

National Water Main Cleaning Co.

Canton, MA 02021 Norfolk County Tel: (781) 828-0863, Fax: (781) 828-2473

Project-information

Project name:	Contract number:	Contact:	Date:
Franklin, MA	ARC005-4	Sean Mitchell	09/19/2014

Client Arcadis U.S. Inc.

Contact: Sean Mitchell

Position: Water Resources Engineer

Road 200 Harvard Mills Square, Suite 430

Town Wakefield, MA 01880

County Middlesex County

Telephone: (781) 213-4933

Fax:

Mobile: (774) 573-3431

E-Mail:

Site

Contact:

Position:

Road

Town Franklin, MA

County

Telephone:

Fax:

Mobile:

E-Mail:

Contractor National Water Main Cleaning Co.

Contact: Dennis Sullivan
Position: Vice President

Road **25 Marshall Street** Town **Canton, MA 02021**

County Norfolk County
Telephone: (781) 828-0863

Fax: **(781) 828-2473**

Mobile:

E-Mail: **boston@nwmcc.com**



Defect Grade Description

Project name:	Contract number:	Contact:	Date:
Franklin, MA	ARC005-4	Sean Mitchell	09/19/2014

Occurances without damage: for example, laterals, joints etc. 1: NO DEFECTS WERE DETECTED. Constructional deficiencies or occurances with insignificant influence to tightness, hydraulic <u>2:</u> or static pressure of pipe: f.e. wide joints, badly torched intakes, minor deformation of plastic pipes, minor erosions etc. REHABILITATION CAN BE SCHEDULED LONG-TERM. Constructional deficiencies diminishing static, hydraulic and tightness: f.e. open joints, <u>3:</u> untorched intakes, cracks, minor drainage obstructions such as calcide build ups, protruding laterals, minor damages to pipe wall, individual root penetrations, corroded pipe walls etc. REHABILITATION IS NECESSARY MEDIUM-TERM WITHIN 3 TO 5 YEARS. Constructional damages with nonsufficient static safety, hydraulic or tightness: f.e. axial/radial pipebursts, pipe deformations, visually noticeable infiltration/exfiltration, cavities in pipe-wall, severe protruding, laterals severe root penetrations, severe corrosion of pipe wall etc. REHABILITATION PROCEDURE IS URGENT AND HAS TO BE COMPLETED WITHIN 1 TO 2 YEARS. NECESSITY FOR EMERCENCY OPERATIONS HAS TO BE EXAMINED. Pipe is already or will shortly be impermeable: f.e. collapsed pipe, deeply rooted pipe or other **5**: drainage obstructions. Pipe loses water or danger of backwater in basements etc. REHABILITATION IS URGENT AND SHORT-TERM. IN ORDER TO PREVENT FURTHER

DAMAGE, NECESSARY TEMPORARY SPOT REPAIR HAS TO BE

CONDUCTED ON EMERGENCY LEVEL.



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Inspection report

Date: 08/04/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B. OLMEDA	section number: 1	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

Street: **COTTAGE ST** Flow Control: Start MH: City: FRANKLIN, MA Year Renewed End MH: Location Code: Tape/Media #: TV50-080414 Total length surveyed: 37 ft

purpose of Survey:

Shape/Size: C Circular 8/8 Material: CAS Cast Iron Joint length:

Use: Basin:

37.00

Lining: Job Name:

Comment:

Location details:

1:100 position observation grade code

0.00 AMH Downstream Manhole, Survey Begins 1A 0.00 **S1** SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, within 8 inch: YES, start



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Inspection report

Date: 08/04/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B. OLMEDA	section number:	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 COTTAGE ST
 Flow Control:
 Start MH:
 1

 City:
 FRANKLIN, MA
 Year Renewed
 End MH:
 2

 Location Code:
 Tape/Media #:
 TV50-080414
 Total length surveyed: 171 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use: Material: CAS Cast Iron Joint length:

Basin: Lining: Job Name:

Comment:

Location details:

2

171.00

1:400 position code observation grade

1 0.00 AMH Upstream Manhole, Survey Begins

0.00 S1 SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, S within 8 inch: YES, start

Downstream Manhole, Survey Ends

 QSR
 QMR
 SPR
 MPR
 OPR
 SPRI
 MPRI
 OPRI

 5E00
 0000
 165
 0
 165
 5
 0
 5



Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/04/2014		1 Dry	B. OLMEDA	3	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 COTTAGE ST
 Flow Control:
 Start MH:
 2A

 City:
 FRANKLIN, MA
 Year Renewed
 End MH:
 2

 Location Code:
 Tape/Media #:
 TV50-080414
 Total length surveyed: 26 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:75 position code observation grade





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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/04/2014		1 Dry	B. OLMEDA	4	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 COTTAGE ST
 Flow Control:
 Start MH:
 2A

 City:
 FRANKLIN, MA
 Year Renewed
 End MH:
 3

 Location Code:
 Tape/Media #:
 TV50-080414
 Total length surveyed: 198 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:450 position code observation grade

2A 0.00 AMH Upstream Manhole, Survey Begins

0.00 S1 SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, S within 8 inch: YES, start

109.00 TF Tap Factory Made, at 03 o'clock, 6, within 8 inch: YES

197.00 F1 SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, S 5 within 8 inch: YES, end

198.00 AMH Downstream Manhole, Survey Ends

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5F00	0000	195	0	195	5	0	5



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Inspection report

		•	•		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/04/2014		1 Dry	B. OLMEDA	5	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

Street: **COTTAGE ST** Flow Control: Start MH: 3 City: FRANKLIN, MA Year Renewed End MH: Location Code: Tape/Media #: TV50-080414 Total length surveyed: 214 ft

purpose of Survey: Shape/Size: C Circular 16/16

Material: CAS Cast Iron Joint length: Use: Lining:

Basin: Job Name:

Comment:

Location details:

1:500 position observation code grade

0.00 AMH Upstream Manhole, Survey Begins 3 0.00 **S1** SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, within 8 inch: YES, start Tap Factory Made, at 03 o'clock, 6, within 8 inch: YES 58.53



Inspection report

Date: 08/04/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B. OLMEDA	section number: 6	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 COTTAGE ST
 Flow Control:
 Start MH:
 4

 City:
 FRANKLIN, MA
 Year Renewed
 End MH:
 5

 Location Code:
 Tape/Media #:
 TV50-080414
 Total length surveyed: 150 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use: Material: CAS Cast Iron Joint length:

Basin: Lining: Job Name:

Comment:

Location details:

1:350 position code observation grade

4 0.00 AMH Upstream Manhole, Survey Begins

0.00 S1 SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, Swithin 8 inch: YES, start



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/04/2014		1 Dry	B. OLMEDA	7	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 COTTAGE ST
 Flow Control:
 Start MH:
 5

 City:
 FRANKLIN, MA
 Year Renewed
 End MH:
 6

 Location Code:
 Tape/Media #:
 TV50-080414
 Total length surveyed: 149 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:350 position code observation grade

5 0.00 AMH Upstream Manhole, Survey Begins

0.00 S1 SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, Swithin 8 inch: YES, start



National Water Main Cleaning Co. Canton, MA 02021

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Inspection report

		•	•		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/04/2014		1 Dry	B. OLMEDA	8	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 SAXON ST
 Flow Control:
 Start MH:
 6

 City:
 FRANKLIN, MA
 Year Renewed
 End MH:
 7

 Location Code:
 Tape/Media #:
 TV50-080414
 Total length surveyed: 165 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:375 position code observation grade

6 0.00 AMH Upstream Manhole, Survey Begins

0.00 S1 SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, S within 8 inch: YES, start

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5E00	0000	165	0	165	5	0	5



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/05/2014		1 Dry	B.OLMEDA	9	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 saxon st
 Flow Control:
 Start MH:
 7

 City:
 FRANKLIN,MA
 Year Renewed
 End MH:
 8

 Location Code:
 Tape/Media #:
 TV50-8-5-14
 Total length surveyed: 67 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use: Material: CAS Cast Iron Joint length:

Basin: Lining: Job Name:

Comment:

Location details:

QSR

5100

QMR

0000

SPR

1:150 position code observation grade

7 0.00

AMH Upstream Manhole, Survey Begins

SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, S

within 8 inch: YES

OPR

SPRI

MPRI

OPRI

MPR



Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/05/2014		1 Dry	B.OLMEDA	10	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 saxon st
 Flow Control:
 Start MH:
 8

 City:
 FRANKLIN,MA
 Year Renewed
 End MH:
 9

 Location Code:
 Tape/Media #:
 TV50-8-5-14
 Total length surveyed: 233.6 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:525 position code observation grade

8 0.00

233.60

0000

QSR

5100

AMH

AMH Upstream Manhole, Survey Begins

SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, S

within 8 inch: YES

Downstream Manhole, Survey Ends

OPR

SPRI

MPRI

OPRI



Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/05/2014		1 Dry	B.OLMEDA	11	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

Street: saxon st Flow Control: Start MH: City: FRANKLIN,MA Year Renewed End MH: Location Code: Tape/Media #: TV50-8-5-14 Total length surveyed: 285.3 ft purpose of Survey: Shape/Size: C Circular 16/16

Material: CAS Cast Iron Joint length: Use: Lining:

Basin: Job Name:

Comment:

Location details:

1:650 grade position observation code

0.00 AMH Upstream Manhole, Survey Begins 9

> 285.30 AMH Downstream Manhole, Survey Ends



Inspection report

Date: 08/05/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number:	PSR:					
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:					

Street: FISHER st Flow Control: Start MH: 10 City: FRANKLIN,MA Year Renewed End MH: Location Code: Tape/Media #: TV50-8-5-14 Total length surveyed: 169.1 ft purpose of Survey: Shape/Size: C Circular 16/16

Material: CAS Cast Iron Joint length: Use: Lining:

Basin: Job Name:

Comment: Location details:

1:400

grade position observation code

0.00 AMH Upstream Manhole, Survey Begins 10

AMH Downstream Manhole, Survey Ends



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Inspection report

Date: 08/05/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number: 13	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

Street: FISHER st Flow Control: Start MH: City: FRANKLIN,MA Year Renewed End MH: Location Code: Tape/Media #: TV50-8-5-14 Total length surveyed: 190.5 ft

purpose of Survey: Shape/Size:

C Circular 16/16 Material: CAS Cast Iron Joint length: Use: Lining: Basin: Job Name: Comment: Location details: 1:425 position observation grade code 0.00 AMH Upstream Manhole, Survey Begins 11 0.00 SRCC Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, within 8 inch: YES 23.10 TFC Tap Factory Made Capped, at 11 o'clock, 6, within 8 inch: NO 111.40 Tap Factory Made Capped, at 02 o'clock, 6, within 8 inch: NO 138.50 Tap Factory Made, at 11 o'clock, 6, within 8 inch: NO

ARC005-4.mdb	//	page:	15
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OPR

SPRI

MPRI

OPRI

AMH Downstream Manhole, Survey Ends

MPR

SPR

190.50

QMR

0000

12

QSR 5100



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Inspection report

Date: 08/06/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B. OLMEDA	section number:	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 FISHER ST
 Flow Control:
 Start MH:
 12

 City:
 FRANKLIN, MA
 Year Renewed
 End MH:
 13

 Location Code:
 Tape/Media #:
 TV50-080614
 Total length surveyed:
 190 ft

purpose of Survey: Shape/Size: C Circular 16/16

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:425 position code observation grade

12 0.00 AMH Upstream Manhole, Survey Begins

190.00

13



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Inspection report

Date: 08/06/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B. OLMEDA	section number: 15	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

Street: FISHER ST Flow Control: Start MH: 13 City: FRANKLIN, MA Year Renewed End MH: Location Code: Tape/Media #: TV50-080614 Total length surveyed: 188 ft purpose of Survey: Shape/Size: C Circular 16/16 Material: CAS Cast Iron Joint length:

Use: Lining: Basin: Job Name: Comment: Location details: 1:425 position observation grade code 0.00 AMH Upstream Manhole, Survey Begins 13 82.00 Tap Factory Made, at 10 o'clock, 6, within 8 inch: NO 119.00 Tap Factory Made, at 03 o'clock, 6, within 8 inch: YES 160.67 Tap Factory Made, at 10 o'clock, 6, within 8 inch: NO 188.00 Downstream Manhole, Survey Ends QMR SPR MPR SPRI MPRI OPRI QSR OPR 0000 0000

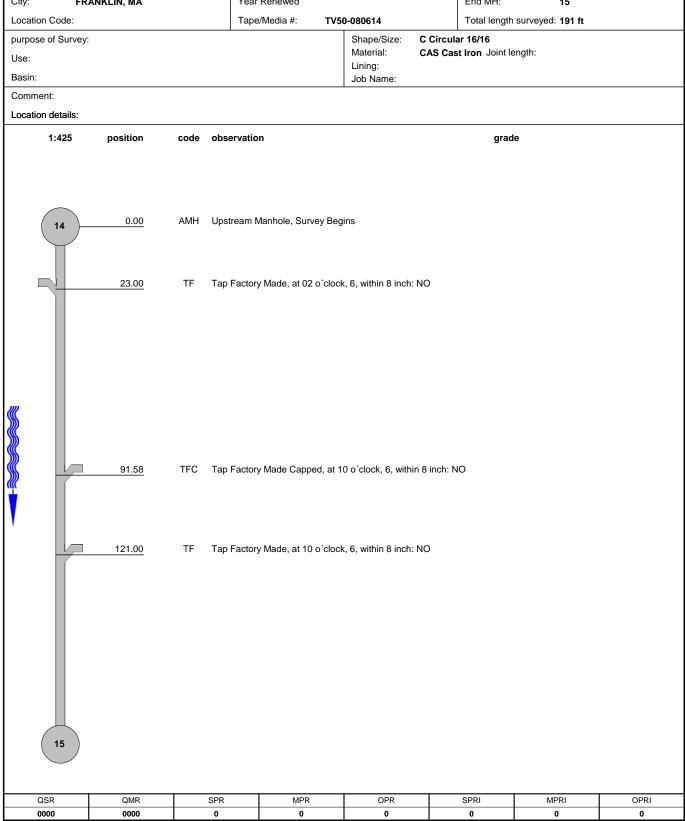


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Inspection report

Date: 08/06/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B. OLMEDA	section number: 16	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

Street: FISHER ST Flow Control: Start MH: 14 City: FRANKLIN, MA Year Renewed End MH: Tape/Media #: TV50-080614 Total length surveyed: 191 ft





Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/06/2014		1 Dry	B. OLMEDA	17	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

Street: **HAYWARD ST** Flow Control: Start MH: 15 FRANKLIN, MA Year Renewed End MH: Location Code: Tape/Media #: TV50-080614 Total length surveyed: 175 ft purpose of Survey: Shape/Size: C Circular 18/18 Material:

CAS Cast Iron Joint length: Use: Lining: Basin: Job Name: Comment: Location details: 1:400 position observation grade code 0.00 AMH Upstream Manhole, Survey Begins 15 77.00 Tap Factory Made, at 11 o'clock, 6, within 8 inch: NO 92.33 Tap Factory Made, at 01 o'clock, 6, within 8 inch: NO 143.67 TFC Tap Factory Made Capped, at 12 o'clock, 6, within 8 inch: NO 175.00 AMH Downstream Manhole, Survey Ends 16

OPR

SPRI

MPRI

OPRI

MPR

QMR

0000

QSR 0000 SPR



Inspection report

Date: 08/06/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B. OLMEDA	section number: 18	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 HAYWARD ST
 Flow Control:
 Start MH:
 16

 City:
 FRANKLIN, MA
 Year Renewed
 End MH:
 17

 Location Code:
 Tape/Media #:
 TV50-080614
 Total length surveyed:
 174 ft

 purpose of Survey:
 Shape/Size:
 C Circular 18/18

Purpose of Survey: Use: Use: Basin: Comment: Location details: 1:400 position code observation grade TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 48.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 143.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 144.667 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 145.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 146.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 156.	Locati	ion Code:	ANKLIN, MA		Tape/Media #: TV	50-080614	Total length	surveyed: 174 ft	
Use: Basin: Comment: Location details: 1:400 position code observation grade 1400 position code observation grade TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 48.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 89.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 147.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 147.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 148.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 148.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 149.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 140.00 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO					.,			-,	
Basin: Location details: 1:400 position code observation grade 16 0.00 AMH Upstream Manhole, Survey Begins 17 Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 18 99.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 19 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 10 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 10 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 10 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 11 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 11 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 11 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 12 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 13 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 14 15 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18		77.				Material:		ngth:	
Comment: Location details: 1:400 position code observation grade AMH Upstream Manhole, Survey Begins 22:00 TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 88:00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142:67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142:67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 170 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 171 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 172 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 173 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 174 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 175 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 176 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 177 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 178 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 179 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 170 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 177 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 178 TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 179 TAP TAP Factory Made, at 12 o'clock, 6, within 8 inch: NO 179 TAP		:							
Location details: 1:400 position code observation grade 16 0.00 AMH Upstream Manhole, Survey Begins 22.00 TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 48.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 17 Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 18 90.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 18 142.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 18 142.67 TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 19 148.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 19 148.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 19 148.67 TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO						oob Hame.			
AMH Upstream Manhole, Survey Begins TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 83.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 177 TRA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 188 OMR SPR MPR OPR SPRI MPRI OPRI									
AMH Upstream Manhole, Survey Begins TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 83.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 177 TRA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 188 OMR SPR MPR OPR SPRI MPRI OPRI		1.400	nosition	code c	hservation		grade	<u> </u>	
TFA Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO ### NO ### Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO ### Tap Factory Made, at 12 o'cl		11400	position	0000	, , , , , , , , , , , , , , , , , , ,		grad	•	
89.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 90.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 17							inch: NO		
90.00 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 142.67 TFA Tap Factory Made Active, at 12 o'clock, 6, within 8 inch: NO 146.67 TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 17 QSR QMR SPR MPR OPR SPRI MPRI OPRI		0	48.00	TF 1	ap Factory Made, at 12 o´cloo	k, 6, within 8 inch: N	10		
TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO 17 QSR QMR SPR MPR OPR SPRI MPRI OPRI	**	•							
			_						
				+					



Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/07/2014		1 Dry	B.OLMEDA	19	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

Street: HAYWARD ST Flow Control: Start MH: 17
City: FRANKLIN Year Renewed End MH: 18
Location Code: Tape/Media #: TV50-8-7-14 Total length surveyed: 183.6 ft

purpose of Survey: F Routine Asseessment Shape/Size: C Circular 18/18

Use:

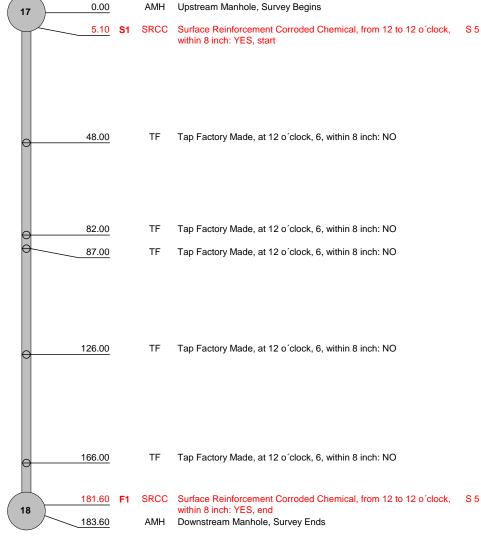
Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:425 position code observation grade





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Inspection report

Date: 08/07/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number: 20	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 HAYWARD ST
 Flow Control:
 Start MH:
 18

 City:
 FRANKLIN
 Year Renewed
 End MH:
 19

 Location Code:
 Tape/Media #:
 TV50-8-7-14
 Total length surveyed: 185.3 ft

purpose of Survey: F Routine Asseessment Shape/Size: C Circular 18/18

Use:

Material: CAS Cast Iron Joint length:
Lining:

Upstream Manhole, Survey Begins

within 8 inch: YES, start

Basin: Job Name:

AMH

SRCC

0.00

0.00 **S1**

Comment:

Location details:

18

QSR

5F00

QMR

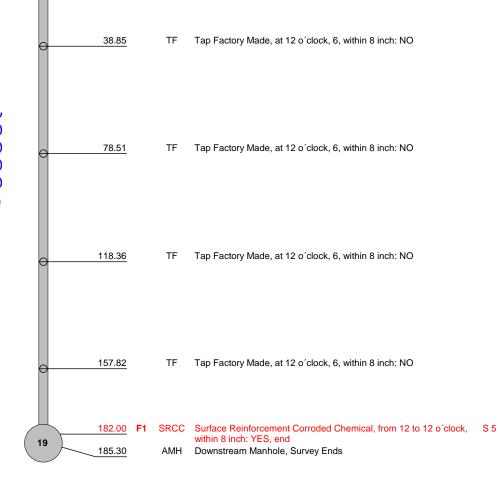
0000

SPR

180

1:425 position code observation grade

Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock,



OPR

MPR

SPRI

MPRI

OPRI



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Inspection report

Date: 08/07/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number: 21	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 HAYWARD ST
 Flow Control:
 Start MH:
 19

 City:
 FRANKLIN
 Year Renewed
 End MH:
 20

 Location Code:
 Tape/Media #:
 TV50-8-7-14
 Total length surveyed:
 181 ft

purpose of Survey: F Routine Asseessment Shape/Size: C Circular 18/18

Use:

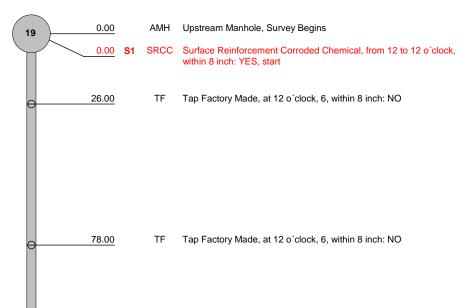
Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:425 position code observation grade



TF Tap Factory Made, at 12 o'clock, 6, within 8 inch: NO

181.00

within 8 inch: YES, end

Downstream Manhole, Survey Ends

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5F00	0000	180	0	180	5	0	5

Surface Reinforcement Corroded Chemical, from 12 to 12 o'clock, S 5



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Inspection report

Date: 08/08/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number:	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 HAYWARD ST
 Flow Control:
 Start MH:
 20

 City:
 FRANKLIN
 Year Renewed
 End MH:
 21

Location Code: Tape/Media #: TV50-8-8-14 Total length surveyed: 186 ft

purpose of Survey: F Routine Asseessment Shape/Size: C Circular 18/18

Material: CAS Cast Iron Joint length:

Use:
Lining:
Basin:
Job Name:

Kas Cast Iron Joint length:
Lining:
Job Name:

Comment:

Location details:

1:425 position code observation grade

20 0.00 AMH Upstream Manhole, Survey Begins



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Inspection report

Date: 08/08/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number: 23	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 HAYWARD ST
 Flow Control:
 Start MH:
 21

 City:
 FRANKLIN
 Year Renewed
 End MH:
 22

Location Code: Tape/Media #: TV50-8-8-14 Total length surveyed: 186 ft

purpose of Survey: F Routine Asseessment Shape/Size: C Circular 18/18

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment: Location details:

1:425 position code observation grade

21 0.00 AMH Upstream Manhole, Survey Begins



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Inspection report

Date: 08/11/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number: 24	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

Street: **EASEMENT** Flow Control: Start MH: 22 City: **FRANKLIN** Year Renewed End MH:

Location Code: Tape/Media #: TV50-8-11-14 Total length surveyed: 261 ft

purpose of Survey: **F Routine Assessment** Shape/Size: C Circular 18/18 Material: CAS Cast Iron Joint length:

Use: Lining: Basin: Job Name:

Comment:

Location details:

1:600 grade position observation code

0.00 AMH Upstream Manhole, Survey Begins 22

AMH Downstream Manhole, Survey Ends

261.00



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Inspection report

Date: 08/11/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number: 25	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

Street: **EASEMENT** Flow Control: Start MH: 23 City: **FRANKLIN** Year Renewed End MH:

Location Code: Tape/Media #: TV50-8-11-14 Total length surveyed: 172.2 ft

purpose of Survey: **F Routine Assessment** Shape/Size: C Circular 18/18 Material: CAS Cast Iron Joint length:

Use: Lining:

Basin: Job Name:

Comment:

Location details:

1:400 position observation grade code

0.00 AMH Upstream Manhole, Survey Begins 23 38.90

172.20

QMR

0000

24

QSR 0000 Tap Break-In Active, at 10 o'clock, 6, within 8 inch: NO

OPR

SPRI

MPRI

OPRI

MPR

AMH Downstream Manhole, Survey Ends

SPR



Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/11/2014		1 Dry	B.OLMEDA	26	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 EASEMENT
 Flow Control:
 Start MH:
 24

 City:
 FRANKLIN
 Year Renewed
 End MH:
 25

Location Code: Tape/Media #: TV50-8-11-14 Total length surveyed: 164.7 ft

purpose of Survey: F Routine Asseessment Shape/Size: C Circular 20/18
Use: CAS Cast Iron Joint length:

Use:
Lining:
Basin:
Job Name:

Comment:

Location details:

25

1:375 position code observation grade

24 0.00 AMH Upstream Manhole, Survey Begins



Inspection report

Date: 08/11/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number: 27	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 EASEMENT
 Flow Control:
 Start MH:
 25

 City:
 FRANKLIN
 Year Renewed
 End MH:
 26

Location Code: Tape/Media #: TV50-8-11-14 Total length surveyed: 159.1 ft

purpose of Survey: F Routine Asseessment Shape/Size: C Circular 20/20

Use: Material: CAS Cast Iron Joint length: Lining:

Basin: Job Name:

Comment:

Location details:

1:375 position code observation grade

25 0.00 AMH Upstream Manhole, Survey Begins

AMH Downstream Manhole, Survey Ends



Inspection report

		•	•		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/11/2014		1 Dry	B.OLMEDA	28	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 EASEMENT
 Flow Control:
 Start MH:
 26

 City:
 FRANKLIN
 Year Renewed
 End MH:
 27

Location Code: Tape/Media #: TV50-8-11-14 Total length surveyed: 134.6 ft

purpose of Survey: F Routine Asseessment Shape/Size: C Circular 20/20

Use: Material: CAS Cast Iron Joint length: Lining:

Basin: Job Name:

Comment:

Location details:

1:300 position code observation grade

26 0.00 AMH Upstream Manhole, Survey Begins

AMH Downstream Manhole, Survey Ends

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



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Inspection report

Date: 08/19/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: B.OLMEDA	section number: 29	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

EASEMENT Street: Flow Control: Start MH: 27 City: FRANKLIN,MA Year Renewed End MH: Location Code: Tape/Media #: TV50-8-19-14 Total length surveyed: 176 ft

purpose of Survey: Shape/Size: C Circular 20/20

Material: CAS Cast Iron Joint length: Use: Lining:

Basin: Job Name:

Comment:

Location details:

1:400 grade position observation code

0.00 AMH Upstream Manhole, Survey Begins 27



Inspection report

		•	•		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/19/2014		1 Dry	B.OLMEDA	30	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: J Jetting	rate:

 Street:
 EASEMENT
 Flow Control:
 Start MH:
 28

 City:
 FRANKLIN,MA
 Year Renewed
 End MH:
 29

 Location Code:
 Tape/Media #:
 TV50-8-19-14
 Total length surveyed: 327.4 ft

purpose of Survey: Shape/Size: C Circular 20/20

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

AMH

0.00

QMR

0000

QSR 0000

Comment:

Location details:

28

1:750 position code observation grade

Upstream Manhole, Survey Begins

171.00
TF Tap Factory Made, at 10 o'clock, 6, within 8 inch: NO
187.80
TBA Tap Break-In Active, at 10 o'clock, 6, within 8 inch: NO

SPR

OPR

SPRI

MPRI

OPRI

MPR



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/21/2014			B.OLMEDA	31	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 EASEMENT
 Flow Control:
 Start MH:
 29

 City:
 FRANKLIN,MA
 Year Renewed
 End MH:
 30

 Location Code:
 Tape/Media #:
 TV50-8-21-14
 Total length surveyed: 359.5 ft

purpose of Survey: Shape/Size: C Circular 24/24

Use:

Material: CAS Cast Iron Joint length:
Lining:

Basin: Job Name:

Comment:

Location details:

1:800 position code observation grade

29 0.00 AMH Upstream Manhole, Survey Begins

30

AMH Downstream Manhole, Survey Ends

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0	0	0	0	0	0



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/21/2014			B.OLMEDA	32	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
				J Jetting	

 Street:
 EASEMENT
 Flow Control:
 Start MH:
 30

 City:
 FRANKLIN,MA
 Year Renewed
 End MH:
 31

 Location Code:
 Tape/Media #:
 TV50-8-21-14
 Total length surveyed: 369.2 ft

purpose of Survey: Shape/Size: C Circular 24/24

Use: Material: CAS Cast Iron Joint length:

Basin: Lining: Job Name:

Comment:

Location details:

1:825 position code observation grade

30 0.00 AMH Upstream Manhole, Survey Begins

369.20

31



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Inspection report

Date: 08/23/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: A. Rodrigues	section number: 33	PSR:
Total Length of Section:	Survey Customer: Arcadis	Job #: ARC005-4	Clean Date: 08/23/2014	Pre-Cleaned: H Heavy Cleaning	rate:

Job Name:

Street: **Beaver St Easment** Flow Control: **N Not Controlled** Start MH: MH31 FRANKLIN,MA Year Renewed End MH: MH32

Location Code: E Woods Tape/Media #: TV50-8-23-14 Total length surveyed: 177 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24 Material: CAS Cast Iron Joint length:

Use: SS Sanitary Lining: Basin:

Comment:

Location details:

1:400 grade position observation code

0.00 AMH Upstream Manhole, Survey Begins MH31 QSR QMR SPR MPR OPR SPRI MPRI OPRI 0000 0000



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/23/2014		1 Dry	A. Rodrigues	34	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
	Arcadis	ARC005-4	08/23/2014	H Heavy Cleaning	

Street: Beaver St Easment Flow Control: N Not Controlled Start MH: MH32
City: FRANKLIN,MA Year Renewed End MH: MH33
Location Code: E Woods Tape/Media #: TV50-8-23-14 Total length surveyed: 135 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Use: So samuary Lining:
Basin: Job Name:

Comment:

Location details:

1:325 position code observation grade

0.00 AMH Upstream Manhole, Survey Begins MH32 MH33 QSR QMR SPR MPR OPR SPRI MPRI OPRI 0000 0000



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/23/2014		1 Dry	A. Rodrigues	35	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
	Arcadis	ARC005-4	08/23/2014	H Heavy Cleaning	

Street: Beaver St Easment Flow Control: N Not Controlled Start MH: MH33

City: FRANKLIN,MA Year Renewed End MH: MH34

Location Code: E Woods Tape/Media #: TV50-8-23-14 Total length surveyed: 296 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Lining:
Basin:
Job Name:

QMR

0000

QSR 0000 SPR

Comment:
Location details:

1:675 position code observation grade

0.00 AMH Upstream Manhole, Survey Begins MH33 296.00 AMH Downstream Manhole, Survey Ends

OPR

SPRI

MPRI

OPRI



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/26/2014		1 Dry	DAVID DUDLEY	36	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
	Arcadis	ARC005-4	8/26/14	H Heavy Cleaning	

 Street:
 BEAVER STREET
 Flow Control:
 Start MH:
 MH 34

 City:
 FRANKILIN MA
 Year Renewed
 End MH:
 MH 35

 Location Code: D Easement/Right of Way
 Tape/Media #:
 TV215-082614
 Total length surveyed: 463 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Lining:
Basin:
Job Name:

Comment:

Location details:

0000

0000

1:1050 position code observation grade

0.00 AMH Upstream Manhole, Survey Begins MH 34 463.00 AMH Downstream Manhole, Survey Ends MH 35 QSR QMR SPR MPR OPR SPRI MPRI OPRI



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
08/26/2014		1 Dry	DAVID DUDLEY	37	
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned:	rate:
	Arcadis	ARC005-4	8/26/14	H Heavy Cleaning	

 Street:
 BEAVER STREET
 Flow Control:
 Start MH:
 MH 35

 City:
 FRANKILIN MA
 Year Renewed
 End MH:
 MH 36

 Location Code: D Easement/Right of Way
 Tape/Media #:
 TV215-082614
 Total length surveyed: 247 ft

Location Code: D Easement/Right of Way Tape/Media #: TV215-082614 Total length surveyed: 247

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Lining:
Basin:
Job Name:

Comment:

Location details:

1:550 position code observation grade

0.00 AMH Upstream Manhole, Survey Begins MH 35 247.00 AMH Downstream Manhole, Survey Ends MH 36 QSR QMR SPR MPR OPR SPRI MPRI OPRI 0000 0000



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Inspection report

Date: 08/27/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: DAVID DUDLEY	section number: 38	PSR:
Total Length of Section:	Survey Customer: ARCADIS	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER STREET Flow Control: Start MH: 36
City: FRANKILIN MA Year Renewed End MH: 37

Location Code: D Easement/Right of Way Tape/Media #: TV215-082714 Total length surveyed: 389.1 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24
Use: SS Sanitary Material: CAS Cast Iron Joint length:

Use: SS Sanitary Lining: Job Name: CAS Cast Iron Joint length of the len

Comment:

Location details:

0000

0000

1:875 position code observation grade

0.00 AMH Upstream Manhole, Survey Begins 36 389.10 MSA Survey Abandoned, Remark: NO MORE CABLE QSR QMR SPR MPR OPR SPRI MPRI OPRI



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Inspection report

Date: 08/27/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: DAVID DUDLEY	section number: 39	PSR:
Total Length of Section:	Survey Customer: ARCADIS	Job #: ARC005-4	Clean Date: 08/27/2014	Pre-Cleaned: H Heavy Cleaning	rate:

Street: **BEAVER STREET** Flow Control: **N Not Controlled** Start MH: MH 36 FRANKILIN MA Year Renewed End MH: MH 37 Location Code: D Easement/Right of Way Tape/Media #: TV215-082714 Total length surveyed: 389 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Material: CAS Cast Iron Joint length: Use: SS Sanitary

Lining: Basin: Job Name:

Comment: RAN OUT OF TV CABLE

Location details:

1:875 position observation grade code



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Inspection photos

City:	Street:	Date:	section number:	PSR:
FRANKII IN MA	REAVER STREET	08/27/2014	39	

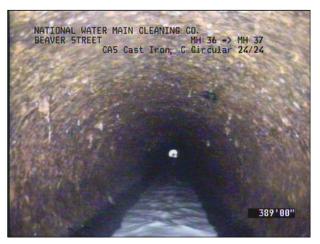


Photo: 5_2a, Tape/Media No.: TV215-082714, 00:00:00 389FT, Survey Abandoned, Remark: END OF CABLE



Norfolk County Tel: (781) 828-0863, Fax: (781) 828-2473

Inspection report

Date: 08/30/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 40	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTOR Flow Control: N Not Controlled Start MH: SMH 42

City: FRANKLIN MA Year Renewed End MH: SMH 41

Location Code: D Easement/Right of Way Tape/Media #: TV41-082914 Total length surveyed: 355 ft

purpose of Survey: Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Basin: Lining: Job Name:

Comment:

Location details:

1:800 position code observation grade

SMH 42

0.00

AMH Downstream Manhole, Survey Begins

12.15

S1 SAVC Surface Aggregate Visible Chemical, from 09 to 03 o'clock, within 8 S 3 inch: YES, start

DAE Deposits Attached Encrustation, 5 % of cross sectional area, from M 2 09 to 03 o'clock, within 8 inch: YES

98.19

DAE Deposits Attached Encrustation, 5 % of cross sectional area, from M 2 09 to 03 o'clock, within 8 inch: YES, start

M 2

355.00 AMH Upstream Manhole, Survey Ends

355.00 F1 SAVC Surface Aggregate Visible Chemical, from 09 to 03 o´clock, within 8 S 3

355.00

DAE Deposits Attached Encrustation, 5 % of cross sectional area, from M 2

09 to 03 o'clock, within 8 inch: YES, end

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3L00	2100	207	104	311	3	2	2.57



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Inspection report

Date: 08/30/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 41	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTOR Flow Control: N Not Controlled Start MH: SMH 41

City: FRANKLIN MA Year Renewed End MH: SMH 40A

Location Code: D Easement/Right of Way Tape/Media #: TV41-082914 Total length surveyed: 34 ft

purpose of Survey: Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Lining:
Basin:
Job Name:

Comment:
Location details:

QSR

0000

QMR

0000

SPR

1:100 position code observation grade

SMH 41 0.00 AMH Downstream Manhole, Survey Begins

SMH 40A 34.00 AMH Upstream Manhole, Survey Ends

OPR

SPRI

MPRI

OPRI



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Inspection report

Date: 08/30/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 42	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTOR Flow Control: N Not Controlled Start MH: SMH 40A

City: FRANKLIN MA Year Renewed End MH: SMH 40

Location Code: D Easement/Right of Way Tape/Media #: TV41-082914 Total length surveyed: 149 ft

purpose of Survey: Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length: Lining:

Basin: Job Name:

Comment:

Location details:

1:350 position code observation grade

SMH 40A

0.00

AMH

Downstream Manhole, Survey Begins

1.31

S1

DAE

Deposits Attached Encrustation, 10 % of cross sectional area, from M 2 08 to 04 o'clock, within 8 inch: YES, start



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Inspection report

Date: 08/30/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 43	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTOR Flow Control: N Not Controlled Start MH: SMH 40

City: FRANKLIN MA Year Renewed End MH: SMH 39

Location Code: D Easement/Right of Way Tape/Media #: TV41-082914 Total length surveyed: 319 ft

purpose of Survey: Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Lining: Job Name:

Comment:

Location details:

1:725 position code observation grade

MH 40

0.00

AMH

Downstream Manhole, Survey Begins

0.50

S1

DAE

Deposits Attached Encrustation, 10 % of cross sectional area, from M 2

09 to 03 o'clock, within 8 inch: YES, start



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Inspection report

Date: 08/30/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number:	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: **BEAVER ST INTERCEPTOR** Flow Control: **N Not Controlled** Start MH: **SMH 39** FRANKLIN MA Year Renewed End MH: **SMH 38**

Location Code: D Easement/Right of Way Tape/Media #: TV41-082914 Total length surveyed: 195 ft

purpose of Survey: Shape/Size: C Circular 24/24 Material: CAS Cast Iron Joint length: SS Sanitary Use:

Lining: Basin: Job Name:

Comment:

Location details:

1:450 position observation code grade

0.00 AMH Downstream Manhole, Survey Begins SMH 39

> Deposits Attached Encrustation, 10 $\,\%$ of cross sectional area, from $\,$ M 2 08 to 04 o'clock, within 8 inch: YES, start 16.56 DAE



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Inspection report

Date: 08/30/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 45	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTOR Flow Control: N Not Controlled Start MH: SMH 38

City: FRANKLIN MA Year Renewed End MH: SMH 37

Location Code: D Easement/Right of Way Tape/Media #: TV41-082914 Total length surveyed: 192 ft

purpose of Survey: Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Lining: Job Name:

Comment:
Location details:

1:450 position code observation grade

9.44 S1 DAE Deposits Attached Encrustation, 10 % of cross sectional area, from M 2
08 to 04 o'clock, within 8 inch: YES, start

Deposits Attached Encrustation, 10 % of cross sectional area, from M2



National Water Main Cleaning Co. Canton, MA 02021 Norfolk County Tel: (781) 828-0863, Fax: (781) 828-2473

Inspection report

Date: 08/30/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 46	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTOR Flow Control: N Not Controlled Start MH: SMH 37

City: FRANKLIN MA Year Renewed End MH: SMH 36

Location Code: D Easement/Right of Way Tape/Media #: TV41-082914 Total length surveyed: 482 ft

purpose of Survey: Shape/Size: C Circular 24/24

Use: SS Sanitary Material: CAS Cast Iron Joint length:

Use: So samuary Lining:
Basin: Job Name:

Comment:
Location details:

1:1525 position code observation grade

MH 37 0.00 AMH Downstream Manhole, Survey Begins



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
09/04/2014		1 Dry	G.DELUCA	47	
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTER Flow Control: D Using Jetter Start MH: SMH 42

City: FRANKLIN MA Year Renewed End MH: SMH 41

Location Code: D Easement/Right of Way Tape/Media #: TV41-090414 Total length surveyed: 355 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: RCP Reinforced Concrete Pipe Joint length:

Basin: Lining: Job Name:

Comment:

Location details:

QSR

3L00

QMR

2L00

1:800 position code observation grade



MPR

OPR

SPRI

MPRI

OPRI

2.51

SPR



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
09/04/2014		1 Dry	G.DELUCA	48	
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTER Flow Control: D Using Jetter Start MH: SMH 41

City: FRANKLIN MA Year Renewed End MH: SMH 40A

Location Code: D Easement/Right of Way Tape/Media #: TV41-090414 Total length surveyed: 33 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: RCP Reinforced Concrete Pipe Joint length:

Lining: Job Name:

Comment:

Location details:

1:75 position code observation grade

MH 41 0.00 AMH Downstream Manhole, Survey Begins

1.61 S1 DAE Deposits Attached Encrustation, 10 % of cross sectional area, from M 2 09 to 03 o'clock, within 8 inch: YES, start

Upstream Manhole, Survey Ends

31.93 **F1**

AMH

33.00

SMH 40A

Deposits Attached Encrustation, 10 $\,\%$ of cross sectional area, from $\,$ M 2 09 to 03 o'clock, within 8 inch: YES, end



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Inspection report

Date: 09/04/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 49	PSR:
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTER Flow Control: D Using Jetter Start MH: SMH 42

City: FRANKLIN MA Year Renewed End MH: SMH 43

Location Code: D Easement/Right of Way Tape/Media #: TV41-090414 Total length surveyed: 222 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24
Use: SS Sanitary CAS Cast Iron Joint length:

Lining: Job Name:

Comment:

Location details:

1:500 position code observation grade

MH 42

0.00

AMH Upstream Manhole, Survey Begins

5.02

S1

DAE

Deposits Attached Encrustation, 10 % of cross sectional area, from M 2
09 to 03 o'clock, within 8 inch: YES, start

Downstream Manhole, Survey Ends

09 to 03 o'clock, within 8 inch: YES, end

MPR

222.00

QMR

312G

SMH 43

QSR

0000

AMH

SPR

Deposits Attached Encrustation, 15 $\,\%$ of cross sectional area, from $\,$ M $\,3$

OPR

SPRI

MPRI

2.02

OPRI

2.02



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Inspection report

- 1			-	-		
ſ	Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
١	09/04/2014		1 Dry	G.DELUCA	50	
	Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Shape/Size:

C Circular 24/24

Street: **BEAVER ST INTERCEPTER** Flow Control: D Using Jetter Start MH: **SMH 43** FRANKLIN MA Year Renewed End MH: **SMH 44**

Location Code: D Easement/Right of Way Tape/Media #: TV41-090414 Total length surveyed: 385 ft

purpose of Survey: Material: CAS Cast Iron Joint length: SS Sanitary Use:

Lining: Basin: Job Name:

A Maintenance Related

Comment:

Location details:

1:875 position observation code grade

0.00 AMH Upstream Manhole, Survey Begins SMH 43 Deposits Attached Encrustation, 10 $\,\%$ of cross sectional area, from $\,$ M 2 08 to 04 o'clock, within 8 inch: YES, start 1.41 **S1** DAE

Deposits Attached Encrustation, 15 $\,\%$ of cross sectional area, from $\,$ M $\,3$



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
09/04/2014		1 Dry	G.DELUCA	51	
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: **BEAVER ST INTERCEPTER** Flow Control: D Using Jetter Start MH: **SMH 44** FRANKLIN MA Year Renewed End MH: **SMH 45**

Location Code: D Easement/Right of Way Tape/Media #: TV41-090414 Total length surveyed: 389 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24 Material: CAS Cast Iron Joint length: SS Sanitary Use:

Lining: Basin: Job Name:

Comment:

Location details:

1:875 position observation code grade

0.00 AMH Upstream Manhole, Survey Begins SMH 44 Deposits Attached Encrustation, 10 $\,\%$ of cross sectional area, from $\,$ M 2 08 to 04 o'clock, within 8 inch: YES, start 2.81 **S1** DAE

SPRI MPRI OPRI QSR QMR SPR MPR OPR 0000 2N00



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Inspection report

Date: 09/05/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 52	PSR:
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTER Flow Control: D Using Jetter Start MH: SMH 45
City: FRANKLIN MA Year Renewed End MH: SMH 46

Location Code: D Easement/Right of Way Tape/Media #: TV41-090514 Total length surveyed: 199 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24
Use: SS Sanitary CAS Cast Iron Joint length:

Lining: Job Name:

Comment:

Location details:

1:450 position code observation grade

MH 45

0.00

AMH Upstream Manhole, Survey Begins

5.02

S1

DAE

Deposits Attached Encrustation, 10 of cross sectional area, from 08 M 2 to 04 o'clock, within 8 inch: YES, start

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	2F00	0	78	78	0	2	2



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Inspection report

Date: 09/05/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 53	PSR:
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street:	BEAVER ST INTERCEPTER	Flow Control:	D Using Jetter	Start MH:	SMH 46
City:	FRANKLIN MA	Year Renewed		End MH:	SMH 46A
Location Code: D Easement/Right of Way		Tape/Media #:	TV41-090514	Total length surveyed	: 24 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: RCP Reinforced Concrete Pipe Joint length:

Lining:
Basin:
Job Name:

AMH

Comment:

Location details:

1:75 position code observation grade

Upstream Manhole, Survey Begins

SMH 46A

QSR

0000

QMR

0000

SPR

OPR

SPRI

MPRI

OPRI



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Inspection report

ľ	Date: 09/05/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 54	PSR:
Ī	Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street:	BEAVER ST INTERCEPTER	Flow Control:	D Using Jetter	Start MH:	SMH 46A
City:	FRANKLIN MA	Year Renewed		End MH:	SMH 47
Location Code: D Easement/Right of Way		Tape/Media #:	TV41-090514	Total length surveyed	: 130 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: RCP Reinforced Concrete Pipe Joint length:

Lining:
Job Name:

Comment:

Basin:

Location details:

1:300 position code observation grade

SMH 46A 0.00

AMH Upstream Manhole, Survey Begins

SPR

AMH Downstream Manhole, Survey Ends

130.00

QMR

SMH 47

QSR

0000

OPR

SPRI

MPRI

OPRI



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Inspection report

Date: 09/05/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 55	PSR:
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTER Flow Control: D Using Jetter Start MH: SMH 47

City: FRANKLIN MA Year Renewed End MH: SMH 47A

Location Code: D Easement/Right of Way Tape/Media #: TV41-090514 Total length surveyed: 194 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: RCP Reinforced Concrete Pipe Joint length:

Lining: Job Name:

AMH

0.00

QMR

3121

SPR

QSR

0000

Comment:

Location details:

SMH 47

1:525 position code observation grade

Upstream Manhole, Survey Begins

163.54

DAE
Deposits Attached Encrustation, 10 % of cross sectional area, at 04 M2 o'clock, within 8 inch: NO
RMJ
Roots Medium Joint, from 12 to 03 o'clock, 10 %, within 8 inch: YES M3

SMH 47A

194.00

AMH
Downstream Manhole, Survey Ends

OPR

MPR

SPRI

MPRI

2.5

OPRI

2.5



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Inspection report

Date: 09/05/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 56	PSR:
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street:	BEAVER ST INTERCEPTER	Flow Control:	D Us	sing Jetter		Start MH:	SMH 47A
City:	FRANKLIN MA	Year Renewed				End MH:	SMH 48
Location Code: D Easement/Right of Way		Tape/Media #:	TV41	1-090514		Total length surveyed	d: 95 ft
purpose of Survey: A Maintenance Related				Shape/Size:	C Circula		
1				Material:	VCP Vitri	ified Clay Pipe Joint le	enath:

Use: SS Sanitary Lining:

Basin:				Lining: Job Name:			
Comment:							
Location details:							
1:225	position	code	observation		grade		
SMH 47A	0.00	АМН	Upstream Manhole, Survey	Begins			
	17.87	RFJ	Roots Fine Joint, at 07 o'clo	ck, within 8 inch: YES	M 1		
	18.17	RFJ	Roots Fine Joint, from 01 to	03 o'clock, within 8 inch:	YES M1		
	29.92	RFJ	Roots Fine Joint, from 12 to	04 o´clock, within 8 inch:	YES M1		
	43.87	В	Broken, from 03 to 04 o'cloc	ck, within 8 inch: YES	\$4		
	50.80	RFJ	Roots Fine Joint, at 08 o´clo	ck, within 8 inch: YES	M 1		
	58.53	RMJ	Roots Medium Joint, from 03	3 to 09 o´clock, 10 %, wi	thin 8 inch: YES M 3		
	72.79	RFJ	Roots Fine Joint, from 01 to	04 o´clock, within 8 inch:	YES M1		
	80.82 S1	RMJ	Roots Medium Joint, from 09 YES, start	9 to 03 o´clock, 15 %, wi	thin 8 inch: M 3		
SMH 48	91.96 F1 95.00	RMJ AMH	Roots Medium Joint, from 09 YES, end Downstream Manhole, Surve		thin 8 inch: M 3		
							,
QSR	QMR		SPR MPR	OPR	SPRI	MPRI	OPRI



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Inspection report

Date: 09/05/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 57	PSR:
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: **BEAVER ST INTERCEPTER** Flow Control: D Using Jetter Start MH: **SMH 48** FRANKLIN MA Year Renewed End MH: **SMH 49** Location Code: D Easement/Right of Way Tape/Media #: TV41-090514 Total length surveyed: 225 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Material: VCP Vitrified Clay Pipe Joint length: SS Sanitary Use:

Lining: Basin: Job Name:

AMH

0.00

Comment:

Location details:

1:525 position observation code grade

SMH 48 3.71 Roots Medium Joint, at 09 o'clock, 10 %, within 8 inch: YES M 3 **RMJ** Roots Medium Joint, at 08 o'clock, 5 %, within 8 inch: YES Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inch:

Upstream Manhole, Survey Begins



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Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
09/05/2014		1 Dry	G.DELUCA	58	
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

 Street:
 BEAVER ST INTERCEPTER
 Flow Control:
 D Using Jetter
 Start MH:
 SMH 49

 City:
 FRANKLIN MA
 Year Renewed
 End MH:
 SMH 50

 Location Code: D Easement/Right of Way
 Tape/Media #:
 TV41-090514
 Total length surveyed: 224 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: VCP Vitrified Clay Pipe Joint length:

Lining: Job Name:

Comment:

Location details:

SMH 50

QSR

0000

QMR

3G00

1:500 position code observation grade

MH 49

0.00

AMH Upstream Manhole, Survey Begins

6.53

S1 RMJ Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inch: M3
YES, start

MPR

Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inch:

OPR

SPRI

MPRI

OPRI

YES, end

SPR



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Inspection report

Date: 09/08/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 59	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTER Flow Control: D Using Jetter Start MH: SMH 50
City: FRANKLIN MA Year Renewed End MH: SMH 50A
Location Code: D Easement/Right of Way Tape/Media #: TV41-090814 Total length surveyed: 250 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: VCP Vitrified Clay Pipe Joint length:

Basin: Lining: Job Name:

AMH

0.00

Comment:

Location details:

SMH 50

QSR

0000

QMR

3814

SPR

1:575 position code observation grade

Upstream Manhole, Survey Begins

108.93 Roots Fine Joint, at 09 o'clock, within 8 inch: YES M 1 185.13 RFJ Roots Fine Joint, from 02 to 04 o'clock, within 8 inch: YES M 1 194.26 RFJ Roots Fine Joint, at 09 o'clock, within 8 inch: NO M 1 Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES 194.26 RFJ M 1 RMJRoots Medium Joint, from 08 to 04 o'clock, 15 %, within 8 inch: 249.28 RMJ Roots Medium Joint, from 08 to 04 o'clock, 15 %, within 8 inch: M 3 SMH 50A 250.00 AMH Downstream Manhole, Survey Ends

OPR

SPRI

MPRI

2.33

OPRI

2.33



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Inspection report

Date: 09/08/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 60	PSR:
Total Length of Section:	Survey Customer:	Job #:	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

 Street:
 BEAVER ST INTERCEPTER
 Flow Control:
 D Using Jetter
 Start MH:
 SMH 50A

 City:
 FRANKLIN MA
 Year Renewed
 End MH:
 SMH 51

Location Code: D Easement/Right of Way Tape/Media #: TV41-090814 Total length surveyed: 242 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24
Use: SS Sanitary VCP Vitrified Clay Pipe Joint length:

Lining:
Basin:
Job Name:

Comment:

Location details:

SMH 51

QSR 0000 QMR

3H00

SPR

1:550 position code observation grade

SMH 50A 0.00 AMH Upstream Manhole, Survey Begins

8.73 S1 RMJ Roots Medium Joint, from 08 to 04 o'clock, 15 %, within 8 inch: M3
YES, start

OPR

SPRI

MPRI

OPRI



National Water Main Cleaning Co. Canton, MA 02021 Norfolk County Tel: (781) 828-0863, Fax: (781) 828-2473

Inspection report

		-	-		
Date:	P.O.# / WO.#:	Weather:	Surveyed By:	section number:	PSR:
09/09/2014		1 Dry	G.DELUCA	61	
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

Street: BEAVER ST INTERCEPTER Flow Control: D Using Jetter Start MH: SMH 51

City: FRANKLIN MA Year Renewed End MH: SMH 52

Location Code: E Woods Tape/Media #: TV41-090914 Total length surveyed: 147 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: RCP Reinforced Concrete Pipe Joint length:

Lining:
Basin:
Job Name:

Comment:

Location details:

1:350 position code observation grade

MH 51 0.00 AMH Upstream Manhole, Survey Begins

SMH 52 147.00

AMH Downstream Manhole, Survey Ends



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Inspection report

Date: 09/09/2014	P.O.# / WO.#:	Weather: 1 Dry	Surveyed By: G.DELUCA	section number: 62	PSR:
Total Length of Section:	Survey Customer:	Job #: ARC005-4	Clean Date:	Pre-Cleaned: H Heavy Cleaning	rate:

 Street:
 BEAVER ST INTERCEPTER
 Flow Control:
 D Using Jetter
 Start MH:
 SMH 52

 City:
 FRANKLIN MA
 Year Renewed
 End MH:
 SMH 53

 Location Code: E Woods
 Tape/Media #:
 TV41-090914
 Total length surveyed: 384 ft

purpose of Survey: A Maintenance Related Shape/Size: C Circular 24/24

Use: SS Sanitary Material: RCP Reinforced Concrete Pipe Joint length:

Lining: Job Name:

Comment:

Location details:

0000

2100

1:875 position code observation grade

0.00 AMH Upstream Manhole, Survey Begins SMH 52 Deposits Attached Other, 5 $\,$ % of cross sectional area, at 05 o'clock, $\,$ M 2 within 8 inch: YES 292.35 DAZ 384.00 AOC Drop Connection, Survey Ends **SMH 53** QMR SPR SPRI MPRI OPRI QSR MPR OPR