

Knepper Applicable PHMSA Training Completed			
	Online Computer Based Training	Status	Date
1	PHMSA-PL1DIMP Introduction of Distribution Integrity Management Program WBT	Successful	5/3/2011
2	PHMSA-PL1GLAW Introduction to Gas Laws WBT	Successful	8/11/2014
3	PHMSA-PL1HCA High Consequence Areas WBT	Successful	7/4/2005
4	PHMSA-PL1ICDA Internal Corrosion Direct Assessment WBT	Successful	4/1/2011
5	PHMSA-PL1IPROC Integrity Management Processes WBT	Successful	7/6/2005
6	PHMSA-PL1ODOR Natural Gas Odorization WBT	Successful	4/4/2011
7	PHMSA-PL1PRESS Fundamentals of Gas Pressure Regulators WBT	Successful	2/26/2007
8	PHMSA-PL1RA Introduction to Risk Assessment Methods WBT	Successful	4/25/2015
9	PHMSA-PL2FLMEC - Fundamentals of Fluid Mechanics WBT	Successful	4/24/2015
10	PHMSA-PL2P195 Introduction to Part 195 WBT	Successful	4/14/2015
11	PHMSA-PL3CP Fundamentals of Pipeline Corrosion and Cathodic Protection WBT	Successful	8/14/2007
12	PHMSA-PL3ECDA External Corrosion Direct Assessment WBT	Successful	4/1/2011
13	PHMSA-PL3ELEC Fundamentals of Basic DC Electricity WBT	Successful	8/18/2007
14	PHMSA-PL3OQ Operator Qualification WBT Course	Successful	1/31/2006
15	PHMSA-PL3PIG Fundamentals of Launching and Receiving Maintenance Pigs WBT	Successful	6/8/2010
16	PHMSA-PL3PP Fundamentals of Plastic Pipe WBT	Successful	4/12/2007
17	PHMSA-PL3REG Regulatory Overview WBT	Successful	4/8/2015
18	PHMSA-PL3SCADA Fundamentals of SCADA Systems WBT	Successful	3/14/2011
19	PHMSA-PL3SCCDA Stress Corrosion Cracking Direct Assessment WBT	Successful	8/23/2006
20	PHMSA-PL3WELD Introduction to Pipeline Welding WBT	Successful	6/1/2007
21	PHMSA-PL4LNG Fundamentals of Liquefied Natural Gas (LNG) WBT	Successful	6/15/2005
21	PHMSA-PL3IC - Investigating and Managing Internal Corrosion of Pipelines WBT	Successful	10/6/2016
22	PHMSA-PL3DA Drug and Alcohol Testing for the Pipeline Industry WBT	Successful	10/8/2016
	COURSES	Status	Date
1	PHMSA-PL1297 Gas Integrity Management (IM) Protocol Course	Successful	5/5/2005
2	PHMSA-PL4253 Liquefied Natural Gas (LNG) Safety Technology and Inspection Course	Successful	7/29/2005
3	PHMSA-PL1250 Safety Evaluation of Gas Pipeline Systems Course	Successful	12/15/2005
4	PHMSA-PL2284 (HAZWOPER) Refresher for Pipeline Safety Representatives	Successful	1/9/2007
5	PHMSA-PL3322 Evaluation of Operator Qualification (OQ) Programs Course	Successful	1/21/2016
6	PHMSA-PL3256 Pipeline Failure Investigation Techniques Course	Successful	2/9/2007
7	PHMSA-PL1255 Gas Pressure Regulation and Overpressure Protection Course	Successful	4/12/2007
8	PHMSA-PL1310 Plastic and Composite Materials Course	Successful	6/15/2007
9	PHMSA-PL3242 Welding and Welding Inspection of Pipeline Materials Course	Successful	6/15/2007
10	PHMSA-PL3254 Joining of Pipeline Materials Course	Successful	6/15/2007
11	PHMSA-PL3257 Pipeline Safety Regulation Application and Compliance Procedures Course	Successful	8/17/2007
12	PHMSA-PL3600 Root Cause/Incident Investigation Course	Successful	8/21/2009
13	PHMSA-PL3292 Safety Evaluation of Inline Inspection (ILI)/Pigging Programs Course	Successful	6/11/2010
14	PHMSA-PL3293 Corrosion Control of Pipeline Systems Course	Successful	6/25/2010
15	PHMSA-PL3291 Fundamentals of (SCADA) System Technology and Operation Course	Successful	4/1/2011
16	PHMSA-PL3355 Safety Evaluation of Control Room Management Programs	Successful	8/29/2014
17	PHMSA-PL1245 Safety Evaluation of Distribution Integrity Management Programs (DIMP) Course	Successful	4/23/2015
18	PHMSA-PL2258 Safety Evaluation of Hazardous Liquid Pipeline Systems Course	Successful	5/15/2015
19	PHMSA-PL3267 Fundamentals of Integrity Management Course	Successful	7/31/2015
20	PHMSA-PL3306 External Corrosion Direct Assessment (ECDA) Field Course	Successful	8/14/2015
21	PHMSA-PL2294 Safety Evaluation of Hazardous Liquid Pipeline (IM) Programs Course	Successful	4/28/2017

**(20) Cast Iron Bare Steel Replacement Program:**

A cast iron/bare steel replacement program (“CIBS Program”) shall be implemented that will be based on a construction year (April through December). By no later than January 15 of each year, EnergyNorth shall provide a copy of its CIBS Plan, defined below, to Staff for review and comment. EnergyNorth shall meet with Staff in technical sessions to discuss the plan to be implemented for the subsequent construction year. After review by Staff, EnergyNorth will take all reasonable steps to carry out and implement the plan, taking into account Staff comments.

The CIBS plan, which will cover cast iron and bare steel pipe replacements, will describe each replacement project, itemizing the proposed projects by general category, along with the targeted amount of investment to be made during the following construction year, which budget shall not be less than the CIBS base amount for capital expenditures described in paragraph e below (“CIBS Plan”). The CIBS Plan will prioritize cast iron and bare steel pipe replacements based on factors including leakage, material condition, age and other components affecting pipe integrity. The CIBS Plan will not address replacement of cast iron and bare steel pipes required in public works projects and/or carried out pursuant to the Cast Iron Encroachment Policy referenced in Condition 12 above.

EnergyNorth agrees to engage in an annual evaluation and selection process to identify and target investments to be proposed in the CIBS Plan, as follows:

- a. It will undertake an annual review of the performance of its distribution system as it relates to the integrity of its cast iron and bare steel pipelines. This review will provide: (1) a detailed analysis of leak activity over the preceding ten years on the bare steel and cast iron gas mains, and (2) an evaluation of which main segments represent the highest priority segments for replacement. Consideration will be given to the age of the main, the date the leak(s) occurred, leak classification, type of leak, number of clamps used in leak repair, condition of main when repaired, specific leak location, building types in the area of the main segment and quantity of bare steel services attached to the potential segment to be replaced.
- b. Adjustments in the priority of main segment replacement could be made due to planned paving projects, public relations, or identification of new main segments by operating personnel in the field that were not captured through EnergyNorth’s data systems.
- c. Using the process identified in (a) and (b) above, EnergyNorth shall rank and prioritize those mains to be replaced in the associated construction year and provide its plans to the Commission.
- d. Categories of spending will include the following:

- 1.1 unprotected bare steel main replacement, as determined by the evaluation and selection process;
- 1.2. cast iron main replacement as determined by the evaluation and selection process;
- 1.3. cast iron or bare steel main replacement candidates requested by field operating personnel; and
- 1.4. bare steel services replaced as a result of a segment of bare steel main or cast iron main that is selected.

Categories of spending that are not included in the CIBS:

- 2.1. costs of moving inside meters to outside;
- 2.2. costs of reconnecting existing plastic services or existing coated steel services from cast iron mains or bare steel mains to the newly installed replacement main;
- 2.3. costs of any mains replaced made of polyethelene or steel that have a protective coating;
- 2.4. costs of any mains that are abandoned;
- 2.5. costs of coated steel mains that “act as bare steel mains” such as poorly coated steel mains or disbonded steel mains, unless approved by the Safety Division;
- 2.6. incremental costs of upsizing with the exception of (n) below; and
- 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. Such carryover costs include items such as restoration costs not incurred during the construction year.
- 2.8. 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.

e) EnergyNorth shall bear the initial \$500,000 of capital expenditures under the CIBS program (“the CIBS Base Amount”) (in accordance with the Handy Whitman index). The CIBS Base Amount excludes replacement projects required by public works projects and/or carried out pursuant to the Cast Iron Encroachment Policy referenced in Condition 12. Provided that investments were made in accordance with the approved CIBS plan, EnergyNorth will be allowed a permanent increase in its base distribution delivery rates to recover the annual revenue requirement for those investments that are found to be reasonable and prudent made in the preceding construction year and in excess of the CIBS Base Amount. The permanent capital investment recovery allowance will not take effect until the actual costs of the

previous construction year are approved by the Commission. Petitions for cost recovery will be submitted annually thereafter not later than May 1, for an effective date of July 1.

f) After Staff completes the review of the CIBS Plan for a given construction year, EnergyNorth shall track all capital investments made in accordance with the approved CIBS Plan. EnergyNorth will reconcile actual capital expenditures with the CIBS Plan targets at the conclusion of the CIBS Plan period.

g) EnergyNorth agrees that it will file a report with the Commission on May 15 of each year detailing the actual amount of capital investments made in accordance with implementing the CIBS Plan during the prior construction year (“CIBS Report”). The report will include a calculation of the incremental revenue requirement associated with the capital investments in rate base that exceeds the CIBS Base Amount, using the Commission-approved imputed or actual capital structure and cost of capital determined using the Commission-approved return on equity and cost of debt. If the Commission has not made a final determination in the first rate case by the time the first adjustment is to be calculated, a reasonable proxy will be used for the rate calculation and an adjustment will be made to the revenue requirement to reconcile to the approved cost of capital rates when the rates from the first rate case go into effect.

h) EnergyNorth agrees to file its annual CIBS Report on the prior construction year’s activities at the time it makes its rate adjustment filing on May 15. The Settling Parties and Staff understand that, in implementing the CIBS Plan, the circumstances encountered during the year may require reasonable deviations from the original plan. In such cases, EnergyNorth shall include an explanation of any deviations in the report. For cost recovery purposes, EnergyNorth shall have the burden to show that any deviations were due to circumstances out of its reasonable control or, if within its control, were reasonable and prudent. The CIBS Report shall include a breakdown of footage replaced by municipal projects that involve Cast Iron /Bare Steel as well the footage replaced under the Cast Iron Encroachment Policy. Samples of reporting that Staff has reviewed previously are included in Attachment A.

i) The CIBS Program will remain in place through and beyond EnergyNorth’s future rate cases until terminated by the Commission or by mutual agreement at the end of a given construction year, with a final capital allowance pertaining to the final year.

j) EnergyNorth can elect to not finalize its CIBS Plan until after the winter frost patrol ends in early April. By May 1, EnergyNorth shall finalize actual projects and provide a copy of the final CIBS Plan to Staff. In addition, the priority rankings of main segments for replacement will be subject to change over the course of the year due to new information. In such case, if EnergyNorth believes it is prudent to change



the rankings from the approved CIBS Plan, it will notify Staff, stating the reasons for the change prior to construction. If Staff does not believe that particular components of the revised plans are reasonable and the matter is not resolved between EnergyNorth and Staff, Staff may object and the matter may be referred to the Commission for resolution.

k) EnergyNorth acknowledges that Staff review will not relieve EnergyNorth of its obligation to operate its business and maintain safe, reliable service through expenditures and other capital investments in the ordinary course of business that are not set forth in the CIBS Plan, nor will it bind Staff to a particular position regarding the adequacy and/or effectiveness of the plan.

l) However, EnergyNorth will be authorized to include in its CIBS Plan the replacement of cast iron and bare steel pipe located in the vicinity of public works projects, where replacement is not required as a part of the project, but permitted for convenience or other reasons, as determined by the Safety Division.

m) EnergyNorth shall provide GIS Mapping or other electronic means that shows the project scope with each submittal of the CIBS Plan.

n) No upsizing of pipe diameter shall be allowed for cost recovery within the CIBS Program on 60 psig systems. For low pressure systems (12 inches water column and below) no upsizing shall be allowed for cost recovery within the CIBS Program except for 3" nominal diameter low pressure pipe replaced with 4" nominal diameter pipe and other special circumstances as approved by the Safety Division.

o) EnergyNorth shall provide the Commission Staff with actual cutouts of the worst section within any bare steel main segment replaced prior to reconciling any cost adjustments for associated construction season. Cutouts shall be approximately 12 inches to 24 inches in length.

p) EnergyNorth shall provide a written report accompanying the actual cutouts in section 20(o) above that includes: photographs the replaced bare steel segment; a general description of the condition of the pipe; the street address from which it was taken; age of material; original wall thickness; measured depth of deepest pit of the cutout; operating pressure of replaced pipe; pH of soil condition of cutout surrounds; results of testing for microbiological acid producing bacteria (APB) and sulfate reducing bacteria (colonies per ML); and identification of the threshold of high bacteria counts.

## **II. Additional Granite State Electrical Safety Conditions (Electrical Underground Facility Protection)**

### **Underground Damage Prevention Program Enhancement**

1. Granite State Electric Company (Granite State) will institute a new Locating/Mark-Out Policy within the existing Underground Damage Prevention Program. The Locating/Mark-Out Policy will provide enhanced public safety by increasing the commitments and responsibilities associated with locating and marking private underground residential facilities within Granite State's franchise territory. Notwithstanding the exemption contained in RSA 374:53 concerning facilities not owned by the operator, Granite State accepts the additional responsibility of locating privately owned, residential underground electrical facilities pursuant to excavation notifications, and agrees to establish the Locating/Mark-Out Policy ("Policy") described below.

### **Policy Implementation and Potential Discontinuation**

2. Locating/Mark-Out Policy will be implemented within 120 days of the Closing Date.
3. Granite State reserves the right to discontinue the Policy with Staff review and consent but without the necessity of obtaining formal Commission approval if the incremental costs of implementing the Policy, not including advertising and marketing costs or other non-field costs, exceed \$10,000 annually. In the event Granite State disagrees with Staff's decision not to consent, it may file a request for review with the Commission. Granite State will file written notification of any discontinuation of the Policy with the Commission.

### **Policy Requirements**

4. Within Granite State's franchise territory, Granite State will mark privately owned, residential underground facilities up to the meter and including the service entrance upon receipt of notifications received via the One Call Notification System.
5. The electrical service includes primary service voltage levels as well as secondary voltage levels.
6. The electrical service also includes service from aerial distribution systems as well as underground systems.
7. Notifications received for underground excavation involving commercial properties are not included in the waiver or this Policy.
8. The location and marking of excavations involving underground electrical facilities beyond the meter, such as from a house to a barn, lamp post, pool, shed and other structures, are not included in this Policy.

9. Granite State's responsibility under the Policy shall not extend beyond marking out the facility, and does not include repairs to such facilities.
10. Field Markouts made under the Policy shall clearly indicate private electrical facilities that are not owned or operated by GSE.
11. During each year the Policy is in effect, Granite State shall maintain a level of accuracy for markouts made under the Policy that is commensurate with the level achieved for its own facilities. An audit or equivalent method may be used to determine the accuracy percentage of Policy markouts.
12. Granite State will not be required to mark such services defined in this Policy where the customer refuses Granite State access or denies such markout service.

### **Program Reporting**

13. By January 31, 2013, Granite State shall submit an initial report to the Safety Division of the average accuracy level for markouts made of underground facilities pursuant to the One Call Notification System, and the derivation with sufficient detail supporting the determination of the average used to measure the accuracy level for the Policy. The initial report shall indicate the levels of markout accuracy obtained for Granite State facilities as well as privately owned, residential facilities. The report shall also contain the elements listed in item 14 below. Staff shall review and comment on the submittal, and Granite State shall incorporate Staff's comments into subsequent reports in following years.
14. Granite State shall keep track of costs expended and associated data, including but not limited to: number of notifications received, number of markouts made, address locations of markouts, quantity and locations of customer refusals, and dates of services performed. A summary report with subtotals by month shall be submitted to Staff annually, no later than January 31st for the previous calendar year's Policy.
15. The new Policy does not require Granite State to file a monthly E-26 report for markouts made under the Policy.



FY	Age
2009-1	55
2009-2	79
2009-3	80
2009-4	54
2009-5	100
2009-6	96
2009-7	84
2009-8	100
2010-1	54
2010-2	109
2010-3	78
2010-4	101
2010-5	62
2010-6	108
2010-7	83
2010-8	111
2010-9	78
2011-1	63
2011-2	98
2011-3	97
2011-4	55
2011-5	63
2012-1	83
2012-2	51
2013-1	110
2013-2	102
2014-1	111
2014-2	111
2014-3	
2014-4	56
2014-5	119
2014-6	
2014-7	66
2015-1	58
2015-2	55
2015-3	101
2015-4	58
2015-5	
2015-6	58
2015-7	60
2016-1	99 est
2016-2	91
2017-1	112
2017-2	104
2017-3	101

	2017-4	93
	2017-5	55
	2017-6	112
Sum	48	83.9

# LIBERTY UTILITIES BARE STEEL REPLACEMENT PROGRAM

2009-2017

Prepared by the New Hampshire Public Utilities Commission-Safety Division



# 2017 Bare Steel Replacement Reports





# FY 2017

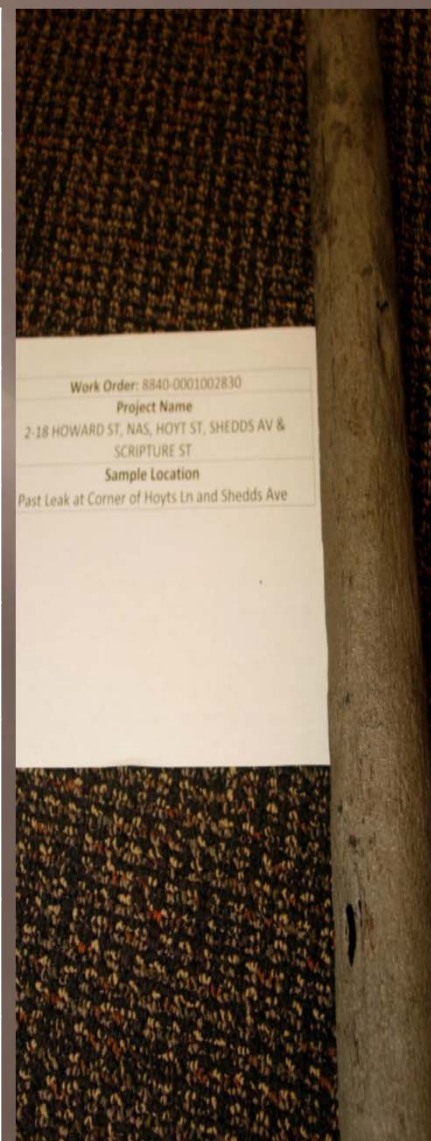
Address	22-50 Bridge St
Town	Nashua
Pipe Size	2"
Install Date	1904
Wall Thickness	0.188 in
Age	112
Pressure	12 in water column
Ground PH	6
Pipe Condition	50% Wall Loss/ Poor Condition





# FY 2017

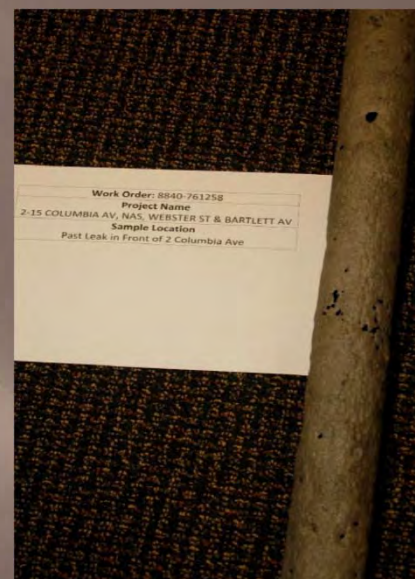
Address	18 Howard St
Town	Nashua
Pipe Size	2"
Install Date	1912
Wall Thickness	0.188 in
Age	104
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2017

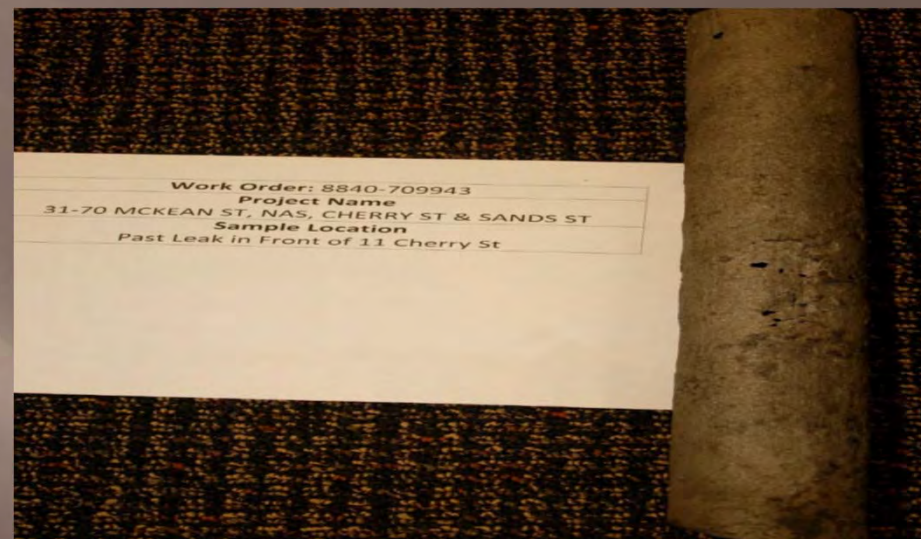
Address	2-15 Columbia Ave
Town	Nashua
Pipe Size	2"
Install Date	1915
Wall Thickness	0.188 in
Age	101
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2017

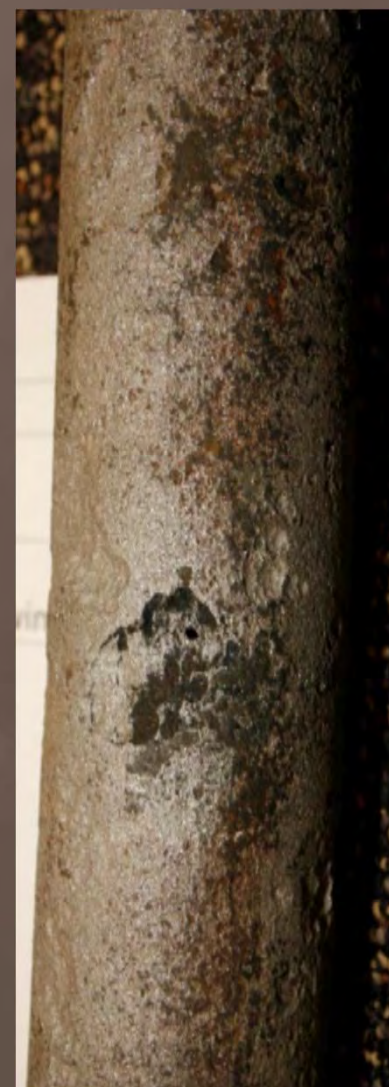
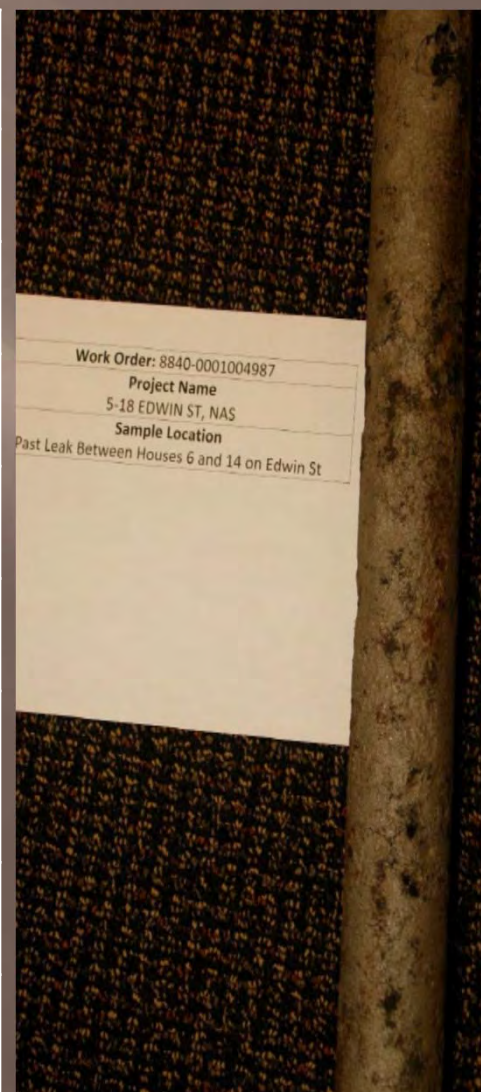
Address	31-70 McKean St
Town	Nashua
Pipe Size	2"
Install Date	1923
Wall Thickness	0.188 in
Age	93
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2017

Address	5-18 Edwin St
Town	Nashua
Pipe Size	2"
Install Date	1961
Wall Thickness	0.188 in
Age	55
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2017

Address	2-16 Stevens St
Town	Nashua
Pipe Size	2"
Install Date	1904
Wall Thickness	0.188 in
Age	112
Pressure	12 in water column
Ground PH	7
Pipe Condition	100% Wall Loss/ Very Poor Condition





# 2016 Bare Steel Replacement Reports



# FY 2016

Address	48 Newbury St NAS (On Underhill St)
Town	Nashua
Pipe Size	2"
Install Date	Unknown
Wall Thickness	0.188 in
Age	Unknown
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2016

Address	49 Summer St (On Salem St)
Town	Nashua
Pipe Size	2"
Install Date	1924
Wall Thickness	0.218 in
Age	91
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition



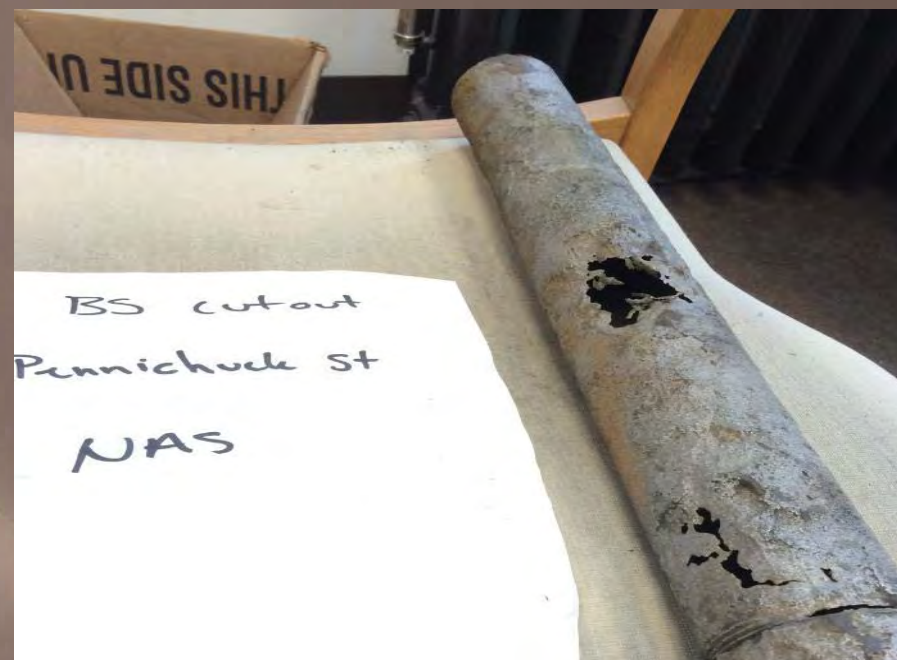


# 2015 Bare Steel Replacement Reports



# FY 2015

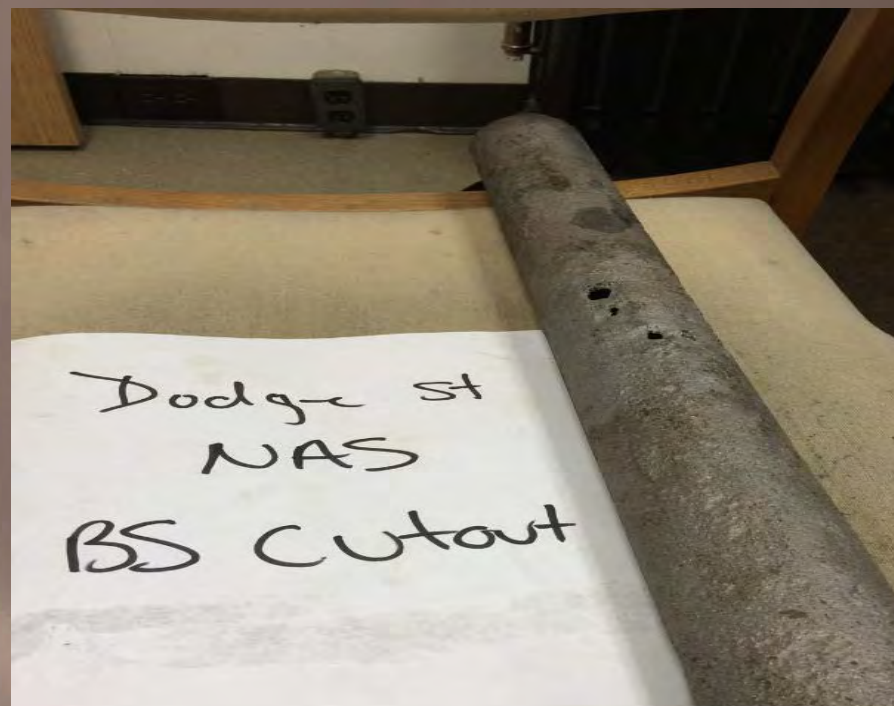
Address	Pennichuck St & Caron Ave
Town	Nashua
Pipe Size	2"
Install Date	1956/1960
Wall Thickness	0.143 in
Age	58
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2015

Address	90 Dodge St
Town	Nashua
Pipe Size	2"
Install Date	1959
Wall Thickness	0.160 in
Age	55
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2015

Address	93 Walnut St
Town	Nashua
Pipe Size	2"
Install Date	1913
Wall Thickness	0.160 in
Age	101
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2015

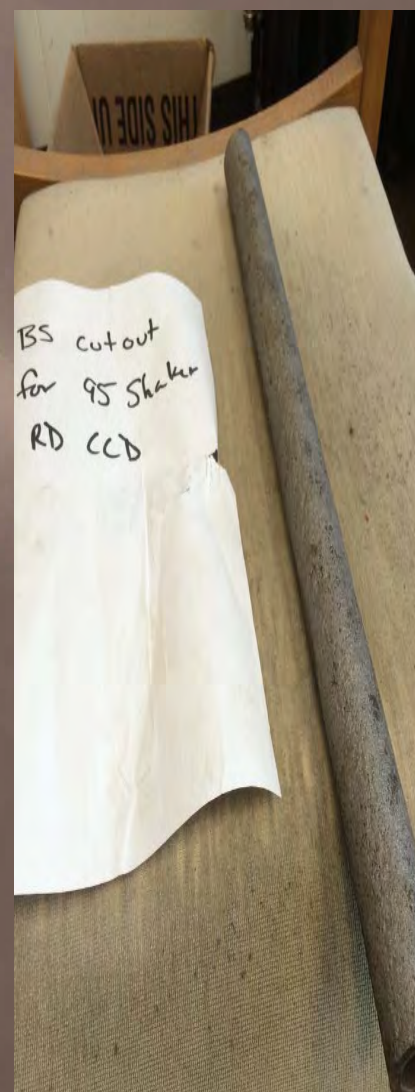
Address	57 Spaulding St
Town	Nashua
Pipe Size	2"
Install Date	1956
Wall Thickness	0.139 in
Age	58
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2015

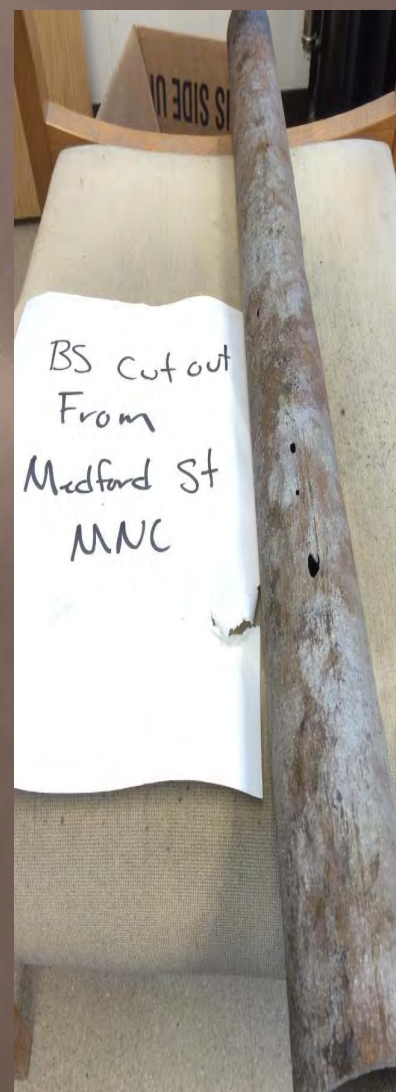
Address	95 Shaker Road (Shaker Rd School)
Town	Concord
Pipe Size	1"
Install Date	Unknown
Wall Thickness	0.133 in
Age	Unknown
Pressure	60 psig
Ground PH	6
Pipe Condition	27% Wall Loss/ Fair Condition





# FY 2015

Address	249 Medford St
Town	Manchester
Pipe Size	2"
Install Date	1956/1960
Wall Thickness	0.160 in
Age	58
Pressure	60 psig
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2015

Address	348 Lincoln St
Town	Manchester
Pipe Size	3"
Install Date	1954
Wall Thickness	0.234 in
Age	60
Pressure	60 psig
Ground PH	6
Pipe Condition	12% Wall Loss/ Fair Condition





# 2014 Bare Steel Replacement Reports





# FY 2014

Address	1-34 Dickerman St
Town	Nashua
Pipe Size	2"
Install Date	1902/1925
Wall Thickness	0.154 in
Age	111
Pressure	12 in water column
Ground PH	7.5
Pipe Condition	90% Wall Loss/ Poor Condition





# FY 2014

Address	1-44 Revere St & Fernwood St
Town	Nashua
Pipe Size	2"
Install Date	1902/1925
Wall Thickness	0.188 in
Age	111
Pressure	12 in water column
Ground PH	7
Pipe Condition	37% Wall Loss/ Moderate Condition





# FY 2014

Address	17-28 Sunset Dr
Town	Belmont
Pipe Size	2"
Install Date	Unknown
Wall Thickness	0.188 in
Age	Unknown
Pressure	60 psig
Ground PH	6
Pipe Condition	100% Wall Loss/Very Poor Condition





# FY 2014

Address	8-18 Maple St
Town	Nashua
Pipe Size	2"
Install Date	1957
Wall Thickness	0.154 in
Age	56
Pressure	12 in water column
Ground PH	6.5
Pipe Condition	39% Wall Loss/Moderate Condition





# FY 2014

Address	3-25 Pratt St & Zellwood St
Town	Nashua
Pipe Size	2"
Install Date	1894/1914
Wall Thickness	0.188 in
Age	119
Pressure	60 psig
Ground PH	7
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2014

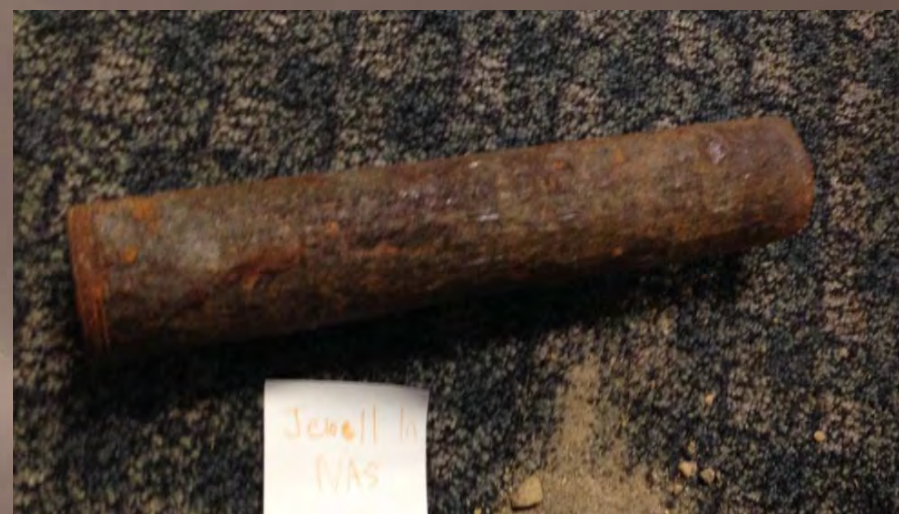
Address	5-21 Ridge St
Town	Nashua
Pipe Size	2"
Install Date	Unknown
Wall Thickness	0.154 in
Age	119
Pressure	12 in water column
Ground PH	6.5
Pipe Condition	39% Wall Loss/ Moderate Condition





# FY 2014

Address	1-6 Jewell Lane
Town	Nashua
Pipe Size	2"
Install Date	1947
Wall Thickness	0.154 in
Age	66
Pressure	12 in water column
Ground PH	7
Pipe Condition	32% Wall Loss/ Moderate Condition





# 2013 Bare Steel Replacement Reports





# FY 2013

Address	5-19 Lemon St
Town	Nashua
Pipe Size	2"
Install Date	1902/1925
Wall Thickness	Unknown
Age	110
Pressure	12 in water column
Ground PH	6
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2013

Address	2-13 Grove St
Town	Nashua
Pipe Size	2"
Install Date	1910
Wall Thickness	Unknown
Age	102
Pressure	12 in water column
Ground PH	7
Pipe Condition	Deep Pitting/ Poor Condition





# 2012 Bare Steel Replacement Reports



# FY 2012

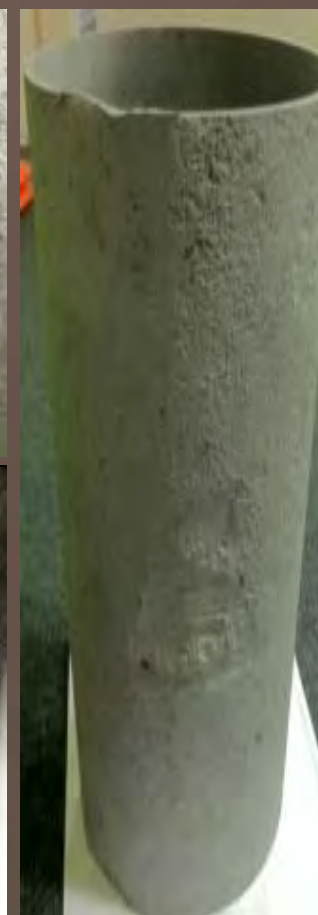
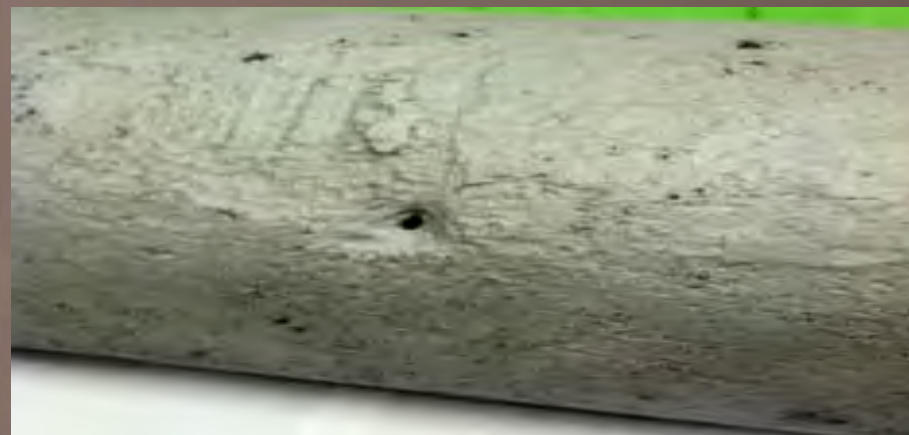
Address	18-56 Ash St
Town	Nashua
Pipe Size	2"
Install Date	1928
Wall Thickness	Unknown
Age	83
Pressure	12 in water column
Ground PH	6.5
Pipe Condition	100% Wall Loss/ Very Poor Condition





# FY 2012

Address	55-100 W North St
Town	Manchester
Pipe Size	8"
Install Date	1960
Wall Thickness	Unknown
Age	51
Pressure	12 in water column
Ground PH	6
Pipe Condition	Deep Pitting/ Poor Condition



# 2011 Bare Steel Replacement Reports





# FY 2011

Address	20-34 School St
Town	Hudson
Pipe Size	2"
Install Date	1947
Wall Thickness	Unknown
Age	63
Pressure	12 in water column
Ground PH	7.5
Pipe Condition	Deep Pitting/ Fair to Poor Condition





# FY 2011

Address	2-18 Faxon St & 1-7 Faxon Ave
Town	Nashua
Pipe Size	2"
Install Date	1912
Wall Thickness	Unknown
Age	98
Pressure	12 in water column
Ground PH	7.5
Pipe Condition	Multiple Large Holes/ Very Poor Condition





# FY 2011

Address	116-130 Bowers St
Town	Nashua
Pipe Size	2"
Install Date	1913
Wall Thickness	Unknown
Age	97
Pressure	12 in water column
Ground PH	7
Pipe Condition	Heavy Wall Loss/ Poor Condition





# FY 2011

Address	1-19 Perkins St & 41-46 Bradley St
Town	Concord
Pipe Size	1.5"
Install Date	1955
Wall Thickness	Unknown
Age	55
Pressure	12 in water column
Ground PH	7
Pipe Condition	Deep Pitting/ Fair to Poor Condition





# FY 2011

Address	Chester St-59 Berkeley St
Town	Nashua
Pipe Size	2"
Install Date	1947
Wall Thickness	Unknown
Age	63
Pressure	12 in water column
Ground PH	7
Pipe Condition	Visible Holes/ Very Poor Condition





# 2010 Bare Steel Replacement Reports





# FY 2010

Address	2-7 Cornell St
Town	Concord
Pipe Size	2"
Install Date	1955
Wall Thickness	Unknown
Age	54
Pressure	60 psig
Ground PH	7 to 8
Pipe Condition	Good Condition
	Coated Steel





# FY 2010

Address	83 Pleasant St
Town	Concord
Pipe Size	2"
Install Date	1900
Wall Thickness	Unknown
Age	109
Pressure	12 in water column
Ground PH	6
Pipe Condition	Some Areas of Pitting and Wall Loss





# FY 2010

Address	25-28 Depot St
Town	Franklin
Pipe Size	2"
Install Date	1931
Wall Thickness	Unknown
Age	78
Pressure	60 psig
Ground PH	6
Pipe Condition	Good Condition
	Coated Steel





# FY 2010

Address	80-113 Blossom St
Town	Nashua
Pipe Size	2"
Install Date	1908 & 1913
Wall Thickness	Unknown
Age	101
Pressure	12 in water column
Ground PH	5
Pipe Condition	Extremely Poor Condition





# FY 2010

Address	5-11 Bristol St
Town	Nashua
Pipe Size	4"
Install Date	1947, 1951, 1954, 195?
Wall Thickness	Unknown
Age	62
Pressure	12 in water column
Ground PH	7
Pipe Condition	Moderate Uniform Pitting/ Fair Condition





# FY 2010

Address	12-25 Buck St
Town	Nashua
Pipe Size	2"
Install Date	1901, 1903 & 1911
Wall Thickness	Unknown
Age	108
Pressure	12 in water column
Ground PH	6 to 7
Pipe Condition	Heavy Pitting/ Poor Condition





# FY 2010

Address	2-4 Fourth St
Town	Nashua
Pipe Size	2"
Install Date	1926
Wall Thickness	Unknown
Age	83
Pressure	12 in water column
Ground PH	6
Pipe Condition	Significant Deep Pitting/ Poor Condition





# FY 2010

Address	31-39 Newbury St
Town	Nashua
Pipe Size	2"
Install Date	1898, 1910, 1928
Wall Thickness	Unknown
Age	111
Pressure	12 in water column
Ground PH	3 to 4
Pipe Condition	Significant Wall Loss/ Poor Condition





# FY 2010

Address	5-21 Winter St
Town	Tilton
Pipe Size	4"
Install Date	1931
Wall Thickness	Unknown
Age	78
Pressure	60 psig
Ground PH	7
Pipe Condition	Fair Condition





# 2009 Bare Steel Replacement Reports





# FY 2009

Address	Concord St
Town	Concord
Pipe Size	2"
Install Date	1953
Wall Thickness	0.166 in
Age	55
Pressure	12 in water column
Ground PH	7 to 8
Pipe Condition	Deep pitting/Significant wall loss





# FY 2009

Address	2 Woodman St
Town	Concord
Pipe Size	1.5"
Install Date	1929
Wall Thickness	0.130 in
Age	79
Pressure	12 in water column
Ground PH	7 to 8
Pipe Condition	Deep pitting/Significant wall loss





# FY 2009

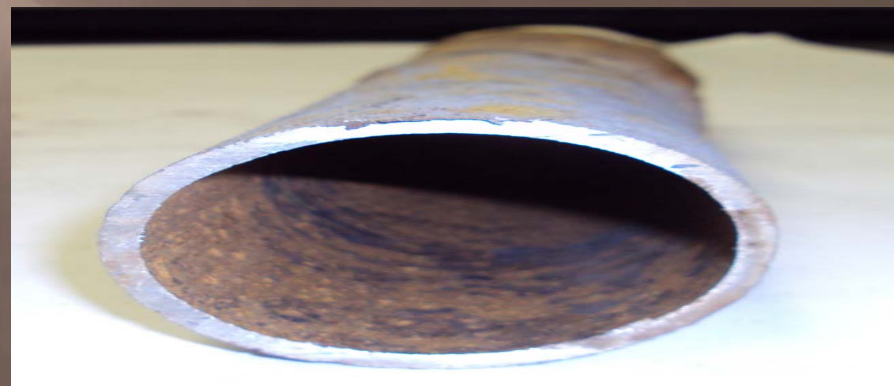
Address	Connell St
Town	Hudson
Pipe Size	2"
Install Date	1928
Wall Thickness	0.139 in
Age	80
Pressure	12 in water column
Ground PH	6 to 7
Pipe Condition	Deep pitting/Significant wall loss





# FY 2009

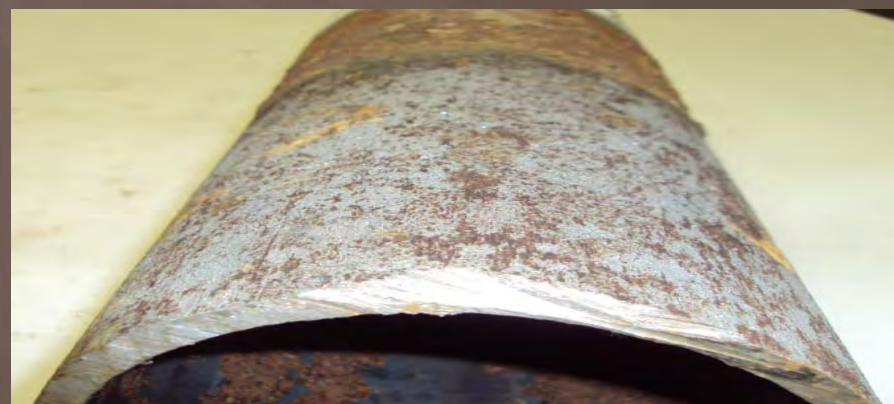
Address	Gloria Avenue
Town	Hudson
Pipe Size	2"
Install Date	1954
Wall Thickness	0.148 in
Age	54
Pressure	60 psig
Ground PH	7 to 8
Pipe Condition	Fair Condition





# FY 2009

Address	Library St
Town	Hudson
Pipe Size	4"
Install Date	1908
Wall Thickness	0.234 in
Age	100
Pressure	12 in water column
Ground PH	6
Pipe Condition	Fair Condition





# FY 2009

Address	Mulberry St
Town	Nashua
Pipe Size	2"
Install Date	1912
Wall Thickness	0.124 in
Age	96
Pressure	12 in water column
Ground PH	7 to 8
Pipe Condition	Concentrated Deep Pitting





# FY 2009

Address	Prescott St & Putnam St
Town	Nashua
Pipe Size	2"
Install Date	1924
Wall Thickness	Not Taken Due to Poor Condition
Age	84
Pressure	12 in water column
Ground PH	6 to 7
Pipe Condition	Pipe Breakage and Pit Holes





# FY 2009

Address	Reed Ct
Town	Nashua
Pipe Size	2"
Install Date	1908
Wall Thickness	0.121 in
Age	100
Pressure	12 in water column
Ground PH	6
Pipe Condition	Significant Wall Loss





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**SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED**

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**Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.**

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