

**STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION**

LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP.

d/b/a

LIBERTY UTILITIES

**Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Results Filing**

Docket No. DG 16-XXX

April 15, 2016



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INTRODUCTION

Pursuant to the settlement agreement approved by the New Hampshire Public Utilities Commission (the “Commission”) as part of the National Grid plc/KeySpan Corporation merger proceeding in Docket No. DG 06-107 and the settlement agreement in Docket No. DG 11-040 (the “Settlement Agreement”) approved by Order No. 25,370, Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (“Liberty” or the “Company”) submits the results of the Cast Iron Bare Steel (“CIBS”) Replacement Program for fiscal year 2016 (April 1, 2015 to March 31, 2016). As required by the Settlement Agreement, the Company submits the following information in connection with this report and the prefiled Joint Testimony of Gwyn M. Cassetty and Ian Crabtree, and the Testimony of David Simek: (1) a report detailing the actual amount of capital investments made in accordance with implementing the CIBS program during fiscal year 2016 (Attachment GMC-ITC-2 to Joint Cassetty-Crabtree Testimony); (2) a calculation of the incremental revenue requirement associated with placing the capital investments into rate base above a base spending level of \$514,244 (Attachment DBS-1 to Simek Testimony); (3) a description of variances between actual results and the original plan, and (4) a request for a permanent increase in base distribution delivery rates in the amount of \$214,434 effective for usage on and after July 1, 2016. In addition, this report and Mr. Simek’s Testimony will provide an update on the status of pending road degradation fee litigation between Liberty and the cities of Concord and Manchester, a discussion of Liberty’s treatment of the Concord and Manchester road degradation fees in this filing, and a description of the repairs tax deduction for which CIBS projects are eligible.

SECTION 1: ACTUAL CAPITAL EXPENDITURES

Actual capital expenditures incurred during implementation of the CIBS program for fiscal year 2016 are detailed in Attachment GMC-ITC-2 to the Cassetty-Crabtree Testimony. Through a series of technical sessions that began in 2008, the Commission Staff and the Company have agreed that the capital investment amounts to be included for recovery under CIBS may include all prudently incurred direct and indirect¹ costs associated with: (i) replacement or abandonment² of cast iron and bare steel mains, including replacement of existing pipe with replacement pipe of the same size³, with recovery for the costs of “upsizing” the pipe allowed only when specifically justified;⁴ (ii) replacement or abandonment of cast iron or bare steel service lines directly connected to bare steel or cast iron main replacement projects; and (iii) tie over of connected service lines not replaced or abandoned as part of a cast iron bare steel main replacement project.

Categories of costs that may not be included for recovery under CIBS include: (i) replacement or abandonment of plastic main; (ii) replacement or abandonment of coated steel main, regardless of vintage, unless approved by the Safety Division of the Commission; (iii) replacement, abandonment, or reconnecting of plastic or coated steel services that were connected to existing cast iron or bare steel main replacement projects; (iv) the differential in

¹ Indirect costs mean overheads such as pension, OPEB's and other fringe benefits, payroll taxes, material handling costs and other general & administrative expenses that are loaded on all labor and material transactions. Categories of costs that may not be included for recovery under the plan include costs related to CIBS planning (other than normal engineering and project planning), reporting and filing.

² For purposes of ii and iii, abandonments such as mains that are not servicing a customer via a service will not be allowed. Other abandonments will be considered by Staff on a case by case basis.

³ 3-inch pipes, which are no longer standard size, will be routinely replaced with 4-inch pipes.

⁴ See Settlement Agreement in DG 11-040, Attachment J, section (20) n.

cost to replace existing cast iron or bare steel mains with pipe of a diameter that is greater than the existing main and the cost to replace that main with a pipe that is larger than the existing main, unless specifically justified; (v) relocation of customer meters from inside to outside; (vi) random cast iron or bare steel service replacements not connected to a cast iron or bare steel main replacement project; (vii) carryover costs in aggregate exceeding 5% of the approved estimated total expenditures under the CIBS program for the construction year, unless approved by the Safety Division; and (viii) replacements made under the Cast Iron Encroachment Policy are not eligible for accelerated rate recovery in the Cast Iron/Bare Steel Program unless a special circumstance is approved by the Safety Division.

On January 15, 2015, the Company made its proposed FY 2016 CIBS program filing with the Commission. On March 20, 2015, the filing was reviewed with Staff for project selection and scope. The Company also responded to several sets of discovery requests from Staff and OCA in relation to the FY 2016 CIBS program filing.

The FY 2015 carryover costs that were captured within the FY 2016 program totaled \$816,314. According to the Settlement Agreement in DG 11-040, Attachment J, section 20(d)(2.7), “carryover costs in aggregate exceeding 5% of the approved estimated total expenditures under the CIBS program for the construction year, unless approved by the Safety Division.” The estimated total cost associated with completed FY 2016 projects is \$6,037,479, resulting in a 5% cap of \$301,874 allowable carryover cost. Therefore, the differential amount of \$514,440 requires approval from the Safety Division for inclusion into the rate recovery calculation. The Company is requesting such approval as part of this filing.

Line 49, column BA of Attachment GMC-ITC-2 shows the actual recoverable expenditures of the FY 2016 projects, totaling \$4,058,866. After removing from the actual expenditures the CIBS base amount of \$514,244 in accordance with the terms of the Settlement Agreement and \$48,350 for degradation fees that were double counted in FY 2014, the total incremental expenditures to be included in rate base is \$3,496,272. Appendix A to this report is the Condition Bare Steel Main Replacement Program – Sample Analysis Report for FY 2016. This report contains photographs and descriptions of various pipe segments removed and catalogued as part of the FY 2016 CIBS program.

SECTION 2: CALCULATIONS OF INCREMENTAL REVENUE REQUIREMENT

In this filing, Liberty is seeking recovery in rates of the incremental revenue requirement associated with an additional \$3,496,272 of CIBS recoverable capital investments. As set forth in Attachment DBS-1, page 1 to Mr. Simek's Testimony, the revenue requirement associated with the CIBS cumulative capital expenditures is \$2,069,876 (line 35(h)) with a corresponding revenue deficiency of \$214,434 (line 39 (h)). Consistent with prior delivery rate increases for the CIBS program, the Company proposes to apply the increase pro rata across all customer classes. Attachment DBS-1, page 4 to Mr. Simek's Testimony also indicates the annual bill impacts for an average residential customer and commercial customers in rate classes G-41, G-42 and G-52. Attachment DBS-2 is a computation of the cumulative revenue requirement associated with the CIBS program since its inception in FY 2009.

SECTION 3: DIFFERENCES BETWEEN INITIAL ESTIMATED EXPENDITURES AND FISCAL YEAR-END ESTIMATED EXPENDITURES

The Company's FY 2016 CIBS Plan provided for the replacement of 8.54 miles of cast

iron and bare steel pipe at an estimated cost of \$7,782,510, (excluding the City of Manchester degradation fees). As shown on Attachment GMC-ITC-2 (line 32 column AF), the Company eliminated 5.05 miles of cast iron and bare steel at a cost of \$4,578,647 (line 31, column BG), excluding the City of Manchester degradation fees. A reconciliation of the total costs to the total recoverable costs is shown in Table 1 below:

Table 1

		<u>Attachment GMC-ITC-2</u> <u>Reference</u>
Actual Loaded Costs (excl. Manchester degradation fees)	\$4,578,647	line 31, column BG
FY 2015 allowable carry-over costs	301,874	line 47, column BA
FY 2015 remaining carry-over costs	514,440	line 48, column BA
Less: Expected FY 2016 carry-over costs	-593,728	line 31, column BB
Non-recoverable main costs	-182,838	line 31, column AW
Non-recoverable service costs	-559,529	line 31, column AX
Total Recoverable Costs	\$4,058,866	line 49, column BA

Details of the variances between estimated and actual costs by project are shown in Attachment GMC-ITC-2 columns BC through BI.

SECTION 4: STATUS OF THE PENDING LITIGATION BETWEEN LIBERTY AND THE CITIES OF CONCORD AND MANCHESTER

On June 15, 2010, National Grid filed an action in Hillsborough County Superior Court against the City of Manchester seeking an injunction against enforcement of regulations concerning street opening permit fees (“degradation fees”), as well as a request for a declaratory judgment invalidating such fees. The matter was docketed as NO 216-2010-EQ 001722. Similarly, on June 29, 2010, National Grid filed an action in Merrimack County Superior Court against the City of Concord seeking an injunction against enforcement of its degradation fee

regulations, as well as a request for a declaratory judgment invalidating such fees. The matter was docketed as NO 217-2010-CV-00402. On April 6, 2011, the Company filed a motion for summary judgment in the Concord matter, and filed a motion for summary judgment in the Manchester matter on May 6, 2011.

On August 25, 2011, the Merrimack County Superior Court granted summary judgment to National Grid on the basis that the degradation fees at issue are pre-empted by state law. The City of Concord subsequently appealed that decision to the New Hampshire Supreme Court, which held that the City ordinance is not preempted by State law. The Supreme Court concluded that there was a factual dispute between EnergyNorth and the City regarding whether patching an excavated paved road with new pavement diminishes or restores the road's original life expectancy. The case was been remanded to Superior Court for trial, which was completed in May 2015. The trial court issued an order in July 2015, which struck down the penalty provisions in each ordinance for excavating new pavement, but otherwise upheld the ordinances. Both parties appealed to the New Hampshire Supreme Court. The parties attempted mediation in January 2016, but were unsuccessful. The Company expects the Supreme Court to issue a briefing schedule soon and the case will be briefed and argued in the summer and fall.

SECTION 5: TREATMENT OF CONCORD AND MANCHESTER DEGRADATION FEES

Liberty agreed to pay degradation fees to the City of Concord under protest while the litigation and appeal are pending. The City of Manchester agreed to allow Liberty to refrain from paying the fees, subject to the issuance of bonds in sufficient amount to pay any

outstanding fees. Although Liberty has not been paying the Manchester degradation fees, it has been accruing the costs in its books and records. The FY2016 CIBS program recoverable costs are exclusive of the Manchester degradation fees. For the FY2017 program, Manchester degradation fees will also be excluded from the recoverable estimated and actual costs.

A summary of degradation fees included for recovery as part of the CIBS program costs is shown in Table 2 below:

Table 2

<u>Period</u>	<u>City of Concord</u>	<u>City of Manchester</u>		<u>Total</u>
Fiscal 2011	\$19,856	\$275,035		\$294,891
Fiscal 2012	\$37,960	\$39,885		\$77,845
Fiscal 2013	\$9,747	\$382,335		\$392,082
Fiscal 2014	\$48,350	-0-	(1)	\$48,350
Fiscal 2015	\$75,541	-0-	(1)	\$75,541
Fiscal 2016	\$129,773	-0-	(1)	\$129,733
Total	<u>\$321,227</u>	<u>\$697,255</u>		<u>\$1,018,442</u>

(1) Excludes FY 2014 through FY 2016 accrued Manchester degradation fees in the amounts of \$246,449, \$236,710 and \$202,250, respectively from the calculation of the revenue requirement.

Upon a successful outcome of the litigation, the Company will refund the revenue previously collected in revenue requirement calculations. Attachment DBS-3 to Mr. Simek's Testimony shows an estimated calculation of this amount. Currently, the Company would need to return approximately \$102,171 to customers as shown on Page 1, Line 32(b). This is based on the assumption that the litigation will be conclusively resolved before the filing of the FY

2017 revenue requirement. It is estimated that the Concord and Manchester degradation fees to be incurred during the FY 2017 construction season will be \$120,750 and \$441,650, respectively.

SECTION 6: TAX DEDUCTION FOR REPAIR EXPENSES

In 2009, the Internal Revenue Service issued guidance, under Internal Revenue Code Section 162, regarding the eligibility of certain repair and maintenance expenses for an immediate deduction for income tax purposes, but capitalized by the Company for book purposes. This tax deduction has the effect of increasing deferred taxes and lowering the revenue requirement that customers will pay under the CIBS program. Repairs resulting in the replacement of less than 20 percent of an original unit of property qualify for a repairs tax deduction. A gas company's gas subsystem is considered a "unit of property" for the purposes of the repairs tax deduction. As explained in Mr. Simek's Testimony, projects included in the CIBS program are expected to qualify as repairs; thus, when computing the revenue requirement, the Company reflects a tax deductibility of 100 percent for all CIBS jobs.

SECTION 7: CAST IRON/BARE STEEL REPLACED UNDER MUNICIPAL PROJECTS AND THE CAST IRON ENCROACHMENT POLICY

In FY 2016, the Company replaced approximately 248 feet of cast iron through the Cast Iron Encroachment Policy and approximately 12,206 feet of cast iron and bare steel through municipal projects, totaling to approximately 2.36 miles of replacement. This amounts to approximately 7.41 miles of cast iron and bare steel replacement in FY 2016. A yearly summary of cast iron and bare steel replacement through municipal projects and encroachments can be seen in Table 3 below:

Table 3

	Footage of Cast Iron/Bare Steel Replaced	
Fiscal Year	Municipal Projects	Encroachments
2008-2009	10,980	171
2009-2010	19,920	28
2010-2011	11,649	62
2011-2012	17,791	40
2012-2013	12,524	53
2013-2014	19,118	55
2014-2015	10,587	169
2015-2016	12,206	248
Total Footage	114,775	826
Total Mileage	21.74	0.16

**APPENDIX A: FY 2016 CONDITION BARE STEEL MAIN REPLACEMENT PROGRAM –
SAMPLE ANALYSIS**

Over the course of the FY 2016 construction season, bare steel pipe and soil samples were collected from the CIBS main replacement program. Each sample was sand blasted to exposed the pipe down to the bare metal and will be provided for visual representation. Soil samples were taken as close to the pipe samples as possible in an effort to retrieve native soil. Each sample was collected in the field and a GPS point was captured. Chemical testing was conducted to determine the existing pH, chloride, sulfide and sulfate levels. Microbiological testing for Acid Producing Bacteria (APB) and Sulfate Reducing Bacteria (SRB) were performed as well. Both chemical and microbiological tests were conducted as soon as possible. The table below shows the threshold of bacteria levels based on the results of bacterial colonies per milliliter.

Number of Positive Bottles	Bacteria Colonies/ML	Reporting Value Colonies/ML	Bacteria Level
0	< 1 - 10	< 10	Low
1	10	10	Low
2	10 - 100	100	Medium
3	100 - 1000	1,000	Medium
4	1,000 - 10,000	10,000	High
5	> 10,000 - 100,000	100,000	High

Positive APB and SRB vials with corresponding reporting values.

Samples were taken at the following locations:

(1) **48 NEWBURY ST, NAS (ON UNDERHILL ST) – WO# 8840-0001002992** – 2 inch bare steel (unknown YOI), low pressure (LP) – 0.188” wall thickness.

- A soil sample was taken and analyzed. Chemical and microbiological testing was performed on 9/25/2015. The pH was measured to be 6.0 or neutral. Testing for chlorides was negative. Presence of sulfide tested negative (<5 mg/l) and sulfate levels measured 400 mg/l or in the low-medium range. The APB testing produced a reading of 1,000 bacteria colonies per ML or a medium level of bacteria. The testing for SRB produced a reading of <10 bacteria colonies per ML or a low level of bacteria. The soil was observed to be a light brown color, sandy and odorless.
- The pipe sample was observed to be in very poor condition. The sample has multiple locations of pitting and a large hole with 100% wall loss on the exposed steel.
- The following pictures were taken:



(2) **49 SUMMER ST (ON SALEM ST), NASHUA – WO# 8840-791898** – 2 inch bare steel (1924), low pressure (LP) – 0.218” wall thickness.

- A soil sample was taken and analyzed. Chemical and microbiological testing was performed on 10/15/2015. The pH was measured to be 6.0 or neutral. Testing for chlorides was negative. Presence of sulfide tested negative (<5 mg/l) and sulfate levels measured 400 mg/l or in the low-medium range. The APB testing produced a reading of 100,000 bacteria colonies per ML or a high level of bacteria. The testing for SRB produced a reading of 1,000 bacteria colonies per ML or a medium level of bacteria. The soil was observed to be a dark brown color, sandy with some odor.
- The pipe sample was observed to be in very poor condition. The sample has deep pitting and multiple locations of small holes with 100% wall loss on the exposed steel.
- The following pictures were taken:



Conclusions/Recommendations:

- (1) Bare steel cutouts locations should continue to be identified on designs and reference dimensions to leak repair locations. This is to ensure a piece of poor condition bare steel pipe is collected.
- (2) A representative should be on site to verify that the pipe sample is acceptable and that the soil taken is valid for analysis. The soil sample should be tested as soon as possible. Testing the soil when it is “fresh” will provide more accurate results as it relates to the existing chemical and microbiological conditions at each location.
- (3) The criteria used for the segment selection process should continue to include references to deep pitting and/or poor condition. This data has proven to be useful and indicative of pipe that is in need of replacement.
- (4) Special attention should be paid to locations where bare steel segments are to remain in service and the pH is highly acidic or highly alkaline.
- (5) Special attention should be paid to locations where bare steel segments are to remain in service and high levels of bacteria are recorded.
- (6) MSES Consultants, Inc. – Corrosion Products Division recommended incorporating results from sulfide and sulfate levels as it relates to the aggressiveness of potential corrosion. Special attention should be paid to locations where bare steel segments are to remain in service and high levels sulfide and/or sulfate are recorded.
- (7) GPS points will be taken at locations of where samples were collected. Soil condition and chemical/microbiological testing results should be added as attributes to each point once determined.

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Priority	Work Order #	Town Code	Street	From	To	Material	System Pressure (PSIG)	Exst Diameter (Inches)	YOI	Relay Diameter	Bare Steel Services	Coated Steel Services	Plastic Services	Total Services (Estimated)	Relay Footage	New Main Footage	Aband Footage	Total Footage (Estimated)	Cost Estimate (Loaded)	Estimated Degradation Fee
NORTHERN DIVISION																				
1	8840-0001002879	LAC	7-73 EDWARDS ST, LAC	PROVINCE ST	BALDWIN ST	CI	LP	4	1900	4" LP PL		6	6	12	1,015			1,015	\$147,457	
2	8840-0001002867	CCD	47-90 N SPRING RD, CCD, RUMFORD ST & CAMBRIDGE ST	SCHOOL ST	WASHINGTON ST	CI	LP	3 & 4	1892/1895/1898	4" LP PL	34		22	56	2,950			2,950	\$508,888	\$36,100
3	8840-0001002868	CCD	203-274 SOUTH ST, CCD, JORDAN AV & JOHNSON AV	WILSON ST	MOORELAND AV	CI	LP	4 & 6	1931/1933/1939	8" LP PL South St (Rockingham-Wilson), 6" LP PL South St (Mooreland-Rockingham), 6" LP PL Wilson St, 4" LP PL Jordan & Johnson	18	5	17	40	3,130			3,130	\$480,121	\$12,500
4	8840-641993	CCD	167-203 SOUTH ST, CCD, CONANT DR & RUNDLETT ST	NORWICH ST	WILSON ST	CI & BS	LP to 60	1.25, 3, 4 & 6	1951/1955/1958	4" HP PL Conant St, 2" HP PL on remaining segments	47	9	23	79	5,240			5,240	\$854,617	\$42,450
5	8840-0001002615	CCD	19-50 PERLEY ST, CCD, GROVE ST & THORNDIKE ST	PIERCE ST	S STATE ST	CI	LP	3 & 4	1893/1946	4" LP PL	7	1	40	48	2,270			2,270	\$402,137	\$27,000
6	8840-0001000444	CCD	20-50 ALLISON ST, CCD, DUNKLEE ST	SPRUCE ST	PILLSBURY ST	CI	LP	4	1907	4" LP PL	9	1	7	17	1,175			1,175	\$215,571	\$14,000
7	8840-0001001272	CCD	12-29 ROCKLAND RD, CCD	AUBURN ST	#17	BS	LP	2	1963	4" LP PL	5		2	7	425			425	\$73,928	\$5,500
Northern Division Totals											120	22	117	259	16,205	0	0	16,205	\$2,682,719	\$137,550
														Mileage	3.07	0.00	0.00	3.07		
CENTRAL DIVISION																				
1	8840-0001002841	MNC	684-853 HALL ST, MNC, PEARL ST, BELMONT ST, ORANGE ST	MEAD ST	MYRTLE ST	CI	LP	4	1896/1913/1925	4" LP PL	29	3	33	65	3,390			3,390	\$586,068	\$119,400
2	8840-925627	MNC	401-803 RIVER RD, MNC, THAYER ST & EVERETT ST	READEY ST	ROSWELL ST	CI	LP to 60	3, 4, 6 & 8	1906/1915	4" HP PL River Rd, 2" HP PL Park Av, Thayer St & Everett St	14	4	22	40	2,550		1,550	4,100	\$455,157	\$90,600
3	8840-0001003728	MNC	14-72 MONROE ST, MNC	ELM ST	RIVER RD	CI	LP to 60	4	1911	2" HP PL	7		4	11	480	145		625	\$108,673	\$22,500
4	8840-919916	MNC	5-116 FOREST ST, MNC, BABEL ST	SYLVESTER ST	EOM	CI	LP	4	1927/1938	4" LP PL	10		4	14	920			920	\$169,413	\$32,100
5	8840-0001002842	MNC	500-760 HOWE ST, MNC, WILSON ST	LINCOLN ST	BELMONT ST	CI	LP to 60	4 & 6	1914	2" HP PL	20	2	17	39	1,975	115		2,090	\$364,035	\$80,700
6	8840-642286	MNC	462-610 SPRUCE ST, MNC, & CANTON ST	BEACON ST	KENNEY ST	CI	LP	4	1900/1917/1924	6" LP PL Spruce St (Beacon to Canton), 4" LP PL Spruce St (Canton to EOM) & 4" LP PL Canton St	19	5	21	45	2,360			2,360	\$426,364	\$84,900
Central Division Totals											99	14	101	214	11,675	260	1,550	13,485	\$2,109,711	\$430,200
														Mileage	2.21	0.05	0.29	2.55		
SOUTHERN DIVISION																				
1	8840-840337	NAS	22-50 BRIDGE ST, NAS, E HOLLIS, HOBBS, CHASE, CROWN	TEMPLE ST	FERRY ST	CI & BS	LP to 60	2, 4 & 6	1901/1904/1924/1970	2" HP PL	30	20	17	67	3,455		3,685	7,140	\$872,752	
2	8840-0001001271	NAS	2-30 AUBURN ST, NAS & LOCUST ST	CHARLES ST	AMHERST ST	CI	LP	4	1924	4" LP PL	14	2	10	26	2,490			2,490	\$548,319	
3	8840-0001002830	NAS	2-18 HOWARD ST, NAS, HOYT ST, SHEDDS AV & SCRIPTURE ST	TEMPLE ST	GORMAN AV	BS & CI	LP to 60	2 & 4	1912/1921/1923	2" HP PL	26		16	42	1,915			1,915	\$391,990	
4	8840-761258	NAS	2-15 COLUMBIA AV, NAS, WEBSTER ST & BARTLETT AV	CONCORD ST	WELLINGTON ST	BS	LP to 60	2 & 4	1915	2" HP PL	8	3	6	17	1,325		690	2,015	\$299,773	
5	8840-0001002992	NAS	34-48 UNDERHILL ST, NAS	NEWBURY ST	EOM	BS	LP	2	Unknown	Abandon & tie over services to exst 4" CS	2	2		4			350	350	\$38,880	
6	8840-791898	NAS	1-44 WHITNEY ST, NAS, SALEM ST & ATWOOD CT	LEMON ST	SUMMER ST	CI & BS	LP	2, 4 & 6	1904/1905/1914/1924	6" LP PL Whitney St, 4" LP PL Salem St & Atwood Ct	20	6	12	38	2,030			2,030	\$557,873	
7	8840-0001001270	NAS	2-15 BADGER ST, NAS	W HOLLIS ST	KINSLEY ST	BS	LP	2	1909	4" LP PL	3	4	7	14	535			535	\$142,944	
Southern Division Totals											103	37	68	208	11,750	0	4,725	16,475	\$2,852,531	\$0
														Mileage	2.23	0.00	0.89	3.12		
FY2015-16 CIBS Program Totals											322	73	286	681	39,630	260	6,275	46,165	\$7,644,960	\$567,750
														Total Mileage	7.51	0.05	1.19	8.74		
FY2014-15 Carry Over Costs																				
	8840-0001000439	CCD	1-36 MERRIMACK ST, CCD												1,250			1,250		
	8840-0001000975	CCD	2-33 UNION ST, CCD, MAPLE ST												1,360		75	1,435		
	8840-710944	LAC	17-103 NORTH ST, LAC, & SCHOOL												1,275		275	1,550		
	8840-0001000448	MNC	147-360 CILLEY RD, MNC LINCOLN												1,500		285	1,785		
	8840-0001000443	MNC	348-350 LINCOLN ST, MNC												435			435		
	8840-923056	MNC	184-250 NORTH ST, MNC, HEMLOCK												725		605	1,330		
	8840-0001000434	MNC	205-287 MEDFORD ST, MNC												865			865		
	8840-586533	MNC	5-99 ROSEMONT AV, MNC												690			690		
	8840-919954	MNC	6-100 ISLAND POND RD, MNC, & S MAMMOTH RD												1,350			1,350		
	8840-761259	NAS	109-115 E HOLLIS, NAS, DENTON												147		510	657		
	8840-791853	NAS	87-98 WALNUT ST, NAS												471			471		
	8840-0001000437	NAS	14-66 SAWYER ST, NAS												1,050			1,050		
FY2014-15 Carry Over Totals															11,118		1,750	12,868		
Grand Total																				

*Informational purposes only. Concord degradation fees are included in the main costs. Not all Manchester degradation fees have been invoiced to the Company and include estimated costs as well as actuals. Manchester degradation fees are not included in any of the cost recovery calculations.

Priority	Work Order #	Town Code	Street	Total Cost Estimate (Loaded)	Cost/Ft Estimate (Loaded)	Loading %	Estimated Recoverable Cost (Loaded)	Comments	Actual Completion Date	Status	Actual Footage Installed	CS & PL Relay & New Main Footage	Upsized Footage	Total CIBS Eliminated (AC+R-AD)	Actual Service Relays BS	Actual Service Relays CS & PL	Actual Service Inserts BS	Actual Service Inserts CS & PL	Actual Service Transfer	Actual Service Aband
NORTHERN DIVISION																				
1	8840-0001002879	LAC	7-73 EDWARDS ST, LAC	\$147,457	\$145.28	31%	\$119,440	5 Broken main & 5 Joint leak repairs within relay footage. Comments indicated 3 areas with graphitization.	5/15/2015	CASBUILT	1,155			1,155		6			5	
2	8840-0001002867	CCD	47-90 N SPRING RD, CCD, RUMFORD ST & CAMBRIDGE ST	\$544,988	\$184.74	27%	\$501,388.96	1890's Vintage. 16 Joint leaks within relay footage. City paving other streets and would like this completed firsts.	6/10/2015	CASBUILT	3,165	125		3,040	30	8			14	
3	8840-0001002868	CCD	203-274 SOUTH ST, CCD, JORDAN AV & JOHNSON AV	\$492,621	\$157.39	26%	\$428,580.27	City Paving South St in 2016. Area where there is sediment and blockage in the main.	1/6/2016	CASBUILT	3,369	220	1,388	3,149	16	9			12	
4	8840-641993	CCD	167-203 SOUTH ST, CCD, CONANT DR & RUNDLETT ST	\$897,067	\$171.20	28%	\$780,448.01	City Paving South St in 2016. Area where there is sediment and blockage in the main. School nearby.	8/20/2015	CASBUILT	5,763	60		5,703	35	17	15	11	1	
5	8840-0001002615	CCD	19-50 PERLEY ST, CCD, GROVE ST & THORNDIKE ST	\$429,137	\$189.05	28%	\$343,309.87	12 Joint leak repairs & 1 Grade 2 leak within relay footage. School nearby.	9/3/2015	CASBUILT	2,493	60		2,433	4	5			37	
6	8840-0001000444	CCD	20-50 ALLISON ST, CCD, DUNKLEE ST	\$229,571	\$195.38	29%	\$218,092.05	10 Joint leak repairs within relay footage.	6/5/2015	CASBUILT	1,258			1,258	7	2			4	
7	8840-0001001272	CCD	12-29 ROCKLAND RD, CCD	\$79,428	\$186.89	29%	\$76,430.28	Service record indicates main is bare steel and in poor condition. No leak history.												
Northern Division Totals				\$2,820,269	\$174.04		\$2,467,689.61				17,203	465	1,388	16,738	92	47	15	11	73	0
				Cost per Foot Install	\$174.04															
CENTRAL DIVISION																				
1	8840-0001002841	MNC	684-853 HALL ST, MNC, PEARL ST, BELMONT ST, ORANGE ST	\$705,468	\$208.10	22%	\$522,047	4 Broken Mains and 7 Joint leaks within relay footage. City to replace sewer on Pearl St. School nearby.	10/16/2015	CASBUILT	798	100		698	5				9	
2	8840-925627	MNC	401-803 RIVER RD, MNC, THAYER ST & EVERETT ST	\$545,757	\$214.02	24%	\$382,030	4 Broken Mains and 7 Joint leaks within relay footage. City to replace sewer and pave a section of River Rd.	12/2/2015	CASBUILT	2,635	150		4,035	13	23			1	1
3	8840-0001003728	MNC	14-72 MONROE ST, MNC	\$131,173	\$209.88	23%	\$98,380	3 Broken Mains and 1 Joint leak within relay footages. Field recommendation, main is graphitized.	6/26/2015	CASBUILT	595	145		450	6	1		3		
4	8840-919916	MNC	5-116 FOREST ST, MNC, BABEL ST	\$201,513	\$219.04	23%	\$163,226	3 Broken Mains and 2 Joint leaks within relay footage.												
5	8840-0001002842	MNC	500-760 HOWE ST, MNC, WILSON ST	\$444,735	\$212.79	22%	\$320,209	2 Broken Mains and 2 Joint leaks within relay footage. Poor condition noted in comments.	8/4/2015	COMP	2,130	180		1,950	20	19		1		
6	8840-642286	MNC	462-610 SPRUCE ST, MNC, & CANTON ST	\$511,264	\$216.64	23%	\$362,997	2 Broken Mains, 6 Joint leaks and 1 Grade 3 leak within relay footage. Deep pitting noted in comments.												
Central Division Totals				\$2,539,911	\$188.35		\$1,848,889				6,158	575	0	7,133	44	43	0	4	10	1
				Cost per Foot Install	\$212.81															
SOUTHERN DIVISION																				
1	8840-840337	NAS	22-50 BRIDGE ST, NAS, E HOLLIS, HOBBS, CHASE, CROWN	\$872,752	\$252.61	29%	\$654,564	3 Broken Mains in relay footage, 2 in 2014 and several joint leaks. 1 Grade 3 leak.	9/9/2015	COMP	304			304	5					
2	8840-0001001271	NAS	2-30 AUBURN ST, NAS & LOCUST ST	\$548,319	\$220.21	31%	\$498,970	2 Broken Mains and several Joint leaks within the relay footage.												
3	8840-0001002830	NAS	2-18 HOWARD ST, NAS, HOYT ST, SHEDDS AV & SCRIPTURE ST	\$391,990	\$204.69	32%	\$354,284	BS main note to be in poor condition in Shedd's Av. 2015 sewer replacement in Hoyt's Ln.												
4	8840-761258	NAS	2-15 COLUMBIA AV, NAS, WEBSTER ST & BARTLETT AV	\$299,773	\$226.24	32%	\$230,825	5 corrosion leaks within 700 feet. Expose main report indicates deep pitting on main. Church nearby.												
5	8840-0001002992	NAS	34-48 UNDERHILL ST, NAS	\$38,880	\$0.00	31%	\$13,219	3 corrosion leaks within 50 feet. Field recommendations, main in very poor condition.	9/24/2015	COMP				350	2	2				
6	8840-791898	NAS	1-44 WHITNEY ST, NAS, SALEM ST & ATWOOD CT	\$557,873	\$274.81	30%	\$502,086	2 Broken Mains and several joint leaks within the relay footage. BS main noted to be in poor condition in Salem.	10/14/2015	COMP	2,176	30	1,010	2,146	17	8	1		10	
7	8840-0001001270	NAS	2-15 BADGER ST, NAS	\$142,944	\$267.19	31%	\$111,496	1 Corrosion leak repair noted in poor condition. Indicated bare steel main is rested on drain and should be replaced asap.												
Southern Division Totals				\$2,852,531	\$173.14		\$2,365,445				2,480	30	1,010	2,800	24	10	1	0	10	0
				Cost per Foot Install	\$242.77															
FY2015-16 CIBS Program Totals				\$8,212,710	\$177.90		\$6,682,023				25,841	1,070	2,398	26,671	160	100	16	15	93	1
				Cost per Foot Install	\$205.88					Total Mileage	4.89	0.20	0.45	5.05						
FY2014-15 Carry Over Costs																				
	8840-0001000439	CCD	1-36 MERRIMACK ST, CCD	\$111,405			\$111,405	Final Restoration.												
	8840-0001000975	CCD	2-33 UNION ST, CCD, MAPLE ST	\$129,323			\$129,323	Final Restoration.												
	8840-710944	LAC	17-103 NORTH ST, LAC, & SCHOOL	\$146,381			\$146,381	Final Restoration.												
	8840-0001000448	MNC	147-360 CILLEY RD, MNC LINCOLN	\$51,088			\$51,088	Final Restoration. Contribution to City for overlaying street. Degradation fees waived.												
	8840-0001000443	MNC	348-350 LINCOLN ST, MNC	\$36,193			\$36,193	Final Restoration.												
	8840-923056	MNC	184-250 NORTH ST, MNC, HEMLOCK	\$108,002			\$108,002	Final Restoration.												
	8840-0001000434	MNC	205-287 MEDFORD ST, MNC	\$78,046			\$78,046	Final Restoration.												
	8840-586533	MNC	5-99 ROSEMONT AV, MNC	\$65,428			\$65,428	Final Restoration.												
	8840-919954	MNC	6-100 ISLAND POND RD, MNC, & S MAMMOTH RD	\$21,981			\$21,981	Final Restoration.												
	8840-761259	NAS	109-115 E HOLLIS, NAS, DENTON	\$20,541			\$20,541	Final Restoration.												
	8840-791853	NAS	87-98 WALNUT ST, NAS	\$38,102			\$38,102	Final Restoration.												
	8840-0001000437	NAS	14-66 SAWYER ST, NAS	\$106,117			\$106,117	Final Restoration. City agreed to pilot 1 foot cutback.												
FY2014-15 Carry Over Totals				\$912,607			\$912,607													
Grand Total				\$9,125,317			\$7,594,630													

*Informational purposes only. Concord degradation fees are included in the main costs. Not all Manchester degradation fees have been invoiced to the Company and include estimated costs as well as actuals. Manchester degradation fees are not included in any of the cost recovery calculations.

Priority	Work Order #	Town Code	Street	Actual Service New	Actual Service Total	Degradation Fees*	Actual Main Cost - Direct (CCD DEGRADATION INCL)	Actual Service Cost - Direct	Actual Total Cost Direct (AP + AQ)	Actual Main Cost Loaded (CCD DEGRADATION INCL)	Actual Service Cost - Loaded	Actual Total Cost Loaded (AS + AT)	Loading %	Main Costs to be Removed (Non-recoverable)	Service Cost to be Removed (Non-Recoverable)	Recoverable Main Cost (AS - AW)	Recoverable Service Cost (AT - AX)	Total Recoverable Cost (AY + AZ)	Estimated Carryover Costs - Loaded (EXCL MNC DEGRADATION FEES)	Estimated Direct Cost (EXCL MNC DEGRADATION FEES)	Actual Cost Direct (EXCL MNC DEGRADATION FEES, INCL CARRYOVER)
NORTHERN DIVISION																					
1	8840-0001002879	LAC	7-73 EDWARDS ST, LAC	2	13	\$0	\$78,283	\$32,937	\$111,220	\$84,180	\$50,767	\$134,947	21%	\$0.00	\$50,767	\$84,180	\$0	\$84,180		\$112,781	\$111,220
2	8840-0001002867	CCD	47-90 N SPRING RD, CCD, RUMFORD ST & CAMBRIDGE ST		52	\$41,518	\$367,041	\$119,369	\$486,410	\$367,613	\$144,416	\$512,030	5%	\$18,488.74	\$53,126	\$349,125	\$91,290	\$440,415	\$100,522	\$427,757	\$572,065
3	8840-0001002868	CCD	203-274 SOUTH ST, CCD, JORDAN AV & JOHNSON AV	1	38	\$9,268	\$210,786	\$98,381	\$309,167	\$270,227	\$137,565	\$407,792	32%	\$30,202.07	\$83,630	\$240,025	\$53,935	\$293,960	\$60,077	\$389,986	\$358,265
4	8840-641993	CCD	167-203 SOUTH ST, CCD, CONANT DR & RUNDLETT ST		79	\$32,715	\$263,707	\$228,209	\$491,916	\$268,285	\$242,922	\$511,207	4%	\$4,541.47	\$83,096	\$263,743	\$159,827	\$423,570	\$167,923	\$699,878	\$633,192
5	8840-0001002615	CCD	19-50 PERLEY ST, CCD, GROVE ST & THORNDIKE ST		46	\$34,038	\$205,365	\$103,230	\$308,595	\$226,141	\$114,661	\$340,802	10%	\$8,722.00	\$107,819	\$217,419	\$6,842	\$224,261	\$136,258	\$336,441	\$419,640
6	8840-0001000444	CCD	20-50 ALLISON ST, CCD, DUNKLEE ST	1	14	\$12,235	\$227,271	\$31,530	\$258,802	\$235,904	\$40,851	\$276,755	7%	\$0.00	\$17,711	\$235,904	\$23,139	\$259,043		\$179,557	\$258,802
7	8840-0001001272	CCD	12-29 ROCKLAND RD, CCD																		
Northern Division Totals				4	242	\$129,773	\$1,352,453	\$613,657	\$1,966,109	\$1,452,350	\$731,183	\$2,183,533	11%	\$61,954	\$396,149	\$1,390,396	\$335,033	\$1,725,429	\$464,780	\$2,146,399	\$2,353,183
Avg Loaded Cost																					
CENTRAL DIVISION																					
1	8840-0001002841	MNC	684-853 HALL ST, MNC, PEARL ST, BELMONT ST, ORANGE ST		14	\$12,000	\$97,686	\$27,942	\$125,627	\$108,044	\$27,876	\$135,920	8%	\$13,539.35	\$18,511	\$94,505	\$9,365	\$103,870		\$95,398	\$125,627
2	8840-925627	MNC	401-803 RIVER RD, MNC, THAYER ST & EVERETT ST		38	\$90,600	\$324,339	\$23,929	\$348,268	\$400,636	\$30,027	\$430,663	24%	\$34,861.71	\$18,533	\$365,775	\$11,495	\$377,269	\$128,948	\$350,692	\$447,459
3	8840-0001003728	MNC	14-72 MONROE ST, MNC		10	\$22,500	\$71,649	\$22,614	\$94,263	\$81,954	\$31,310	\$113,264	20%	\$19,971.98	\$12,506	\$61,982	\$18,804	\$80,786		\$83,783	\$94,263
4	8840-919916	MNC	5-116 FOREST ST, MNC, BABEL ST																		
5	8840-0001002842	MNC	500-760 HOWE ST, MNC, WILSON ST		40	\$77,150	\$215,504	\$86,265	\$301,769	\$243,772	\$101,774	\$345,546	15%	\$20,600.45	\$53,550	\$223,172	\$48,224	\$271,395		\$282,400	\$301,769
6	8840-642286	MNC	462-610 SPRUCE ST, MNC, & CANTON ST																		
Central Division Totals				0	102	\$202,250	\$709,177	\$160,751	\$869,928	\$834,406	\$190,987	\$1,025,394	18%	\$88,973	\$103,100	\$745,433	\$87,887	\$833,320	\$128,948	\$812,273	\$969,119
Avg Loaded Cost																					
SOUTHERN DIVISION																					
1	8840-840337	NAS	22-50 BRIDGE ST, NAS, E HOLLIS, HOBBS, CHASE, CROWN		5		\$63,306	\$21,864	\$85,170	\$77,922	\$23,700	\$101,622	19%	\$0.00	\$0	\$77,922	\$23,700	\$101,622		\$63,047	\$85,170
2	8840-0001001271	NAS	2-30 AUBURN ST, NAS & LOCUST ST																		
3	8840-0001002830	NAS	2-18 HOWARD ST, NAS, HOYT ST, SHEDDS AV & SCRIPTURE ST																		
4	8840-761258	NAS	2-15 COLUMBIA AV, NAS, WEBSTER ST & BARTLETT AV																		
5	8840-0001002992	NAS	34-48 UNDERHILL ST, NAS		4		\$12,694	\$19,566	\$32,259	\$14,495	\$22,326	\$36,821	14%	\$14,495.00	\$12,939	\$0	\$9,387	\$9,386		\$29,717	\$32,259
6	8840-791898	NAS	1-44 WHITNEY ST, NAS, SALEM ST & ATWOOD CT		36		\$425,143	\$88,317	\$513,461	\$544,311	\$93,239	\$637,550	24%	\$17,415.35	\$47,340	\$526,895	\$45,899	\$572,795		\$428,700	\$513,461
7	8840-0001001270	NAS	2-15 BADGER ST, NAS																		
Southern Division Totals				0	45	\$0	\$501,143	\$129,747	\$630,890	\$636,728	\$139,265	\$775,993	23%	\$31,910	\$60,279	\$604,817	\$78,986	\$683,803	\$0	\$521,465	\$630,890
Avg Loaded Cost																					
FY2015-16 CIBS Program Totals				4	389	\$332,023	\$2,562,773	\$904,154	\$3,466,927	\$2,923,485	\$1,061,435	\$3,984,919	15%	\$182,838	\$559,529	\$2,740,646	\$501,906	\$3,242,552	\$593,728	\$3,480,136	\$3,953,192
																					Avg Loaded Cost
FY2014-15 Carry Over Costs																					
	8840-0001000439	CCD	1-36 MERRIMACK ST, CCD							\$84,487	\$28,162	\$112,650				\$84,487	\$28,162	\$112,650			
	8840-0001000975	CCD	2-33 UNION ST, CCD, MAPLE ST							\$76,467	\$25,489	\$101,956				\$76,467	\$25,489	\$101,956			
	8840-710944	LAC	17-103 NORTH ST, LAC, & SCHOOL							\$88,907	\$29,636	\$118,543				\$88,907	\$29,636	\$118,543			
	8840-0001000448	MNC	147-360 CILLEY RD, MNC LINCOLN							\$63,789	\$21,263	\$85,052				\$63,789	\$21,263	\$85,052			
	8840-0001000443	MNC	348-350 LINCOLN ST, MNC							\$475	\$158	\$633				\$475	\$158	\$633			
	8840-923056	MNC	184-250 NORTH ST, MNC, HEMLOCK							\$79,341	\$26,447	\$105,787				\$79,341	\$26,447	\$105,787			
	8840-0001000434	MNC	205-287 MEDFORD ST, MNC							\$61,887	\$20,629	\$82,516				\$61,887	\$20,629	\$82,516			
	8840-586533	MNC	5-99 ROSEMONT AV, MNC							\$18,035	\$6,012	\$24,046				\$18,035	\$6,012	\$24,046			
	8840-919954	MNC	6-100 ISLAND POND RD, MNC, & S MAMMOTH RD							\$26,945	\$8,982	\$35,927				\$26,945	\$8,982	\$35,927			
	8840-761259	NAS	109-115 E HOLLIS, NAS, DENTON							\$18,888	\$6,296	\$25,184				\$18,888	\$6,296	\$25,184			
	8840-791853	NAS	87-98 WALNUT ST, NAS							\$32,583	\$10,861	\$43,443				\$32,583	\$10,861	\$43,443			
	8840-0001000437	NAS	14-66 SAWYER ST, NAS							\$60,431	\$20,144	\$80,575				\$60,431	\$20,144	\$80,575			
FY2014-15 Carry Over Totals											\$612,235	\$204,078	\$816,314			\$612,235	\$204,078	\$816,314			
													% of Estimated Costs for the FY2015-16 Completed Projects in column V				\$301,874				
														Remaining Carryover Cost		\$514,440					
Grand Total										\$3,535,720	\$1,265,513	\$4,801,233		Total Requested Recoverable Cost		\$3,352,882	\$705,984	\$4,058,866			

*Informational purposes only. Concord degradation fees are included in the main costs. Not all Manchester degradation fees have been invoiced to the Company and include estimated costs as well as actuals. Manchester degradation fees are not included in any of the cost recovery calculations.

Priority	Work Order #	Town Code	Street	Direct Variance %	Estimated Loaded Cost (EXCL MNC DEGRADATION FEES)	Actual Loaded Cost (EXCL MNC DEGRADATION FEES, INCL CARRYOVER)	Loaded Cost Variance %	Variance Comments
NORTHERN DIVISION								
1	8840-0001002879	LAC	7-73 EDWARDS ST, LAC	-1%	\$147,457	\$134,947	-8%	On Budget.
2	8840-0001002867	CCD	47-90 N SPRING RD, CCD, RUMFORD ST & CAMBRIDGE ST	34%	\$544,988	\$612,552	12%	Slightly Over Budget. Additional costs for ledge removal, 15 test holes required by City of CCD to check depth of service for transfers, and additional cots for processed gravel.
3	8840-0001002868	CCD	203-274 SOUTH ST, CCD, JORDAN AV & JOHNSON AV	-8%	\$492,621	\$467,869	-5%	On Budget.
4	8840-641993	CCD	167-203 SOUTH ST, CCD, CONANT DR & RUNDLETT ST	-10%	\$897,067	\$679,130	-24%	Under Budget - MIDWAY did grind and inlay on Conant Dr extent, which is cheaper than estimated using RHW to execute restoration. Loadings less than estimated.
5	8840-0001002615	CCD	19-50 PERLEY ST, CCD, GROVE ST & THORNDIKE ST	25%	\$429,137	\$477,060	11%	Slightly Over Budget. Binder Flush (temporary paving) not included in estimate and additional footage.
6	8840-0001000444	CCD	20-50 ALLISON ST, CCD, DUNKLEE ST	44%	\$229,571	\$276,755	21%	Over Budget. Originally estimated as Grind and Inlay - Restored with a 2' cutback.
7	8840-0001001272	CCD	12-29 ROCKLAND RD, CCD					
Northern Division Totals				10%	\$2,740,841	\$2,648,313	-3%	
Avg Loaded Cost/Foot North					\$174	\$154		
CENTRAL DIVISION								
1	8840-0001002841	MNC	684-853 HALL ST, MNC, PEARL ST, BELMONT ST, ORANGE ST	32%	\$119,191	\$135,920	14%	Over Budget. Reduced project size to Pearl St & Belmont St, estimate revised. Additional test holes were needed for locating services and CI main on Belmont, extra depth charges (very deep tie-in holes) and an additional 180 feet more than initially estimated.
2	8840-925627	MNC	401-803 RIVER RD, MNC, THAYER ST & EVERETT ST	28%	\$455,157	\$559,611	23%	Over Budget. Additional binder/paving restoration required due to late completion date of the project; ledge removal and extra depth, service restoration not in estimate; gravel and additional traffic control needed.
3	8840-0001003728	MNC	14-72 MONROE ST, MNC	13%	\$108,673	\$113,264	4%	On Budget.
4	8840-919916	MNC	5-116 FOREST ST, MNC, BABEL ST					
5	8840-0001002842	MNC	500-760 HOWE ST, MNC, WILSON ST	7%	\$364,035	\$345,546	-5%	On Budget.
6	8840-642286	MNC	462-610 SPRUCE ST, MNC, & CANTON ST					
Central Division Totals				19%	\$1,047,056	\$1,154,342	10%	
Avg Loaded Cost/Foot Central					\$180	\$187		
SOUTHERN DIVISION								
1	8840-840337	NAS	22-50 BRIDGE ST, NAS, E HOLLIS, HOBBS, CHASE, CROWN	35%	\$79,025	\$101,622	29%	Over Budget. Reduced project size to just Jackson St, estimate revised. Extra cost due to asbestos disposal.
2	8840-0001001271	NAS	2-30 AUBURN ST, NAS & LOCUST ST					
3	8840-0001002830	NAS	2-18 HOWARD ST, NAS, HOYT ST, SHEDDS AV & SCRIPTURE ST					
4	8840-761258	NAS	2-15 COLUMBIA AV, NAS, WEBSTER ST & BARTLETT AV					
5	8840-0001002992	NAS	34-48 UNDERHILL ST, NAS	9%	\$38,880	\$36,821	-5%	On Budget.
6	8840-791898	NAS	1-44 WHITNEY ST, NAS, SALEM ST & ATWOOD CT	20%	\$557,873	\$637,550	14%	Over Budget. S&L charges for crews hand digging under 12" drain line, assisting union tapping crew and approx. \$20k of additional flagger charges for extended duration.
7	8840-0001001270	NAS	2-15 BADGER ST, NAS					
Southern Division Totals				21%	\$675,778	\$775,993	15%	
Avg Loaded Cost/Foot South					\$275	\$298		
FY2015-16 CIBS Program Totals				14%	\$4,463,675	\$4,578,647	3%	
Avg Loaded Cost/Foot Total					\$185	\$176		
FY2014-15 Carry Over Costs								
	8840-0001000439	CCD	1-36 MERRIMACK ST, CCD		\$111,405	\$112,650	1%	Final restoration cost came in on budget.
	8840-0001000975	CCD	2-33 UNION ST, CCD, MAPLE ST		\$129,323	\$101,956	-21%	Final restoration cost came in under than estimated.
	8840-710944	LAC	17-103 NORTH ST, LAC, & SCHOOL		\$146,381	\$118,543	-19%	Final restoration cost came in under than estimated.
	8840-0001000448	MNC	147-360 CILLEY RD, MNC LINCOLN		\$51,088	\$85,052	66%	Final restoration cost came in over than estimated.
	8840-0001000443	MNC	348-350 LINCOLN ST, MNC		\$36,193	\$633	-98%	Final restoration cost came in under than estimated.
	8840-923056	MNC	184-250 NORTH ST, MNC, HEMLOCK		\$108,002	\$105,787	-2%	Final restoration cost came in on budget.
	8840-0001000434	MNC	205-287 MEDFORD ST, MNC		\$78,046	\$82,516	6%	Final restoration cost came in on budget.
	8840-586533	MNC	5-99 ROSEMONT AV, MNC		\$65,428	\$24,046	-63%	Final restoration cost came in under than estimated.
	8840-919954	MNC	6-100 ISLAND POND RD, MNC, & S MAMMOTH RD		\$21,981	\$35,927	63%	Final restoration cost came in over than estimated.
	8840-761259	NAS	109-115 E HOLLIS, NAS, DENTON		\$20,541	\$25,184	23%	Final restoration cost came in over than estimated.
	8840-791853	NAS	87-98 WALNUT ST, NAS		\$38,102	\$43,443	14%	Final restoration cost came in over than estimated.
	8840-0001000437	NAS	14-66 SAWYER ST, NAS		\$106,117	\$80,575	-24%	Final restoration cost came in under than estimated.
FY2014-15 Carry Over Totals					\$912,607	\$816,314	-11%	
Grand Total					\$5,376,282	\$5,394,961	0.3%	

*Informational purposes only. Concord degradation fees are included in the main costs. Not all Manchester degradation fees have been invoiced to the Company and include estimated costs as well as actuals. Manchester degradation fees are not included in any of the cost recovery calculations.

Marketing Efforts in 2015

Liberty's marketing efforts in 2015 included efforts to acquire customers who are currently on main but not using natural gas.

1. CIBS Program

Before any CIBS work was started, Liberty sent letters to all residents, both existing and potential customers, to inform them of the scope of work that would be taking place. In addition to providing current customers with notice, the letter was also intended to inform homeowners **not** currently taking advantage of natural gas that the best time to convert to natural gas would be when construction was underway.

In total, there were 444 letters sent out in 2015. Of the 444 letters sent to homeowners, 385 were already natural gas customers. This indicates that only 59 homeowners along the 2015 CIBS routes were not customers, or that the route had a saturation rate of 87%. Out of the 59 letters that were sent to non-customers, we received 5 responses yielding an 8% response rate. Out of the 5 homeowners that contacted us, 4 had gas services installed in 2015, indicating a conversion success rate of 80%. Of the 4 services installed, 2 meters have been turned on and claimed by the sales department. The other 2 services should have meters installed by the end of 2016.

In addition to sending letters, the field crew completing the construction hung door hangers on the door of potential customers. Field personnel also spoke to potential customers that were home while the construction crews were completing the work in an effort to get them to sign up for natural gas. Both of these methods appeared to be unsuccessful, as no customers were added.

2. Paving Letters

By working with Town officials as well as Liberty's engineering department, the sales team was able to identify roads that were scheduled to be repaved in 2015. Due to town restrictions on opening a newly paved road, getting potential customers on these routes to sign up *prior* to the commencement of paving was paramount. In order to capture these potential customers, letters were sent urging those interested to convert **before** their road was repaved. Due to a late start in the season, as well as towns removing roads that were not actually going to be paved, approximately 100 letters were sent to potential customers. Out of the 100 letters sent, there were 3 responses. Of those 3 responses, 1 converted to natural gas, and the other two were lost for varied reasons.

3. Advertising/Branding Campaign

In an effort to reach a wider range of customers, Liberty's new marketing analyst helped initiate the following marketing efforts:

- 8 direct mail pieces mailed directly to the homes of 5,500 potential customers within 100 feet from Liberty's natural gas distribution system. From all 8 mailings, a total of 89 leads came in, 27 of which were sold.
- As a follow up from the direct mail pieces, general email blasts were sent to the potential customers on our direct mail list that we had email addresses for. In total, 7,280 emails were sent. We received two leads, neither of which was sold. Upon further investigation, many of the email addresses we were provided with were invalid/no longer used by the potential customer we were trying to reach.
- 4 full page newspaper ads run 4 consecutive Sundays in a row in 3 different local residential papers advertising the benefits of natural gas. The newspapers these ads appeared in were The Concord Monitor, The Nashua Telegraph, and Manchester Union Leader. On the commercial side, 8 full page news ads were run in the NH Business Review. The sales department CRM system shows no leads came in from these efforts. However, because these ads were more of a branding effort, they still could have made an impact.
- In 2015, Liberty started sending out something we termed "neighbor letters." Once a sales representative would sell a job, they would look at surrounding houses in the neighborhood, and determine which were not currently using natural gas. We would then send a personalized letter to those customers indicating that one of their neighbors had signed up for natural gas, and this would be an ideal time to convert seeing as there would already be a crew on their street. In total, 2,663 neighbor letters were sent. Out of those 2,663 letters sent, we received 159 leads, 80 of which were sold. This indicates a response rate of 5.97%. Out of all marketing efforts done in 2015, this proved to be the most successful.
- In 2015, Liberty's marketing analyst also produced sales collateral for both the residential and commercial sales reps which included handouts and brochures. These handouts acted as sales tools, and provided prospects with information about natural gas as well as the programs offered by Liberty Utilities.

Planned Marketing Efforts for 2016

In an effort to acquire new customers, Liberty has implemented or is in the process of implementing the following:

1. CIBS

Similar to 2015, letters will be sent to all abutters along the routes where work will take place. However, we have created a second letter to be sent only to potential customers. Due to the fact that the initial letter sent is mostly focused on the scope of work, the information regarding converting to natural gas

could easily become over looked. With that in mind, the 2nd notice letter is short and to the point, not flooded with information regarding the scope of work and is being printed on yellow paper to stand out. The sales representatives will also look up owner information, including their mailing address, to ensure the letters make it to the appropriate person. The sales reps direct lines will also be used, so a potential customer does not need to go through the 800 line. Although the results from the door hangers and field personnel did not prove to be successful, we will still continue to use these methods. It has been proven that it takes 7 “touches” from a company before a potential customer will make contact, and these two methods serve to remind the customer we are there.

2. MISC Marketing/Branding Efforts

In addition to the 2 CIBS letters that will be sent, Liberty will also do the following:

- 3-4 residential Direct Mail pieces
- 1-2 commercial Direct Mail pieces
- Paving Letters
- Residential “Neighbor Letters”
- Commercial “Surrounding Business Letters”
- Partner with local organizations to help brand and promote Liberty Utilities
- Participate in Co-Op branding with Liberty’s preferred contractors
- Run ads in both residential and commercial newspapers



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Avis important. Veuillez traduire immédiatement.

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ĐÂY LÀ MỘT BẢN THÔNG CÁO QUAN TRỌNG
XIN VUI LÒNG CHO DỊCH LẠI THÔNG CÁO ẤY

Это очень важное сообщение.
Пожалуйста, попросите чтобы
вам его перевели.

«Date»

«Customer_First_Name_» «Customer_Last_Name_»

Or Current Resident

«House_» «Street_Name_» «Suffix_» «Unit_Type» «Unit_»

«Town_», «State» 0«Zip_»

Dear «Customer_First_Name_»,

This is an important notice to inform you that Liberty Utilities will be working in your neighborhood to maintain and/or extend the integrity and reliability of our natural gas distribution system. The work will take place on «Work_Location_» and will begin in «Work_Begin_DateMonthSeason». Work will generally take place from 7:00 a.m. – 5:00 p.m. Monday through Saturday. We apologize in advance for any inconvenience, but this project is part of our commitment to provide continuous improvements and keep the natural gas delivery system safe and reliable.

- Liberty Utilities and/or a qualified contractor will perform the work. A police detail will be provided, if necessary. The road will be open to the public and parking may be limited. A construction foreman, with appropriate identification, will be on site to address your parking needs throughout the duration of the construction.
- There may be a lag between temporary and permanent restoration of the street and sidewalk, depending on weather and ground conditions.

If you have any questions about the project, please call «Construction_Employee_Name_» at «Construction_Employee_Phone_Number_». For general inquiries, Customer Service can be reached between the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday at 1-800-833-4200.

Not a Liberty Utilities natural gas customer?

If you do not currently have natural gas, now is the best time to make the switch. Once your street is repaved, it will be **multiple years** before Liberty Utilities will be able to connect your residence to gas. For further information about converting to natural gas, call **1-800-833-4200** and press **option 5**. When calling, please reference Code: «Code_»

Sincerely,

Liberty Utilities



«Date»

«Customer_First_Name_» «Customer_Last_Name_»
«House_» S «Street_Name_» «Street_Suffix_» «Unit_Type_» «Unit_»
«CityTown_», «State» 0«Zip»

Dear «Customer_First_Name_»,

I am a «Liberty_Employee_Title_» with Liberty Utilities, and I am contacting you to make sure you are aware that Liberty Utilities will be working in your neighborhood to maintain and/or extend the integrity and reliability of our natural gas distribution system. After researching your property, it looks like you are not currently using natural gas. Please be aware that once all work in your neighborhood has been completed, the road will be repaved and there will be a restriction put in place that will prevent us from bringing natural gas to your home/business for a **minimum** of **5 years**.

If it was your intention to convert to natural gas when your current equipment needs replacing, **it is imperative you contact me right away**. I have included some information about natural gas, as well as my business card. I welcome the opportunity to discuss your needs, and help you determine if natural gas is the right choice for you.

Sincerely,

«Liberty_Employee_Name_», «Liberty_Employee_Title_»
«Liberty_Employee_Phone_Number_»
«Liberty_Employee_Email»

Kindly reference «Lead_Source_» when you contact me

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