fixed Chg \$ S

(12) QCPAC Principal and Interest expenses for DWGTF financing are based on a 30 year bond with interest rate of

(13) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the step revenues granted in DW16-806

(14) Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2018 and 12/31/2018 based on a 30 year bond with an actual total all in interest rate of #### Average Coupon rate as the all-in TIC (Total Interest Cost) for the 8,250,000.00 S \$ 8,229,376.70 plus Cost of Issuance and net Premium/Discount on the issued bonds. which includes the 2018 capital project costs of 420,712

(15) Operating expense revenues requested in DW19-084 less total Other Revenues of \$

(16) QCPAC percent revenue surcharges based on requested revenues being sought in DW19-084

Impact on Single Family Residential Home:	DW16-806	D	W19-084
Monthly meter charge granted in DW16-806, inclusive of Step increase - \$	22.58	\$	24.35
Average Single Family Consumption (CCF) -	8.58		7.77
Consumption Charge granted in DW16.806, inclusive of Step increase - \$	3.66	\$	3.95
Ave. Single Family monthly bill with rates granted in DW16-806, inclusive of			
step - \$	53.98	\$	55.02
Assumes an GM metered customer class rate increase of	7.85% is	granted in DW1	9-084

Exhibit 1

371,430.48

Pennichuck Water Works, Inc. DW 18-022 2017 QCPAC Capital Expenditures 1/30/2018 Updated 6/25/2018 to reflect corrections associated with Staff Data Requests

				T	Т		<u> </u>							
		1			D				F				QCPAC	
		i	Financing	NHPUC	Date of NHPUC	,	Estimated Project Cost as of	Estimated Project Cost as of	Final Unaudited Project Costs at of				Eligible Annual Tax	
Project Name/Description	Project Description	Work Order #	Docket No.	Order No.	Order 1	Funded in DW16-806 Step	1/18/2017	11/15/2017	1/19/2018	Community	Taxable	Tax Rate (1)		Explanation for Change/Addition/Deletion since 1/18/2017
Heavy Dump Truck Replacement (#12)	Heavy Dump Truck Replacement (#12)	1702309	DW14-130	25,734	, ,	Yes	\$ 130,000	Paid 2014 Bond		Merrimack			ş -	P&I and property taxes recovered in DW16-806 Step Increase
Replace Aging Services	9 Renewed Services with 2014 Bond Funds 23 Renewed Services with 2018 Bond Funds	Monthly 21, 22, 23	DW14-130 DW17-183	25,735 26,101	11/7/2014 2/2/2018	Partial	\$ 80,000	Paid 2014 Bond \$ 40,000	\$ 100.454	Nashua Nashua	Yes	\$ 29.82	\$ - \$ 2006	P&I and property taxes recovered in DW16-806 Step Increase P&I and property taxes to be recovered in 2018 OCPAC
Replace Aging Hydrants	3 Hydrants replaced with 2014 Bond Funds	Monthly 31	DW14-130	25,735	11/7/2014	Partial	\$ 42,000	Paid 2014 Bond	ş 100,454	Nashua	103	<i>¥</i> 27.02	\$ -	P&I and property taxes recovered in DW16-806 Step Increase
	5 Hydrants replaced with 2018 Bond Funds		DW17-183	26,101	2/2/2018	No	- /	\$ 11,000	\$ 18,643	Nashua	Yes	\$ 29.82		P&I and property taxes to be recovered in 2018 QCPAC
Replace Aging Valves	3 Valve Replacements 2 New Services for Single Family Paridential surgery hold are Traiff	Monthly 12, 13	DW17-183 DW14-130	26,101 25,735	2/2/2018 11/7/2014	No Partial	───	\$ 50,000 Paid 2014 Bond	\$ 53,122	Nashua	Yes	\$ 29.82	\$ 1,584	Based on final valve replacement expenditured in 2017. P&I and property taxes recovered in DW16-806 Step Increase
New Services	2 New Services for Single Family Residential, owner build, per Tariff 5 New Services for Single Family Residential, owner build, per Tariff	Monthly 20	DW14-130 DW17-183	26,101	2/2/2014	No	\$-	\$ 34.537	\$ 29,648	Nashua Nashua	Yes	\$ 29.82	\$ - \$ 884	P&I and property taxes recovered in DW16-806 Step Increase P&I and property taxes to be recovered in 2018 QCPAC
Replace Leaded Brass Meters with Lead free brass meters	410 New Meters for Lead Meter exchanges - 5/8"-6"	Monthly 50	DW14-130	25,735	11/7/2014	Partial	\$ 832,000	Paid 2014 Bond	1	Nashua			ş -	P&I and property taxes recovered in DW16-806 Step Increase
Replace Leaded blass Meters with Lead free blass meters	1,410 New Meters for Lead Meter exchanges - 5/8"-6' (NEED ACTUAL 332	Monuny 50	DW17-183	26,101	2/2/2018	No	ş 0.52,000	\$ 247,266	\$ 267,950	Nashua	Yes	\$ 29.82	\$ 7,990	P&I and property taxes to be recovered in 2018 QCPAC
Replace Aging meter reading Radios	Replace 99 failed radios Replace 238 failed radios	Monthly 54	DW14-130 DW17-183	25,735	2/2/2014	Partial Remainder	\$ 28,000	Paid 2014 Bond \$ 22 729	\$ 22.802	Nashua Nashua	Yes	e 20.02	\$ - \$ (90)	P&I and property taxes recovered in DW16-806 Step Increase P&I and property taxes to be recovered in 2018 QCPAC
Ferromagnetic Pipe locators (3)	Ferromagnetic Pipe locators (3)		DW17-183	26,101	2/2/2018	No	\$ 10.500	ę <u> </u>	,	Merrimack		\$ 29.82		None acquired
Heavy Dump Truck Replacement (#86)	Heavy Dump Truck Replacement (#86)	1708349	DW17-183	26,101	2/2/2018	No	\$ 100,000			Merrimack	No	ş -	\$ -	ivone acquired
Service Truck replacement (#47)	Service Truck replacement (#47)	1715542	DW17-183	26,101	1 1	No	\$ 60,000		ę 17,002	Merrimack	No	Ş -	ş -	
Replacement of Foreman truck	Replacement of Foreman truck	120002	De	eferred. No Bc	Bond sought. No Q	QCPAC sought.	\$ 90,000	\$ 75,000		Merrimack	27	Ş -	Ş -	Deferred until 2018
Replace Dump Truck Body Medium Duty Dump Truck Replacement (#71)	#312 - Replace Dump Truck Body Medium Duty Dump Truck Replacement (#71)	1720997 1708350	DW17-183	26,101	2/2/2018	No	\$ 70.000	\$ 70.000	\$ 15,740 \$ 90,160	Merrimack	No	e	¢	Project added at end of year using existing truck chassis for new dump body.
Replace Truck #70	Replace Truck #70	1707209	DW17-183	26,101	2/2/2018	No	\$ -	\$ 32,034				ş -	ş -	Truck replaced when transmission failed rather than repair transmission on a 10 year old truck
Replace Truck #58	Replace 2006 Truck with 104,000 miles	1702097			1 1			,	\$ 6,242					
20 Ton Tag Trailer replacement	20 Ton Tag Trailer replacement				Bond sought. No C	`	\$ 20,000							Deferred
Variable Message Signs - 2	Customer Notification	1702307	DW14-130	25,734	, ,	Yes		Paid 2014 Bond Paid 2014 Bond	<u> </u>					P&J and property taxes recovered in DW16-806 Step Increase
Replacement Radio Meter Reading Equipment (4) Pipe Saws (5)	Replace 10 year old radio meter reading handheld units Pipe Saws (5)	1800440	DW14-130 DW17-183	25,734 26,101	11/7/2014 2/2/2018	Yes No	\$ 25,000 \$ 20,000		\$ 9,384	Merrimack	No			P&I and property taxes recovered in DW16-806 Step Increase
Metal Detectors (6)	Metal Detectors (6)	1708348	DW17-183 DW17-183	26,101	2/2/2018	No	\$ 20,000 \$ 7,000	1		Merrimack	No	1		
Replacement Excavator	Replacement Excavator	1702312	DW17-183	26,101	2/2/2018	No	\$ 75,000	\$ 69,554	\$ 69,554	Merrimack	No			
Complete construction of 16 DW Highway	Final billing for the completion of work by contractor at 16 DW Highway	1701990	DW17-183	26,101	2/2/2018	No	\$ -	\$ 67,050		Merrimack	Yes	\$ 28.17	\$ 1,835	Billing from final work on 16 DW not carried over in original budget
MRX meter reading device GPS Units	MRX meter reading device Trimble Devices	1708487 1713734	DW17-183	26,101	2/2/2018	No	\$ -	\$ 8,190	\$ 8,190 \$ 21,287		No			Existing 8 year old meter reading device failed Devices purchased early to support field deployment of GIS.
GPS Units	1 fimble Devices	1/15/34	'	+	+		<u>├────</u>							Charges are for Internal engineering, OH, Union Labor, truck and AFDUC. These expenses are not eligible for
Raw Water Transmission Main project	Finalization of 2016 project	1601365, 1701991	DW15-046	25,774	4/13/2015	Yes	Ş -	Paid for by SRF	\$ 176,829	Merrimack	Yes	\$ 28.17	\$ 4,981	SRF funding.
Nashua & Amherst Paving Fir	nal paving associated with watermain projects					No	\$ 1,100,000					Ş -	Ş -	Budget Placeholder
Nashua & Amherst Paving	Park Street Water Main Replacement project paving	1701989	DW17-183	26,101	2/2/2018	No		\$ 4,908			103	\$ 29.82		Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving Nashua & Amherst Paving	Mulberry Street Water Main Replacement project paving Contribution to City of Nashua in lieu of final trench restoration - includes Rochette. Ash. and Marquis	1701988	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	No	├─── ┤	\$ 6,840 \$ 120,000			100	\$ 29.82 \$ 29.82		Budgeted under Final Paving associated with water main replacement projects Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving Nashua & Amherst Paving	Contribution to City of Nashua in lieu of final trench restoration - includes Rochette, Ash, and Marquis Chestnut Street Phase I Water Main Replacement project paving	1/18685, 1/18684 1703643	DW17-183 DW17-183	26,101	2/2/2018	No	├────┼	\$ 120,000 \$ 65,780		Nashua Nashua	Yes	\$ 29.82 \$ 29.82		Budgeted under Final Paving associated with water main replacement projects Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Scripture Street Water Main Replacement project paving	1703642	DW17-183	26,101	2/2/2018	No		\$ 11,200		Nashua	Yes	\$ 29.82		Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Gorman Street Water Main Replacement project paving	1718679	DW17-183	26,101	2/2/2018	No			\$ 400	Nashua	Yes	\$ 29.82	\$ 12	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Water Street Water Main Replacement project paving							\$ 44,561				-		Paving deferred at City request
Nashua & Amherst Paving Nashua & Amherst Paving	Brook Street Water Main Replacement project paving Ash Street Water Main Replacement project paving	1700310 1700315	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	No No	├─── ┤		\$ 9,844 \$ 22,678	Nashua Nashua	Yes Yes	\$ 29.82 \$ 29.82		Budgeted under Final Paving associated with water main replacement projects Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Worcester Street Area Water Main Replacement project paving	1718680	DW17-183 DW17-183	26,101	2/2/2018	No	<u>├────</u>		\$ 22,078 \$ 3.020	Nashua	Yes	\$ 29.82 \$ 29.82		Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Lovell Street Water Main Replacement project paving	1703644	DW17-183	26,101	2/2/2018	No			\$ 82,060	Nashua	Yes	\$ 29.82		Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Towells Street Water Main Replacement project paving	1703639	DW17-183	26,101	2/2/2018	No			\$ 17,233	Nashua	Yes	\$ 29.82		Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving	Howard Street Water Main Replacement project paving	1718682	DW17-183	26,101	2/2/2018	No	 		\$ 2,800	Nashua	100	\$ 29.82	-	Budgeted under Final Paving associated with water main replacement projects
Nashua & Amherst Paving Nashua & Amherst Paving	Hoyts Water Main Replacement project paving Shedds Ave. Water Main Replacement project paving	1718683 1718681	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	No	╂─────╂		\$ 1,000 \$ 2,000	Nashua Nashua	- +0	\$ 29.82 \$ 29.82		Budgeted under Final Paving associated with water main replacement projects Budgeted under Final Paving associated with water main replacement projects
	nherst Street Area Water Main Replacement Project	1/10001	25 11 105	20,101	2/2/2010	110	<u> </u>		÷ 2,000	i vasiida	103	ę 19.01	ę 00	bugetet inder i mai i aving associatet with water main replacement projects
			<u> </u>	<u> </u>	† †		i i i i i i i i i i i i i i i i i i i	Paid for by SRF	\$ 923,785			1		
Amherst Street Project - Amherst Street water main replacement	Replace 3,150 LF of 6" Unlined CI Water main on Amherst Street	1601318, 1702928	DW16-236	25,887		Partial		· ·		Nashua	ļ			Charges are for Internal engineering, OH, Union Labor, truck and AFDUC. These expenses are not eligible for
Amherst Street Project - Berkshire Street water main replacement	Replace xxx LF of x"/x" Steel/Unlined CI Water main on Berkshire Street	1601320, 1702931	DW16-236	25,887		Yes		Paid for by SRF	\$ 6,058	Nashua	No			SRF funding. \$767,357 in 2017 construction costs were financed with SRF loan funds. The principal and
Amherst Street Project - Terrace Ave. water main replacement Amherst Street Project - Bruce Street water main replacement	Replace 280 LF of 2"/4" Steel/Unlined CI Water main on Terrace Ave. Replace 260 LF of 6" Unlined CI Water main on Bruce Street	1601321, 1702932 1601319, 1702930	DW16-236 DW16-236	25,887 25.887		Yes Yes	\$ 75,000 \$ 75,000		\$ 1,763 \$ 4,183	Nashua Nashua	ł			interest associated with this loan amount must be recovered as part of the 2018 QCPAC surcharge.
Sweet Hill	New Supplemental Well required by NHDES	1503914, 1602428, 1701490		26,101	2/2/2018	No	\$ 70,000	\$ 70,000		Plaistow	Yes	\$ 28.39	\$ 4.651	Project began in 2015. Project required by NHDES to address shortage of supply.
Pennichuck Bog - Educational Program Accessway	Construct Nature Walk around Pennichuck Bog				Bond sought. No C		\$ 38,000							Deferred
Gilman Street	Replace 8 & 6 in CI with 1225 LF of 8 inch CLDI				Bond sought. No Q		\$ 425,000	Ŧ	ļ					Deferred until 2018
Amherst Mack Hill & Dodge Milford Booster Station Replacement	Replace 1525 feet of 8 A/C with CLDI Transfer services from A/C to D/I Dodge Rd. Replace 25 Yr old below ground confined space booster station w/above ground station				Bond sought. No Q Bond sought. No Q		\$ 300,000 \$ 550,000							Deferred until future date in coordination with Town Storm Drain project Project deferred indefinitely.
Snow Station Upgrade - Add 3rd pump	Increase pumping capacity to meet existing demands and contractual obligations	1702918	DW17-183		2/2/2018	No	\$ 550,000 \$ 125,000	1	\$ 13,323	Nashua	Yes	\$ 29.82	\$ 397	Analysis showed that rebuilding one pump would provide initial capacity required.
	ging infrastructure replacement in coordination with sewer replacement	·					\$ 400,000							
Warren Street	Replaced 300 LF of 4 inch CI with 8 in DIPCL	1702870	DW17-183	26,101	2/2/2018	No		\$ 60,000			Yes			\$20,000 for final paving in 2018
Lowell Street	Replaced 425 LF of 6 inch CI with 6 in DIPCL	1702874	DW17-183	26,101	2/2/2018	No	↓ ∓	\$ 60,000		Nashua	100			\$38,500 for final paving in slate for 2018 was completed in 2017.
Green Street Beard Street	Replaced 330 LF of 4 inch CI with 8 in DIPCL Replaced 350 LF of 8 inch CI with 8 inch DIPCL	1702872 1702873	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	No	┟─────╂	\$ 27,000 \$ 75,000		Nashua Nashua	Yes Yes	\$ 29.82 \$ 29.82		Including final paving Including paving
Lemon Street	Replaced 320 LF of 8 mich CI with 8 mich DFPCL Replaced 320 LF of 2 inch CI with 4 in PVC	1702875	DW17-183 DW17-183	26,101	2/2/2018	No	rt	\$ 30,250		Nashua		ę 17.01		\$17,000 for final paving in 2018
Proctor Street	Replaced 130 LF of 2 &1.5 inch CI with 4 inch PVC	1707322	DW17-183	26,101	2/2/2018	No		\$ 51,000	\$ 63,829	Nashua	Yes	\$ 29.82	\$ 1,903	Excludes final paving
Gillis Street	Replaced 1,290 LF of 4 inch CI with 8 inch DIPCL	1617684, 1703641	DW17-183	26,101	2/2/2018	No	<u>↓</u> T		\$ 71,987					Project missed in Nov 2017 filing
Temple Street Mulvanity Street	Replaced 375 LF of 8 inch CI with 6 inch HDPE and 8 inch DIPCL Replaced 280 LF of 2 inch CI with 4 inch PVC	1600381, 1703640 1707323	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	No	┢────┤	\$ 151,093 \$ 106,300		Nashua Nashua				Including final paving Excludes final paving
24" watermain from Manchester Street to Tinker Road	Add 1800 lf of 24 inch CLDI on Manchester Street Easement to Tinker Road	1/0/323		20,000	2/2/2018 Bond sought. No Q	- 10	\$ 500,000	1	ু ১৯,৬১/	1 Nasnua	1 05	<i>q 2</i> 9.02	y 2,000	Excludes final paving Deferred until 2018
24 watermain from Manchester Street to Thiker Road Water main looping	Close loop on 101A end of main to beyond Truell and loop onto Truell 1200 lf				Bond sought. No Q		\$ 300,000		1			1		Deferred until 2018
Water main looping	Old Nashua Rd. RR Crossing @ Route 101A	1703646	DW17-183	26,101	2/2/2018	No			\$ 8,334	Amherst	Yes	\$ 30.30	1	
	Fowell - Zellwood - Pratt replace 1720 If of 6 in CI with 8 in CLDI				Bond sought. No Q		\$ 400,000	1						Part of Project deferred until 2018
Buchanan Avenue	Replaced 540 LF of 6 inch CI with 8 inch DIPCL Brachard 400 LF of 2 inch Send with 4 inch DIPCL	1702843	DW17-183	26,101	2/2/2018	No	┟─────┤	\$ 84,752	\$ 96,013 \$ 21,105	Nashua	100	\$ 29.82 \$ 20.82		Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Circle Ave Main Replacement Fowell Street	Replaced 400 LF of 2 inch Steel with 4 inch PVC Replaced 900 LF of 6 inch CI with 175 LF of 4 inch and 725 LF of 8 inch DIPCL	1715613 1702844	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	No	<u>⊦</u> ∔		\$ 21,195 \$ 192,179			\$ 29.82 \$ 29.82		Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Zellwood Avenue	Replaced 900 LF of 6 inch CI with 1/5 LF of 4 inch and /25 LF of 8 inch DIPCL Replaced 375 LF of 6 inch CI with 4 in PVC	1702844 1702845	DW17-183 DW17-183	26,101	2/2/2018	No	I	\$ 480,000				\$ 29.82 \$ 29.82		Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Pratt Street	Replaced 710 LF of 6 inch CI with 12 inch DIPCL	1702846	DW17-183	26,101	2/2/2018	No			\$ 146,106					Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
	ring infrastructure replacement						\$ 320,000							
Lincoln Street	Replaced 790 LF of 6 inch CI with 8 in DIPCL	1702841	DW17-183	,			┟─────┤	\$ 152,407 \$ 120,440		Nashua				Individual Streets Part of 2017 Main Street Area Water Main Replacement Project
Nutt Street Kinsley Street	Replaced 100 LF of 1 inch and 500 LF of 4 inch CI with 100 LF of 4 inch and 500 LF of 8 inch DIPCL Replace unlined cast iron leads to side streets ahead of City paving	1702842	DW17-183		2/2/2018 Bond sought. No C	OCPAC sought	\$ 175.000	\$ 120,440 \$ -	\$ 109,004	Nashua	Yes	\$ 29.82	<u>ه</u> 3,251	Individual Streets Part of 2017 Main Street Area Water Main Replacement Project Project deferred to 2017
Factory Street	Replace 12 & 8 in CI with 640 lf of 16 in CLDI 640 lf	·			Bond sought. No Q		\$ 250,000	1						Project deferred to 2017 Project deferred to 2018
	HDOT Project													
		1701891	DW17-183	26,101	2/2/2018	N			£ 45.074	Bedford	Yes	\$ 23.19	\$ 1.066	NHDOT project that was added in Spring of 2017
Route 101 Widening, Bedford	Relocate water main on Route 101					NO	Ļ	\$ 46,200						
Route 101 Widening, Bedford Route 101 Widening, Bedford Route 101 Widening, Bedford	Relocate water main on Route 101 Relocated water main along Nashua Road Relocate water main on Bell Hill Road	1701891 1702838 1702839	DW17-183 DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018 2/2/2018	No No		\$ 46,200 \$ 43,100 \$ 15,400	\$ 43,740	Bedford	Yes		\$ 1,014	NHDOT project that was added in Spring of 2017 NHDOT project that was added in Spring of 2017

		1702940	DW/17 192	26 101	2/2/2010	N		(7.400 8	116 205	D 16 1	X	¢ 22.10 ¢	2,695 NHDOT project that was added in Spring of 2017. Partial reimbursement from NHDOT of \$26,010.89
Route 101 Widening, Bedford Route 122 @ Nathan Lord Lane Water Main Relocation	Relocate Service to 3 Nashua Road Water Main Relocation to accommodate Town of Amherst Storm Drain installation	1702840 1715666	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	No	\$ c c	67,400 \$ 54,630 \$	59,558	Amherst		\$ 23.19 \$ \$ 30.30 \$	
Howard St. Emergency Main Replacement -	Water Main Relocation to accommodate Town of Amnerst Storm Drain installation Howard St. Emergency Main Replacement -	1600371, 1601379	DW1/-185	20,101	2/2/2010	INO	5 - 5	54,030 \$	106.838	Nashua	Yes	\$ 30.30 \$ \$ 29.82 \$	
Trimble Devices - Used for field locating Assets via GIS program	Upgrade to Ipad device driven units	1703027	DW17-183	26.101	2/2/2018	No	\$ 72.000 \$	68.623 \$	47,336	Merrimack	No	ş 27.02 ş	5,100 Ennergency project to replace failed 2 steel water main fate in 2017.
Engineering Replacement Vehicles (2)	Replace 2 Vehicles	1702831, 1702832			11/7/2014	Yes		2014 Bonds \$	-	Merrimack	No		P&I and property taxes recovered in DW16-806 Step Increase
Complete PWW Core System Hydraulic Model	Distribution Model Phase 2				Bond sought. No		\$ 25,000 \$	-					Project underway, will not be used and useful in 2017
PWW-PEU Interconnection - DW Highway to River	DW Highway to Merrimack River Booster station ¹		De	eferred. No B	Bond sought. No	OCPAC sought.	\$ 311,500 \$	-					Deferred to 2018 due to timing of final NHDES permitting
WTP - Conversion to LED Lighting	WTP - Conversion to LED Lighting		De	eferred. No B	Bond sought. No	QCPAC sought.	\$ 80,000 \$	-					Deferred, staff time not available to complete in 2017
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements		DW14-130	25,735	11/7/2014	Partial	Pd 2	2014 Bonds		Derry	Yes	\$ 33.23 \$	 P&I and property taxes recovered in DW16-806 Step Increase
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements	Monthly 60, 61, 62, 63	DW17-183	26,101	2/2/2018	No	\$ 60,000 \$	38,000 \$	41,386	Derry	Yes	\$ 33.23 \$	1,375
Booster/Well/Chem Feed pump replacements	Replace VFD on Twin Ridge Well	1701888	DW17-183	26,101	2/2/2018	No	\$	2,089 \$	2,089	Plaistow	Yes	\$ 28.39 \$	59 Budgeted under Booster/Well/Chem Feed pump replacement
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		De	eferred. No B	Bond sought. No	QCPAC sought.	\$ 15,000 \$	-					Budget place holder. No treatment system installs/replacement YTD
Misc. Structural Improvements	Misc. Structural Improvements		De	eferred. No B	Bond sought. No	QCPAC sought.	\$ 20,000 \$	-					Budget place holder. No structural improvements YTD
Harris Dam Spillway Reconstruction	Complete Harris Dam Spillway Reconstruction	1701987						\$	6,018	Nashua	Yes	\$ 29.82 \$	179
Replace Vehicle #62	Replace 11 year old truck with107,863 miles			26,101	2/2/2018	No	\$ 60,000 \$	45,000					A new vehicle was purchased and this vehicle was retained and kept in service. #99 was retired.
Replace Vehicle #49	Replace 7 year old truck with 104,875 miles	1800462	DW17-183			No	\$ 35,000 \$	35,000 \$	27,323	Nashua	No		Retired #49
Replace vehicle #204	Replace 6 year old truck with 175,260 miles	1800481			2/2/2018	No	\$ 60,000 \$	45,000 \$	42,678	Nashua	No		Change from beginning of budget year as to type of vehicle being replaced. #204 retired.
Replace Vehicle #63	Replace 7 year old truck with 110,249 miles		DW17-183	26,101	2/2/2018	No	\$ 35,000 \$	35,000					Retired #63
Replace Vehicle #44	Replace 8 year old truck with over 130,000 miles	1800479	T21747 402	26 101	2/2/2010	N 7		\$	42,678	Nashua	No		Retired #44
New Vehicle #119	New Water Supply Vehicle, no replacement	1704173			2/2/2018	No	Ş - Ş	63,038 \$	62,282	Nashua	No		No vehicle retired.
Replace Vehicle #99	Replace 11 year old truck with over 140,000 miles	1800480	DW17-183	26,101		No		\$	27,323	Nashua	No		Retired #99
Replace Vehicle #46	Add utility body to vehicle #46	1703002	DW17-183	26,101	2/2/2018	No		5	2,071	Nashua	No		No vehicle retired.
Install overhead crane and door-WTP process area	Install overhead crane and door-WTP process area	1701887, 1719861	DW17-183		2/2/2018 2/2/2018	No	\$ 75,000 \$ \$ 75,000 \$	75,000 \$ 25,000	45,731	Nashua	Yes	\$ 29.82 \$	1,364 Design cost for WTP crane and door. Door is used and useful Project deferred until 2018
Merrimack River Station pump/motor rebuild	Merrimack River Station pump/motor rebuild		DW1/-183	20,101	2/2/2018	No		25,000				\$	- Project deferred until 2018
	misc. equipment purchases	1715517	DW/17 107	26 101	2/2/2010	× 7	\$ 25,000 \$	-	4 500	N. I	N	~	
Misc. equipment purchases THM precursor control at Bon Terrain Tank	Purchase New Electric Muilti-Meter Install mixer in Bon Terrain Tank	1715547 1703024	DW17-183	26,101	2/2/2018 2/2/2018	No	Ş.	1,500 \$	1,500	Nashua Amherst	No	\$ 20.20	Budgeted under WTP Misc equipment purchased Budgeted under WTP Misc equipment purchased
THM precursor control at Bon Terrain Tank Replace VFD on Sludge Chopper Pump at WTP	Install mixer in Bon Terrain Tank Replace VFD on Sludge Chooper Pump at WTP	1703024 1707190	DW17-183 DW17-183		2/2/2018 2/2/2018	No	5	2,600 \$ 3,503 \$	2,600	Amherst Nashua	Yes Yes	\$ 30.30 \$ \$ 29.82 \$	
		1701885	DW17-183 DW17-183			No	3	3,503 \$ 17,177 \$	3,503	Nashua Nashua	Yes	\$ 29.82 \$ \$ 29.82 \$	
WTP - Replace 30" IP Discharge Meter Purchase new lab equipment	W'TP - Replace 30" IP Discharge Meter Purchase new lab equipment	1/01885				OCPAC sought.	\$ 15,000 \$	1/,1// \$	1/,1//	inashua	1 65	g 29.02 \$	512 Duugeteu under w 11 Misc equipment purchased
Purchase new lab equipment	Purchase new lab equipment Hanna Titrator	1707187			2/2/2018	No	\$ 15,000 \$	5,900 \$	5,900	Nashua	No		Budgeted under Purchase new lab equipment
WTP structural/HVAC	Replaced Compressor on A/C Unit FWPS	1708347	DW17-183 DW17-183			No	\$ 10,000 \$	5,568 \$	5,568	Nashua	Yes	\$ 29.82 \$	
Misc Security upgrades for remote facilities	Misc. Fencing/Security Projects	1/0634/		, .	1 1 2 2	OCPAC sought.	\$ 25,000 \$	3,300 à	5,508	INASHUA	1.68	ş 29.62 ş	Budget place holder. No Misc. Fencing/Security Projects YTD
Complete Fencing around WTP for Security	Perimeter fencing at WTP	1706963			2/2/2018	QCI AC Sought.	\$ 80,000 \$	5,588 \$	5,588	Nashua	Yes	\$ 29.82 \$	167 Main Gate opening mechanism replaced. Fencing deferred
Replace Clarifier (2)Vacuum Blowers and Actuators	Replace Clarifier (2)Vacuum Blowers and Actuators	1/00903			Bond sought. No	OCPAC cought	\$ 25,000 \$	0,000 à	5,566	INASHUA	1.68	ş 29.62 ş	Deferred
Misc. SCADA Electrical upgrades	Misc. SCADA Electrical				Bond sought. No		\$ 30,000 \$	-					Budget Place Holde.r See below for actual projects
Mise: SCADA Electrical upgrades	Valleyfield - Install Cellular Communication	1701886	DW17-183			No	ş 50,000 ş	5.000 \$	3,249	Plaistow	Yes	\$ 28.39 \$	92 Budgeted under Misc. SCADA Electrical upgrades
Misc. SCADA Electrical upgrades	Install Cellular Communication, Cabot Preserve	1716549	DW17-183	26,101		No	ş - ş	5,000 \$	2,642	Bedford		\$ 23.19 \$	61 Project added to allow remote monitoring of water system
Hi-Lo Generator	Hi-Lo Generator	1701899	DW17-183	26,101	2/2/2018	No		ç	47.332	Derry	Yes	\$ 33.23 \$	1 573 Permanent standby generator added on site at this Community Water System
Armory Street Booster Pump VFD replacements	Replace failed VFD's on Armory Street Booster Pumps	1719862	DW17-183	26,101	2/2/2018	No	S _ S	23,500 \$	47,002	Nashua	Yes	\$ 29.82 \$	Budgeted under Misc, SCADA Electrical upgrades
Misc. SCADA Electrical upgrades	Replace all SCADA Computers and Upgrade System	1701889	DW17-183			No	ş - ş	43.000 \$	19,990	Nashua	Yes		596 Unbudgeted. Security upgrades required hardware replacement
Well Rehabilitations (3)	Well Rehabilitations				Bond sought. No	OCPAC sought.	\$ 60.000 \$	-				s s	- Budget place holder. No Well Rehabilitation Projects YTD
WTP Closed Circuit Camera replacement/improvements	Closed Circuit Camera replacement/improvements				Bond sought. No		\$ 60,000 \$	-				*	Deferred
WTP - Replace storefront glass, renovate WTP reception	Replace storefront glass, renovate WTP reception		De	eferred. No B	Bond sought. No	OCPAC sought.	\$ 50,000 \$	-					Deferred
Office renovation-conference room	Office renovation-conference room		De	eferred. No B	Bond sought. No	QCPAC sought.	\$ 50,000 \$	-					Deferred
Water Supply - Watershed Public Education	Fertilization / Pesticide - Phase 1		De	eferred. No B	Bond sought. No	QCPAC sought.	\$ 20,000 \$	-					Will not be completed until 2018
Stormwater BMP Notifications and Community Education	Stormwater BMP Notifications and Community Education		De	eferred. No B	Bond sought. No	QCPAC sought.	\$ 12,000 \$	-					Will not be completed until 2018
St. Joseph's Land Purchase	Watershed protection	1503675	DW17-183	26,101	2/2/2018	No		Ş	69,790	Nashua	Yes	\$ 29.82 \$	2,081 Project started in 2015. Land purchased from local hospital. Land adjacent to Supply Pond.
Secure reception area	Office Security for Front Reception Desk	1708425	DW17-183	26,101	2/2/2018	No	\$ 10,000 \$	20,990 \$	18,824	Merrimack	No		Original estimate did not include bullet proof glass and other security features
Adjustable Desk Tops	Accommodate back issues	1713759	DW17-183	, .		No	ş - ş	6,088 \$	- 1	Merrimack	No		
Asset Management - Phase 3	Asset Management 2016 Carry over	1600061	DW17-183			No	\$ 200,000 \$	200,000 \$	161,590			\$ 28.17 \$	4,552
Conversion to R.A.M. Fixed Assets carry-over	Conversion to R.A.M. Fixed Assets carry-over	1707349		26,101		No	\$ 11,000 \$	11,000 \$., .	Merrimack	No	ş - ş	-
Firewall	Firewall replacement	1702081	DW17-183			No	\$ 50,000 \$	36,426 \$		Merrimack	No		
Asset Management - Phase 4	Continue progress on Asset Management implementation	1700300	DW17-183	26,101		No	\$ 736,000 \$	350,000 \$	492,133	Various	Yes	\$ 28.85 \$	14,198 Reduced level of work than budgeted due to staff time diverted to PFOA response
Click Mobile Upgrade	Upgrade ClickMobile to work on iPads	1707189	DW17-183	26,101	2/2/2018	No	\$ 150,000 \$	5,400				\$	- 2016 Work completed. 2017 work deferred until 2018
Click Mobile Upgrade	Purchase iPADs for ClickMobile Platform	1702223	DW17-183		2/2/2018	No	5 - 5	5,160 \$	5,160	Various	Yes		149 Budgeted for under Upgrade ClickMobile to work on iPADs
Infoview upgrade	Upgrade Infoview to the latest version	1702224	DW17-183		2/2/2018	No	\$ 5,000 \$	3,150 \$	3,150	Various	Yes	\$ 28.85 \$	91
Exchange Upgrade	Upgrade Exchange to the latest version		DW17-183		2/2/2018 Bond sought, No	No OCDAC anusht	\$ 31,000 \$ \$ 80,000 \$	20,420				Ş	- Deferred
Retention Archive Solution Munis Enhancements	Infrastructure to Archive older stagnant files Bill prints/forms, Forms import, Click-Munis import, CSS and Dashboard/Central				Bond sought. No Bond sought. No	V	\$ 80,000 \$ \$ 180,000 \$	-					Deferred until 2018 Waiting for vender acceptance of software enhancements
Munis Enhancements Miscellaneous Software	Dill prints/ forms, Forms import, Click-Munis import, CSS and Dashboard/Central				Bond sought. No Bond sought. No		\$ 180,000 \$ \$ 15,000 \$	-					Waiting for vender acceptance of software enhancements Budget place holder.
	Upgrade Synergyn/WAM		DW17-183		2/2/2018	CCLUC SOUGHT.	a 15,000 à	- 10.386					Budgete flace holder. Budgeted for under Misc. Software
Miscellaneous Software Miscellaneous Software	Upgrade Synergyn/WAM Backflow Data Collection software	1707208	DW17-183 DW17-183			No	2 - 3 9 e	6,700 \$	5.400	Merrimack	No		Budgeted for under Misc. Software Budgeted for under Misc. Software
Miscellaneous Software	Munis - Enhancements - SDS Replacement	1502439			2/2/2018	No	y - 3	0,700 \$		Merrimack			Budgeted for under Misc. Software
Miscellaneous Software	PDF Converter Software	1614048			2/2/2018			\$	3,994		No		Required to make website ADA compliant
Miscellaneous Hardware	154 Goliveitei oottwate					OCPAC sought.	\$ 18.000 \$	-					Budget place holder. No Misc. Hardware purchased YTD
Miscellaneous Hardware	LT06 Tape Drive #2	1617689			2/2/2018			S	19.395	Merrimack	No		wages processioned and processing and a second se
Network Infrastructure	Replacement of virtual servers and network switch stack. Existing hardware no longer supported.	1716547			2/2/2018			ŝ		Merrimack	No		
LIMS upgrade	Upgrade to Laboratory Information Systems software					QCPAC sought.	\$ 11,000 \$	-	.,				Release of new version delayed until 2018
Badge Swipe for IT Area	Allow for tracking of traffic after hours into IT area - Security					QCPAC sought.	\$ 2,000 \$	-					Project cancelled for 2017
DigsSafe into Click	Track Dig safe work order time electronically					QCPAC sought.	\$ 2,000 \$	-				1	Project cancelled for 2017
Website Upgrades & Updates	Update Website. Enhance customer useability	1704175	DW17-183	26,101	2/2/2018	No	\$ 36,000 \$	21,700 \$	13,250	Merrimack	No		
	ISO 27001 Equivalency Project	1707186			2/2/2018		ş - ş	40,500 \$	31,555	Merrimack	No		Evaluation of IT infrastructure for security
IT Security Project						QCPAC sought.						\$	- Deferred
IT Security Project Physical Server for Autodesk Revit			D	nemedi. 140 D	Jond Sought. 140		\$ 8,000 \$	-					
						QCPAC sought.	\$ 8,000 \$ \$ 12,000 \$	-				\$	- Deferred
Physical Server for Autodesk Revit	One times revenue tariffed amount		DW14-130	eferred. No B 25,735		QCPAC sought. Partial	\$ 12,000 \$	- 2014 Bonds				\$	

 Total Projected 2017 PWW Capital Exit
 \$ 9,729,000
 \$ 4,163,760
 \$ 6,058,766

 Amount to be funded with April 2018 Bond issue \$ 5,291,409

 Amount to be funded with Amherst Street Project SRF loan \$ 767,357

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of 6.60/1000

Projected Property Tax - \$ 122,079

Project Name/Description	Burley Devolution	Weste Ostan #	Financing Docket No.	Approved Budgeted Amount	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Final Project cost as of 12/31/2018	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Ī
	Project Description	Work Order # 1708351 &	Docket 140.	Budgeted Amount	075072010	57 507 2010	11/ 50/ 2010	as of 12/ 51/ 2010	Community	Taxable	Tax Rate (1)	Expense	1
Replace Forman Truck Single Family New Services	Existing Truck has been a safety and maintenance problem Single Family, Owner Build, New Homes	1813525 20 workorders	2019 Docket 2019 Docket	\$ 90,000 \$ 46,000	\$ 97,685 \$ 46,000	\$ 120,756 \$ 46,000	\$ 120,756 \$ 37,403	\$ 92,018 \$ 40,850	Merrimack Various	No Yes	\$ 28.92 \$ 28.40	\$ - \$ 1,160	i
Renewed Services	Replacement of failed services	workorders	2019 Docket 2019 Docket	\$ 40,000 \$ 92,000				\$ 40,850 \$ 47,818	Various	Yes	\$ 28.40 \$ 28.40		
Hydrants	Replacement of non functional hydrants (Run rate) (8 YTD)	30 & 31	2019 Docket	\$ 50,000		\$ 50,000		\$ 35,560	Various	Yes	\$ 28.40		8
Valve Replacements	Replacement of Failed Gate Valves	workorders 12 & 13	2019 Docket	\$ 30,000	\$ 30,000			\$ 14,412	Various	Yes	\$ 28.40	\$ 1,010 \$ 409	
Replace failed meter reading radios	Replace out of warrantee failed radio meter readers	54 workorders	2019 Docket 2019 Docket	\$ 50,000	\$ 50,000	\$ 50,000	\$ 52,000 \$ 60,000	\$ 46,153	Various	Yes	\$ 28.40 \$ 28.40	\$ 1,311	
New Meters (growth) 5/8"-2" (CORE & CWS)	New meters for new customers.	50 workorders	2019 Docket	\$ 114,000					Various	Yes	\$ 28.40		2
New Meters for Lead Meter exchanges (PWW-CORE & CWS) 5/8"-6" Ferromagnetic Pipe locators (3)	Replace High lead brass meter with new no lead brass meter (2071 YTD) Ongoing small equipment replacement - run rate	50 workorders	2019 Docket 2019 Docket	\$ 532,000 \$ 10,000	\$ 532,000 \$ 10,000	\$ 360,000 \$ 10,000	. ,	\$ 326,902	Various Merrimack	Yes No	\$ 28.40 \$ 28.92	- /	/ n P
Service Truck replacement (#76)	Replace 2008 Pick up with 156,000+ miles	1900417	2019 Docket	\$ 60,000				\$ 61,905	Merrimack	No	\$ 28.92		Ť
1 Service Truck - New	Service Truck for 1 new ops employees	1900416	2019 Docket	\$ 35,000	\$ 35,000	\$ 35,000		\$ 62,215	Merrimack	No	\$ 28.92		V
Replacement of Meter Supervisor Truck (#14) Replace Valve/vac trailer unit	Replace 7 year old pick up with 167,000+ miles with small SUV Existing unit has reach the end of its usable life	1825491	2019 Docket 2019 Docket	\$ 28,000 \$ 65,000	\$ 28,000 \$ 65,000	\$ 28,000	\$ 31,563	\$ 25,563	Merrimack	No No	\$ 28.92 \$ 28.92		P
Trimble units for Meter Reading (6 units)	Replace CE meter reading equipment	1830144	2019 Docket	\$ 39,000	\$ 39,000	\$ 48,000	\$ 58,829	\$ 56,829	Merrimack	No	\$ 28.92 \$ 28.92		r
Pipe Saws (5)	Ongoing small equipment replacement - run rate	1819287	2019 Docket	\$ 6,000			\$ 5,900	\$ 5,900	Merrimack	No	\$ 28.92		I
Metal Detectors (6)	Ongoing small equipment replacement - run rate	1805724	2019 Docket	\$ 7,000 \$ 52,000	\$ 7,000 \$ 62,641	\$ 7,000 \$ 62,641	\$ - \$ 62,641	\$ - \$ 62,641	Merrimack	No	\$ 28.92 \$ 28.92		F
Add Air Conditioning to Mechanics Bay Four trench boxes	Security Project Replace 22 year old trench boxes	1805/24 1818578	2019 Docket 2019 Docket	\$ 52,000 \$ 20,000				\$ 62,641 \$ 22,456	Merrimack	Yes No	\$ 28.92 \$ 28.92		<u> </u>
Vehicle Lift Replacement	Replace 9000lb Ammco lift with new 12000lb Rotary Lift in Mechanic's Bay	1805726	2019 Docket	\$ -	ş -	\$ 7,974	\$ 7,974	\$ 7,974	Merrimack	Yes	\$ 28.92		ı
Utility Truck	Replace Vehicle #4 2011 F-350 w/ 140,000 miles and higher maintenance needs	1001110	2019 Docket	ş -	<u>\$</u>	\$ 65,000			Merrimack	No	\$ 28.92		F
Utility Van Utility Van	Replace Vehicle #72 2011 Ford E-2500 Van - High mileage & maintenance costs Replace Vehicle #27 2011 Ford E-2500 Van - High Mileage & maintenance costs	1826440 1826439	2019 Docket 2019 Docket	\$ - \$ -	<u>\$</u>	\$ 35,000 \$ 35,000	\$ 31,648 \$ 31,704	\$ 32,052 \$ 32,897	Merrimack Merrimack	No No	\$ 28.92 \$ 28.92		2
Utility Van	Replace Vehicle #27 2011 Ford E-2500 Van - Figh Mileage & maintenance costs	1826439	2019 Docket 2019 Docket	ş -	\$	\$ 35,000 \$ 35,000		\$ 32,097 \$ 32,097	Merrimack	No	\$ 28.92 \$ 28.92		2
Road Plates (2)	8x8 and 8x10 1" Steel Road Plates	1830146	2019 Docket	ş -	ş -	\$ 5,500	\$ 5,380	\$ 5,380	Merrimack	No	\$ 28.92	ş -	2
Interconnection of BWC (Bedford) to PWW	Interconnection of BWC (Bedford) to PWW	1800734	2019 Docket	\$ 85,000	\$ 310,000	\$ 310,000	\$ 310,000	\$ 258,923	Bedford	Yes	\$ 24.76	\$ 6,411	
Elm St	Replace 1570 LF of 8 & 6 inch CI with 12 inch DIPCL	1812907	2019 Docket 2019 Docket	\$ 416,000	\$ -	s -	s -	\$ 258,925 \$ -	Nashua	Yes	\$ 27.81		- 19
Monroe Street	Replace 485 LF of 4 inch (HDPE,CI) with 8 inch DIPCL	1812908	2019 Docket	\$ 122,000	ş -	ş -	ş -	\$ -	Nashua	Yes	\$ 27.81	Ş -	C
West Pearl Street	Replace 325 LF of 8 inch CI with 8 inch DIPCL	1812909	2019 Docket	\$ 100,000	\$ -	\$ -	\$ -	\$ -	Nashua	Yes	\$ 27.81		C
Gillis St Orange St (Concord St to Lock St)	Residual paving from prior year main replacement Residual paving from prior year main replacement	1812910 1812911	2019 Docket 2019 Docket	\$ 143,000 \$ 96,000	\$ 66,000 \$ 96,000	\$ 60,000 \$ 65,000		\$ 61,887 \$ 98,236	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81		_
Temple Street	Residual paving from prior year main replacement	1812923	2019 Docket	\$ -	\$ 20,000	\$ 20,000	\$ 20,000	\$ -	Nashua	Yes	\$ 27.81		R
Buchanan St	Residual paving from prior year main replacement	1800533	2019 Docket	\$ 36,600	\$ 36,600	\$ 38,000	\$ 33,330	\$ 33,330	Nashua	Yes	\$ 27.81	\$ 927	/
Lincoln Ave	Residual paving from prior year main replacement	1813071 & 1807532	2019 Docket	\$ 52,300	\$ 52,300	\$ 54,000	\$ 70,337	\$ 69,988	Nashua	Yes	\$ 27.81	\$ 1,946	4
Nutt St	Residual paving from prior year main replacement	1807332	2019 Docket	\$ 32,500 \$ 39,600	\$ 39,600	\$ 34,000 \$ 41,000	\$ 70,337 \$ 29,134	\$ 09,988 \$ 29,134	Nashua	Yes	\$ 27.81	- /	_
Circle Ave	Residual paving from prior year main replacement	1812913	2019 Docket	\$ 11,000	\$ 11,000	\$ 19,140	\$ 9,136	\$ 9,136	Nashua	Yes	\$ 27.81	\$ 254	4
Pratt St	Residual paving from prior year main replacement	1812914	2019 Docket	\$ 47,000				\$ 46,218	Nashua	Yes	\$ 27.81		
Zellwood Ave Faxon St	Residual paving from prior year main replacement Residual paving from prior year main replacement	1812915 1812916	2019 Docket 2019 Docket	\$ 25,000 \$ 6,000		\$ 27,000 \$ 7,000	. ,	\$ 26,077 \$ -	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81		R
		1812917 &			,	* ,,		,				÷	Ť
Fifield St	Residual paving from prior year main replacement	1806835	2019 Docket	\$ 4,400	\$ 4,400	\$ 6,400	\$ 28,673	\$ 59,273	Nashua	Yes	\$ 27.81	- /	
Fowell Ave Terrace Street	Residual paving from prior year main replacement Residual paving from prior year main replacement	1807533 1812918	2019 Docket 2019 Docket	\$ 59,400 \$ 5,200				\$ 57,369	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81		_
Beard St	Residual paving from prior year main replacement	1812919	2019 Docket	\$ 16,100	\$ 17,700			ş -	Nashua	Yes	\$ 27.81		R
Green St	Residual paving from prior year main replacement	1812920	2019 Docket	\$ 3,100	\$ 3,100	. ,		\$-	Nashua	Yes	\$ 27.81		R
Warren St	Residual paving from prior year main replacement	1807535	2019 Docket	\$ 11,000				ş -	Nashua	Yes	\$ 27.81		R
Lowell St Lemon St	Residual paving from prior year main replacement Residual paving from prior year main replacement	1812921 1812922	2019 Docket 2019 Docket	\$ 23,000 \$ 4,400				<u>s</u> -	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81		R
Lawndale Ave	Residual paving from prior year main replacement	1900349	2019 Docket				\$ 8,193	\$ 8,193	Nashua	Yes	\$ 27.81		
Main Street	Residual paving from prior year main replacement	XXXX	2019 Docket	A 54 500	a at (70)	a at (70	\$ 6,402	\$ -	Nashua	Yes	\$ 27.81		R
Mulvantity St - Emergency Replacement Proctor Street Emergency Replacement	Residual paving from prior year main replacement Residual paving from prior year main replacement	1812925 1812924	2019 Docket 2019 Docket	\$ 51,700 \$ -	\$ 21,670 \$ 11,600	\$ 21,670 \$ 11,600	\$ 21,670 \$ 10,896	\$ 20,101 \$ 10,896	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81		
Reserve for Contingent Liability for Paving Costs	Reserve for Contingent Liability for Paving Costs	n/a		\$ (634,800)	, j			\$ -	Nashua	No	\$ 27.81		_
Asset Management	Asset Management	1800341	2019 Docket	\$ 330,000	· /			\$ 386,820	Various	Yes	\$ 28.40	- /	_
Asset Management - Outside GIS Consulting Services Asset Management - Water Modeling Consulting	Outside GIS Consulting Services Water Modeling Consulting	1800341 1800341	2019 Docket 2019 Docket	\$ 73,000 \$ 50,000				Ŷ	Various Various	No No	\$ 28.40 \$ 28.40		C
Asset Management - Trimble R2 Units	Trimble R2 Units	1800341	2019 Docket	\$ 13,000			\$ - \$	ş -	Various	Yes	\$ 28.40		R
Asset Management - Water Level Well Monitoring Eq		1800341	2019 Docket	\$ 5,000			ş -	\$-	Various	No	\$ 28.40		R
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL	1806433 1702858 &	2019 Docket	\$ 475,100	\$ 435,000	Ş -	Ş -	Ş -	Nashua	Yes	\$ 27.81	Ş -	F
Ritter Street	Replace 500LF of 6 inch CI with 12 inch DIPCL	1806828	2019 Docket	\$ 161,500	\$ 215,000	\$ 225,000	\$ 191,000	\$ 168,793	Nashua	Yes	\$ 27.81	\$ 4,694	4
		1702857 &						Í Í					
Woodward Street	Replace 300 LF of 6 inch CI with 12 inch DIPCL	1806829	2019 Docket	\$ 95,300	\$ 110,000	\$ 130,000	\$ 142,373	\$ 145,417	Nashua	Yes	\$ 27.81	\$ 4,044) It
Factory Street	Replace 625 LF of 8 inch and 950 LF CI 950 LF of 16 inch DIPCL	1702836 & 1806830 1720993 &	2019 Docket	\$ 487,000	\$ 520,000	\$ 540,000	\$ 602,707	\$ 607,926	Nashua	Yes	\$ 27.81	\$ 16,906	5 I
Pennichuck Street	Replace 100 LF of 12 inch CI with 12 inch DIPCL	1806831	2019 Docket	\$ 39,900	\$ 42,000	\$ 76,000	\$ 76,000	\$ 78,146	Nashua	Yes	\$ 27.81	\$ 2,173	3 I:
Early Street	Replace 385 LF of 6" CI with 8" DIPCL	1806836	2019 Docket	\$ -	\$ 119,000	\$ 119,000	\$ 161,436	\$ 161,622	Nashua	Yes	\$ 27.81	\$ 4,495	ίA
Fossa Avenue	Replace 310 LF of 6 inch CI and 2 PVC with 6 inch and 4 inch DIPCL	1720991 & 1806801	2019 Docket	\$ 46,200	\$ 38,346	\$ 38,346	\$ 115,917	\$ 114,888	Nashua	Yes	\$ 27.81	\$ 3,195	5 R
Russell Avenue	Replace 775 LF of 8 inch and 275 LF of 6 inch CI with 775 LF of 8 inch and 225 LF of 4 inch DIPCL	1720992 & 1806802	2019 Docket	\$ 237,800	\$ 197,374	\$ 197,374	\$ 255,478	\$ 256,860	Nashua	Yes	\$ 27.81	\$ 7,143	3 15
Taylor Street (Main St to Lynn)	Replace 2084 LF of 6 inch CI with 8 inch DIPCL	1806803	2019 Docket 2019 Docket	\$ 237,800 \$ 171,800		. ,	. ,		Nashua	Yes	\$ 27.81 \$ 27.81	- /	_
Burnett Street	Replace 535 LF of 6 inch CI with 12 inch DIPCL	1806804	2019 Docket	\$ 172,800	\$ 143,424	\$ 143,424		\$ 203,647	Nashua	Yes	\$ 27.81	\$ 5,663	3 F
Field Street	Replace 325 LF of 6 inch CI with 6 inch DIPCL Replace 450 LF of 6 inch CI with 6 inch DIPCL	1806435 1806794	2019 Docket 2019 Docket	\$ 71,700 \$ 159,000	\$ 59,511 \$ 131,970	\$ 59,511 \$ 131,970			Nashua	Yes	\$ 27.81 \$ 27.81		
Fernwood Street Revere Street	Replace 450 LF of 6 inch CI with 6 inch DIPCL Replace 760 LF of 6 inch CI with 8 inch DIPCL	1806/94 1806795	2019 Docket 2019 Docket	\$ 159,000 \$ 191,000		\$ 131,970 \$ 158,530			Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81		
	Replace 760 LF of 8 inch CI and 160 LF of 6 inch CI with 760 LF of 8 inch and 160 LF												Т
Stevens Street	of 4 inch DIPCL	1806797	2019 Docket	\$ 40,000	\$ 33,200	\$ 40,200	\$ 264,258	\$ 264,358	Nashua	Yes	\$ 27.81	- /	
Evergreen Street Morton Street	Replace 310 LF of 1.5 and 1.25 inch CI with 4 inch DIPCL Replace 290 LF of 1.5 inch CI with 550 LF of 4 inch DIPCL	1806798 1806799	2019 Docket 2019 Docket	\$ 69,300 \$ 94,000	\$ 57,519 \$ 78,020	\$ 57,519 \$ 78,020		\$ 71,695 \$ 104,035	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81		
Monton Steet	Replace 290 LF of 1.5 inch CI with 550 LF of 4 inch DIPCL Replace 300 LF of 8 inch CI and 160 LF of 2 inch CI with 300 LF of DIPCL and 160 LF	1000/99	2019 DOCKET	<i>9</i> 94,000	e /8,020	∉ /8,020	<i>q</i> 103,934	÷ 104,035	inasnua	1 05	<i>q</i> 27.81	<u>a</u> 2,893	+
Park Avenue	of 4 inch DIPCL	1806796	2019 Docket	\$ 132,000	\$ 109,560	\$ 109,560	\$ 180,970	\$ 180,796	Nashua	Yes	\$ 27.81		_
	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL	n/a	2019 Docket	\$ 1,024,400	\$ -		\$ -	\$ -	Nashua	Yes	\$ 27.81	\$ - \$ -	E P
Coburn Woods (all side streets)			2010 D - 1 -:										- 12
Northwest High Pressure System Improvements	Looping of dead end mains. Parallel watermain required to rebuild Kessler Tank	1806805	2019 Docket 2019 Docket	\$ 600.000	\$ -	s -	\$ -	ş - ş -	Nashua	Vee	\$ 27.91		
		1806805 1806810	2019 Docket 2019 Docket 2019 Docket	\$ 600,000 \$ 500,000		<u>\$</u>	<u>\$</u> - \$-	\$ - \$ -	Nashua Amherst	Yes Yes	\$ 27.81 \$ 31.59	Ş -	E E

Explanation for Change/Addition/Deletion since 1/30/2018	
Additional labor, metal and other hardware to properly outfit the truck. Project reduced by \$16,000 for trade in value.	
10 New Services installed in 2018 18 failed services replaced in 2018.	
8 failed hydrants replaced in 2018.	
5 failed gate valves replaced in 2018.	
602 failed radios replaced in 2018. 2,303 new meters installed in 2018. The new meters installed were for new customers and also to replace	
meters that had lead content in excess of 0.25% by weight of the brass meter body.	
Purchase deferred until 2019	
Vehicle spec was changed to Heavy Duty Quad Cab	
Project reduced by \$6,000 for trade in value. Project deferred until 2019	
Purchase deferred until 2019	
Updated quotes with higher materials cost, steel surcharge & Freight.	
Purchase deferred until 2019	
2019 Capital Budget item moved to 2018 2019 Capital Budget item moved to 2018	
2019 Capital Budget item moved to 2018	
2019 Capital Budget item moved to 2018 Original budget done prior to design; increased scope of work to remove all AC water main from Back	
River Rd.	
City Sewer delayed until 2019 City Sewer delayed until 2019	
City Sewer delayed until 2019	
Restoration turned over to City of Nashua with multiple utilities contributing Based on revised paving contribution estimate	
Residual Paving Costs still outstanding at end of 2018	
Residual Paving Costs still outstanding at end of 2018	
Residual Paving Costs still outstanding at end of 2018 Residual Paving Costs still outstanding at end of 2018	
Residual Paving Costs still outstanding at end of 2018	
Residual Paving Costs still outstanding at end of 2018 Residual Paving Costs still outstanding at end of 2018	
Residual Paving Costs still outstanding at end of 2018	
Residual Paving Costs still outstanding at end of 2018	
Paving shared with other impacted Utilities and City	
Contingent Paving obligation paid	
Reduced based on anticipated work to be completed in 2018	
Carried in Asset Management Budget Used on an as-needed basis	
Replacement not needed in 2018	
Replacement not needed in 2018 Project deferred until 2019	
- Coper water the second s	
Increased due to conditions encountered during construction and additional temporary paving	
Increased due to conditions encountered during construction and additional temporary paving	
Increased due to conditions encountered during construction and additional temporary paving Added to Misc Replacements to improve fire protection near hospital	
Reduce based on bid numbers does not include final paving	
Final Paving completed in 2018	
Amount of replacement plipr increased from 790 LF to 2084 LF, includes final paving Final Paving completed in 2018	
Final Paving completed in 2018	
E 10 1 10 10 0010	
Final Paving completed in 2018 Final Paving completed in 2018	
Final Paving completed in 2018 The \$40,200 in the Board approved budget was a copy and paste error. The correct budget for this project	
Final Paving completed in 2018 The \$40,200 in the Board approved budget was a copy and paste error. The correct budget for this project based on the distribution engineer's original estimate was \$xxx,xxx	
Final Paving completed in 2018 The \$40,200 in the Board approved budget was a copy and paste error. The correct budget for this project	
Final Paving completed in 2018 The \$40,200 in the Board approved budget was a copy and paste error. The correct budget for this project based on the distribution engineer's original estimate was \$xxx,xxx Final Paving completed in 2018 Final Paving completed in 2018	
Final Paving completed in 2018 The \$40,200 in the Board approved budget was a copy and paste error. The correct budget for this project based on the distribution engineer's original estimate was \$xxx,xxx Final Paving completed in 2018 Final Paving completed in 2018 Final Paving completed in 2018. Final Paving completed in 2018. Deferred to future, time frame undetermined	
Final Paving completed in 2018 The \$40,200 in the Board approved budget was a copy and paste error. The correct budget for this project based on the distribution engineer's original estimate was \$xxx,xxx Final Paving completed in 2018 Final Paving completed in 2018 Final Paving completed in 2018. Original budget assumed paving would be completed in 2019. Deferred to future, time frame undetermined Project needed to be deferred to complete other water main replacement projects that came up in 2018	
Final Paving completed in 2018 The \$40,200 in the Board approved budget was a copy and paste error. The correct budget for this project based on the distribution engineer's original estimate was \$xxx,xxx Final Paving completed in 2018 Final Paving completed in 2018 Final Paving completed in 2018. Final Paving completed in 2018. Deferred to future, time frame undetermined	

Project Name/Description	Project Description	Work Order #	Financing Docket No.	Approved Budgeted Amount	Estimated Project Cost as of 6/30/2018	Estimated Project Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Final Project cost as of 12/31/2018	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Ī
Northwest High Pressure System Improvements	Replace 1300 LF of 12 inch AC with 1300 LF of 24 inch DIPCL along Deerwood Dr.	1806806	2019 Docket	ş -	ş -	ş -	ş -	ş -	Nashua	Yes	\$ 27.81	ş -	1
Northwest High Pressure System Improvements	Add 3400 LF or 20 inch HDPE and 24" DIPCL RR Crossing parallel to Amherst St	1806808		s -	s -	s -	s -	_	Nashua	Yes			1
Lake Street	(Nashua Airport) Replace 2950 LF of 6 inch CI with 12 inch DI	1814740	2019 Docket 2019 Docket	\$ 1,085,200	\$ 1,415,200	c	c	\$ - \$	Nashua	Yes	\$ 27.81 \$ 27.81	ş - ş -	+
Larconeer	Replace 2550 EF of o men of with 12 men D1	1702860 &	2019 DOCKET	<i>a</i> 1,005,200	φ 1,415,200	- -	- -	- -	Ivasiida	103	9 27.01		Ť
Kinsley Street	Replace 275 LF of 12" CI and 1020 LF of 6" CI with 12" DIPCL	1825911	2019 Docket		\$ 526,000	\$ 542,620	\$ 693,441	\$ 693,827	Nashua	Yes	\$ 27.81	\$ 19,295	1
Harvard Street	Replace 784 LF of 8 inch CI with 8 inch DIPCL	1814742	2019 Docket		\$ 150,000	<u>s</u> -	<u>s</u> -	\$ -	Nashua	Yes	\$ 27.81		1
Replace Jeep with Pickup Replace Ranger Pickup	Replace 2006 Jeep with 152,407 miles with Pickup Replace 2005 Ranger Pickup with 186,885 miles	1817800 1817796	2019 Docket 2019 Docket	\$ 30,000 \$ 30,000		\$ 22,969 \$ 34,054	\$ 22,969 \$ 34,054	\$ 22,969 \$ 34,054	Merrimack	No No	\$ 28.92 \$ 28.92		+
Mast Road Replacement (PEU-PWW) Interconnection	PWW share of PWW-PEU Interconneciton budget	1807148	2019 Docket 2019 Docket		\$ 57,000	\$ 67,850	\$ 67,850	\$ 67,850	Merrimack	Yes	\$ 28.92		1
Marshall Street	Replace 1074 LF of 8" CI with 1074 LF of 8" DIPCL	1813935	2019 Docket	ş -	\$ 270,000	\$ 325,000	\$ 354,813	\$ 355,362	Nashua	Yes	\$ 27.81		1
Ferryalls Court	Replace 116 LF of 1.25" steel pipe with 4" PVC	1825319	2019 Docket	ş -	\$ 60,000	\$ 62,000	\$ 77,391	\$ 78,552	Nashua	Yes	\$ 27.81	. ,	1
Salvail Court Lovewell Street	Replace 100 LF of 1.25 inch steel pipe with 4 inch PVC Replace 400 LF of 1.25" steel pipe with 8" DIPCL	1825910 1825912	2019 Docket 2019 Docket	\$ - \$ -	\$ 55,000 \$ 210,000	\$ 55,000 \$ 86,000	\$ 55,000 \$ 139,276	\$ 139,417	Nashua Nashua	Yes	\$ 27.81 \$ 27.81		0
Shakespeare High Pressure System	Expand HP system to address pressure issues to 4 streets	1813926	2019 Docket	s -	\$ 273,000	\$ 230,000	\$ 230,000	\$ 211,941	Nashua	Yes	\$ 27.81	\$ 5,894	
Lakeside Avenue	Replace 275 LF of 1.25" steel pipe with 4" PVC	n/a	2019 Docket	ş -	\$ 75,000	ş -	ş -	Ş -	Nashua	Yes	\$ 29.82	ş -	1
Cheshire Street	Replace 394 LF of 8" AC with 394 LF of 12" DIPCL	1825913	2019 Docket	c	e	\$ 123,000	\$ 183,586	\$ 183,707	Nashua	Yes	\$ 27.81	\$ 5,109	ŀ
Investment in developer installed services at 1xannual revenue	Per tariff (224)	n/a	2019 Docket 2019 Docket	s -	s -	\$ 123,000 \$ 133,175	\$ 133,175	\$ 141.179	Various	Yes	\$ 27.81 \$ 28.40	\$ 3,109	-
Chase Street	Replace 430 LF of 6" CI with 4: HDPE	1829925		\$ _	s _	\$	\$ 134,600	\$	Nashua	Yes	\$ 27.81		Ĩ
		60, 61, 62 & 63		¢ ¢	¢ (0.000	¢ (0.000		¢ 50.000				Ŷ	t
Booster/Well/Chem Feed pump replacements	Booster/Well/Chem Feed pump replacements (13 YTD)	workorders	2019 Docket	\$ 60,000	\$ 60,000	- ,	\$ 48,354	\$ 50,899	Various	Yes	\$ 28.40	\$ 1,446	
Replace 2 Submersible Jet Pumps	Replace two submersible jet pumps in the headworks at the WTP Install/replace treatment systems in small CWS	1818297	2019 Docket 2010 Docket	\$ -	\$ - e 15.000	\$ 14,707 \$ 15,000	\$ 14,707	\$ 14,707	Nashua	Yes	\$ 27.81 \$ 28.40		+
Install/replace treatment systems in small CWS Misc, Structural Improvements	Install/replace treatment systems in small CWS Misc, Structural Improvements	n/a	2019 Docket 2019 Docket	\$ 15,000 \$ 20,000		\$ 15,000 \$ 5,000	ə - S -	ə - S -	Various Various	Yes	\$ 28.40 \$ 28.40		+
Misc. Structural Improvements	WTP - Replace FWPS oil Tank Leak Monitor	1820031	2019 Docket	\$ -	,	\$ 1,200		\$ 3,331	Nashua	Yes	\$ 27.81		t
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		2019 Docket	\$ 20,000	\$ 20,000			\$ -	Various	Yes	\$ 28.40		T
Replacement of 18" Backwash Acuator	The replacement of the electric valve actuator for the 18" backwash water control valve	1819988	2019 Docket	ş -	\$ -	\$ 4,456	\$ 4,456	\$ 4,456	Nashua	Yes	\$ 27.81		Ţ
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	1010110	2019 Docket	\$ 30,000	. ,	\$ 10,000	\$ -	a 5.0/5	Various	Yes	\$ 28.40	-	+
Miscellaneous SCADA/Electrical Miscellaneous SCADA/Electrical	WTP - Replace High Lift #4, Soft Starter Mechanism WTP - Replace Turbidimeter Controller - Filters 1A/1B	1813113 1805725	2019 Docket 2019 Docket	Ŷ	<u>\$</u>	\$ 5,265 \$ 3,246	\$ 5,265 \$ 3,246	\$ 5,265 \$ 3,246	Nashua Nashua	Yes Yes	\$ 27.81 \$ 28.40		
Miscellaneous SCADA/Electrical	Install CMI units on 4 meters at this location	1814856	2019 Docket 2019 Docket	Ŷ	s -	\$ 3,272		\$ 3,572	Nashua	Yes	\$ 27.81		_
Miscellaneous SCADA/Electrical	Replacement of the variable frequency drive unit for pump #2 at this location	1819989	2019 Docket	ş -	\$ -	\$ 9,765	\$ 9,765	\$ 9,765	Nashua	Yes	\$ 28.40		T
Well Rehabilitation	Well Rehabilitation	n/a	2019 Docket	\$ 50,000	1	s -	s -	\$ -	Various	Yes	\$ 28.40		1
WIP Structural/HVAC WIP Structural/HVAC	WTP Structural/HVAC The rebuilding of the heating/AC roof top unit for WTP Finished Water Pump Station	1818208	2019 Docket 2019 Docket	\$ 10,000	\$ 10,000	\$ - \$ 6,094	\$ - \$ 6,094	\$ - \$ 6,094	Nashua Nashua	Yes	\$ 27.81 \$ 27.81		┿
Purchase new lab equipment	Purchase new lab equipment	1010200	2019 Docket 2019 Docket	\$ 20,000	\$ 20,000	\$ 5,000		\$ 0,094 \$ -	Nashua	No	\$ 27.81 \$ 27.81		t
Purchase new lab equipment	Replace Combined Filter Effluent Chlorine Analyzer	1820254	2019 Docket		\$ -	\$ 3,575		\$ 3,575	Nashua	No	\$ 27.81		f
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	n/a	2019 Docket	\$ 10,000		ş -	ş -		Various	Yes	\$ 28.40		1
Purchase new vehicle #212	Vehicle needed for new Community Water System Operator	1816162	2019 Docket	\$ 65,000		\$ 39,513	\$ 39,513	\$ 41,478	Nashua	No	\$ 27.81		+
Replace Vehicle Replace Vehicle	Replacement of vehicle #62 Replacement of vehicle #38	1825490 1819990	2019 Docket 2019 Docket	\$ 65,000 \$ 40,000	\$ 65,000 \$ 40,000	\$ 50,000 \$ 27,306	\$ 48,374 \$ 30,081	\$ 42,374 \$ 27,581	Nashua Nashua	No No	\$ 27.81 \$ 27.81		÷
WTP Perimeter Fence	WTP Perimeter Fence	n/a	2019 Docket	\$ 80,000	\$ 80,000	\$ -	\$ -	\$ -	Merrimack	Yes	\$ 28.92	-	Ť,
Bowers Dam Spillway reconstruction engineering	Bowers Dam Spillway reconstruction engineering	1824545	2019 Docket	\$ 90,000		\$ 50,000	ş -	ş -	Merrimack	No	\$ 28.92	ş -	T
WTP Camera system upgrade	Existing Camera system is outdated	1819073	2019 Docket	\$ 50,000	\$ 50,000	\$ 4,000		\$ -	Nashua	Yes	\$ 27.81		l
Dredging feasibility study Sourcewater Protection Study	Dredging feasibility study Sourcewater Protection Study	1807145 1807146	2019 Docket 2019 Docket	\$ 31,500 \$ 15,000		\$ 31,500 \$ 15,000	\$ 31,873	\$ - \$	Various Various	No No	\$ 28.40 \$ 28.40		÷
Purchase replacement Aeration system compressor	Harris Pond raw water aeration system, replace 1 of 2	1829845	2019 Docket 2019 Docket	\$ -	\$ -	\$ 17,000	\$ 17,000	\$ 16,889	Nashua	Yes	\$ 27.81	-	ť
Purchase new lab equipment	Purchase bench top Zeta potential analyzer	1826397	2019 Docket	ş -	\$ -	\$ 75,000	\$ 75,000	\$ 38,375	Nashua	Yes	\$ 27.81		T
Purchase and install 2-raw water streaming current monitors	Replacement of two older units, 1 currently not operational	1829848	2019 Docket	ş -	\$ -	\$ 55,000	ş -	\$ 10,695	Nashua	Yes	\$ 27.81		1
Aquatic Vegetation Assessment and Management WTP - Replace Filter to Waste Valve Actuator	Aquatic Vegetation Assessment and Management Replace valve actuator that controls flow of water from filters during waste/backwash ph	1807147 na 1800482	2019 Docket 2019 Docket	\$ 7,500	\$ 7,500 \$ -	\$ 7,500 \$ 6,276	\$ - ¢	\$ - \$ 6,276	Various Nashua	No Yes	\$ 28.40 \$ 27.81		-
wir - kepiace riter to waste valve Actuator	Repace valve actuator that controls now of water from inters during waste/ backwash pr	1814346, 1704175	2019 Docket	ş -	ş -	a 0,270	ş -	a 0,270	INASIIUA	105	\$ 2/.01	.a 1/5	t
Website Upgrades SIEM Appliance	Improved Customer Service Experience Aggregate Real-time monitoring of system alerts and logs	& 1826890 n/a	2019 Docket 2019 Docket	\$ 10,000 \$ 26,000		\$ 19,068 \$ -	\$ - \$ -	\$ 4,500 \$ -	Merrimack Merrimack	No No	\$ 28.92 \$ 28.92		-
		101011	2010 5						N				ľ
Windows Server Licensing Renewal AD Change Auditor	Purchase Windows server for virtual servers Needed to track changes to Authentication Server	1813466 n/a	2019 Docket 2019 Docket	\$ - \$ 4,000	\$ - \$ 4,000	\$ 22,925 \$ -	\$ 22,925 \$ -	\$ 22,925 \$ -	Merrimack Merrimack	No No	\$ 28.92 \$ 28.92		ł
File Server Replacement	Replace older hardware	n/a	2019 Docket 2019 Docket	\$ 13,000		ş -	ş -	<u>\$</u> -	Merrimack	No	\$ 28.92 \$ 28.92	-	ţ
Storage Upgrade	Replace non-supported hardware and increase speed	1817426	2019 Docket	\$ 70,000		\$ 52,000	\$ 43,785	\$ 45,197	Merrimack	No	\$ 28.92	ş -	ļ
Munis FER Enhancements Click Mobile Application Changes	Needed as Business process change Needed as Business process change	n/a	2019 Docket 2019 Docket	\$ 64,000 \$ 30,000		\$ 64,000 \$ 30,000	\$ -	\$ -	Merrimack	No	\$ 28.92 \$ 28.92		ļ
		n/a 1702223, 1707189		Í Í	· · · · · ·		-	\$ -	Merrimack	No			Ť
ClickMobile Move to iPads Additional iPads for Meter Techs	Move to a more functional device Configuration and deployment of 6 devices	& 1807440 1825224	2019 Docket 2019 Docket	\$ 140,000 \$ -	\$ 140,000 \$ -	\$ 140,000 \$ 6,000	\$ 140,000 \$ 6,000	\$ 249,378 \$ 4,680	Merrimack	No	\$ 28.92	s - s -	$\frac{1}{1}$
Implement Customer Balances over the phone	Improved Customer Service Experience	1025224	2019 Docket 2019 Docket	\$ 4,000	\$ 4,000	\$ -	\$ -	\$ -	Merrimack	No	\$ 28.92	1	t
Miscellaneous Hardware	Run Rate replacements		2019 Docket	\$ 15,000	\$ 15,000			\$ -	Merrimack	No	\$ 28.92	ş -	1
Miscellaneous Hardware	Purchase network switch for core routing @ Manchester Street	1813280	2019 Docket	ş -	-	\$ 4,203		\$ 4,203	Merrimack	No	\$ 28.92	-	t
Miscellaneous Hardware Miscellaneous Hardware	Castle/Ware Laptops Replacement Printer - Engineering	1818947 1817323	2019 Docket 2019 Docket	Ŷ	\$ - \$ 2,249	\$ 4,642 \$ 2,249		\$ 4,642 \$ 2,249	Merrimack	No No	\$ 28.92 \$ 28.92		╉
Miscellaneous Hardware Miscellaneous Software	Run Rate replacements	181/323 n/a	2019 Docket 2019 Docket	\$ -		\$ 2,249 \$ 12,000		<i>a</i> 2,249	Merrimack	No	\$ 28.92 \$ 28.92		t
LIMS upgrade	Allow for Electronic Data Collection in the Field	1817795	2019 Docket	\$ 11,000	\$ 6,000			\$ 939	Merrimack	No	\$ 28.92	ş -	Ĵ
Physical Server for Pearl	Physical Server for Pearl	n/a	2019 Docket	\$ 12,000		\$ -	<u>s</u> -		Merrimack	No	\$ 28.92	-	1
Corporate Job Scheduler Consulting	Centralized nightly Job management and notification Consulting	n/a n/a	2019 Docket 2019 Docket	\$ 4,000 \$ 32,000					Merrimack	No No	\$ 28.92 \$ 28.92		+
Laptops for L.G. & D.W.	Laptops for L.G. & D.W.	n/a 1813464	2019 Docket 2019 Docket	\$ 32,000 \$ 4,000	· · · · · · · · · · · · · · · · · · ·	\$ 32,000 \$ 5,442	\$ 32,000 \$ 5,442	\$ 5,442	Merrimack	No	\$ 28.92 \$ 28.92		ł
Additional Computers	Additional Computers	1814843	2019 Docket	\$ 4,000		\$ 5,717	\$ 5,717	\$ 6,798	Merrimack	No	\$ 28.92	ş -	ţ
Replace 43 desk top computers at Main office	Computers are 7 years old and running on unsupported Windows 7 platform	1825498	2019 Docket	ş -	\$ -	\$ 41,267	\$ 41,267	\$ 49,614	Merrimack	No	\$ 28.92		ļ
Office 365 Exchange Migration	Office 365 Exchange Migration	1817818	2019 Docket	7	\$ 16,400	\$ 6,200		\$ 7,737	Merrimack	No	\$ 28.92		4
VPN Update Berkshire St	VPN appliance to better support our mobile workforce Water Main Replacement	1824579 1817715	2019 Docket 2019 Docket	\$ - \$ -	<u>></u> - S -	ş -	<u>\$</u>	\$ 3,366 \$ 5,239	Nashua	Yes	\$ 27.81	\$ - \$ 146	┦
Bedford Water System Expansion	5/8" Meters	1820043	2019 Docket 2019 Docket	\$ -	ş -	ş -	ş - Ş -	\$ 5,239 \$ 10,947	Bedford	Yes	\$ 24.76		
GIS/GeoSync/Work	GIS/GeoSync/Work	1813962	2019 Docket		\$ -	ş -	ş -	\$ 13,360	Various	Yes	\$ 28.40	\$ 379	
2017 Phase 2 Install Overhead Crane and Door-WTP Process Area Design	2018 Phase 2 Install Overhead Crane and Door-WTP Process Area Design	1814354	2019 Docket	-	ş -	ş -	ş -	\$ 12,412	Nashua	Yes	\$ 27.81		
New Virtual Server	New Virtual Server Replace VFD, Booster #2, Orchard Ave Station	1819083	2019 Docket 2010 Docket		\$ - \$ -	\$ - e	\$ -	\$ 16,321 \$ 1,710	Merrimack	Yes	\$ 28.92 \$ 27.81		
Replace VFD	Replace vrD, Dooster #2, Orchard Ave Station	1819288	2019 Docket	- ș	- <u>د</u>	- ș	- ș	\$ 1,719	Nashua	Yes	<i>a</i> 27.81	\$ 48	+

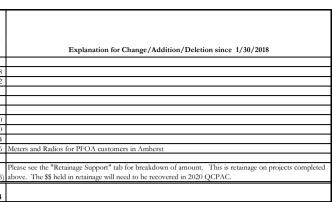
c	Europeanian for Change (Addition (Deletion since 1/20/2018
	Explanation for Change/Addition/Deletion since 1/30/2018 Deferred to 2019 to take advantage of low interest DWGTF Loan - design and survey
	Deferred to 2019 to take advantage of low interest DWGTF Loan - design and survey
	Gas Company with late start. Project requires temporary water. Deferred to 2019
	Gas Company with fate start. Project requires temporary water. Deferred to 2019
5	In conjunction with the City of Nashua's 2018 sewer replacements
	In conjunction with the City of Nashua's 2018 sewer replacements - Delayed to 2019
2	Added after approved budget. Opportunity to replace 8 inch A/C pipe RR crossing on Marshall St was to be lowered and fire protection concerns
5	Paving program to overlay street. Found leak. Main found in poor condition
	paving program, same era as Ferry Alls Ct. Gas replacement will compromise 1933 era water line. Based on revised contractor estimate. Final paving
7	completed in 2018
	Project developed in response to a combination of low pressure and pressure surges causing customer
ł	plumbing issues. Gas Company with late start. Project requires temporary water. Deferred to 2019
	Eliminate AC water main located in Street that City added to their 2018 street paving project. Final paving
)	completed in 2018. Tasiffed investment not included in Board approved budget
	Tariffed investment not included in Board approved budget
	Completed in conjunction with a City of Nashua Sewer Replacement. City covering Street reconstruction
5	
)	
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	No well rehabilitations projected to occur
)	
	None projected through year end
	Project reduced by \$6,000 for trade in value.
	Project reduced by \$2,500 for trade in value. deferred to 2019 due to resource availability
	Not Eligible for 2019 QCPAC as this is engineering only
	Equipment will not be installed until 2019.
	Study is not QCPAC Qualified Study is not QCPAC Qualified
)	Replaced existing compressor which was not repairable
7	Device used to verify and correlate streaming current monitors and further optimize treatment process. Devices used to optimize water treatment at Nashua Facility - Purchase in new lab equipment line above
	Study is not QCPAC Qualified
;	
	Project deferred until 2019 Project Cancelled due to reduced need
	Project Cancelled due to reduced need The assimilation of multiple new Windows Server licenses from multiple projects into one Enterprise
	License to cover all virtual servers. Project Finished
	Due to the licensing model moving from Purchase to Subscription based, this will become an expense item. Project Cancelled due to reduced need
	Project Complete
	Project deferred until 2019 Deferred to 2019
	Hardware purchases and Contractor charges
	Deferred until 2019
	Replaced desktops. Allows for remote access via VPN
_	Replaced desktops. Allows for remote access via VPN Replace failed engineering printer
	No plans for the rest of the year. Will request from contingency fund if something comes up
	No additional project costs expected. Project Cancelled due to reduced need
	deferred
_	Three Lap tops acquired for L.G., G.T. and J.B. Replaced desktops. Allows for remote access via VPN. Pr
_	Project Complete
	Moved project from 2019 to 2018
-	
5	2018 Spring clean up associated with water main project completed in 2017.
)	Meters and Radios for PFOA customers in Bedford
2	
2	
/	

PWW 2019 QCPAC 5

Project Name/Description	Project Description	Work Order #	Financing Docket No.	Approved Budgeted Amount	Estimated Project Cost as of Pro 6/30/2018	Estimated oject Cost as of 9/30/2018	Estimated Project Cost as of 11/30/2018	Final Project cost as of 12/31/2018		Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Unitrends RC823S	Backup and Disaster Recovery Device	1617283	2019 Docket	ş -	ş - ş	-	ş -	\$ 27,998	Merrimack	No	\$ 28.92	ş -
W. Allds St. Water Main Replacement - Main Street Nashua Intersections	W. Allds St. Water Main Replacement - Main Street Nashua Intersections	1700632	2019 Docket	ş -	ş - ş	-	ş -	\$ 27,969	Nashua	Yes	\$ 27.81	\$ 778
W Allds Street Phase II (Main to end) Int with Main Street Nashua Inters	W Allds Street Phase II (Main to end) Int with Main Street Nashua Inters	1700676	2019 Docket	ş -	\$ - \$	-	\$ -	\$ 6,531	Nashua	Yes	\$ 27.81	\$ 182
TIG Welder	TIG Welder	1900419	2019 Docket	ş -	ş - ş	-	ş -	\$ 2,955	Merrimack	No	\$ 28.92	ş -
Utility Truck Replacement	Replacement of #47 with Truck #315	1900418	2019 Docket	ş -	ş - ş	-	ş -	\$ 62,215	Merrimack	No	\$ 28.92	ş -
Additional Trench Boxes	Additional Trench Boxes	1826437	2019 Docket	ş -	ş - ş	-	ş -	\$ 22,241	Merrimack	No	\$ 28.92	ş -
Overhead Crane and Door	WIP Process Area Installation	1807303	2019 Docket	ş -	ş - ş	-	ş -	\$ 19,761	Nashua	Yes	\$ 27.81	\$ 550
Sweet Hill Well #3	Sweet Hill Well #3 (2018 Carryover)	1813054	2019 Docket	ş -	\$ - \$	-	ş -	\$ 2,408	Plaistow	Yes	\$ 28.93	\$ 70
SCADA System Upgrade	WTP - 2018 replace all SCADA computers and upgrade system	1813303	2019 Docket	ş -	ş - ş	-	ş -	\$ 20,642	Nashua	Yes	\$ 27.81	\$ 574
Amherst Water System Expansion	Meters and Radios	1806832	2019 Docket	\$ -	s - s	-	ş -	\$ 16,646	Amherst	Yes	\$ 31.59	\$ 526
#353-Service Truck Replacement (#47)	#353-Service Truck Replacement (#47)	1813945	2019 Docket	ş -	\$ - \$	-	ş -	\$ 1,103	Merrimack	No	\$ 27.81	ş -
Retainage	Retainage		2019 Docket					\$ (197,247)	Nashua	Yes	\$ 27.81	\$ (5,485)
				\$ 10,008,000	\$ 9,102,095 \$	6,807,006	\$ 8,600,675	\$ 8,263,302	Projected Prop	· ·	e associated with QCPAC projects	

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Total PWW Capex for 2018 - \$ 8,263,302



Pennichuck Water Works, Inc.
DW 19-029
Projected 2019 QCPAC Capital Expenditures

			Financing				Estimated Project			QCPAC Eligible Property Tax Expense Based on Qrdy Update) Tax Rate (I) Explanation for Change/Addition/Deletion since Petition Filing		
Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.		Board Approved Eligible for 202 2019 Capex Budget QCPAC Surchard		Taxable	Tax Rate (1)			
New Services (10) Renewed Services (20)	Single Family, Owner Build, New Homes Replacement of failed services		DW17-183 DW17-183	26,101 26.101	2/2/2018 2/2/2018	\$ 46,000 Yes \$ 92,000 Yes	\$ 46,000 Various \$ 92,000 Various	Yes Yes	\$ 28.85 \$ 28.85	\$ 1,327 \$ 2,654		
Hydrants (10) Gates (10)	Replacement of non functional hydrants Replacement of Failed Gate Valves		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 50,000 Yes \$ 40,000 Yes	\$ 50,000 Various \$ 40,000 Various	Yes Yes	\$ 28.85 \$ 28.85	\$ 1,443		
Radios (2750)	Replace out of warrantee failed radio meter readers		DW17-183	26,101	2/2/2018	\$ 275,000 Yes	\$ 30,000 Various	Yes	\$ 28.85	\$ 866 peferred Radio Replacement program (Radios are 12 years old). 300 left in budget to replace failed publics.		
Meters (Growth) 5/8"-2" - Core & CWS (480) Meters 5/8"-6" Lead Meter Exchange - Core & CWS (3000)	Meters (Growth 5/8".2" - Core & CWS (48)) Meters 5/8".6" Lead Meter Exchange - Core & CWS (3000)		DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ 48,000 Yes \$ 300,000 Yes	\$ 48,000 Various \$ 300,000 Various	Yes	\$ 28.85 \$ 28.85	\$ 1,385 \$ 8,655		
Entrance Security Gate & Perimeter Fence Renlace 13 vr Vac Trailer - Safety & Maint issue	Entrance Security Gate & Perimeter Fence Renlace 13 vr Vac Trailer - Safety & Maint issue		DW17-183 DW17-183	26,101 26,101 26.101	2/2/2018 2/2/2018 2/2/2018	\$ 75,000 Yes \$ 100,000 Yes	\$ 75,000 Merrimack \$ 75,000 Merrimack	Yes	\$ 28.92 \$ 28.92			
Protectus Meter Upgrade	Spitbrook Rd Protectus Meter Upgrade Rofrost Turbo 2 Electric Pine Freeze Kts		DW17-183 DW17-183	26,101 26,101 26,101	2/2/2018 2/2/2018 2/2/2018	\$ 21,000 Yes \$ 21,000 Yes	\$ 21,000 Nashua	Yes	\$ 27.81	\$ 584		
Pipe Freeze Kits (2) Network Digital Display Installation	Relocate & network display to Assignment room & new 75" display in Conference Rm		DW17-183 DW17-183 DW17-183	26,101 26,101 26.101	2/2/2018 2/2/2018 2/2/2018		\$ 2,700 Merrimack	Yes Yes	\$ 27.81 \$ 28.92 \$ 30.81	\$ 78 New technology available to display department information digitally		
Plate Compactors (4) 2018 Dodge Ram 2500 (#313)	Replacement of failed compactors unable to obtain repair parts Carryover Costs to 2018 projects not recovered in prior QCPAC	1907613	0.1 DSRR	20,101	2/2/2018	\$ - No	\$ 1,969 Merrimack	No	\$ 28.92			
2018 Dodge Ram 2500 (#314) 2018 Dodge Ram 2500 (#315)	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1907612 1907615	0.1 DSRR 0.1 DSRR			\$ - No \$ - No	\$ 1,969 Merrimack \$ 2,542 Merrimack	No	\$ 28.92 \$ 28.92	\$ - \$ -		
2018 Dodge Ram Promaster 1500 Cargo Van (#347) 2018 Dodge Ram Promaster 1500 Cargo Van (#348)	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1907987 1907988	0.1 DSRR 0.1 DSRR			\$ - No \$ - No	\$ 1,060 Merrimack \$ 1,060 Merrimack	No	\$ 28.92 \$ 28.92	\$ - \$ -		
2018 Dodge Ram Promaster 1500 Cargo Van (#349) Meter Data Logging Equipment	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1907989 1907885	0.1 DSRR 0.1 DSRR			\$ - No \$ - No	\$ 1,060 Merrimack \$ 2,849 Various	No Yes	\$ 28.92 \$ 28.85			
Gilman Street Elm Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL Replace 875 LF of 6 inch CI with 12 inch DIPCL		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 550,000 Yes \$ 559,350 Yes	\$ 615,000 Nashua \$ 255,000 Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 17,103 \$ 7,092		
Monroe Street W.Pearl Street	Replace 310 LF of 4 inch CI with 8 inch DIPCL Replace 260 LF of 8 inch CI with 8 inch DIPCL		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 122,270 Yes \$ 138,050 Yes	\$ 120,000 Nashua \$ 140,000 Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 3,337 \$ 3,893		
Harvard Street West Hollis Street Check Valve Pit	Replace 800 LF of 8 inch CI with 8 inch DIPCL Install at the int of W. Hollis St and Panther Dr.		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 247,500 Yes \$ 88,000 Yes	\$ 249,200 Nashua \$ - Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 6,930 \$ - Deferred to future year to accommodate additional water main projects		
NWS Improvements - Manchester Street NWS Improvements -Route 101A and Route 121 (Amherst)	Add 2700 LF of 24 inch DIPCL on Manchester St. Add 2200 LF of 12 inch DIPCL to close loop		_			\$ 660,000 Yes \$ 550,000 Yes	\$ 660,000 Nashua \$ 550,000 Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 18,355		
NWS Improvements - Noue 101A and Koule 121 (Annerst) NWS Improvements - Tinker Road NWS Improvements - Deerwood Drive & Amherst St. Intersection	Replace 825 LF of 12 inch DTPCL to Gose loop Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL Replace 1300 LF of 12 inch AC with 1300 LF of 24 inch DIPCL		DWGTF Financing			\$ 550,000 Tes \$ 522,500 Yes \$ 467,500 Yes	\$ 522,500 Nashua \$ 467,500 Nashua	Yes	\$ 27.81 \$ 27.81 \$ 27.81	\$ 15,250 \$ 14,531 \$ 13,001		
NWS Improvements - Deerwood Drave & Amherst St. Intersection NWS Improvements - Deerwood Dr. Northwest Blvd Loop NWS Improvements Ponemah Rd/Route 101A.Loop	Reptace 1300 LF of 12 mch AC with 1300 LF of 24 mch DIPCL Add 3400 LF of 20 mch HDPE including RR pipe jacking Add 2200 LF of 21 mch DIPCL to close two loop major dead ends		. mancing			\$ 635,800 Yes	\$ 635,800 Nashua	Yes	\$ 27.81 \$ 27.81 \$ 27.81	\$ 17,682		
City of Nashua Sewer - Chase Street	Replace 470 LF of 6 inch CIP with 470 LF of 6 inch DIPCL	1829925, 1900484	DW17-183	26,101	2/2/2018	\$ 484,000 Yes \$ 176,000 Yes	\$ 484,000 Nashua \$ 190,000 Nashua	Yes	\$ 27.81			
City of Nashua Sewer - Ash Street City of Nashua Sewer - Lake Street	Replace 710 LF of 6 inch CIP with 710 LF of 12 inch DIPCL Replace 2950 LF of 6 inch CI with 12 inch DIPCL	1814367 1814740	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 242,000 Yes \$ 990,000 Yes	\$ 162,800 Nashua \$ 1,890,050 Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 4,527 \$ 52,562		
City of Nashua Paving - Vilna St. Interconnection to BWC	Replace 15 LF of 1.5 inch steel with 2 inch HDPE for paving program Carryover Costs to 2018 projects not recovered in prior QCPAC	1900429	DW17-183 0.1 DSRR	26,101	2/2/2018	\$ - Yes \$ - No	\$ 16,750 Nashua \$ 3,400 Nashua	Yes Yes	\$ 27.81 \$ 27.81	466 Includes final paving - complete 5		
Woodward Avenue Ritter Street	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1910117 1910116	0.1 DSRR 0.1 DSRR			\$ - No \$ - No	\$ 2,200 Nashua \$ 6,890 Nashua	Yes	\$ 27.81 \$ 27.81	Carry over costs from project completed in 2018, pay for with 0.1 DSRR Carry over costs from project completed in 2018, pay for with 0.1 DSRR		
Factory Street Taylor Street	Carryover Costs to 2018 projects not recovered in prior QCPAC	1909270 1906988	0.1 DSRR 0.1 DSRR			\$ - No \$ - No	\$ 20,209 Nashua \$ 233 Nashua	Yes	\$ 27.81 \$ 27.81	\$ 562 Carry over costs from project completed in 2018, pay for with 0.1 DSRR		
Shakspeare HP System Exp City of Nashua Paving - Mill St.	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC Abandon 1.5" Steel water main and switch customers over to parallel 8" water main	1901942	0.1 DSRR 0.1 DSRR			\$ - No \$ - Yes	\$ 257 Nashua \$ 257 Nashua \$ 17,900 Nashua	Yes	\$ 27.81 \$ 27.81	6 Carry over costs from project completed in 2018, pay for with 0.1 DSRR 7 Carry over costs from project completed in 2018, pay for with 0.1 DSRR 408 Includes from project complete		
City of Nashua Paving - Ferryalls Ct	Abandon 1.5 Steel water main and switch customers over to paralel 8 water main Replace 35 ft of 1" copper water main crossing Canal St with a 4" DIPCL Water Main	1908316	DW17-183	26,101	2/2/2018	\$ - Yes	\$ 58,580 Nashua	Yes	\$ 27.81 \$ 27.81	§ 1.629 Ferryalls was replaced last year to the limit of Canal St - complete this is phase 2 extending into		
City of Nashua Paving - Salvail Ct	Replace 1.5" Steel water main and install a 4" DIPCL Water Main (contaminated area)	1908317	DW17-183	26,101	2/2/2018	\$ - Yes	\$ 95,000 Nashua	Yes	\$ 27.81	Canal St - complete S 2,642 Includes final paving - complete		
City of Nashua Paving - Nutt St - Final Paving and restoration City of Nashua Paving - Cheshire St - Final Cleanup	Pavement restoration and final landscaping Fence repair and site clean up	1907682 1908353	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - Yes \$ - Yes	\$ 13,000 Nashua \$ 1,400 Nashua	Yes Yes	\$ 27.81 \$ 27.81	Solution 2 State St		
City of Nashua - Simon St at Will St Upgrade City of Nashua Paving - Main St.	Abandon pump station pit and clean up intersection pipe work for improved flows Main St final paving at intersection with Factory St. Carry over from 2018		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - Yes \$ - Yes	\$ 215,100 Nashua \$ 24,500 Nashua	Yes Yes	\$ 27.81 \$ 27.81	5,982 Includes base paving - Finished paving required in 2020 not included Final paving bill for this project.		
City of Nashua Paving - Lemon St - Carry over from 2017 City of Nashua Paving - Lowell St - Carry over from 2017	Paving only - Carry over from 2017 Paving only - Carry over from 2017		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - Yes \$ - Yes	\$ 24,850 Nashua \$ 37,000 Nashua	Yes	\$ 27.81 \$ 27.81	S 691 Estimated paving contribution - Originally anticipated for 2020 S 1,029 Estimated paving contribution - Originally anticipated for 2020		
City of Nashua Paving - Green St - Carry over from 2017 City of Nashua Paving - Bread St - Carry over from 2017	Paving only - Carry over from 2017 Paving only - Carry over from 2017		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - Yes \$ - Yes	\$ 10,000 Nashua \$ 25,900 Nashua	Yes Yes	\$ 27.81 \$ 27.81	278 Estimated paving contribution - Originally anticipated for 2020 S 720 Estimated paving contribution - Originally anticipated for 2020		
City of Nashua Paving - Terrace St - Carry over from 2017 City of Nashua Paving - Warren St - Carry over from 2017	Paving only - Carry over from 2018 Paving only - Carry over from 2017		DW17-183 DW17-183	26,101 26.101	2/2/2018 2/2/2018	\$ - Yes \$ - Yes	\$ 20,500 Nashua \$ 19,500 Nashua	Yes	\$ 27.81 \$ 27.81	\$ 570 Estimated paving contribution - Originally anticipated for 2020		
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River		DWGTF			\$ 5,500,000 Yes	\$ 6,600,000 Merrimack	Yes	\$ 28.92	 Bids higher than Engineers estimate due to tight contractor market and changes in final permit requirements that impacted initial design that engineers estimate was based on. 		
Asset Management Outside GIS Consulting Services Asset Management Water Modeling Consulting	Outside GIS Consulting Services Water Modeling Consulting		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 60,000 Yes \$ 36,000 Yes	\$ 60,000 Various \$ 36,000 Various	No No	\$ 28.85 \$ 28.85	\$ -		
Asset Management Water Modering Consuming Asset Management Trimble R2 Units	Trimble R2 Units		DW17-183 DW17-183	26,101	2/2/2018	\$ 30,000 Tes \$ 14,000 Yes	\$ 30,000 Various \$ 14,000 Various	Yes	\$ 28.85 \$ 28.85			
WAM/Synergen Upgrade Cost & Functionality Study	WAM/Synergen Upgrade Cost & Functionality Study	1900568, 1910219	DW17-183	26,101	2/2/2018	\$ - No	\$ 45,000 Various	No	\$ 28.85	\$ - Study to select replacement of Synergyn CMMS system which goes unsupported at the end of 2020		
Investment in developer installed services at 1xannual revenue 2019 Ford Escape	Per tariff Replace Totaled 2015 Ford Escape	1907481	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 60,000 Yes \$ - Yes	\$ 60,000 Various \$ 23,998 Merrimack	Yes No	\$ 28.85 \$ 28.92	1,731 Vehicle in accident. Vehicle totaled and needed to be replaced.		
Bower Dam reconstruction and engineering	Bower Dam reconstruction and engineering		DW17-183	26,101	2/2/2018	\$ 25,000 No	\$ 25,000 Merrimack	No	\$ 28.92	Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for		
Bowers Dam Letter of Deficiency design/analysis	perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity					No	\$ 35,000 Merrimack	No	\$ 28.92	\$ - this dam Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for		
Harris Dam Letter of Deficiency design/analysis	perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity					No	\$ 40,000 Merrimack	No	\$ 28.92	\$ - this dam Letter of deficiency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for		
Supply Pond Letter of Deficiency design/analysis Booster Pump replacement/rebuild	perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity Booster Pump replacement/rebuild		DW17-183	26.101	2/2/2018	No \$ 40,000 Yes	\$ 35,000 Merrimack \$ 15,445 Various	No Yes	\$ 28.92 \$ 28.85	this dam this dam S 446 Reduced by intermediate booster pump rebuild below.		
Booster Pump replacement/rebuild Well Pump replacements	WTP Rebuild pump end, Intermediate Pump #3 Well Pump replacements	1914986	DW17-183 DW17-183	26,101 26.101	2/2/2018 2/2/2018	\$ - Yes \$ 15.000 Yes	\$ 24,555 Nashua \$ 15,000 Various	Yes	\$ 27.81 \$ 28.85	683 Pump Bearings failed on Intermediate Booster Pump at WIP 8 433		
Chemical Feed pump replacements Upgrade SCADA historian software, new hardware	Chemical Feed pump replacements upgrade SCADA historian software, new hardware		DW17-183 DW17-183	26,101	2/2/2018	\$ 10,000 Yes \$ 150,000 Yes	\$ 10,000 Various \$ 150,000 Various	Yes	\$ 28.85 \$ 28.85	\$ 289 \$ 4,328		
Twin Ridge rebuild softener system, install radon treatment	Twin Ridge rebuild softener system, install radon treatment		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 50,000 Yes \$ 20,000 Yes	\$ 50,000 Various \$ 50,000 Plaistow \$ 10,700 Various	Yes	\$ 28.85 \$ 28.85 \$ 28.85	\$ 1,443		
Mise. Structural Improvements Mise. Structural Improvements	Mise. Structural Improvements Replace Fire Alarm System CPU	1907102, 1910221	DW17-183 DW17-184	26,102	2/3/2018	\$ 20,000 Tes \$ -	\$ 10,700 Various \$ 9,300 Nashua	Yes	\$ 28.85 \$ 28.85			
Miscellaneous Equipment Purchased Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased Purchase 2 Gas Monitors for WS Confined Space Program	1907611	DW17-183 DW17-184	26,101	2/2/2018 2/3/2018	\$ 17,500 Yes \$ -	\$ 9,928 Various \$ 4,568 Nashua	Yes Yes	\$ 28.85 \$ 28.85			
Miscellaneous Equipment Purchased Miscellaneous SCADA/Electrical	Purchase Entry Tripod and Winch for WS Confined Space Program Miscellaneous SCADA/Electrical	1910296	DW17-185 DW17-183	26,103 26,101	2/4/2018 2/2/2018	\$ - \$ 30,000 Yes	\$ 3,004 Nashua \$ 30,000 Various	Yes Yes	\$ 28.85 \$ 28.85	\$ 866		
WTP Structural/HVAC Purchase new lab equipment	WTP Structural/HVAC Purchase new lab equipment		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 10,000 Yes \$ 20,000 Yes	\$ 10,000 Nashua \$ 18,500 Nashua	Yes Yes	\$ 28.85 \$ 28.85	\$ 289 \$ 534 Reduced by purchase of HACH DR 900 below		
Purchase new lab equipment Miscellaneous Fencing and Security projects	HACH DR 900 Miscellaneous Fencing and Security projects	1908450	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - Yes \$ 10,000 Yes	\$ 1,500 Nashua \$ 10,000 Various	Yes Yes	\$ 28.85 \$ 28.85	\$ 43 \$ 289		
Replace Ferric Chloride Feed pump Carbon media changeout-filters 1 & 2	Replace Ferric Chloride Feed pump Carbon media changeout-filters 1 & 2		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 10,000 Yes \$ 1,000,000 Yes	\$ 10,000 Nashua \$ 1,525,000 Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 42,410 New PFAS regulations require that all filter media be changed out to ensure compliance with the		
Add 3rd pump at Main Dunstable Booster, replace 1 existing Replace Kessler Farm booster pump package	Add 3rd pump at Main Dunstable Booster, replace 1 existing Replace 20 year old package booster station pumps and piping. Piping is steel which is beginning to pit		DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 120,000 Yes \$ 75,000 Yes	\$ - Nashua \$ 75,000 Nashua	Yes	\$ 27.81 \$ 27.81	Pump delivery time is about 30 weeks which delays this project until 2020 2,086		
Stump Pond Subwatershed assessment Stump Pond Stormwater BMP	Stump Pond Subwatershed assessment Stump Pond Stormwater BMP		0.1 DSRR 0.1 DSRR			\$ 25,000 No \$ 20,000 No	\$ 25,000 Merrimack \$ 20,000 Merrimack	No	\$ 28.92 \$ 28.92			
Public Education -Watershed signage Replace 2 Hach Turbidimeters and associated control module	Public Education -Watershed signage Replace 2 Hach Turbidimeters and associated control module		0.1 DSRR DW17-183	26,101	2/2/2018	\$ 20,000 No \$ 10,000 Yes	\$ 20,000 Merrimack \$ 10,000 Nashua	No Yes	\$ 28.92 \$ 27.81			
Camera System Upgrade Dredging Feasibility Study	Carryover Costs from 2018 Project Carryover Costs from 2018 study	1900413 1901939	0.1 DSRR 0.1 DSRR			\$ - No \$ - No	\$ 7,500 Nashua \$ 24,600 Merrimack	Yes	\$ 27.81 \$ 28.92	Carry over costs from project completed in 2018, pay for with 0.1 DSRR		
Source Water Protection Study Aquatic Veretation Assessment	Carryover Costs from 2018 study Carryover Costs from 2018 study	1901740 1906080	0.1 DSRR 0.1 DSRR 0.1 DSRR	-		\$ - No \$ - No	\$ 12,000 Merrimack \$ 4,200 Merrimack	No	\$ 28.92 \$ 28.92 \$ 28.92	Soudy - Pay for with 0.1 DSRR Sudy - Pay for with 0.1 DSRR		
Fiber Conduit between WTP and Dist	Install Fiber Conduit between Water Treatment Plant and Distribution to eliminate ongoing Comcast Ethemed line to one of the buildings		DW17-183	26,101	2/2/2018	\$ 40,000 Yes	\$ 40,000 Nashua	Yes	\$ 27.81	\$ 1,112		
Munis FER Enhancements Wireless Access Points for Main Office	Munis FER Enhancements Wireless Access Points for Main Office	1	DW17-183 DW17-183	26,101 26.101	2/2/2018 2/2/2018	\$ 35,000 Yes \$ 14,000 Yes	\$ 35,000 Merrimack \$ - Merrimack	No No	\$ 28.92 \$ 28.92	ş . e		
KVM for Data Center	Keyboard Video Mouse for Data Center so that multiple servers can be accessed by one console without	1	DW17-183 DW17-183	26,101	2/2/2018	\$ 14,000 Yes				ч - е		
IOS Charging Station	having to move the Monitor/Keyboards/ Mouse connections each time. Charging Station for multiple iPads to allow for upgrades across multiple devices concurrently.		DW17-183	26,101	2/2/2018	\$ 2,500 Yes \$ 1,200 Yes	\$ - Merrimack \$ - Merrimack	No	\$ 28.92 \$ 28.92	ə - Ş -		
Digital Signage for Distribution	Digital Signage for Distribution allowing notices and schedules to be more prominently displayed		DW17-183	26,101	2/2/2018	\$ 2,000 Yes	\$ 1,270 Merrimack	No	\$ 28.92	s -		
VDI Pilot	A pilot to determine whether a Virtual Desktop Infrastructure would be feasible for our environment		DW17-183	26,101	2/2/2018	\$ 12.000 Yes	S - Merrimack	No	\$ 28.92	s -		
Mise Hardware	Mise Hardware Mise Software		DW17-183 DW17-183	26,101 26.101	2/2/2018	\$ 20,000 Yes \$ 12,000 Yes	\$ 20,000 Merrimack \$ 12,000 Merrimack	No	\$ 28.92 \$ 28.92 \$ 28.92	s -		
Misc Software Website upgrades	Mise Software Website upgrades Forderer Common Physics and the characteristics		DW17-183	26,101	2/2/2018	\$ 8,000 Yes	\$ 8,000 Merrimack	No	\$ 28.92	s -		
Implement Customer Balances over the phone Click Resource Assistant	Implement Customer Balances over the phone Allow for the moving of customer Appointment from an generic resource to a named resource.		DW17-183 0.1 DSRR	26,101	2/2/2018	\$ 4,000 Yes \$ - No	\$ 25,550 Merrimack \$ 22,828 Merrimack	No	\$ 28.92 \$ 28.92	ş - ş -		
Veeam Backup Software	Replacement of existing backup software due to exorbitant vendor fees to keep original system running.	1	0.1 DSRR	1	1	Ś - No	\$ 25,550 Merrimack	No	\$ 28.92	s .		
veean backup software		ennichuck Water Works				\$ 14,978,170	\$ 17,567,124 Projected Pr			\$ 481,139		

 State
 Total Projected PWW QCPAC Capex for 2019 - \$
 \$
 14,908,170
 \$
 17,179,748

 Amount funded by SRF/DWGTF - \$
 \$
 \$
 \$,819,800
 \$
 \$,819,800

 Amount to be funded by 2020 Bond Issue - \$
 \$
 6,088,370
 \$
 \$,359,948

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

PWW 2019 QCPAC 7

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of	Board Approved 2019 Capex Budget	Board Approved 2019 Capex Budget, Eligible for 2020 Revised 8/24/19 QCPAC Surcharg	Estimated Project Costs as of 6/30/2019	Estimated Project Cost as of 9/30/2019	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tas Expense (Based on Qrtly Update	
New Services (10) Renewed Services (20)	Project Description Single Family, Owner Boild, New Homes Replacement of fulled services	20 workorders 21, 22 & 23 workorders	DW17-183 DW17-183	26,101 26.101	2/2/2018	\$ 46,000	\$ 46,000 Yes \$ 92,000 Yes	\$ 46,000 \$ 92,000	\$ 36,000	Various Various	Yes	\$ 28.85 \$ 28.85	\$ 1,03	 6 installed throug 26 replaced throug
Hydratts (10) Gates (10) Gates (10)	Replacement of non-functional hydrants (MM - 5 INSTALLED THRU 09/30) Replacement of Failed Gare Valves	30 & 31 workorders 12 & 13 workorders	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 50,000	\$ 50,000 Yes	\$ 50,000 \$ 40,000	\$ 36,000	Various Various	Yes	\$ 28.85 \$ 28.85	\$ 1,03	5 installed throug 6 3 installed throug
Radios (2750) Meters (Growth) 5/8"-2" - Core & CWS (480)	Replace out of warrantee failed radio meter readers Meters (Growth) 5/8*-2* - Core & CWS (480)	54 workorders 50 workorders	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 275,000 \$ 48,000	\$ 30,000 Yes \$ 48,000 Yes	\$ 30,000 \$ 48,000		Various	Yes	\$ 28.85 \$ 28.85		359 replaced thro
Meters [Growth] 578-2-COF & CWS [480] Meters 578"-6" Lead Meter Exchange - Core & CWS (3000) Entrance Security Gate & Perimeter Fence	Meters (Grown) 5/8 - 2 - Core & CWS (480) Meters 5/8"-6" Lead Meter Exchange - Core & CWS (3000) Entrance Security Gate & Perimeter Fence	50 workorders 50 workorders 1901598	DW17-183 DW17-183 DW17-183	26,101	2/2/2018 2/2/2018 2/2/2018	\$ 300,000	\$ 300,000 Yes	\$ 48,000 \$ 300,000 \$ 75,000	4 - rojooo	Various Various Merrimack	Yes Yes Yes	\$ 28.85 \$ 28.92 \$ 28.92	s .	1515 instance, ic
Replace 13 yr Vac Trailer - Safety & Maint issue Protectus Meter Upgrade	Replace 13 yr Vac Trailer - Safety & Maint issue Spithrook Rd Protectus Meter Upgrade	n/a n/a	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ 21,000	\$ 21,000 Yes	\$ - \$ 21,000		Merrimack Nashua	Yes Yes	\$ 28.92 \$ 27.81	\$ 58	
Pipe Freeze Kits (2) Network Digital Display Installation Plate Compactors (4)	RoFrost Turbo 2 Electric Pipe Freeze Kts Relocate & network display to Assignment room & new 75 th display in Conference Rm	1915135 n/a	DW17-183 DW17-183 DW17-183	26,101 26,101 26,101	2/2/2018 2/2/2018 2/2/2018	s -	\$ 7,400 Yes \$ 2,700 Yes \$ 17,500 Yes	\$ 7,400 \$ 2,700 \$ 17,500	\$ 2,700	Nashua Merrimack Nashua	Yes Yes	\$ 27.81 \$ 28.92 \$ 30.81	\$ 7	6 Existing Freeze k 78 New technology :
2018 Dodge Ram 2500 (#313) 2018 Dodge Ram 2500 (#314) 2018 Dodge Ram 2500 (#315)	Replacement of failed compactors unable to obtain repair parts Carrover Costs to 2018 projects not recovered in prior QCPAC Carrover Costs to 2018 projects not recovered in prior QCPAC Carrover Costs to 2018 projects not recovered in prior QCPAC	n/a 1907613 1907612 1907615	0.1 DSRR 0.1 DSRR 0.1 DSRR			\$. \$.	\$ 1,969 No \$ 1,969 No \$ 2,542 No	\$ 1,969 \$ 1,969 \$ 2,542	\$ 1,969 \$ 1,969 \$ 2,542	Merrimack Merrimack Merrimack	No	\$ 28.92 \$ 28.92 \$ 28.92	s . s .	89 Existing units hav
2018 Dodge Ram Promaster 1500 Cargo Van (#347) 2018 Dodge Ram Promaster 1500 Cargo Van (#348) 2018 Dodge Ram Promaster 1500 Cargo Van (#349)	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1907987 1907988	0.1 DSRR 0.1 DSRR			s . s .	\$ 1,060 No \$ 1,060 No	\$ 1,060 \$ 1,060	\$ 1,060	Merrimack Merrimack	No	\$ 28.92 \$ 28.92	s . s .	
2018 Dödge Ram Promaster 1500 Cargo Van (#349) Meter Data Logging Equipment	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1907989 1907885 1607377, 1702856,	0.1 DSRR 0.1 DSRR	26.101		s - s -	\$ 1,060 No \$ 2,849 No	\$ 1,060 \$ 2,849	\$ 2,849	Merrimack Various	No Yes	\$ 28.92 \$ 28.85		2 Equipment used
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL	1806433, 1901176	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ 550,000	\$ 615,000 Yes	\$ 615,000		Nashua	Yes	\$ 27.81	\$ 19,96	9 Pavement contril
Elm Street Monroe Street	Replace 875 LF of 6 inch CI with 12 inch DIPCL Replace 310 LF of 4 inch CI with 8 inch DIPCL	1702871, 1812907, 1901599 1702866, 1812908, 1901602	DW17-183	26,101	2/2/2018	\$ 559,350 \$ 122,270	\$ 255,000 Yes \$ 120,000 Yes	\$ 255,000 \$ 120,000	\$ 378,600 \$ 174,926	Nashua	Yes	\$ 27.81 \$ 27.81	\$ 10,52 \$ 4,86	
W.Pearl Street	Replace 260 LF of 8 inch C1 with 8 inch DIPCL.	1702869, 1812909, 1901602	DW17-183	26,101	2/2/2018	\$ 138,050	\$ 140,000 Yes	\$ 140,000		Nashua	Yes	\$ 27.81	\$ 6,24	13 Pavement contril
Harvard Street	Replace 800 LF of 8 inch CI with 8 inch DIPCL	1814742, 1901604	DW17-183	26,101	2/2/2018	\$ 247,500	\$ 249,200 Yes	\$ 249,200		Nashua	Yes	\$ 27.81	\$ 6,93	Pavement contril paid until 2020
West Hollis Street Check Valve Pit WWS Improvements - Manchester Street WWS Improvements - Route 101A and Route 121 (Amherst)	Install at the int of W. Hollis St and Panther Dr. Add 2700 LF of 24 inch DIPCL on Manchester St. Add 2200 LF of 12 inch DIPCL to close loop	n/a 1806805, 1900422 1806810, 1901607	DW17-183	26,101	2/2/2018	\$ 88,000 \$ 660,000 \$ 550,000	\$ - Yes \$ 660,000 Yes \$ 550,000 Yes	\$ - \$ 660,000 \$ 550,000	\$ 730,000 \$ 550,000	Nashua Nashua Nashua	Yes	\$ 27.81 \$ 27.81 \$ 27.81	\$ 20,30	Deferred to futur 11 Added security fo 16 Adjusted cost bas
NWS Improvements - Route 101A and Route 121 (Amherst) NWS Improvements - Tinker Road NWS Improvements - Deerwood Drive & Amherst St. Intersection	Add 2200 LF of 12 inch DIPAL to close loop Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL Replace 1300 LF of 12 inch AC with 1300 LF of 24 inch DIPCL	1806810, 1901607 1806434, 1900421 1901609	DWGTF Financing			\$ 550,000 \$ 522,500 \$ 467,500	\$ 550,000 Yes \$ 522,500 Yes \$ 467,500 Yes	\$ 550,000 \$ 522,500 \$ 467,500	\$ 526,000	Nashua Nashua Nashua	Yes Yes Yes	\$ 27.81 \$ 27.81 \$ 27.81	\$ 14,62	8 Adjusted cost bas 8 Adjusted cost bas 9 Adjusted cost bas
NWS Improvements - Deerwood Dr. Northwest Blvd Loop NWS Improvements Ponemah Rd/Route 101A Loop	Add 3400 LF of 20 inch HDPE including RR pipe jacking Add 2200 LF of 12 inch DIPCL to close two loop major dead ends	1901610 1901611				\$ 635,800 \$ 484,000	\$ 635,800 Yes \$ 484,000 Yes	\$ 635,800 \$ 484,000	\$ 655,000	Nashua Nashua	Yes	\$ 27.81 \$ 27.81	\$ 18,21	6 Adjusted cost ba Project cancelled
Ty of Nashua Sewer - Chase Street Ty of Nashua Sewer - Ash Street	Replace 470 LF of 6 inch CIP with 470 LF of 6 inch DIPCL Replace 710 LF of 6 inch CIP with 710 LF of 12 inch DIPCL	1829925, 1900484 1814367, 1915975	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ 176,000 \$ 242,000	\$ 190,000 Yes \$ 162,800 Yes	\$ 190,000 \$ 162,800	\$ 225,666	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 6,27	63 Project Complete 76 Pavement contrib
City of Nashua Sewer - Lake Street City of Nashua Paving - Vilna St.	Replace 2950 LF of 6 inch CT with 12 inch DIPCI. Replace 15 LF of 1.5 inch steel with 2 inch HDPE for paying program	1814740, 1915976 1915860 1900429	DW17-183 DW17-183 0.1 DSRR	26,101 26,101	2/2/2018 2/2/2018	\$ 990,000 \$ -	\$ 1,710,500 Yes \$ 16,750 Yes \$ 3,400 No	\$ 1,890,050 \$ 16,750	\$ 20,566	Nashua Nashua	Yes	\$ 27.81 \$ 27.81	\$ 57.	2 Pavement contrib 2 Includes final pav
Interconnection to BWC Woodward Avenue Ritter Street	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1910117 1910116	0.1 DSRR 0.1 DSRR			s . s .	\$ 2,200 No \$ 6,890 No	\$ 3,400 \$ 2,200 \$ 6,890	\$ 2,640	Nashua Nashua Nashua	Yes Yes Yes	\$ 27.81 \$ 27.81 \$ 27.81	\$ 7.	5 Carry over costs 3 Carry over costs 8 Carry over costs
Factory Street Taylor Street	Carryover Costs to 2018 projects not recovered in prior QCPAC Carryover Costs to 2018 projects not recovered in prior QCPAC	1909270 1906988	0.1 DSRR 0.1 DSRR			s - s -	\$ 20,209 No \$ 233 No	\$ 20,209 \$ 233	\$ 24,250 \$ 233	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 67 \$	 Carry over costs Carry over costs
Shakespeare HP System Exp Gity of Nashua Paving - Mill St.	Carryover Costs to 2018 projects not recovered in prior QCPAC Abandon 1.5" Steel water main and switch customers over to parallel 8" water main	1901942 1915006	0.1 DSRR			\$ - \$ -	\$ 257 No \$ 17,900 Yes	\$ 257 \$ 17,900	\$ 18,261	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$	7 Carry over costs 18 Includes final pay Ferryalls was repl
Gity of Nashua Paving - Ferryalls Ct Gity of Nashua Paving - Salvail Ct	Replace 35 ft of 1" copper water main crossing Ganal St with a 4" DIPCI. Water Main Replace 1.5" Steel water main and install a 4" DIPCI. Water Main (contaminated area)	1908316 1908317	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - \$ -	\$ 58,580 Yes \$ 95,000 Yes	\$ 58,580 \$ 95,000		Nashua Nashua	Yes	\$ 27.81 \$ 27.81	\$ 1,62 \$ 2.63	Perryalis was rep 29 complete 36 Includes final pay
Gity of Nashua Paving - Nutt St - Final Paving and restonation Gity of Nashua Paving - Cheshire St - Final Cleanup	Pavement restoration and final landscaping Fence repair and site clean up	1907682 1908353	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	ş .	\$ 13,000 Yes \$ 1,400 Yes	\$ 13,000 \$ 1,400	\$ 13,500	Nashua Nashua	Yes	\$ 27.81 \$ 27.81	\$ 37 \$ 3	75 \$6,240 of this will 89 Completion of 20
City of Nashua - Simon St at Will St Upgrade City of Nashua Paving - Main St.	Abandon pump station pit and clean up intersection pipe work for improved flows Main St final paying at intersection with Factory St. Carry over from 2018	1915974 1900348, 1915859	DW17-183 DW17-183		2/2/2018 2/2/2018 2/2/2018	s -	\$ 215,100 Yes \$ 24,500 Yes \$ 24,850 Yes	\$ 215,100 \$ 24,500	\$ 24,500	Nashua Nashua	Yes Yes	\$ 27.81 \$ 27.81	\$ 68	87 Includes base pay 81 Final paying bill
City of Nashua Paving - Lemon St - Carry over from 2017 City of Nashua Paving - Lowell St - Carry over from 2017 City of Nashua Paving - Green St - Carry over from 2017	Paving only - Carry over from 2017 Paving only - Carry over from 2017 Paving only - Carry over from 2017	1915858 1915857 1915844	DW17-183 DW17-183 DW17-183	26,101 26,101 26,101	2/2/2018 2/2/2018 2/2/2018	s -	\$ 24,850 Yes \$ 37,000 Yes \$ 10,000 Yes	\$ 24,850 \$ 37,000 \$ 10,000	\$ 40,000	Nashua Nashua Nashua	Yes Yes Yes	\$ 27.81 \$ 27.81 \$ 27.81	\$ 1,11	11 Estimated paving 12 Estimated paving 16 Estimated paving
Gity of Nashua Paving - Terrace St - Carry over from 2017 Gity of Nashua Paving - Terrace St - Carry over from 2017	Paving only - Carry over from 2017 Paving only - Carry over from 2018	1915845 1915843	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	s . s .	\$ 25,900 Yes \$ 20,500 Yes	\$ 25,900 \$ 20,500	\$ 29,000	Nashua Nashua	Yes	\$ 27.81 \$ 27.81	\$ 80	6 Estimated paving 2 Estimated paving
City of Nashua Paving - Warren St - Carry over from 2017	Paving only - Carry over from 2017	1915842 1502180, 1601369, 1701489,	DW17-183 DWGTF	26,101	2/2/2018		\$ 19,500 Yes	\$ 19,500	\$ 26,000	Nashua	Yes	\$ 27.81	\$ 72	23 Estimated paving
Merrimack River Intake Asset Management Outside GIS Consulting Services	Year Round Raw Water Intake from Merrimack River Outside GIS Consulting Services	1807360, 1901612, 1908505 1900414	Financing DW17-183	26,101	2/2/2018	\$ 5,500,000 \$ 60,000	\$ 6,600,000 Yes \$ 60,000 Yes	\$ 6,600,000 \$ 60,000		Merrimack Various	Yes	\$ 28.92 \$ 28.85	\$ 190,87	Bids higher than requirements that
Asset Management Outside Oris Consulting Services Asset Management Water Modeling Consulting Asset Management Trimble R2 Units	Water Modeling Consulting Trimble R2 Units	1900414 1900414 1900414	DW17-183 DW17-183	26,101 26,101	2/2/2010 2/2/2018 2/2/2018	\$ 36,000	\$ 36,000 Yes \$ 14,000 Yes	\$ 36,000 \$ 14,000	\$ 20,000 \$ -	Various Various	No Yes	\$ 28.85 \$ 28.85	s . s .	
WAM/Synergen Upgrade Cost & Functionality Study Investment in developer installed services at 1xannual revenue	WAM/Synengen Upgrade Cost & Functionality Study Per tariff	1900568, 1910219 n/a	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018		\$ 45,000 No \$ 60,000 Yes	\$ 45,000 \$ 60,000	\$ 85,000	Various Various	No Yes	\$ 28.85 \$ 28.85	\$ 2,45	
019 Ford Escape Jower Dam reconstruction and engineering Jowers Dam Letter of Deficiency design/analysis	Replace Toolad 2015 Food Eacope Bower Dam reconstruction and engineering perform Hvdraulic and Hvdrology analysis, design improvements to address spillwar capacity	1907481 1824545, 1900432 1901734, 1907078	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ - \$ 25,000	\$ 23,998 Yes \$ 25,000 No \$ 35,000 No	\$ 23,998 \$ 25,000 \$ 35,000	\$ 25,000	Merrimack Merrimack	No	\$ 28.92 \$ 28.92 \$ 28.92	ş -	Vehicle in accider Design Engineeri Letter of deficien
Harris Dam Letter of Deficiency design/analysis	perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity	1907076					\$ 40,000 No	\$ 40,000	\$ 40,000	Merrimack	No	\$ 28.92	s -	Letter of deficien
Supply Pond Letter of Deficiency design/analysis	perform Hydraulic and Hydrology analysis, design improvements to address spillway capacity	1907077	DW17-183	26.101	2/2/2018	e (0.000	\$ 35,000 No	\$ 35,000		Merrimack	No	\$ 28.92		Letter of deficien
Booster Pump replacement/rebuild Booster Pump replacement/rebuild Well Pump replacements	Booster Pump replacement/rebuild (MM - 4 INSTALLED THRU 09/30) WTP Rebuild pump end, Intermediate Pump #3 Wedl Pump replacements (MM - 3 INSTALLED THRU 09/30)	60, 61, 62 & 63 workorders 1914986 60, 61, 62 & 63 workorders	DW17-183 DW17-183 DW17-183	26,101	2/2/2018 2/2/2018 2/2/2018	s .	\$ 15,445 Yes \$ 24,555 Yes \$ 15,000 Yes	\$ 15,445 \$ 24,555 \$ 15,000	\$ 24,555	Various Nashua Various	Yes Yes Yes	\$ 28.85 \$ 27.81 \$ 28.85	\$ 68.	16 Reduced by inten 13 Pump Bearings fa 13
Chemical Feed pump replacements Upgrade SCADA historian software, new hardware	Chemical Feed pump replacements upgrade SCADA historian software, new hardware	60, 61, 62 & 63 workorders n/a	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ 10,000 \$ 150,000	\$ 10,000 Yes \$ 150,000 Yes	\$ 10,000 \$ 150,000	\$ 10,000	Various Various	Yes Yes	\$ 28.85 \$ 28.85	\$ 28 \$ 4,32	
Twin Ridge rebuild softener system, install radon treatment Misc. Structural Improvements	Twin Ridge rebuild softener system, install radon treatment Misc. Structural Improvements Replace Fire Alam System CPU	1907731 n/a 1907102, 1910221	DW17-183 DW17-183 DW17-184	26,101 26,101 26,102	2/2/2018 2/2/2018 2/3/2018	\$ 20,000		\$ 50,000 \$ 10,700 \$ 9,300	\$ 1,400	Plaistow Various Nashua	Yes Yes Yes	\$ 28.85 \$ 28.85 \$ 28.85	\$ 4	 Project scope was Reduced by repla Fire Alarm CPU
Mise: Structural Improvements Miscellaneous Equipment Purchased Miscellaneous Equipment Purchased	Replace view Autom System CPU Miscellancous Equipment Purchased Purchase 2 Gas Monitors for WS Confined Space Program	n/a 1907102, 1910221	DW17-184 DW17-183 DW17-184	26,101	2/3/2018 2/2/2018 2/3/2018	\$ 17,500	\$ 9,500 \$ 9,928 Yes \$ 4,568	\$ 9,928 \$ 9,928 \$ 4,568	\$ 5,479	Various Nashua	Yes	\$ 28.85 \$ 28.85 \$ 28.85	\$ 15	88 Fire Alarm CPU 1 88 Reduced by Misco 82 Routine Miscellar
Miscellaneous Equipment Purchased Miscellaneous Equipment Purchased	Purchase Entry Tripod and Winch for WS Confined Space Program Replace Chlorine Analyzer, Twin Ridge	1910296 1915362	DW17-185 DW17-185	26,103	2/4/2018 2/4/2018		\$ 3,004 \$ -	\$ 3,004		Nashua Nashua	Yes Yes	\$ 28.85 \$ 28.85	\$ 8	87 Routine Miscellar Routine Miscellar
Miscellaneous SCADA/Electrical Miscellaneous SCADA/Electrical WTP Structural/HVAC	Miscellancous SCADA/Electrical Replace VFD, Pump #1 Bowers Landing	n/a 1916547	DW17-183 DW17-183		2/2/2018 2/2/2018 2/2/2018	s .	\$ 30,000 Yes \$ - Yes	\$ 30,000	\$ 2,200	Various Various	Yes	\$ 28.85 \$ 28.85	\$ 6.	3
Parchase new lab equipment Purchase new lab equipment	WTP Structural/HVAC Purchase new lab equipment HACH DR 900	n/a n/a 1908450	DW17-183 DW17-183 DW17-183	26,101	2/2/2018 2/2/2018 2/2/2018	\$ 20,000	\$ 10,000 Yes \$ 18,500 Yes \$ 1,500 Yes	\$ 10,000 \$ 18,500 \$ 1,500	\$ 18,500	Nashua Nashua Nashua	Yes Yes Yes	\$ 28.85 \$ 28.85 \$ 28.85	\$ 53	89 84 Reduced by purc 13
Miscellaneous Fencing and Security projects Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects WTP Perimeter Fence Carryover	n/a 1901608	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018		\$ 10,000 Yes \$ - Yes	\$ 10,000	\$ 3,256 \$ 6,744	Various Various	Yes	\$ 28.85 \$ 28.85	\$ 9. \$ -	4
Replace Ferric Chloride Feed pump Carbon media changsout-filters 1 & 2	Replace Ferric Chloride Feed pump Carbon media changeout-filters 1 & 2	n/a n/a	DW17-183 DW17-183	26,101	2/2/2018	\$ 10,000 \$ 1,000,000	\$ 10,000 Yes \$ 1,050,000 Yes	\$ 10,000 \$ 1,525,000	\$ 10,000 \$ 975,000	Nashua Nashua	Yes	\$ 27.81 \$ 27.81		PFOA standard v
Add 3rd pump at Main Dunstable Booster, replace 1 existing	Add 3rd pump at Main Dunstable Booster, replace 1 existing	n/a	DW17-183		2/2/2018		\$ - Yes	\$ 1,020,000	\$ 713,000	Nashua	Yes	\$ 27.81		2020. Pump delivery tir
Add 3rd pump at Main Dunstable Booster, replace 1 existing Replace Kessler Farm booster pump package	Rebuild Pump #1, Main Dunstable, Nashua Replace 20 year old package booster station pumps and piping. Piping is steel which is beginning to pit	1901615 n/a	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ - \$ 75,000	\$ - Yes \$ 75,000 Yes	\$ 75,000		Nashua Nashua	Yes	\$ 27.81 \$ 27.81	\$ - \$ 2,08	66
Stump Pond Subwatershed assessment Stump Pond Stormwater BMP	Stump Pond Subwatershed assessment Stump Pond Stormwater BMP Public Publ	n/a 1908373	0.1 DSRR 0.1 DSRR			\$ 25,000 \$ 20,000		\$ 25,000 \$ 20,000	\$ 20,000		No	\$ 28.92 \$ 28.92	s .	Study - Pay for w Study - Pay for w
Public Education -Watershed signage Replace 2 Hach Turbidimeters and associated control module Camera System Upgrade	Public Education -Watershed signage Replace 2 Hach Turbidimeters and associated control module Carryover Costs from 2018 Project	n/a 1901618 1900413	0.1 DSRR DW17-183 0.1 DSRR	26,101	2/2/2018	\$ 20,000 \$ 10,000 \$ -		\$ 20,000 \$ 10,000 \$ 7,500	\$ 8,000	Merrimack Nashua Nashua		\$ 28.92 \$ 27.81 \$ 27.81	\$ 22	Study - Pay for w Carry over costs
Dredging Feasibility Study Source Water Protection Study	Carryover Costs from 2018 study Carryover Costs from 2018 study	1901939 1901740	0.1 DSRR 0.1 DSRR			s - s -	\$ 24,600 No \$ 12,000 No	\$ 24,600 \$ 12,000	\$ 12,000	Merrimack Merrimack	No	\$ 28.92 \$ 28.92	s - s -	Study - Pay for w Study - Pay for w
Aquatic Vegetation Assessment Fiber Conduit between WTP and Dist	Carryover Costs from 2018 study Install Fiber Conduit between Water Treatment Plant and Distribution to eliminate ongoing Corncast Ethernet line to one of the buildings	1906080 n/a	0.1 DSRR DW17-183		2/2/2018	\$ - \$ 40,000	\$ 4,200 No \$ 40,000 Yes	\$ 4,200 \$ 40,000		Merrimack Nashua	No Yes	\$ 28.92 \$ 27.81		Study - Pay for w
Munis FER Enhancements Wireless Access Points for Main Office	Duranings Munis PER Enhancements Wireless Access Points for Main Office	n/a n/a	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ 35,000 \$ 14,000		\$ 35,000	\$ 35,000	Merrimack		\$ 28.92 \$ 28.92		Monies moved to
CVM for Data Center	Keyboard Video Mouse for Data Center so that multiple servers can be accessed by one console without having to move the Monitor/Keyboards/ Mouse connections each time.	n/a	DW17-183	26,101	2/2/2018	\$ 2,500	\$ - Yes	s -	s -	Merrimack	No	\$ 28.92	s .	
OS Changing Station	Changing Station for multiple iPads to allow for upgrades across multiple devices concurrently. Digital Signage for Distribution allowing notices and schedules to be more prominently displayed	n/a	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018		\$ - Yes	s -	ş -	Merrimack		\$ 28.92	ş .	+
Signage for Distribution	A pilot to determine whether a Virtual Desktop Infrastructure would be feasible for our environment	1908376	DW17-183	26,101	2/2/2018	\$ 2,000	\$ 1,270 Yes	\$ 1,270	\$ 1,270	Merrimack	No	\$ 28.92	s -	+
VDI Pilot Misc Hardware Misc Hardware	A part of executing witches a viscous account of the second of the second	n/a n/a 1998308	DW17-183		2/2/2018	\$ 12,000 \$ 20,000	\$ - Yes \$ 20,000 Yes	\$ - \$ 20,000		Merrimack	No	\$ 28.92 \$ 28.92		+
lisc Hardware Lisc Hardware Lisc Software	Misc Software	1908308 1908309 n/a	DW17-183	26,101	2/2/2018	\$ 12,000	\$ - \$ - \$ 12,000 Yes	\$ 12,000	\$ 1,397 \$ 2,450 \$ 12,000	Merrimack	No	\$ 28.92	s	+
Contracts Christic upgrades mplement Customer Balances over the phone	Website upgrades Implement Customer Balances over the phone	n/a n/a	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ 8,000	\$ 8,000 Yes \$ 25,500 Yes	\$ 8,000 \$ 25,550	\$ 8,000	Merrimack	No	\$ 28.92 \$ 28.92	S -	Deferred
lick Resource Assistant Database Server License for GIS and other Apps	Allow for the moving of customer Appointment from an generic resource to a named resource. Purchase Server license for Virtual Environment	1907952 1915920	0.1 DSRR DW17-183	26,101	2/2/2018	\$-	\$ 22,828 No	\$ 22,828 \$		Merrimack	No	\$ 28.92 \$ 28.92	ş .	Previously licer
/eeam Backup Software	Particles eerver active tor virtual randrammer Replacement of existing backup software due to exorbitant vendor fees to keep original system running. Performance Management Platform Implementation & Technical Integration	1915920 1909216 1916551	0.1 DSRR			\$ - \$ -	\$ - Yes \$ 25,550 No	\$ 25,550		Merrimack	No	\$ 28.92		
Performance Management Platform Implementation & Technical Integration														

Explanation for Change/Addition/Deletion since Petition Filing rough 9/30. Projecting 1 more by year end.
hrough 9/30. Projecting 2 more by vear end. rough 9/30. Projecting 1 more by vear end. rough 9/30. Projecting 1 more by year end.
dio Replacement program (Radios are 12 years old). 300 left in budget to replace failed radios through 9/30. Projecting 75 more by year end.
d/replaced through 9/30. Projecting 750 more by year end.
2020 due to price increases, model & design changes (trailer or truck)
ze kits have failed and not repainable 15+ years old ogs available to display department information digitally shave failed and parts for repair are not available.
s nave ance and parts for repair are not available.
sed in leak detection ntribution to the Gity of Nashua paid in 2018 (\$127,264)
ntribution to the City of Nashua paid in 2018 (\$127,204) ntribution to City of Nashua of \$138,407 included
ntribution to City of Nashua of \$40,887 included
ntribution to Gity of Nashua of \$82,482 included ntribution to Gity of Nashua of \$75,000 not included as contribution is not expected to be 20 future year to accommodate additional water main projects
is fine replacement (2,500 LF) along Manchester Street it bast on final installed materials
t bast on final installed materials t bast on final installed materials
t bast on final installed materials dled and replaced with piping in projects above
plete ntribution to City of Nashua of \$33.040 included
ntribution to City of Nashua of \$344,000 included I paving - complete
osts from project completed in 2018, pay for with 0.1 DSRR osts from project completed in 2018, pay for with 0.1 DSRR use from activity memory and in 2018, pay for with 0.1 DSRR
ssts from project completed in 2018, pay for with 0.1 DSRR osts from project completed in 2018, pay for with 0.1 DSRR sts from project completed in 2018, pay for with 0.1 DSRR
osts from project completed in 2018, pay for with 0.1 DSRR 1 paying - complete
replaced last year to the limit of Canal St - complete this is phase 2 extending into Canal St -
l paving - complete s will be recovered from Liberty Gas of 2018 Workorder Project
of 2018 Workorder Project e paving - Finished paving required in 2020 not included bill for this project.
bin of uns project. ving contribution - Originally anticipated for 2020 ving contribution - Originally anticipated for 2020
ving contribution - Originally anticipated for 2020 wing contribution - Originally anticipated for 2020
ving contribution - Originally anticipated for 2020 ving contribution - Originally anticipated for 2020
han Engineers estimate due to tight contractor market and changes in final permit
that impacted initial design that engineers estimate was based on.
ct replacement of Synengyn CMMS system which goes unsupported at the end of 2020.
sed on \$75,935 paid out through 9/30. cident. Vehicle totaled and needed to be replaced.
neering Work for 2020 Dam rehabilitation
iciency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dam
iciency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dan iciency issued by the NHDES Dam Bureau regarding inadequate spillway capacity for this dan
ntermediate booster pump rebuild below. 195 failed on Intermediate Booster Pump at WTP
e was limited to MTM media replacement
replacement of failed Fire Alarm CPU PU failed due to electrical surge. Miscellancous Equipment purchased to date
ellaneous Equipment purchase
zellaneous Equipment purchase
purchase of HACH DR 900 below
ard which is slated to go into effect on October 1, 2019. Filter media replacement being stage h intervals. 8 of 12 filters to be replaced in 2019, remaining four filters to be replaced in Sprin
ry time is about 30 weeks which delays this project until 2020
or with 0.1 DSRR or with 0.1 DSRR or with 0.1 DSRR
of watro.1 DSRR
or with 0.1 DSRR or with 0.1 DSRR
or with 0.1 DSRR
L. V
ed to Vecam Backup Project
licensed software was not suitable for Virtual environment
id in 2019 for 2018 QCPAC projects.

PWW 2019 QCPAC 8

										0.001.0	
										QCPAC Eligible	
		Financing	NHPUC Or	der Date of	Approved	QCPAC			F	Property Tax	
Project Name/Description	Project Description	Work Order # Docket No.	No.		Budgeted Amount	Eligible?	Community	Taxable	Tax Rate (1)	Expense	Explanation for Change/Addition/Deletion since 2/9/2019
New Services (10)	Single Family, Owner Build, New Homes	DW17-183	26,101	2/2/2018	\$ 46,000	Yes	Various	Yes	\$ 28.85 \$	1,327	
Renewed Services (20)	Replacement of failed services	DW17-183	26,101	2/2/2018	\$ 92,000	Yes	Various	Yes	\$ 28.85 \$	2,654	
Hydrants (10)	Replacement of non functional hydrants	DW17-183	26,101	2/2/2018	\$ 50,000	Yes	Various	Yes	\$ 28.85 \$	1,443	
Gates (10)	Replacement of Failed Gate Valves	DW17-183	26,101	2/2/2018	\$ 40,000	Yes	Various	Yes	\$ 28.85 \$	1,154	
Radios (300)	Replace out of warrantee failed radio meter readers	DW17-183	26,101	2/2/2018	\$ 30,000	Yes	Various	Yes	<u>\$</u> 28.85 \$	866	
Meters (Growth) 5/8"-2" - Core & CWS (480) Meters 5/8"-6" Lead Meter Exchange - Core & CWS (3000)	Meters (Growth) 5/8"-2" - Core & CWS (480) Meters 5/8"-6" Lead Meter Exchange - Core & CWS (3000)	DW17-183 DW17-183	26,101 26,101	2/2/2018	\$ 48,000 \$ 300,000	Yes Yes	Various Various	Yes Yes	\$ 28.85 \$ \$ 28.85 \$	1,385	
Entrance Security Gate & Perimeter Fence	Entrance Security Gate & Perimeter Fence	DW17-183 DW17-183	26,101	2/2/2018 2/2/2018	\$ 300,000 \$ 75,000	Yes	Merrimack	Yes	\$ 28.92 \$	2,169	
Replace 13 vr Vac Trailer - Safety & Maint issue	Replace 13 vr Vac Trailer - Safety & Maint issue	DW17-183	26,101	2/2/2018	\$ 100.000	Yes	Merrimack	Yes	\$ 28.92 \$	2,107	
Protectus Meter Upgrade	Spitbrook Rd Protectus Meter Upgrade	DW17-183	26,101	2/2/2018	\$ 21,000	Yes	Nashua	Yes	\$ 27.81 \$	584	
Gilman Street	Replace 1470 LF of 8 inch CI with 12 inch DIPCL	DW17-183	26,101	2/2/2018	\$ 550,000	Yes	Nashua	Yes	\$ 27.81 \$	15,296	
Elm Street	Replace 875 LF of 6 inch CI with 12 inch DIPCL	DW17-183	26,101	2/2/2018	\$ 559,350	Yes	Nashua	Yes	\$ 27.81 \$	15,556	
Monroe Street	Replace 310 LF of 4 inch CI with 8 inch DIPCL	DW17-183	26,101	2/2/2018	\$ 122,270	Yes	Nashua	Yes	\$ 27.81 \$	3,400	
W.Pearl Street	Replace 260 LF of 8 inch CI with 8 inch DIPCL	DW17-183	26,101	2/2/2018	\$ 138,050	Yes	Nashua	Yes	\$ 27.81 \$	3,839	
Harvard Street	Replace 800 LF of 8 inch CI with 8 inch DIPCL	DW17-183	26,101	2/2/2018	\$ 247,500	Yes	Nashua	Yes	\$ 27.81 \$	6,883	
West Hollis Street Check Valve Pit NWS Improvements - Manchester Street	Install at the int of W. Hollis St and Panther Dr. Add 2700 LF of 24 inch DIPCL on Manchester St.	DW17-183	26,101	2/2/2018		Yes	Nashua Nashua	Yes Yes	\$ 27.81 \$ \$ 27.81 \$	18.355	
NWS Improvements - Manchester Street NWS Improvements -Route 101A and Route 121 (Amherst)	Add 22/00 LF of 24 inch DIPCL on Manchester St. Add 2200 LF of 12 inch DIPCL to close loop	+			\$ 660,000 \$ 550,000	Yes Yes	Nashua	Yes	\$ 27.81 \$ \$ 27.81 \$	18,355	
NWS Improvements - Tinker Road	Replace 825 LF of 16 inch AC with 825 LF of 24 inch DIPCL	DWGTF			\$ 530,000 \$ 522,500	Yes	Nashua	Yes	\$ 27.81 \$	13,290	
NWS Improvements - Deerwood Drive & Amherst St. Intersection	Replace 1300 LF of 12 inch AC with 1300 LF of 24 inch DIPCL	Financing			\$ 467,500	Yes	Nashua	Yes	\$ 27.81 \$	13.001	
NWS Improvements - Deerwood Dr. Northwest Blvd Loop	Add 3400 LF of 20 inch HDPE including RR pipe jacking				\$ 635,800	Yes	Nashua	Yes	\$ 27.81 \$	17,682	
NWS Improvements Ponemah Rd/Route 101A Loop	Add 2200 LF of 12 inch DIPCL to close two loop major dead ends				\$ 484,000	Yes	Nashua	Yes	\$ 27.81 \$	13,460	
City of Nashua Sewer - Chase Street	Replace 470 LF of 6 inch CIP with 470 LF of 6 inch DIPCL	DW17-183	26,101	2/2/2018		Yes	Nashua	Yes	\$ 27.81 \$	75,087	
City of Nashua Sewer - Ash Street	Replace 710 LF of 6 inch CIP with 710 LF of 12 inch DIPCL	DW17-183	26,101	2/2/2018	\$ 2,700,000	Yes	Nashua	Yes	\$ 27.81 \$	-	
City of Nashua Sewer - Lake Street	Replace 2950 LF of 6 inch CI with 12 inch DIPCL	DW17-183	26,101	2/2/2018		Yes	Nashua	Yes	\$ 27.81 \$	-	
Merrimack River Intake	Year Round Raw Water Intake from Merrimack River	DWGTF Financing			\$ 5,500,000	Yes	Merrimack	Yes	\$ 28.92 \$	159,060	
Asset Management Outside GIS Consulting Services	Outside GIS Consulting Services	DW17-183	26,101	2/2/2018	\$ 60,000	Yes	Various	No	\$	-	
Asset Management Water Modeling Consulting	Water Modeling Consulting	DW17-183	26,101	2/2/2018	\$ 36,000	Yes	Various	No	\$	-	
Asset Management Trimble R2 Units	Trimble R2 Units	DW17-183	26,101	2/2/2018	\$ 14,000	Yes	Various	Yes	\$ 28.85 \$	404	
Investment in developer installed services at 1xannual revenue	Per tariff	DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 60,000 \$ 25,000	Yes	Various	Yes	\$ 28.85 \$	1,731	Desire Frankrike World Gradon Description
Bower Dam reconstruction and engineering Booster Pump replacement/rebuild	Bower Dam reconstruction and engineering Booster Pump replacement/rebuild	DW17-183 DW17-183	26,101	2/2/2018	\$ 25,000 \$ 40,000	No Yes	Merrimack Various	No Yes	\$ 28.85 \$	- 1,154	Design Engineering Work for 2020 Dam rehabilitation
Well Pump replacements	Well Pump replacements	DW17-183	26,101	2/2/2018	\$ 15.000	Yes	Various	Yes	\$ 28.85 \$	433	
Chemical Feed pump replacements	Chemical Feed pump replacements	DW17-183	26,101	2/2/2018	\$ 10,000	Yes	Various	Yes	\$ 28.85 \$	289	
Upgrade SCADA historian software, new hardware	upgrade SCADA historian software, new hardware	DW17-183	26,101	2/2/2018	\$ 150,000	Yes	Various	Yes	\$ 28.85 \$	4,328	
Twin Ridge rebuild softener system, install radon treatment	Twin Ridge rebuild softener system, install radon treatment	DW17-183	26,101	2/2/2018	\$ 50,000	Yes	Plaistow	Yes	\$ 28.85 \$	1,443	
Misc. Structural Improvements	Misc. Structural Improvements	DW17-183	26,101	2/2/2018	\$ 20,000	Yes	Various	Yes	\$ 28.85 \$	577	
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	DW17-183	26,101	2/2/2018	\$ 17,500	Yes	Various	Yes	\$ 28.85 \$	505	
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	DW17-183	26,101	2/2/2018	\$ 30,000	Yes	Various	Yes	\$ 28.85 \$	866	
WTP Structural/HVAC Purchase new lab equipment	WTP Structural/HVAC	DW17-183 DW17-183	26,101 26,101	2/2/2018 2/2/2018	\$ 10,000 \$ 20,000	Yes Yes	Nashua Nashua	Yes Yes	\$ 28.85 \$ \$ 28.85 \$	289 577	
Miscellaneous Fencing and Security projects	Purchase new lab equipment Miscellaneous Fencing and Security projects	DW17-183 DW17-183	26,101	2/2/2018	\$ 20,000 \$ 10,000	Yes	Various	Yes	\$ 28.85 \$	289	
Replace Ferric Chloride Feed pump	Replace Ferric Chloride Feed pump	DW17-183	26,101	2/2/2018	\$ 10,000	Yes	Nashua	Yes	\$ 28.85 \$	289	
Carbon media changeout-filters 1 & 2	Carbon media changeout-filters 1 & 2	DW17-183	26,101	2/2/2018	\$ 525,000	Yes	Nashua	Yes	\$ 28.85 \$	15,146	
Add 3rd pump at Main Dunstable Booster, replace 1 existing	Add 3rd pump at Main Dunstable Booster, replace 1 existing	DW17-183	26,101	2/2/2018	\$ 120,000	Yes	Nashua	Yes	\$ 28.85 \$	3,462	
Replace Kessler Farm booster pump package	Replace 20 year old package booster station pumps and piping. Piping is steel which is beginning to pit	DW17-183	26,101	2/2/2018	\$ 75,000	Yes	Nashua	Yes	\$ 28.85 \$	2,164	
Stump Pond Subwatershed assessment	Stump Pond Subwatershed assessment	DW17-183	26,101	2/2/2018	\$ 25,000	No	Merrimack	No	\$	-	Study - Amortized expense
Stump Pond Stormwater BMP	Stump Pond Stormwater BMP	DW17-183	26,101	2/2/2018	\$ 20,000	No	Merrimack	No	\$	-	BMP Engineering and Design
Public Education -Watershed signage	Public Education -Watershed signage	DW17-183 DW17-183		2/2/2018	\$ 20,000		Merrimack		\$ 28.85 \$		
Replace 2 Hach Turbidimeters and associated control module	Replace 2 Hach Turbidimeters and associated control module Install Fiber Conduit between Water Treatment Plant and Distribution to eliminate ongoing Comcast	Dw1/-185	26,101	2/2/2018	\$ 10,000	Yes	Nashua	Yes	\$ 28.85 \$	289	
Fiber Conduit between WTP and Dist	Ethernet line to one of the buildings	DW17-183	26,101	2/2/2018	\$ 40,000	Yes	Nashua	No	s	_	
Munis FER Enhancements	Munis FER Enhancements	DW17-183	26,101	2/2/2018	\$ 35,000	Yes	Merrimack	No	\$		
Wireless Access Points for Main Office	Wireless Access Points for Main Office	DW17-183	26,101	2/2/2018	\$ 14,000	Yes	Merrimack	No	\$	-	1
KVM for Data Center	Reyboard video mouse for Data center so that multiple servers can be accessed by one console without	DW17-183	26,101	2/2/2018	\$ 2,500	Yes	Merrimack	No	\$	-	
IOS Charging Station	Charging Station for multiple iPads to allow for upgrades across multiple devices concurrently.	DW17-183		2/2/2018	\$ 1,200	Yes	Merrimack	No	\$	-	
Digital Signage for Distribution	Digital Signage for Distribution allowing notices and schedules to be more prominently displayed	DW17-183	26,101	2/2/2018	\$ 2,000	Yes	Merrimack	No	\$	-	
VDI Pilot	A pilot to determine whether a Virtual Desktop Infrastructure would be feasible for our environment	DW17-183		2/2/2018	\$ 12,000	Yes	Merrimack	No	\$	-	
Misc Hardware	Misc Hardware	DW17-183		2/2/2018	\$ 20,000	Yes	Merrimack	No	\$	-	
Misc Software Website upgrades	Misc Software Website upgrades	DW17-183 DW17-183		2/2/2018 2/2/2018	\$ 12,000 \$ 8,000	Yes Yes	Merrimack Merrimack	No No	\$	-	
Website upgrades Implement Customer Balances over the phone	Implement Customer Balances over the phone	DW17-183 DW17-183	,	2/2/2018		Yes	Merrimack	No	2	-	
implement Sustomer Datances over the phone		huck Water Works Projected 2019							se associated with \$	420 200	+
	Pennic	nuck water works Projected 2019	otai Capitai Es	penanure buaget -	φ 15,402,170	L	riojecteu riope	ity Tax Expens	se associated with \$	429,380	

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

 Total Projected PWW QCPAC Capex for 2019 -Amount funded by SRF/DWGTF \$ 15,392,170

 Amount funded by SRF/DWGTF \$ 8,819,800

 Amount to be funded by 2020 Bond Issue \$ 6,572,370

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Orde	Approved Budgeted Amoun	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 2/9/2019
New Services (10)	Single Family, Owner Build, New Homes		DW17-183	26,101	2/2/2018	\$ 46,000	Yes	Various	Yes	\$ 28.85	\$ 1,327	
Renewed Services (20)	Replacement of failed services		DW17-183	26,101	2/2/2018	\$ 92,000	Yes	Various	Yes	\$ 28.85	\$ 2,654	
Hydrants (10)	Replacement of non functional hydrants (Run rate) (8 YTD)		DW17-183	26,101	2/2/2018	\$ 50,000		Various	Yes	\$ 28.85		
Gates (10)	Replacement of Failed Gate Valves		DW17-183	26,101	2/2/2018	\$ 40,000	Yes	Various	Yes	\$ 28.85	\$ 1.154	
Radios (300)	Replace out of warrantee failed radio meter readers		DW17-183	26,101	2/2/2018	\$ 30,000		Various	Yes	\$ 28.85	\$ 866	
Meters (Growth) 5/8"-2" - Core & CWS (480)	Meters (Growth) 5/8"-2" - Core & CWS (480)		DW17-183	26,101	2/2/2018	\$ 48,000	Yes	Various	Yes	\$ 28.85	\$ 1,385	
Meters 5/8"-6" Lead Meter Exchange - Core & CWS (1000)	Meters 5/8"-6" Lead Meter Exchange - Core & CWS (1000)		DW17-183	26,101	2/2/2018	\$ 100,000		Various	Yes	\$ 28.85		
New Utility Vehicle (2)	New Utility Vehicles to replace existing high mileage/maintenance vehicles		DW17-183	26,101	2/2/2018	\$ 130,000	Yes	Merrimack	No	\$ 28.92	\$ -	
New Utility Van (2)	New Utility Vans to replace existing high mileage/maintenance vans		DW17-183	26,101	2/2/2018	\$ 70,000	Yes	Merrimack	No	\$ 28.92	\$ -	
Protectus Meter Upgrade	Protectus Meter Upgrade -		DW17-183	26,101	2/2/2018	\$ 22.000		Nashua	Yes	\$ 27.81		
Trimble Units for Meter Reading (2)	Replacement of CE Meter Reading Equipment (2)		DW17-183	26,101	2/2/2018	\$ 16,000	Yes	Merrimack	No	\$ 28.92	s -	
Residual paving from 2019 main replacement	Residual paving from prior year main replacement		DW17-183	26,101	2/2/2018	\$ -	Yes	Nashua	Yes	\$ 27.81		Pavement for 2019 projects moved back to 2019 Capex
Brook Street	Replace 225 LF of 4 inch and 915 LF of 6 inch CI with 1140 LF of 8 inch DIPCL		DW17-183	26,101	2/2/2018	\$ 422.730		Nashua	Yes	\$ 27.81		and a set projecto more a bude to borry support
Hamilton Street	Replace 410 LF of 6 inch CI with 4 inch DIPCL		DW17-183	26,101	2/2/2018	\$ 97,130	-	Nashua	Yes	\$ 27.81	1	
Ash Street	Replace 510 LF of 6 inch CI with 8 inch DIPCL		DW17-183	26,101	2/2/2018	\$ 191.510		Nashua	Yes	\$ 27.81		
Burritt Street	Replace 425 LF of 4 inch CI with 8 inch DIPCL		DW17-183	26,101	2/2/2018	\$ 157.080		Nashua	Yes	\$ 27.81		
Burntt Street	Replace 125 LF of 4 inch CI with 8 inch DI CL		DW17-183	26,101	2/2/2018	\$ 43,010		Nashua	Yes	\$ 27.81		
Verona Street	Replace 675 LF of 6 inch CI with 8 inch DIPCL		DW17-183	26,101	2/2/2018	\$ 251,130		Nashua	Yes	\$ 27.81	\$ 6,984	
Sarasota Ave	Replace 250 LF of 6 inch CI with 8 inch DIPCL	-	DW17-183	26,101	2/2/2018	\$ 251,150 \$ 92.620		Nashua	Yes	\$ 27.81		
	Replace 250 LF of 6 & 8 inch CI with 8 inch DIPCL		DW17-183	26,101	2/2/2018	\$ 92,62		Nashua		\$ 27.81 \$ 27.81	Ŧ _,o+o	
Alld Street				26,101	, ,	/			Yes			
Lawndale Avenue	Replace 1085 LF of 6 inch CI with 12 inch DIPCL		DW17-183	, .	2/2/2018	\$ 546,920		Nashua	Yes	\$ 27.81	\$ 15,210	
Taylor Road (Lynn St to Fifield St)	Replace 725 LF of 8 inch CI with 12 inch DIPCL		DW17-183	26,101	2/2/2018	\$ 365,750		Nashua	Yes	\$ 27.81		
Temple St (south to Gorman)	Replace 900 LF of 8 inch CI with 12 inch DIPCL	_	DW17-183	26,101	2/2/2018	\$ 457,160		Nashua	Yes	\$ 27.81		
School Street (High to W. Pearl Alleyway)	Replace 400 LF of 4 inch CI with 8 inch DIPCL		DW17-183	26,101	2/2/2018	\$ 151,140		Nashua	Yes	\$ 27.81		
Water Main Replacement - City Sewer Projects	Replacement of various sections of CI pipe		DW17-183	26,101	2/2/2018	\$ -	Yes	Nashua	Yes	\$ 27.81		
Kessler Farm Tank Replacement	Kessler Farm Tank Replacement		DW17-183	26,101	2/2/2018	\$ 3,388,000	Yes	Nashua	Yes	\$ 27.81		
Replace Engineering Pickup	Replace Pickup with > 150,000 miles		DW17-183	26,101	2/2/2018	\$ 35,000		Merrimack	No	\$ 28.92		
Replace Engineering SUV	Replace SUV with $> 150,000$ miles		DW17-183	26,101	2/2/2018	\$ 30,000		Merrimack	No	\$ 28.92		
Investment in developer installed services at 1xannual revenue	Per tariff		DW17-183	26,101	2/2/2018	\$ 60,000		Various	Yes	\$ 28.85	, <u>, , , , , , , , , , , , , , , , , , </u>	
Bowers Dam reconstruction	Bowers Dam reconstruction		DW17-183	26,101	2/2/2018	\$ 900,000	Yes	Merrimack	Yes	\$ 28.92		
WTP Perimeter fence	WTP Perimeter fence		DW17-183	26,101	2/2/2018	\$ 80,000	Yes	Merrimack	Yes	\$ 28.92	\$ 2,314	
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild		DW17-183	26,101	2/2/2018	\$ 55,000	Yes	Various	Yes	\$ 28.85	\$ 1,587	
Well Pump replacements	Well Pump replacements		DW17-183	26,101	2/2/2018	\$ 18,750	Yes	Various	Yes	\$ 28.85	\$ 541	
Chemical Feed pump replacements	Chemical Feed pump replacements		DW17-183	26,101	2/2/2018	\$ 15,000	Yes	Various	Yes	\$ 28.85	\$ 433	
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		DW17-183	26,101	2/2/2018	\$ 18,750	Yes	Various	Yes	\$ 28.85	\$ 541	
Misc. Structural Improvements	Misc. Structural Improvements		DW17-183	26,101	2/2/2018	\$ 27,500	Yes	Various	Yes	\$ 28.85	\$ 793	
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		DW17-183	26,101	2/2/2018	\$ 17,500	Yes	Various	Yes	\$ 28.85	\$ 505	
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		DW17-183	26,101	2/2/2018	\$ 27,500	Yes	Various	Yes	\$ 28.85	\$ 793	
Well Rehabilitation	Well Rehabilitation		DW17-183	26,101	2/2/2018	\$ 40,000	Yes	Various	Yes	\$ 28.85	\$ 1,154	
WTP Structural/HVAC	WTP Structural/HVAC		DW17-183	26,101	2/2/2018	\$ 7,500	Yes	Nashua	Yes	\$ 27.81	\$ 209	
Purchase new lab equipment	Purchase new lab equipment		DW17-183	26,101	2/2/2018	\$ 15,000	Yes	Nashua	No	\$ 27.81	\$ -	
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		DW17-183	26,101	2/2/2018	\$ 7,500		Various	Yes	\$ 28.85		
Replace Vehicle	Replace Vehicle		DW17-183	26,101	2/2/2018	\$ 65.000		Nashua	No	\$ 27.81		
Replace Vehicle	Replace Vehicle		DW17-183	26,101	2/2/2018	\$ 65,000		Nashua	No	\$ 27.81		
Replace Vehicle	Replace Vehicle	1	DW17-183	26,101	2/2/2018	\$ 40.000		Nashua	No	\$ 27.81		
Replace Vehicle	Replace Vehicle	1	DW17-183	26,101	2/2/2018	\$ 40.000		Nashua	No	\$ 27.81		
Carbon Media changeout - filters 3 & 4	Carbon Media changeout - filters 3 & 4		DW17-183	26,101	2/2/2018	\$ 525.000		Nashua	Yes	\$ 27.81		
Arsenic treatment to respond to new MCL	Arsenic treatment to respond to new MCL		DW17-183	26,101	2/2/2018	\$ 15.000		Various	Yes	\$ 28.85		
Various IT Projects	Maintain and replace aging software and hardware		DW17-183	26,101	2/2/2018	\$ 300,000		Merrimack	No	\$ 28.92	\$	
1 4440 4 4 4 10 0000	maintain and replace aging software and natuware		D w 1/-103	20,101	2/2/2010	÷ 500,000	103	mennaek	110	ę 20.72	¥ -	

Total Projected PWW QCPAC Capex for 2020 - \$ 10,179,750

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order E	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 2/9/2019
New Services (10)	Single Family, Owner Build, New Homes		Fut	ure Financing Peti	tion \$	46,000	Yes	Various	Yes	\$ 28.85	\$ 1,327	
Renewed Services (20)	Replacement of failed services		Fut	ure Financing Peti	tion \$	92,000	Yes	Various	Yes	\$ 28.85	\$ 2,654	
Hydrants (10)	Replacement of non functional hydrants (Run rate) (8 YTD)		Fut	ure Financing Peti	tion \$	50,000	Yes	Various	Yes	\$ 28.85	\$ 1,443	
Gates (10)	Replacement of Failed Gate Valves		Fut	ure Financing Peti	tion \$	40,000	Yes	Various	Yes	\$ 28.85	\$ 1,154	
Radios (2750)	Replace out of warrantee failed radio meter readers		Fut	ure Financing Peti	tion \$	275,000	Yes	Various	Yes	\$ 28.85	\$ 7,934	
Meters (Growth) 5/8"-2" - Core & CWS (480)	Meters (Growth) 5/8"-2" - Core & CWS (480)		Fut	ure Financing Peti	tion \$	48,000	Yes	Various	Yes	\$ 28.85	\$ 1,385	
Meters 5/8"-6" Meter Exchange - Core & CWS (1000)	Meters 5/8"-6" Lead Meter Exchange - Core & CWS (1000)		Fut	ure Financing Peti	tion \$	5 100,000	Yes	Various	Yes	\$ 28.85	\$ 2,885	
New Utility Vehicle (2)	New Utility Vehicles to replace existing high mileage/maintenance vehicles		Fut	ure Financing Peti	tion \$	5 130,000	Yes	Merrimack	No	\$ 28.92	\$ -	
New Utility Van (2)	New Utility Vans to replace existing high mileage/maintenance vans		Fut	ure Financing Peti	tion \$	5 70,000	Yes	Merrimack	No	\$ 28.92	\$ -	
Protectus Meter Upgrade	Protectus Meter Upgrade		Fut	ure Financing Peti	tion \$	22,000	Yes	Nashua	Yes	\$ 27.81	\$ 612	
New Vac/Valve Trailer	Replacement of 10yr old Vac for safety & Maintenance Reasons		Fut	ure Financing Peti	tion \$	70,000	Yes	Merrimack	No	\$ 28.92	\$ -	
Residual paving from prior year main replacement	Residual paving from prior year main replacement		Fut	ure Financing Peti	tion \$	653,350	Yes	Nashua	Yes	\$ 27.81	\$ 18,170	
Benson Avenue	Replace 550 LF of 4 inch CI with 8 inch DIPCL		Fut	ure Financing Peti	tion \$	210,650	Yes	Nashua	Yes	\$ 27.81	\$ 5,858	
Spaulding Street	Replace 950 LF of 6 inch CI with 8 inch DIPCL		Fut	ure Financing Peti	tion \$	362,450	Yes	Nashua	Yes	\$ 27.81	\$ 10,080	
Alstead Avenue	Replace 240 LF of 4 inch CI with 4 inch DIPCL		Fut	ure Financing Peti	tion \$	80,300	Yes	Nashua	Yes	\$ 27.81	\$ 2,233	
Spaulding Avenue	Replace 430 LF of 6, 2, & 1.25 inch CI with 4 inch DIPCL		Fut	ure Financing Peti	tion \$	5 104,720	Yes	Nashua	Yes	\$ 27.81	\$ 2,912	
St Lazare Street	Replace 415 LF of 2 inch CI with 4 inch DIPCL		Fut	ure Financing Peti	tion \$	100,980	Yes	Nashua	Yes	\$ 27.81		
Ingalls St (St Camille to end)	Replace 200 LF of 1.5 inch CI with 4 inch DIPCL		Fut	ure Financing Peti	tion \$	48,730	Yes	Nashua	Yes	\$ 27.81	\$ 1,355	
Nye Avenues	Replace 400 LF of 2 & 1.5 inch CI with 4 inch DIPCL		Fut	ure Financing Peti	tion \$	96,140	Yes	Nashua	Yes	\$ 27.81		
Copp Street	Replace 350 LF of 6 inch CI with 8 inch DIPCL		Fut	ure Financing Peti	tion \$	136,620	Yes	Nashua	Yes	\$ 27.81		
Grav Avenue	Replace 360 LF of 6 inch CI with 6 inch DIPCL		Fut	ure Financing Peti	tion \$	112,530	Yes	Nashua	Yes	\$ 27.81		
Coburn Woods (all side streets)	Replace 4400 LF of 2 inch PVC with 4 inch DIPCL		Fut	ure Financing Peti	tion \$	1,320,000	Yes	Nashua	Yes	\$ 27.81		
City Sewer Projects	Replace CI with DICLP		Fut	ure Financing Peti	tion \$	550,000	Yes	Nashua	Yes	\$ 27.81		
Sawver Street	Replace 1600 LF of 6 inch CI with 12 inch DIPCL			ure Financing Peti		528,000	Yes	Nashua	Yes	\$ 27.81		
Woodward Street	Replace 360 LF 8 inch CI with 470 LF 8 inch DIPCL			ure Financing Peti		5 155,100	Yes	Nashua	Yes	\$ 27.81		
Blosson Street	Replace 2400 LF of 6 inch CI and 8 inch CI with 2400 LF of 8 inch DIPCI			ure Financing Peti		792,000	Yes	Nashua	Yes	\$ 27.81		
Linwood Street	Replace 960 LF of 6 inch CI with 8 inch DIPCL			ure Financing Peti		316,800	Yes	Nashua	Yes	\$ 27.81	\$ 8,810	
Balcom Street	Replace 1240 LF 6 inch CI with 1240 LF 8 inch DIPCL			ure Financing Peti		409,200	Yes	Nashua	Yes	\$ 27.81		
Euclid Avenue	Replace 425 LF 6 inch CI with 425LF 8 inch DIPCL			ure Financing Peti		140,250	Yes	Nashua	Yes	\$ 27.81	\$ 3,900	
Fairview Street	Replace 800 LF 6 inch CI with 800 LF 8 inch DIPCL			ure Financing Peti		264,000	Yes	Nashua	Yes	\$ 27.81	\$ 7,342	
Sargent Street	Replace 1900 LF 6 inch CI with 1900 LF 16 inch DIPCL			ure Financing Peti		627,000	Yes	Nashua	Yes	\$ 27.81	\$ 17,437	
Courtland Street	Replace 1170 LF 4 inch CI with 1170 LF 16 inch DIPCL			ure Financing Peti		386,100	Yes	Nashua	Yes	\$ 27.81		
Replace Engineering Pickup	Replace Engineering Pickup with > 150,000 Miles			ure Financing Peti		36,000	Yes	Merrimack	No	\$ 28.92		
Replace Engineering SUV	Replace Engineering SUV with > 150,000 Miles			ure Financing Peti		30,000	Yes	Merrimack	No	\$ 28.92		
Milford Booster Station	Replace/Relocate/Upgrade the Milford Booster Station (>2MGD)			ure Financing Peti		660,000	Yes	Amherst	Yes	\$ 28.85		<u> </u>
Investment in developer installed services at 1xannual revenue	Per tariff			ure Financing Peti		60,000	Yes	Various	Yes	\$ 28.85		<u> </u>
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild			ure Financing Peti		55,000	Yes	Various	Yes	\$ 28.85		<u> </u>
Well Pump replacements	Well Pump replacements			ure Financing Peti		5 <u>35,000</u> 5 18,750	Yes	Various	Yes	\$ 28.85	,	<u> </u>
Chemical Feed pump replacements	Chemical Feed pump replacements			ure Financing Peti		5 15,000	Yes	Various	Yes	\$ 28.85	1	
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS			ure Financing Peti		5 15,000	Yes	Various	Yes	\$ 28.85		
Misc. Structural Improvements	Misc. Structural Improvements			ure Financing Peti		20,000	Yes	Various	Yes	\$ 28.85		<u> </u>
1				ure Financing Peti		20,000	Yes	Various	Yes	\$ 28.85		<u> </u>
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased Miscellaneous SCADA/Electrical			ure Financing Peti		/				-		<u> </u>
Miscellaneous SCADA/Electrical Well Rehabilitation	Well Rehabilitation			ure Financing Peti		30,000 50,000	Yes Yes	Various Various	Yes Yes	\$ 28.85 \$ 28.85		<u> </u>
				ure Financing Peti								
WTP Structural/HVAC	WTP Structural/HVAC			ure Financing Peti		10,000	Yes	Nashua	Yes	\$ 27.81		<u> </u>
Purchase new lab equipment	Purchase new lab equipment			0		20,000	Yes	Nashua	No	\$ 27.81		<u> </u>
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects			ure Financing Peti ure Financing Peti		10,000	Yes	Various	Yes	\$ 28.85 \$ 27.91		<u> </u>]
Replace Vehicle	Replace Vehicle			ure Financing Peti ure Financing Peti	1	65,000	Yes	Nashua	No	\$ 27.81		<u> </u>]
Replace Vehicle	Replace Vehicle			0	τ	65,000	Yes	Nashua	No	\$ 27.81		<u> </u>]
Replace Vehicle	Replace Vehicle			ure Financing Peti		40,000	Yes	Nashua	No	\$ 27.81		<u> </u>]
Replace Vehicle	Replace Vehicle			ure Financing Peti		40,000	Yes	Nashua	No	\$ 27.81		
Carbon Media changeout - filters 5 & 5	Carbon Media changeout - filters 5 & 5			ure Financing Peti		525,000	Yes	Nashua	Yes	\$ 27.81 20.05		
Various projects	Various projects			ure Financing Peti	-	300,000	Yes	Merrimack	No	\$ 28.85		<u> </u>
Replacement of CMMS System (Synergen)	Replacement of CMMS System (Synergen)			ure Financing Peti		1,000,000	Yes	Merrimack	No	\$ 28.85		<u> </u>
	Pennich	uck Water Works P	rojected 2021 Tot	al Capital Expen	diture Budget - \$	5 11,422,670		Projected Prope	erty Tax Expens	se associated with	\$ 267,440	<u> </u>]

Total Projected PWW QCPAC Capex for 2021 - \$ 11,422,670

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Pennichuck Water Works Accrued Liabilities - Retainage

Account	# 344360	2000 004
ACCOUNT	# 241350	-2000-001

Accrued Liabilities - Retainage	Balance	January-18	February-18	March-18	April-18	May-18	June-18	July-18	August-18	September-18	October-18	November-18	December-18	Balance
2018 Main St Area Improvement #s 1806801/1806802/1806803/1806804/1806435/ 1806794/1806795/1806796/1806797/1806798/ 1806799/1606835	-	-		-	-	-	-	(20,420.50)	(25,173.63)	-	(7,475.46)	(18,821.11)	40,329.97	(31,560.73)
2018 Misc Water Main Improvement #s 1806433/1806828/1806829/180630/180631/ 1806836/1813532	-	-	-	-	-	-	-		(17,779.21)	(25,885.53)	-	(19,591.54)	(10,501.99)	(73,758.27)
N. Granese & Sons Bedford Water Expansion PWW #1800734	-	-	-	-	-	-	-	-	-	(13,038.50)	(9,790.00)	-	-	(22,828.50)
NE Earth Mechanics Shakespeare HP System Expansion #1813926	-	-	-	-	-	-	-	-	-	-	(19,289.07)	-	(402.00)	(19,691.07)
RWC Enterprises Ferryalls Ct #1825319	-	-	-	-	-	-	-	-	-	-	(3,018.00)		(6,149.45)	(9,167.45)
Kinsley St #1825911	-	-	-	-	-	-	-	-	-	-	(6,625.00)		-	(6,625.00)
W. F. Grace Marshall St. Water Main #1813935	-	-	-	-	-	-	-	(2,839.05)	-	(17,664.10)	-	(13,112.55)	-	(33,615.70)
TOTAL	-	-	-	-	-	-	-	(23,259.55)	(42,952.84)	(56,588.13)	(46,197.53)	(51,525.20)	23,276.53	(197,246.72)

PWW QCPAC Filing Exhibit 2 Page 6