



**Stew Eleftheriou** 

stew@gprsinc.com Tel. 267-972-7243

# **Legend of Classification (Section)**

Project Name	Project Date
WATER TOWER REC STORM VPI	11/5/2022

**Immediate Attention** <u>5:</u> Defects require immediate attention- Pipe has failed or will likely fail within the next 5 years or sooner. **Poor Condition** 4: Severe Defects that will become Grade 5 defects within the foerseeable future- Pipe will probably fail in 5-10 years **Good Condition** 2: Defects that have not begun to deteriorate- Pipe unlikely to fail for at least 20 years. **Excellent Condition** 1: Minor Defects- Failure unlikley in the foreseeable future **Fair Condition** 3: Moderate defects that will continue to deteriorate- Pipe may fail in 10-20 years.



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# Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD1-CO1
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		127.5 '	127.5 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD1
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	CO1
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

	1:963	Distance	Code	Observation	n			Counter	Photo	Grade
	RD1									
(		0.0	AZ	Access Poin	t Other / RD1			00:00:00	1	
		0.0	MWL	Water Level	, 0% of the vertice	cal dimension		00:00:00	2	
		10.8	MGO	Miscellaneo	us General Obse	ervation / WYE R	IGHT	00:00:29	3	
		12.4	MGO	Miscellaneo	us General Obse	ervation / TIES IN	NTO MAIN	00:01:02	4	
		12.4	MMC	Miscellaneo	us Material Char N	nge, Vitrified clay	pipe / TERRA	00:01:02	5	
		12.4	MSC	Miscellaneo	us Shape or Size	e Change, dia/he	eight: 6inch / 6	00:01:02	6	
		12.4	S01 DSF		ttled Fine, 5% of o'clock, within 8	cross sectional inch, Start	area from 5	00:01:02	7	
•		65.8	F01 DSF		ttled Fine, 5% of o'clock, within 8	cross sectional inch, Finish	area from 5	00:03:02	8	M2
		104.1	TF	Tap Factory	Made at 3 o'cloo	ck, dia/height: 4ir	nch	00:04:24	9	
		106.2	TF	Tap Factory	Made at 2 o'cloo	ck, dia/height: 4ir	nch	00:04:38	10	
		125.5	MSC		us Shape or Sizo TO 8 INCH PIPE	e Change, dia/he	eight: 8inch /	00:05:17	11	
(		127.5	ACOM	Cleanout Ma	ainline / CO1			00:05:47	12	
	CO1									
QS 000		QMR 2A00	QOR 2A00	SPR 0.0	MPR 22.0	OPR 22.0	SPRI 0.0	MPF 2.0		OPRI 2.0



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# Section Pictures - 11/3/2022 - RD1-CO1

City	Stroot	Data	Dina Sagment Deference	Section No.
City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA. PA	209 E HARTWELL LN	11/3/2022	RD1-CO1	1



1, 00:00:00, 0.00ft Access Point Other / RD1



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:29, 10.75ft Miscellaneous General Observation / WYE RIGHT



4, 00:01:02, 12.42ft Miscellaneous General Observation / TIES INTO MAIN



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# Section Pictures - 11/3/2022 - RD1-CO1

City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA. PA	209 E HARTWELL LN	11/3/2022	RD1-CO1	1



5, 00:01:02, 12.42ft Miscellaneous Material Change, Vitrified clay pipe / TERRA COTTA MAIN



6, 00:01:02, 12.42ft Miscellaneous Shape or Size Change, dia/height: 6inch / 6 INCH MAIN



7, 00:01:02, 12.43ft
Deposits Settled Fine, 5% of cross sectional area from 5 o'clock to 7 o'clock, within 8 inch, Start



8, 00:03:02, 65.75ft Deposits Settled Fine, 5% of cross sectional area from 5 o'clock to 7 o'clock, within 8 inch, Finish



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# Section Pictures - 11/3/2022 - RD1-CO1

City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA. PA	209 E HARTWELL LN	11/3/2022	RD1-CO1	1



9, 00:04:24, 104.08ft Tap Factory Made at 3 o'clock, dia/height: 4inch



10, 00:04:38, 106.16ft
Tap Factory Made at 2 o'clock, dia/height: 4inch



11, 00:05:17, 125.50ft Miscellaneous Shape or Size Change, dia/height: 8inch / INCREASE TO 8 INCH PIPE



12, 00:05:47, 127.50ft Cleanout Mainline / CO1



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	Ins	pection	report
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Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	CO1-CO2
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		70.8 '	70.8 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	CO1
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	CO2
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	8 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Vitrified Clay Pipe	Purpose:		Joints failed:	0
Lining Method:		Owner:			

	1:535	Distance	Code	Observation				Counter	Photo	Grade
	CO1									
		0.0	ACOM	Cleanout Mainl	ine / CO1			00:00:00	1	
		0.0	MWL	Water Level, 0°	% of the vertic	al dimension		00:00:00	2	
		27.1	MGO	Miscellaneous	Canaral Observa	nuction / LINE	ANGLES	00:00:51	3	
			WGO	RIGHT	General Obse	valion / LINE /	ANGLES	00:00:51	3	
		29.2	S01 DSF	Deposits Settle o'clock to 7 o'cl			area from 5	00:01:01	4	
•		37.1	MGO	Miscellaneous BRANCH BEIN			LTREE	00:01:21	5	
		43.3	MGO	Miscellaneous	General Obse	vation / LINE A	ANGLES LEFT	00:01:46	6	
		44.9	TF	Tap Factory Ma	ade at 3 o'cloc	k, dia/height: 4	nch	00:01:54	7	
		51.5	F01 DSF	Deposits Settle o'clock to 7 o'cl			area from 5	00:02:15	8	M2
		70.8	OBC	Obstruction The area at 12 o'clo	rough Connec ock / SMALL B	ion, 5% of cros	ss sectional SED AT	00:02:47	9	M2
(	CO2	70.8	ACOM	Cleanout Mainl	ine / CO2			00:02:47	10	
QS	R	QMR	QOR	SPR	MPR	OPR	SPRI	MPR	al l	OPRI
000		2500	2500	0.0	10.0	10.0	0.0	2.0		2.0



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# **Section Pictures - 11/3/2022 - CO1-CO2**

City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA. PA	209 E HARTWELL LN	11/3/2022	CO1-CO2	2



1, 00:00:00, 0.00ft Cleanout Mainline / CO1



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:51, 27.08ft Miscellaneous General Observation / LINE ANGLES RIGHT



4, 00:01:01, 29.16ft
Deposits Settled Fine, 5% of cross sectional area from 5 o'clock to 7 o'clock, within 8 inch, Start



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# **Section Pictures - 11/3/2022 - CO1-CO2**

City	Street	Date	Pipe Segment Reference	Section No.	_
PHILADELPHIA. PA	209 E HARTWELL LN	11/3/2022	CO1-CO2	2	



5, 00:01:21, 37.08ft Miscellaneous General Observation / SMALL TREE BRANCH BEING DRAGGED BY CAMERA



 $6,\,00{:}01{:}46,\,43.25 ft$  Miscellaneous General Observation / LINE ANGLES LEFT



7, 00:01:54, 44.92ft Tap Factory Made at 3 o'clock, dia/height: 4inch



8, 00:02:15, 51.50ft Deposits Settled Fine, 5% of cross sectional area from 5 o'clock to 7 o'clock, within 8 inch, Finish



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# **Section Pictures - 11/3/2022 - CO1-CO2**

City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA, PA	209 E HARTWELL LN	11/3/2022	CO1-CO2	2



9, 00:02:47, 70.84ft Obstruction Through Connection, 5% of cross sectional area at 12 o'clock / SMALL BRANCH WEDGED AT CLEANOUT



10, 00:02:47, 70.84ft Cleanout Mainline / CO2



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Ins	pection	report
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Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	CO2-DOWNSTREAM
Year laid:	Year laid: Pre-cleaning:		Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		69.3 '	69.3 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	CO2
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	8 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Vitrified Clay Pipe	Purpose:		Joints failed:	0
Lining Method:		Owner:			

1:523	Distance	Code	Observation	1			Counter	Photo	Grade
CO2									
	0.0	ACOM	Cleanout Ma	ainline / CO2			00:00:00	1	
		AOOM	Olcariout We	WIIIIIC / 002			00.00.00	'	
	0.0	MWL	Water Level	5% of the vertice	cal dimension		00:00:00	2	
•									
	66.3	TF	Tap Factory	Made at 12 o'clo	ock, dia/height: 4	inch	00:01:50	3	
	67.0	MGO	Miscellaneo	us General Obse	ervation / LINE A	NGLES LEFT	00:02:02	4	
	69.3	ATC	Tee Connec	tion / TIES INTC	MAIN FROM C	B1	00:02:17	5	
DOWNSTREA									
QSR	QMR	QOR	SPR	MPR	OPR	SPRI	MPR		OPRI
0000	0000	0000	0.0	0.0	0.0	0.0	0.0		0.0



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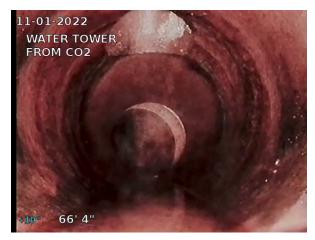
## Section Pictures - 11/3/2022 - CO2-DOWNSTREAM



1, 00:00:00, 0.00ft Cleanout Mainline / CO2



2, 00:00:00, 0.00ft Water Level, 5% of the vertical dimension



3, 00:01:50, 66.33ft
Tap Factory Made at 12 o'clock, dia/height: 4inch



4, 00:02:02, 67.00ft Miscellaneous General Observation / LINE ANGLES LEFT



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# Section Pictures - 11/3/2022 - CO2-DOWNSTREAM

İ	City	Street	Date	Pipe Segment Reference	Section No.
	PHILADELPHIA, PA	209 E HARTWELL LN	11/3/2022	CO2-DOWNSTREAM	3



5, 00:02:17, 69.25ft Tee Connection / TIES INTO MAIN FROM CB1



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# **Inspection report**

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	CB1-DOWNSTREAM
Year laid:	Year laid: Pre-cleaning:		Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		102.0 '	102.0 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	CB1
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	8 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Vitrified Clay Pipe	Purpose:		Joints failed:	0
Lining Method:		Owner:			

	1:770	Distance	Code	Observation	n			Counter	Photo	Grade
	CB1									
		0.0	ACB	Catch Basin	/ CB1			00:00:00	1	
		0.0	MWL	Water Level	, 0% of the vertic	al dimension		00:00:00	2	
		20.6	TF	Tap Factory	Made at 3 o'cloc	k, dia/height: 8in	ch	00:00:34	3	
		22.5	TF	Tap Factory	Made at 3 o'cloc	k, dia/height: 6in	ch	00:00:47	4	
<b>1</b>		57.8	TF	Tap Factory	Made at 3 o'cloc	k, dia/height: 8in	ch	00:01:45	5	
		66.3	MGO	Miscellaneou MAIN	us General Obse	rvation / TIES IN	ITO 15 INCH	00:02:01	6	
		67.3	MSC	Miscellaneou TIES INTO 1	us Shape or Size 15 INCH MAIN	Change, dia/he	ight: 15inch /	00:02:03	7	
		69.8	MWL	Water Level	, 10% of the verti	cal dimension		00:02:07	8	
		77.2	S01 MCU	Miscellaneou	us Camera Unde	rwater, Start		00:02:15	9	
		91.7	F01 MCU	Miscellaneou	us Camera Unde	rwater, Finish		00:02:47	10	M4
		102.0	MSA		us Survey Aband FURTHER DUE		A WOULD	00:03:52	11	
	QSR	QMR	QOR	SPR	MPR	OPR	SPRI	MPR		OPRI
0	000	4300	4300	0.0	12.0 ER REC STORM	12.0	0.0	4.0		4.0



#### Stew Eleftheriou

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# Section Pictures - 11/3/2022 - CB1-DOWNSTREAM



1, 00:00:00, 0.00ft Catch Basin / CB1



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:34, 20.58ft Tap Factory Made at 3 o'clock, dia/height: 8inch



4, 00:00:47, 22.50ft Tap Factory Made at 3 o'clock, dia/height: 6inch



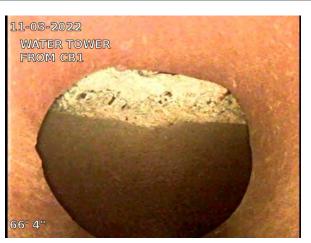
#### Stew Eleftheriou

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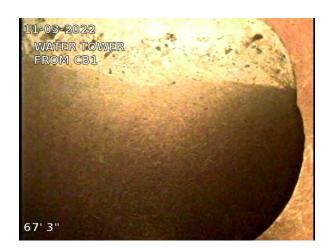
## Section Pictures - 11/3/2022 - CB1-DOWNSTREAM



5, 00:01:45, 57.75ft
Tap Factory Made at 3 o'clock, dia/height: 8inch



6, 00:02:01, 66.33ft Miscellaneous General Observation / TIES INTO 15 INCH MAIN



7, 00:02:03, 67.25ft Miscellaneous Shape or Size Change, dia/height: 15inch / TIES INTO 15 INCH MAIN



8, 00:02:07, 69.84ft Water Level, 10% of the vertical dimension



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## Section Pictures - 11/3/2022 - CB1-DOWNSTREAM

 City
 Street
 Date
 Pipe Segment Reference
 Section No.

 PHILADELPHIA, PA
 209 E HARTWELL LN
 11/3/2022
 CB1-DOWNSTREAM
 4



9, 00:02:15, 77.16ft Miscellaneous Camera Underwater, Start



10, 00:02:47, 91.67ft Miscellaneous Camera Underwater, Finish



11, 00:03:52, 102.00ft Miscellaneous Survey Abandoned / CAMERA WOULD NOT PUSH FURTHER DUE TO FRICTION



Stew Eleftheriou

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Inspection report
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Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	CB2-DOWNSTREAM
Year laid: Pre-cleaning:		Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		11.3 '	11.3 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	CB2
Street:	209 E HARTWELL LN	Media Label:	Media Label:		0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	8 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Vitrified Clay Pipe	Purpose:		Joints failed:	0
Lining Method:		Owner:			

1:86	Distance	Code	Observation	Counter	Photo	Grade
CB2						
	0.0	ACB	Catch Basin / CB2	00:00:00	1	
	0.0	MWL	Water Level, 0% of the vertical dimension	00:00:00	2	
			Joint Separated Large, 1Inch, 1Inch / SEPERATION	AT 00:00:24	3, 4	S4
	10.4	JSL	JOINT			
	11.3	JSL ATC	Tee Connection / TIES INTO MAIN FROM CB1	00:00:44	5	
DOWNSTREA	11.3		JOINT		5	
DOWNSTREA	11.3		Tee Connection / TIES INTO MAIN FROM CB1			OPRI



#### Stew Eleftheriou

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# Section Pictures - 11/3/2022 - CB2-DOWNSTREAM



1, 00:00:00, 0.00ft Catch Basin / CB2



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:24, 10.42ft Joint Separated Large, 1Inch, 1Inch / SEPERATION AT JOINT



4, 00:00:24, 10.42ft Joint Separated Large, 1Inch, 1Inch / SEPERATION AT JOINT



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# Section Pictures - 11/3/2022 - CB2-DOWNSTREAM

City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA, PA	209 E HARTWELL LN	11/3/2022	CB2-DOWNSTREAM	5



5, 00:00:44, 11.33ft Tee Connection / TIES INTO MAIN FROM CB1



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# Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD2-DOWNSTREAM
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		95.3 '	95.3 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD2
Street:	209 E HARTWELL LN	Media Label:	Media Label:		0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

1:719	Distance	Code	Observation	ı			Counter	Photo	Grade
RD2									
	0.0	AZ	Access Point	t Other / RD2			00:00:00	1	
	0.0	MWL	Water Level,	0% of the vertic	al dimension		00:00:00	2	
	1.7	MGO	Miscellaneou INCH MAIN	us General Obse	vation / WYE L	EFT INTO 6	00:00:14	3	
	3.1	MSC	Miscellaneou INCH MAIN	us Shape or Size	Change, dia/he	ight: 6inch / 6	00:00:22	4	
	16.8	MGO	Miscellaneou DOWNWAR	us General Obse D	vation / LINE A	NGLES	00:00:48	5	
	19.9	MGO	Miscellaneou	us General Obse	vation / LINE Li	EVELS OUT	00:00:56	6	
•	28.5	S01 DSF		ttled Fine, 5% of o'clock, within 8 in		area from 5	00:01:09	7	
	83.6	MGO F01 DSF	RIGHT  Deposits Set	us General Obse ttled Fine, 5% of o'clock, within 8 in	cross sectional		00:02:18	8	M2
	89.3	TF		Made at 9 o'cloc		nch	00:02:46	10	
	90.3	MMC	Miscellaneou CHANGE TO	us Material Chan DVCP	ge, Vitrified clay	pipe /	00:02:57	11	
DOWNSTREA	95.3	ATC	Tee Connect	tion / TIES INTO	MAIN		00:03:09	12	
QSR	QMR	QOR	SPR	MPR	OPR	SPRI	MPF	21	OPRI
0000	2A00	2A00	0.0	22.0	22.0	0.0	2.0		2.0
0000	2,100			R REC STORM		0.0			2.0



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# Section Pictures - 11/3/2022 - RD2-DOWNSTREAM

City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA. PA	209 E HARTWELL LN	11/3/2022	RD2-DOWNSTREAM	6



1, 00:00:00, 0.00ft Access Point Other / RD2



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:14, 1.67ft Miscellaneous General Observation / WYE LEFT INTO 6 INCH MAIN



4, 00:00:22, 3.08ft Miscellaneous Shape or Size Change, dia/height: 6inch / 6 INCH MAIN



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## Section Pictures - 11/3/2022 - RD2-DOWNSTREAM



5, 00:00:48, 16.84ft Miscellaneous General Observation / LINE ANGLES DOWNWARD



6, 00:00:56, 19.92ft Miscellaneous General Observation / LINE LEVELS OUT



7, 00:01:09, 28.50ft
Deposits Settled Fine, 5% of cross sectional area from 5 o'clock to 7 o'clock, within 8 inch, Start



8, 00:02:18, 83.58ft Miscellaneous General Observation / LINE ANGLES RIGHT



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## Section Pictures - 11/3/2022 - RD2-DOWNSTREAM



9, 00:02:18, 83.58ft Deposits Settled Fine, 5% of cross sectional area from 5 o'clock to 7 o'clock, within 8 inch, Finish



10, 00:02:46, 89.33ft
Tap Factory Made at 9 o'clock, dia/height: 4inch



11, 00:02:57, 90.25ft Miscellaneous Material Change, Vitrified clay pipe / CHANGE TO VCP



12, 00:03:09, 95.25ft Tee Connection / TIES INTO MAIN



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# Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD3-TRAP
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		37.9 '	37.9 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD3
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	TRAP
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

1:287   Distance   Code   Observation   Counter   Photo   Gr.										
0.0 AZ Access Point Other / RD3 00:00:00 1  0.0 MWL Water Level, 0% of the vertical dimension 00:00:00 2  2.7 MGO Miscellaneous General Observation / LINE ANGLES 00:00:09 3 RIGHT  12.8 MGO Miscellaneous General Observation / WYE LEFT 00:00:41 4  13.8 MGO Miscellaneous General Observation / WYE LEFT 00:00:46 5 MAIN FROM RD2  15.4 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:00:49 6 TIED INTO 6 INCH MAIN  15.4 MMC Miscellaneous Material Change, Vitrified clay pipe / 00:00:49 7 CHANGE TO VCP  20.8 MGO Miscellaneous General Observation / WYE RIGHT INTO 8 00:01:09 8 INCH MAIN  20.8 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:01:09 9 TIES INTO 6 INCH MAIN  27.1 TF Tap Factory Made at 10 o'clock, dia/height: 6inch / 00:01:43 10  28.7 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:02:01 11 REDUCES TO 6 INCH PIPE  28.7 MMC Miscellaneous Material Change, Cast iron / CHANGE TO 00:02:01 12 CIP  33.8 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:16 13  35.5 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:26 14  TRAP	1:287	Distance	Code	Observation	n			Counter	Photo	Grade
0.0   MWL   Water Level, 0% of the vertical dimension   00:00:00   2	RD3									
2.7 MGO Miscellaneous General Observation / LINE ANGLES 00:00:09 3 RIGHT  12.8 MGO Miscellaneous General Observation / WYE LEFT 00:00:41 4  13.8 MGO Miscellaneous General Observation / TIES INTO 6 INCH 00:00:46 5 MAIN FROM RD2  15.4 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:00:49 6 TIED INTO 6 INCH MAIN  15.4 MMC Miscellaneous Material Change, Vitrified clay pipe / 00:00:49 7 CHANGE TO VCP  20.8 MGO Miscellaneous General Observation / WYE RIGHT INTO 8 00:01:09 8 INCH MAIN  20.8 MSC Miscellaneous Shape or Size Change, dia/height: 8inch / 00:01:09 9 TIES INTO 8 INCH MAIN  27.1 TF Tap Factory Made at 10 o'clock, dia/height: 6inch 00:01:43 10  28.7 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:02:01 11 REDUCES TO 6 INCH PIPE  28.7 MMC Miscellaneous Material Change, Cast iron / CHANGE TO 00:02:01 12 CIP  33.8 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:16 13  35.5 MGO Miscellaneous General Observation / WYE RIGHT 00:02:26 14  TRAP		0.0	AZ	Access Poin	nt Other / RD3			00:00:00	1	
12.8   MGO   Miscellaneous General Observation / WYE LEFT   00:00:41   4		0.0	MWL	Water Level	, 0% of the vertice	cal dimension		00:00:00	2	
13.8   MGO   Miscellaneous General Observation / TIES INTO 6 INCH   00:00:46   5		2.7	MGO		us General Obse	ervation / LINE A	NGLES	00:00:09	3	
MSC   Miscellaneous Shape or Size Change, dia/height: 6inch /   00:00:49   6		12.8	MGO	Miscellaneo	us General Obse	ervation / WYE L	EFT	00:00:41	4	
TIED INTO 6 INCH MAIN  15.4		13.8	MGO			ervation / TIES IN	NTO 6 INCH	00:00:46	5	
CHANGE TO VCP  20.8 MGO Miscellaneous General Observation / WYE RIGHT INTO 8 00:01:09 8 INCH MAIN  20.8 MSC Miscellaneous Shape or Size Change, dia/height: 8inch / 00:01:09 9 TIES INTO 8 INCH MAIN  27.1 TF Tap Factory Made at 10 o'clock, dia/height: 6inch 00:01:43 10  28.7 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:02:01 11 REDUCES TO 6 INCH PIPE  28.7 MMC Miscellaneous Material Change, Cast iron / CHANGE TO 00:02:01 12 CIP  33.8 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:16 13  35.5 MGO Miscellaneous General Observation / WYE RIGHT 00:02:26 14  37.9 AZ Access Point Other / TRAP 00:03:24 15		15.4	MSC	Miscellaneo	us Shape or Size 6 INCH MAIN	e Change, dia/he	eight: 6inch /	00:00:49	6	
INCH MAIN  20.8 MSC Miscellaneous Shape or Size Change, dia/height: 8inch / 00:01:09 9 TIES INTO 8 INCH MAIN  27.1 TF Tap Factory Made at 10 o'clock, dia/height: 6inch 00:01:43 10  28.7 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:02:01 11 REDUCES TO 6 INCH PIPE  28.7 MMC Miscellaneous Material Change, Cast iron / CHANGE TO 00:02:01 12 CIP  33.8 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:16 13  35.5 MGO Miscellaneous General Observation / WYE RIGHT 00:02:26 14  37.9 AZ Access Point Other / TRAP 00:03:24 15		15.4	ММС			ige, Vitrified clay	pipe /	00:00:49	7	
TIES INTO 8 INCH MAIN  27.1 TF Tap Factory Made at 10 o'clock, dia/height: 6inch 00:01:43 10  28.7 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:02:01 11  REDUCES TO 6 INCH PIPE  28.7 MMC Miscellaneous Material Change, Cast iron / CHANGE TO 00:02:01 12  CIP  33.8 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:16 13  35.5 MGO Miscellaneous General Observation / WYE RIGHT 00:02:26 14  37.9 AZ Access Point Other / TRAP 00:03:24 15	,	20.8	MGO		us General Obse	ervation / WYE R	RIGHT INTO 8	00:01:09	8	
28.7 MSC Miscellaneous Shape or Size Change, dia/height: 6inch / 00:02:01 11 REDUCES TO 6 INCH PIPE  28.7 MMC Miscellaneous Material Change, Cast iron / CHANGE TO 00:02:01 12 CIP  33.8 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:16 13  35.5 MGO Miscellaneous General Observation / WYE RIGHT 00:02:26 14  37.9 AZ Access Point Other / TRAP 00:03:24 15		20.8	MSC	Miscellaneo	us Shape or Size 3 INCH MAIN	e Change, dia/he	eight: 8inch /	00:01:09	9	
REDUCES TO 6 INCH PIPE  28.7 MMC Miscellaneous Material Change, Cast iron / CHANGE TO 00:02:01 12 CIP  33.8 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:16 13  35.5 MGO Miscellaneous General Observation / WYE RIGHT 00:02:26 14  37.9 AZ Access Point Other / TRAP 00:03:24 15		27.1	TF	Tap Factory	Made at 10 o'clo	ock, dia/height: 6	Sinch	00:01:43	10	
33.8 MGO Miscellaneous General Observation / LINE ANGLES LEFT 00:02:16 13  35.5 MGO Miscellaneous General Observation / WYE RIGHT 00:02:26 14  37.9 AZ Access Point Other / TRAP 00:03:24 15		28.7	MSC			e Change, dia/he	eight: 6inch /	00:02:01	11	
35.5 MGO Miscellaneous General Observation / WYE RIGHT 00:02:26 14  37.9 AZ Access Point Other / TRAP 00:03:24 15  TRAP		28.7	ММС	Miscellaneo CIP	us Material Char	ige, Cast iron / C	CHANGE TO	00:02:01	12	
37.9 AZ Access Point Other / TRAP 00:03:24 15		33.8	MGO	Miscellaneo	us General Obse	rvation / LINE A	NGLES LEFT	00:02:16	13	
TRAP		35.5 MGO Miscellaneous General Observation / WYE RIGHT				00:02:26	14			
	TRAP	37.9	AZ	Access Poin	nt Other / TRAP			00:03:24	15	
- 43K   4WK   4WK   5PK   MPK   0PK   5PKI   MPKI   0PI		OMP	000	CDD	MDD	ODD	CDDI	MDF	)	ODD
					!		!			0.0



#### **Stew Eleftheriou**

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# Section Pictures - 11/3/2022 - RD3-TRAP

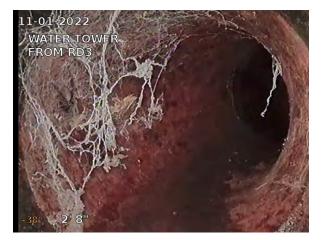
City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA, PA	209 E HARTWELL LN	11/3/2022	RD3-TRAP	7



1, 00:00:00, 0.00ft Access Point Other / RD3



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:09, 2.67ft Miscellaneous General Observation / LINE ANGLES RIGHT



4, 00:00:41, 12.84ft Miscellaneous General Observation / WYE LEFT



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# Section Pictures - 11/3/2022 - RD3-TRAP

City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA. PA	209 E HARTWELL LN	11/3/2022	RD3-TRAP	7



5, 00:00:46, 13.84ft Miscellaneous General Observation / TIES INTO 6 INCH MAIN FROM RD2



6, 00:00:49, 15.42ft Miscellaneous Shape or Size Change, dia/height: 6inch / TIED INTO 6 INCH MAIN



7, 00:00:49, 15.42ft Miscellaneous Material Change, Vitrified clay pipe / CHANGE TO VCP



8, 00:01:09, 20.75ft Miscellaneous General Observation / WYE RIGHT INTO 8 INCH MAIN



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# Section Pictures - 11/3/2022 - RD3-TRAP

City	Street	Date	Pipe Segment Reference	Section No.
PHILADELPHIA. PA	209 E HARTWELL LN	11/3/2022	RD3-TRAP	7



9, 00:01:09, 20.75ft Miscellaneous Shape or Size Change, dia/height: 8inch / TIES INTO 8 INCH MAIN



10, 00:01:43, 27.08ft Tap Factory Made at 10 o'clock, dia/height: 6inch



11, 00:02:01, 28.67ft Miscellaneous Shape or Size Change, dia/height: 6inch / REDUCES TO 6 INCH PIPE



12, 00:02:01, 28.67ft Miscellaneous Material Change, Cast iron / CHANGE TO CIP



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## Section Pictures - 11/3/2022 - RD3-TRAP



13, 00:02:16, 33.75ft Miscellaneous General Observation / LINE ANGLES LEFT



14, 00:02:26, 35.50ft Miscellaneous General Observation / WYE RIGHT



15, 00:03:24, 37.92ft Access Point Other / TRAP



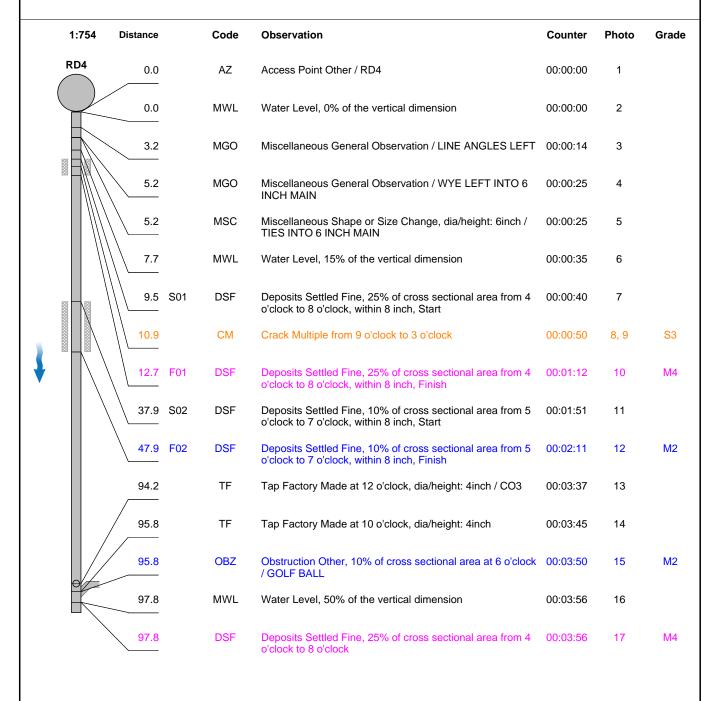
Stew Eleftheriou

stew@gprsinc.com Tel. 267-972-7243

	Ins	pection	report
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Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD4-DOWNSTREAM
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		102.3 '	102.3 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD4
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			





**Stew Eleftheriou** 

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# Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD4-DOWNSTREAM
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		102.3 '	102.3 '

	1:754	Distance	Code	Observation	Counter	Photo	Grade
		101.8	RMB	Roots Medium Barrell from 3 o'clock to 9 o'clock, 50% of cross sectional area	00:04:12	18	M4
1		101.8	OBZ	Obstruction Other, 100% of cross sectional area from 12 o'clock to 12 o'clock / BLOCKAGE - ROOTS, LEAVES, SEDIMENT, MISC DEBRIS	00:04:12	19	M5
V		102.3	MSA	Miscellaneous Survey Abandoned / CANNOT PASS BLOCKAGE	00:04:50	20	



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## Section Pictures - 11/3/2022 - RD4-DOWNSTREAM



1, 00:00:00, 0.00ft Access Point Other / RD4



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:14, 3.16ft Miscellaneous General Observation / LINE ANGLES LEFT



4, 00:00:25, 5.16ft
Miscellaneous General Observation / WYE LEFT INTO 6 INCH MAIN



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## Section Pictures - 11/3/2022 - RD4-DOWNSTREAM



5, 00:00:25, 5.16ft Miscellaneous Shape or Size Change, dia/height: 6inch / TIES INTO 6 INCH MAIN



6, 00:00:35, 7.67ft Water Level, 15% of the vertical dimension



7, 00:00:40, 9.50ft Deposits Settled Fine, 25% of cross sectional area from 4 o'clock to 8 o'clock, within 8 inch, Start



8, 00:00:50, 10.92ft Crack Multiple from 9 o'clock to 3 o'clock



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## Section Pictures - 11/3/2022 - RD4-DOWNSTREAM



9, 00:00:50, 10.92ft Crack Multiple from 9 o'clock to 3 o'clock



10, 00:01:12, 12.67ft Deposits Settled Fine, 25% of cross sectional area from 4 o'clock to 8 o'clock, within 8 inch, Finish



11, 00:01:51, 37.92ft Deposits Settled Fine, 10% of cross sectional area from 5 o'clock to 7 o'clock, within 8 inch, Start



12, 00:02:11, 47.92ft
Deposits Settled Fine, 10% of cross sectional area from 5 o'clock to 7 o'clock, within 8 inch, Finish



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## Section Pictures - 11/3/2022 - RD4-DOWNSTREAM



13, 00:03:37, 94.16ft
Tap Factory Made at 12 o'clock, dia/height: 4inch / CO3



14, 00:03:45, 95.75ft Tap Factory Made at 10 o'clock, dia/height: 4inch



15, 00:03:50, 95.75ft
Obstruction Other, 10% of cross sectional area at 6 o'clock / GOLF BALL



16, 00:03:56, 97.84ft Water Level, 50% of the vertical dimension



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## Section Pictures - 11/3/2022 - RD4-DOWNSTREAM



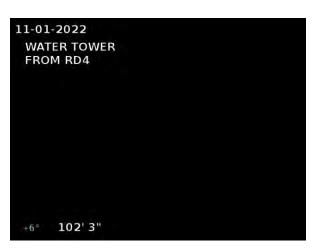
17, 00:03:56, 97.84ft Deposits Settled Fine, 25% of cross sectional area from 4 o'clock to 8 o'clock



18, 00:04:12, 101.83ft Roots Medium Barrell from 3 o'clock to 9 o'clock, 50% of cross sectional area



19, 00:04:12, 101.84ft
Obstruction Other, 100% of cross sectional area from 12 o'clock to 12 o'clock / BLOCKAGE - ROOTS, LEAVES, SEDIMENT, MISC DEBRIS



20, 00:04:50, 102.25ft Miscellaneous Survey Abandoned / CANNOT PASS BLOCKAGE



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	4 •		- 4
Insi	pection	rend	ort.

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	CO3-DOWNSTREAM
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		8.8 '	8.8 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	CO3
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	6 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

Obstruction Other, 10% of cross sectional area at 6 o'clock 00:00:21 5 M  7.5 RMB Roots Medium Barrell from 3 o'clock to 9 o'clock, 50% of 00:01:01 6 M  cross sectional area	1:67	Distance	Code	Observation	n			Counter	Photo	Grade
0.0 MWL Water Level, 0% of the vertical dimension 00:00:00 2  2.2 MWL Water Level, 50% of the vertical dimension 00:00:18 3  2.9 DSF Deposits Settled Fine, 25% of cross sectional area from 4 00:00:21 4 o'clock to 8 o'clock 00 o'clock to 8 o'clock 00:00:00:00:00:00:00:00:00:00:00:00:00:	СОЗ									
2.2 MWL Water Level, 50% of the vertical dimension 00:00:18 3  2.9 DSF Deposits Settled Fine, 25% of cross sectional area from 4 00:00:21 4 10 o'clock to 8 o'clock  2.9 OBZ Obstruction Other, 10% of cross sectional area at 6 o'clock 00:00:21 5 10 o'clock 10 8 o'clock 10 8 o'clock 10 8 o'clock 10 8 o'clock 10 9 o'clo		0.0	ACOM	Cleanout Ma	ainline / CO3			00:00:00	1	
2.9 DSF Deposits Settled Fine, 25% of cross sectional area from 4 00:00:21 4 Nociclock to 8 o'clock to 8 o'clock to 8 o'clock to 9 o'clock, 50% of the cross sectional area at 6 o'clock to 9 o'clock, 50% of the cross sectional area to 9 o'clock, 50% of the cross sectional area to 9 o'clock to 9 o'clock, 50% of the cross sectional area to 9 o'clock to 9 o'clock, 50% of the cross sectional area to 9 o'clock, 50% of the cross sectional area to 9 o'clock to 9 o'clock, 50% of the cross sectional area to 9 o'clock to 9 o'clock, 50% of the cross sectional area to 9 o'clock to 9 o'clock, 50% of the cross sectional area to 9 o'clock to 9 o'clock, 50% of the cross sectional area to 9 o'clock, 50% of the cros		0.0	MWL	Water Level	, 0% of the vertice	cal dimension		00:00:00	2	
7.5 RMB Roots Medium Barrell from 3 o'clock to 9 o'clock, 50% of 00:01:01 6 o'cross sectional area area from 12 o'clock to 13 o'clock To 13 o'clock To 13 o'clock To 13 o'clock To 14 o'clock To 15 o'		2.2	MWL	Water Level	, 50% of the vert	ical dimension		00:00:18	3	
7.5 RMB Roots Medium Barrell from 3 o'clock to 9 o'clock, 50% of 00:01:01 6 cross sectional area  7.5 OBZ Obstruction Other, 100% of cross sectional area from 12 00:01:01 7 o'clock to 12 o'clock / BLOCKAGE - ROOTS, LEAVES, SEDIMENT, MISC DEBRIS  8.8 MSA Miscellaneous Survey Abandoned / CANNOT PASS 00:01:13 8		2.9	DSF			of cross sectiona	l area from 4	00:00:21	4	M4
7.5 OBZ Obstruction Other, 100% of cross sectional area from 12 00:01:01 7 o'clock to 12 o'clock / BLOCKAGE - ROOTS, LEAVES, SEDIMENT, MISC DEBRIS  8.8 MSA Miscellaneous Survey Abandoned / CANNOT PASS 00:01:13 8		2.9	OBZ	Obstruction / GOLF BAL	Other, 10% of cr L	oss sectional are	ea at 6 o'clock	00:00:21	5	M2
	*	7.5	OBZ	Obstruction o'clock to 12 SEDIMENT, Miscellaneou	Other, 100% of a co'clock / BLOCK MISC DEBRIS us Survey Abana	cross sectional a KAGE - ROOTS,	rea from 12 LEAVES,	00:01:01	7	M4 M5
000 000 000 000 000	000	0112	005	082	Mas	052	000:	1	N 1	ODE
		QIVIK 5142	QUK							OPRI 3.8



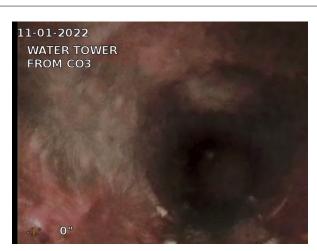
#### **Stew Eleftheriou**

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# Section Pictures - 11/3/2022 - CO3-DOWNSTREAM

 City
 Street
 Date
 Pipe Segment Reference
 Section No.

 PHILADELPHIA, PA
 209 E HARTWELL LN
 11/3/2022
 CO3-DOWNSTREAM
 9



1, 00:00:00, 0.00ft Cleanout Mainline / CO3



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:18, 2.16ft Water Level, 50% of the vertical dimension



4, 00:00:21, 2.92ft Deposits Settled Fine, 25% of cross sectional area from 4 o'clock to 8 o'clock



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# Section Pictures - 11/3/2022 - CO3-DOWNSTREAM

 City
 Street
 Date
 Pipe Segment Reference
 Section No.

 PHILADELPHIA, PA
 209 E HARTWELL LN
 11/3/2022
 CO3-DOWNSTREAM
 9



5, 00:00:21, 2.92ft Obstruction Other, 10% of cross sectional area at 6 o'clock / GOLF BALL



6, 00:01:01, 7.50ft Roots Medium Barrell from 3 o'clock to 9 o'clock, 50% of cross sectional area



7, 00:01:01, 7.50ft
Obstruction Other, 100% of cross sectional area from 12 o'clock to 12 o'clock / BLOCKAGE - ROOTS, LEAVES, SEDIMENT, MISC DEBRIS



8, 00:01:13, 8.75ft Miscellaneous Survey Abandoned / CANNOT PASS BLOCKAGE



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	Ins	pection	report
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Date: 11/3/2022	Work Order:	Weather:	Surveyed By: STEW ELEFTHERIOU	Certificate Number: U0318070300187	Pipe Segment Ref.: RD5-DOWNSTREAM
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		11.7 '	11.7 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD5
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

1:89	Distance	Code	Observation			Counter	Photo	Grade
RD5								
	0.0	AZ	Access Point Other / RD5			00:00:00	1	
	0.0	MWL	Water Level, 0% of the vert	ical dimension		00:00:00	2	
	11.7	ATC	Tee Connection / TIES INT	O MAIN C		00:00:26	3	
DOWNSTREA	M							
	QMR	QOR	SPR MPR	OPR	SPRI	MPR	01	OPRI
QSR	QIVIR	QUR	OFK   WIFK	UPK I	SEKI	IVIPR	d	OFK



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# Section Pictures - 11/3/2022 - RD5-DOWNSTREAM

City Street Date Pipe Segment Reference Section No.

PHILADELPHIA, PA 209 E HARTWELL LN 11/3/2022 RD5-DOWNSTREAM 10



1, 00:00:00, 0.00ft Access Point Other / RD5



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:26, 11.67ft Tee Connection / TIES INTO MAIN



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# Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD6-DOWNSTREAM
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		3.1 '	3.1 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD6
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

	1:50	Distance	Code	Observation	Counter	Photo	Grade
	RD6						
		0.0	AZ	Access Point Other / RD6	00:00:00	1	
		0.0	MWL	Water Level, 100% of the vertical dimension / TRAP AT BOTTOM OF RISER	00:00:00	2	
<b>*</b>							
		3.1	MGO	Miscellaneous General Observation / TRAP AT BOTTOM OF RISER	00:00:25	3	
		3.1	MSA	Miscellaneous Survey Abandoned / CANNOT PASS THROUGH TRAP	00:00:25	4	

QSR	QMR	QOR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0000	0.0	0.0	0.0	0.0	0.0	0.0



#### Stew Eleftheriou

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# Section Pictures - 11/3/2022 - RD6-DOWNSTREAM

City Street Date Pipe Segment Reference Section No.
PHILADELPHIA, PA 209 E HARTWELL LN 11/3/2022 RD6-DOWNSTREAM 11



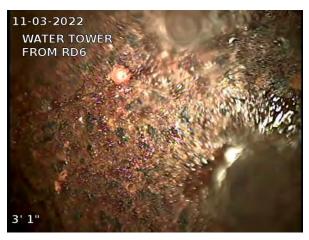
1, 00:00:00, 0.00ft Access Point Other / RD6



2, 00:00:00, 0.00ft Water Level, 100% of the vertical dimension / TRAP AT BOTTOM OF RISER



3, 00:00:25, 3.08ft Miscellaneous General Observation / TRAP AT BOTTOM OF RISER



4, 00:00:25, 3.08ft Miscellaneous Survey Abandoned / CANNOT PASS THROUGH TRAP



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Inspection report
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Date:	Date: Work Order:		Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD8-DOWNSTREAM
Year laid: Pre-cleaning:		Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		6.6 '	6.6 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD8
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

	:50 Distance	Code	Observation	ı			Counter	Photo	Grade
RE	08								
	0.0	AZ	Access Poin	t Other / RD8			00:00:00	1	
	0.0	MWL	Water Level,	0% of the vertice	cal dimension		00:00:00	2	
	2.8	DSZ	Deposits Se	itled Other, 50%	of cross section	nal area from 3	00:00:10	3, 4	M5
			o diddictio o c	Oldok / CEDIM	INT AND OTON	_			
<b>\</b>	3.6	MGO	Miscellaneou RIGHT	us General Obse	ervation / LINE A	ANGLES	00:00:20	5	
	5.2	TF	Tap Factory	Made at 10 o'cle	ock, dia/height: 4	4inch	00:00:33	6	
	6.6	ATC	Tee Connec	tion / TIES INTC	) MAIN		00:00:50	7	
DOWNS	TREAM	QOR	SPR	MPR	OPR	SPRI	MPR		OPRI



#### Stew Eleftheriou

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# Section Pictures - 11/3/2022 - RD8-DOWNSTREAM

City Street Date Pipe Segment Reference Section No.

PHILADELPHIA, PA 209 E HARTWELL LN 11/3/2022 RD8-DOWNSTREAM 12



1, 00:00:00, 0.00ft Access Point Other / RD8



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:10, 2.75ft
Deposits Settled Other, 50% of cross sectional area from 3 o'clock to 9 o'clock / SEDIMENT AND STONE



4, 00:00:10, 2.75ft Deposits Settled Other, 50% of cross sectional area from 3 o'clock to 9 o'clock / SEDIMENT AND STONE



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# Section Pictures - 11/3/2022 - RD8-DOWNSTREAM

City Street Date Pipe Segment Reference Section No.
PHILADELPHIA, PA 209 E HARTWELL LN 11/3/2022 RD8-DOWNSTREAM 12



5, 00:00:20, 3.58ft Miscellaneous General Observation / LINE ANGLES RIGHT



6, 00:00:33, 5.16ft Tap Factory Made at 10 o'clock, dia/height: 4inch



7, 00:00:50, 6.58ft Tee Connection / TIES INTO MAIN



Stew Eleftheriou

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# Inspection report

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
		weather.	1 , , ,		, ,
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD9-DOWNSTREAM
Year laid: Pre-cleaning:		Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		1.3 '	1.3'

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD9
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

	1:50	Distance	Code	Observation	Counter	Photo	Grade
	RD9						
		0.0	AZ	Access Point Other / RD9	00:00:00	1	
		0.0	MWL	Water Level, 0% of the vertical dimension / AT RISER	00:00:00	2	
•		1.3	OBR	Obstruction Rocks, 100% of cross sectional area from 12 o'clock to 12 o'clock / RISER FILLED WITH STONES	00:00:34	3	M5
		1.3	MSA	Miscellaneous Survey Abandoned / RISER FILLED WITH STONES, CANNOT ENTER LINE	00:00:35	4	

QSR	QMR	QOR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	5100	5100	0.0	5.0	5.0	0.0	5.0	5.0



#### **Stew Eleftheriou**

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# Section Pictures - 11/3/2022 - RD9-DOWNSTREAM

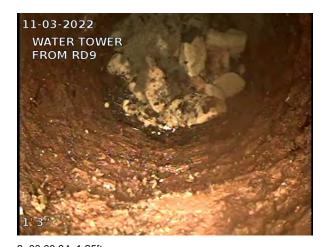
City Street Date Pipe Segment Reference Section No.
PHILADELPHIA, PA 209 E HARTWELL LN 11/3/2022 RD9-DOWNSTREAM 13



1, 00:00:00, 0.00ft Access Point Other / RD9



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension / AT RISER



3, 00:00:34, 1.25ft Obstruction Rocks, 100% of cross sectional area from 12 o'clock to 12 o'clock / RISER FILLED WITH STONES



4, 00:00:35, 1.25ft Miscellaneous Survey Abandoned / RISER FILLED WITH STONES, CANNOT ENTER LINE



Stew Eleftheriou stew@gprsinc.com Tel. 267-972-7243

Ins	pection	report
	P0011011	··

Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD10-DOWNSTREAM
Year laid: Pre-cleaning:		Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		4.0 '	4.0 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD10
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

1:50	Distance	Code	Observation	Counter	Photo	Grade
RD10						
	0.0	AZ	Access Point Other / RD10	00:00:00	1	
	0.0	MWL	Water Level, 0% of the vertical dimension	00:00:00	2	
<b>   </b>						
	0.4	MOO	Minutes and Observation (MME) FET	00.00.00	0	
	3.1	MGO	Miscellaneous General Observation / WYE LEFT	00:00:08	3	
	4.0	ATC	Tee Connection / TIES INTO MAIN	00:00:16	4	
DOWNSTREA	M					

QSR	QMR	QOR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	0000	0000	0.0	0.0	0.0	0.0	0.0	0.0



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# Section Pictures - 11/3/2022 - RD10-DOWNSTREAM

City Street Date Pipe Segment Reference Section No.
PHILADELPHIA, PA 209 E HARTWELL LN 11/3/2022 RD10-DOWNSTREAM 14



1, 00:00:00, 0.00ft Access Point Other / RD10



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension



3, 00:00:08, 3.08ft Miscellaneous General Observation / WYE LEFT



4, 00:00:16, 4.00ft Tee Connection / TIES INTO MAIN



Stew Eleftheriou stew@gprsinc.com Tel. 267-972-7243

Inspection report
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Date:	Work Order:	Weather:	Surveyed By:	Certificate Number:	Pipe Segment Ref.:
11/3/2022			STEW ELEFTHERIOU	U0318070300187	RD12-DOWNSTREAM
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	No Pre-Cleaning	Downstream		12.4 '	12.4 '

City:	PHILADELPHIA, PA	Drainage Area:		Upstream MH:	RD12
Street:	209 E HARTWELL LN	Media Label:		Up Rim to Invert:	0.0
Location Code:		Flow Control:		Downstream MH:	DOWNSTREAM
Location Details:		Sheet Number:		Down Rim to Invert:	0.0
Pipe shape:	Circular	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	4 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Cast Iron	Purpose:		Joints failed:	0
Lining Method:		Owner:			

1:94	Distance	Code	Observation	1			Counter	Photo	Grade
RD12									
	0.0	AZ	Access Poin	t Other / RD12			00:00:00	1	
	0.0	MWL	Water Level,	0% of the vertice	al dimension / A	FTER TRAP	00:00:00	2	
	0.0	MGO		us General Obse RUN BEGINS AI TRAP			00:00:00	3	
	1.5	MGO		us General Obse	rvation / LINE A	NGLES LEFT	00:00:09	4	
	5.1	MGO	Miscellaneou DOWNWAR	us General Obse D	rvation / LINE A	NGLES	00:00:21	5	
	10.8	ммс	Miscellaneou CHANGE TO	us Material Char	ge, Vitrified clay	pipe /	00:00:34	6	
	10.8	FC	Fracture Circumferential from 4 o'clock to 8 o'clock			00:00:34	7	<b>S</b> 2	
	12.4	ATC	Tee Connec	00:00:47	8				
DOWNSTRE	AM								
QSR 2100	QMR 0000	QOR 2100	SPR 2.0	MPR 0.0	OPR 2.0	SPRI 2.0	MPF 0.0		OPRI 2.0



#### Stew Eleftheriou

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# Section Pictures - 11/3/2022 - RD12-DOWNSTREAM

City Street Date Pipe Segment Reference Section No.

PHILADELPHIA, PA 209 E HARTWELL LN 11/3/2022 RD12-DOWNSTREAM 15



1, 00:00:00, 0.00ft Access Point Other / RD12



2, 00:00:00, 0.00ft Water Level, 0% of the vertical dimension / AFTER TRAP



3, 00:00:00, 0.00ft Miscellaneous General Observation / TRAP AT BOTTOM OF RISER, RUN BEGINS AFTER CAMERA HAS PASSED THROUGH TRAP



4, 00:00:09, 1.50ft Miscellaneous General Observation / LINE ANGLES LEFT



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# Section Pictures - 11/3/2022 - RD12-DOWNSTREAM

City Street Date Pipe Segment Reference Section No.

PHILADELPHIA, PA 209 E HARTWELL LN 11/3/2022 RD12-DOWNSTREAM 15



5, 00:00:21, 5.08ft Miscellaneous General Observation / LINE ANGLES DOWNWARD



6, 00:00:34, 10.75ft Miscellaneous Material Change, Vitrified clay pipe / CHANGE TO VCP



7, 00:00:34, 10.75ft Fracture Circumferential from 4 o'clock to 8 o'clock



8, 00:00:47, 12.42ft Tee Connection / TIES INTO MAIN