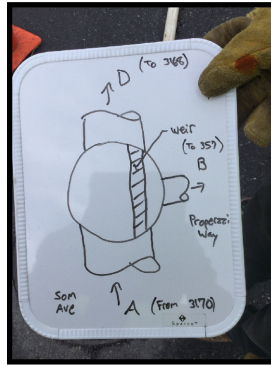
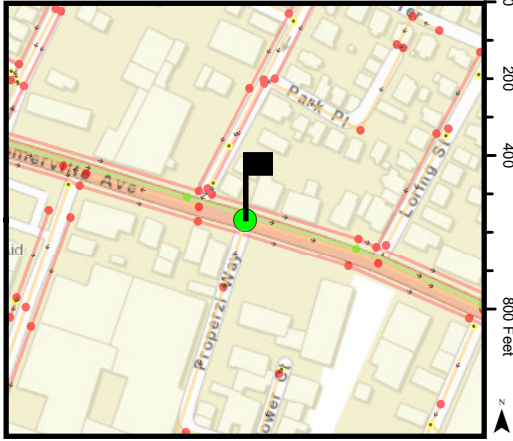


Manhole Inspection Report

MH#

C2-1337



Manhole Type:
Common Manhole

Latitude / Y: 42.382928

Longitude / X: -71.105093

General Comments:

Location of MH - Roadway
Comment -

Manhole Material - Brick
Comment -

Flow - Stagnant
Comment -

Clarity of Flow - Normal Sewer Appearance

Recommendations- Clean/Remove Debris from invert

Catchment Area:

Inspector: Greg Frazier

Date: 11/21/2018 8:19:03 AM

Temp: 30s

Weather: Cloudy/Overcast

Street: Somerville Ave

Cover Size: 24" **Other:**

Manhole Size: **Other:**

Drop: N

Depth to Wet Ring from Rim or Invert:

Weir- (Y/N): Y

Rim to top of weir: 8.05'

MH Channel- (Y/N): Y

MH Channel Condition: Fair

Area Around MH Condition:

Paved- Cracked

MH Condition:

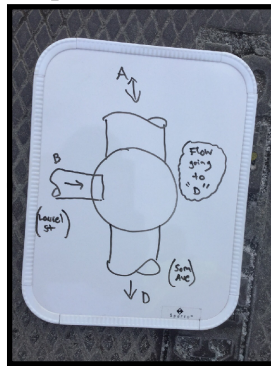
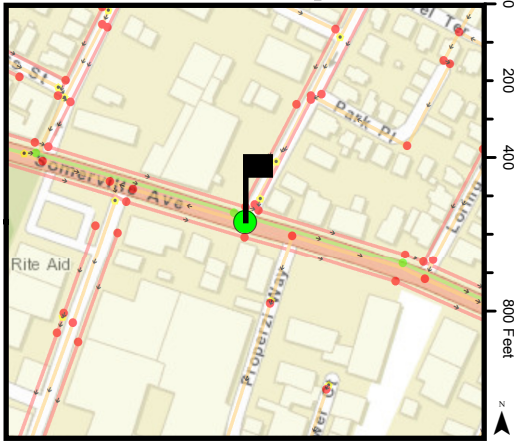
Fair

	Pipe Size	Material	From / To MH#	Invert Depth (from rim)	Flow Depth (from invert)	Debris Depth (from invert)	Condition
A.	30"	Other	C2-3170	9.31'	2"	2"	Good
B.	15"	VCP	FIT-357	9.75'	0"	0"	Fair
C.							
D.	30"	Unknown	C2-3168	9.31'	2"	4"	N/A
E.							
F.							
G.							
H.							

Manhole Inspection Report

MH#

C2-3170



Manhole Type:
Combine Manhole

Latitude / Y: 42.383
Longitude / X: -71.105426

General Comments:

Location of MH - Roadway
Comment -

Manhole Material - Brick
Comment -

Flow - Stagnant
Comment -

Clarity of Flow - Normal Sewer Appearance

Recommendations- Clean/Remove Depris from invert

Catchment Area:

Inspector: Greg Frazier

Date: 11/21/2018 8:34:10 AM

Temp: 30s

Weather: Cloudy/Overcast

Street: Somerville Ave

Cover Size: 24" **Other:**

Manhole Size: Other **Other:** 3'x4'

Drop: N

Depth to Wet Ring from Rim or Invert:

Weir- (Y/N): N

Rim to top of weir:

MH Channel- (Y/N): N

MH Channel Condition:

Area Around MH Condition:

Paved- Cracked

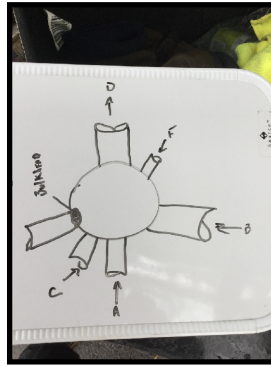
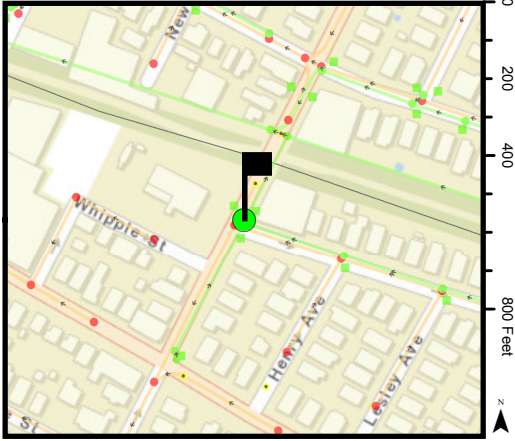
MH Condition:

Good

	Pipe Size	Material	From / To MH#	Invert Depth (from rim)	Flow Depth (from invert)	Debris Depth (from invert)	Condition
A.	36"	PVC	C2-1337	9.36'	6"	1"	Good
B.	15"	PVC	C2-3171	8.02'	1"	0"	Good
C.							
D.	36"	CIPP	C2-3174	9.14'	6"	2"	Fair
E.							
F.							
G.							
H.							

Manhole Inspection Report

MH# C2-6439



Manhole Type:
Storm Manhole

Latitude / Y: 42.394881

Longitude / X: -71.116237

General Comments: Bulkhead on connection to CS; recommend rebuild channel to direct flow to outlet

Location of MH - Roadway
Comment -

Manhole Material - Precast Concrete
Comment -

Flow - Steady
Comment -

Clarity of Flow - Clear

Recommendations- No Action

Catchment Area:

Inspector: Zack Halstead

Date: 11/20/2018 9:58:12 AM

Temp: 30s

Weather: Raining

Street: Willow Ave

Cover Size: 24" **Other:**

Manhole Size: 4' **Other:**

Drop: N

Depth to Wet Ring from Rim or Invert:

NA

Weir- (Y/N): N

Rim to top of weir: NA

MH Channel- (Y/N): Y

MH Channel Condition: Fair

Area Around MH Condition:

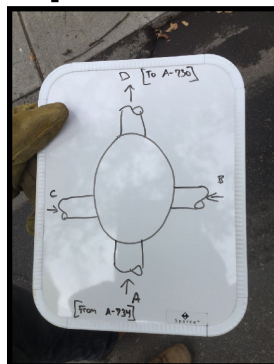
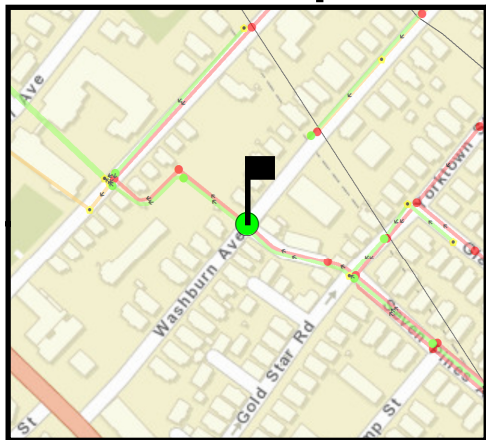
Paved- Satisfactory

MH Condition:

Good

	Pipe Size	Material	From / To MH#	Invert Depth (from rim)	Flow Depth (from invert)	Debris Depth (from invert)	Condition
A.	8"	VCP	CB?	6.71'	1"	0"	Good
B.	20"?	RCP	C2-5419	7.42'	2"	0"	Good
C.	12"	RCP	Unk	4.64'	0"	0"	Good
D.	21"	RCP	1-5431	7.47'	2"	0"	Good
E.	20"	VCP	Bulkheaded	7.37'	0"	0"	N/A
F.	8"	PVC	CB?	5.68'	1"	0"	Good
G.							
H.							

Manhole Inspection Report



Manhole Type:
Sanitary Manhole

Latitude / Y: 42.399896

Longitude / X: -71.130763

General Comments:

Location of MH - Roadway
Comment -

Manhole Material - Brick
Comment -

Flow - Steady
Comment -

Clarity of Flow - Normal Sewer Appearance

Recommendations- Clean/Remove Debris from invert

MH# A-731

Catchment Area:

Inspector: Greg Frazier

Date: 11/21/2018 12:12:12 PM

Temp: 30s

Weather: Cloudy/Overcast

Street: Washburn Ave

Cover Size: 24" **Other:**

Manhole Size: 4' **Other:**

Drop: N

Depth to Wet Ring from Rim or Invert:

Weir- (Y/N): N

Rim to top of weir:

MH Channel- (Y/N): Y

MH Channel Condition:

Area Around MH Condition:

Paved- Satisfactory

MH Condition:

Fair

	Pipe Size	Material	From / To MH#	Invert Depth (from rim)	Flow Depth (from invert)	Debris Depth (from invert)	Condition
A.	12"	VCP	A-734	7.99'	10"	1"	Fair
B.	8"	VCP		7.86'	8"	2"	Good
C.	10"	VCP		7.82'	10"	1"	Good
D.	10"?	VCP	A-730	8.02'		1"	Fair
E.							
F.							
G.							
H.							

APPENDIX H

Confined Space Entry Notes



Somerville MVP - Fieldwork Planning

Somerville, MA

Legend

CSEs to be conducted

Last Updated: 12/19/2018

Street	Address / Intersection	Priority (High, Med, Low)	MH ID	MH Type (DMH, SMH, CMH, COM)	Surface Inspection Needed (Y/N)	Confined Space Entry Needed (Y/N/Maybe/ UNK)	Would camera on pole eliminate CSE? (Y/N/NA)	Surface Inspection Date Completed	Pre-inspection Comments
1 Broadway St	Broadway St / Cross St	High	S2-2767	CMH	Y	Y	Maybe	11/20/2018	Look for cross connect to S2-2767
5 Clarendon Ave	#32 Clarendon Ave	High	S2-2141	CMH	Y	Y	Maybe	11/20/2018	Confirm connectivity; determine source of pipe thru MH; look for cross connect to S2-2767
3 College Ave	College Ave / Holland St	Med	S78CMH9500	CMH	Y	Y	N	11/21/2018	Need CSE to understand connectivity into Tannery Brook
4 Holland St	Holland St / Paulina St / Gorham St	High	CA-5916	DMH	N	Y	Maybe	11/21/2018	GIS outlet not shown; appears CSE needed
2 Medford St	Medford St / School St	High	CA-2397	CMH	Y	Y	Y	11/14/2018	Potential cross connection to CMH A-5353; need CSE to confirm if bulkheads exist
		High	A-5353	CMH	Y	Maybe	Maybe	11/14/2018	Potential high level cross connection to CMH CA-2397
		High	30-5112A	COM?	N	Y	N	10/15/2018	CSE needed to observe potential overflow to CS; MH ID created during flow meter work

Meet Police detail @ 8AM @ #10 Cross St E

↳ Broadway / Cross St

Street Occupancy: Manhole Confined Space Entries

Driveway _____ Street X Sidewalk _____ Emergency _____

FEE per week \$ 0.00
No. of Weeks 1
Trench Permit \$ 0.00
TOTAL \$ credited



DIG SAFE # _____

PERMIT No. 2018166

1. Job location:

Streets: Broadway at Cross St / College Ave at Holland St / Holland St at Gorham St / Medford St at School St

2. Person, Utility or Company Permit is issued to:

Name Stantec Phone: (617) -314-7143 (Zack Halstead)

Address 226 Causeway St, 6th Floor Boston, MA 02114

3. This permit is good from 12/20/2018 to 12/20/2018

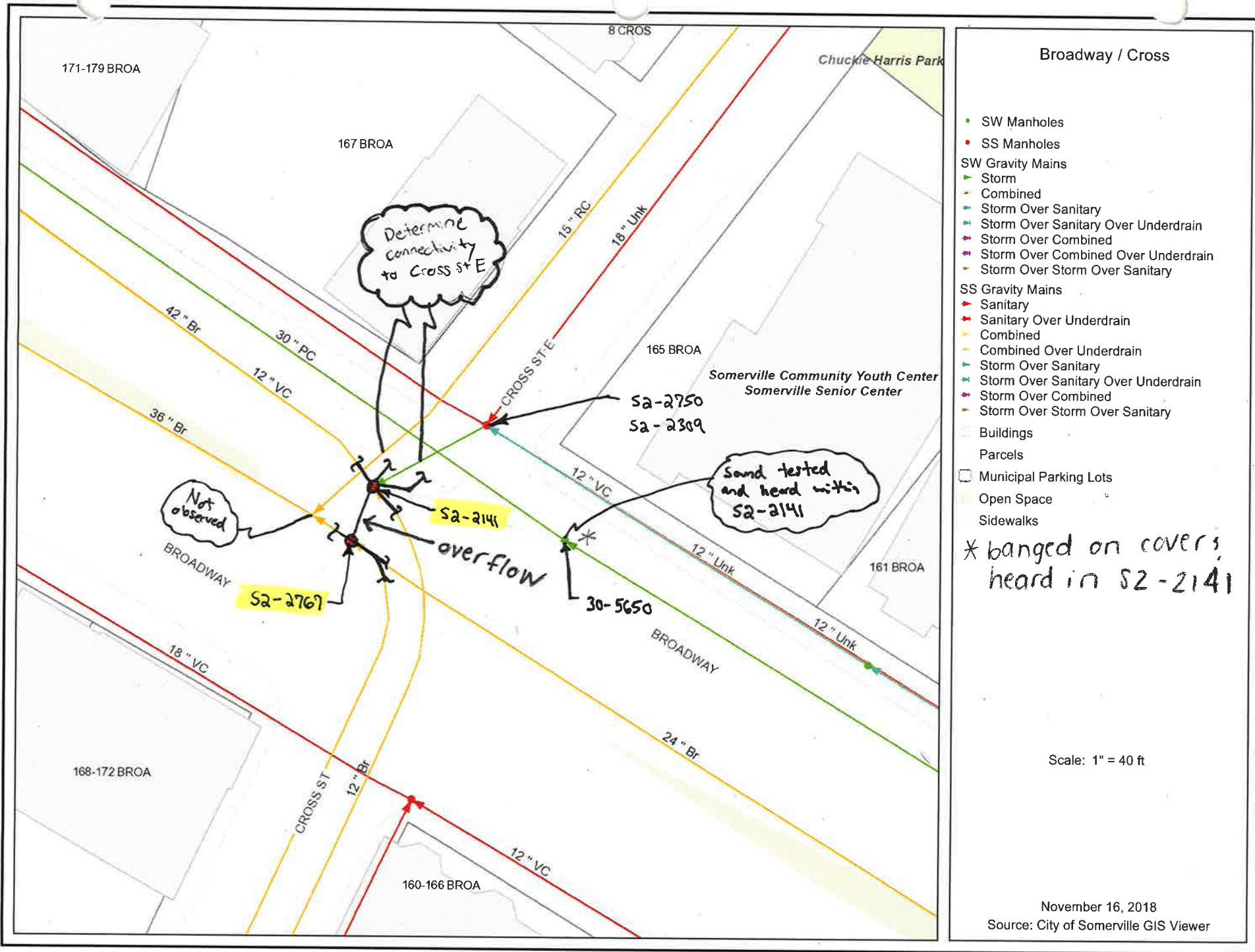
Permit is hereby granted if signed below, subject to revocation at any time for failure to comply with requirements of Law, City Ordinances, Superintendent of Highway regulations and Permit application regulations. All in accordance with the information given in the Permit Application.

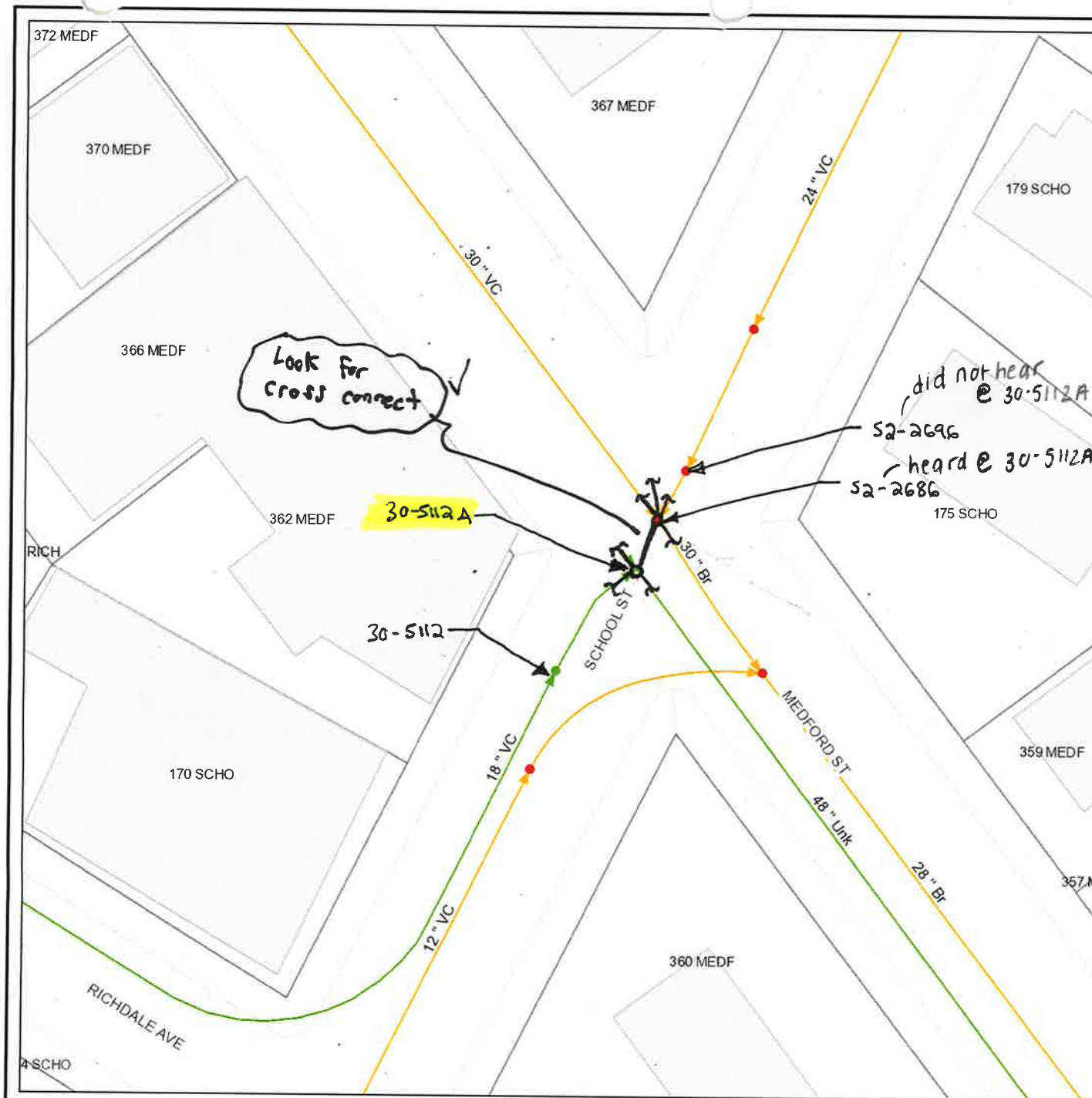
It is further understood that it shall be the responsibility of the permittee to comply with all City Ordinances in the restoration/payment of such City land excavated or otherwise altered.



Engineering Department

Approved Work Hours 7:00 AM to 4:00 PM
In case of a snow/ice event, no work is permitted.





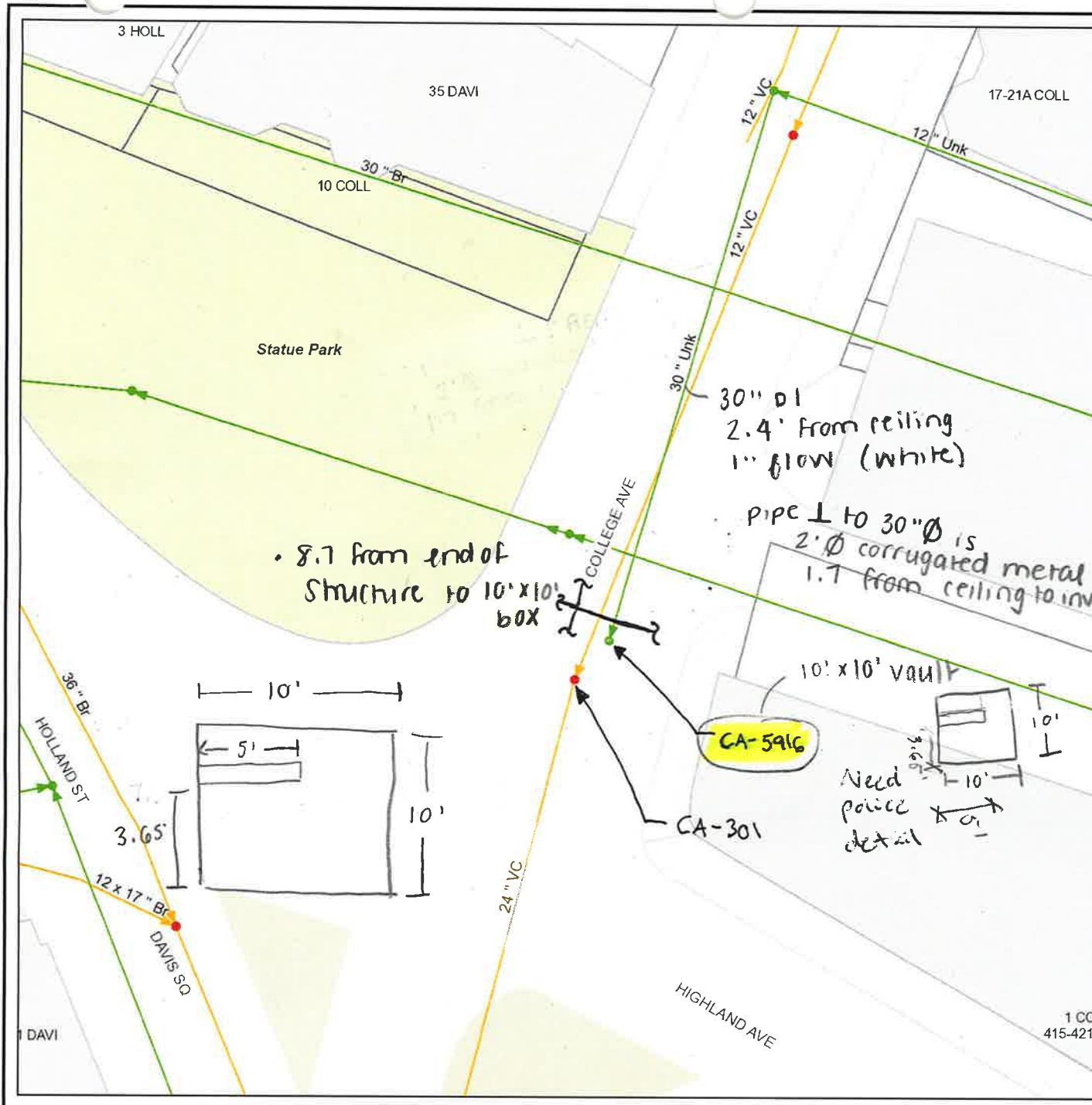
Medford St / School St

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

November 16, 2018
Source: City of Somerville GIS Viewer

22



College Ave / Davis Sq

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary

SS Gravity Mains

- Sanitary
- Sanitary Over Underdrain
- Combined
- Combined Over Underdrain
- Storm Over Sanitary
- Storm Over Sanitary Over Underdrain
- Storm Over Combined
- Storm Over Storm Over Sanitary

Buildings

Parcels

Municipal Parking Lots

Open Space

Sidewalks

• 7.37' = rim to struct. ceiling

• 5' W x 7' H inlet & outlet

• 0.9' from top of structure to top of box culvert

• 4.15' from struc. ceiling to bottom of concrete duct going through

Scale: 1" = 40 ft

• 6-8" of debris

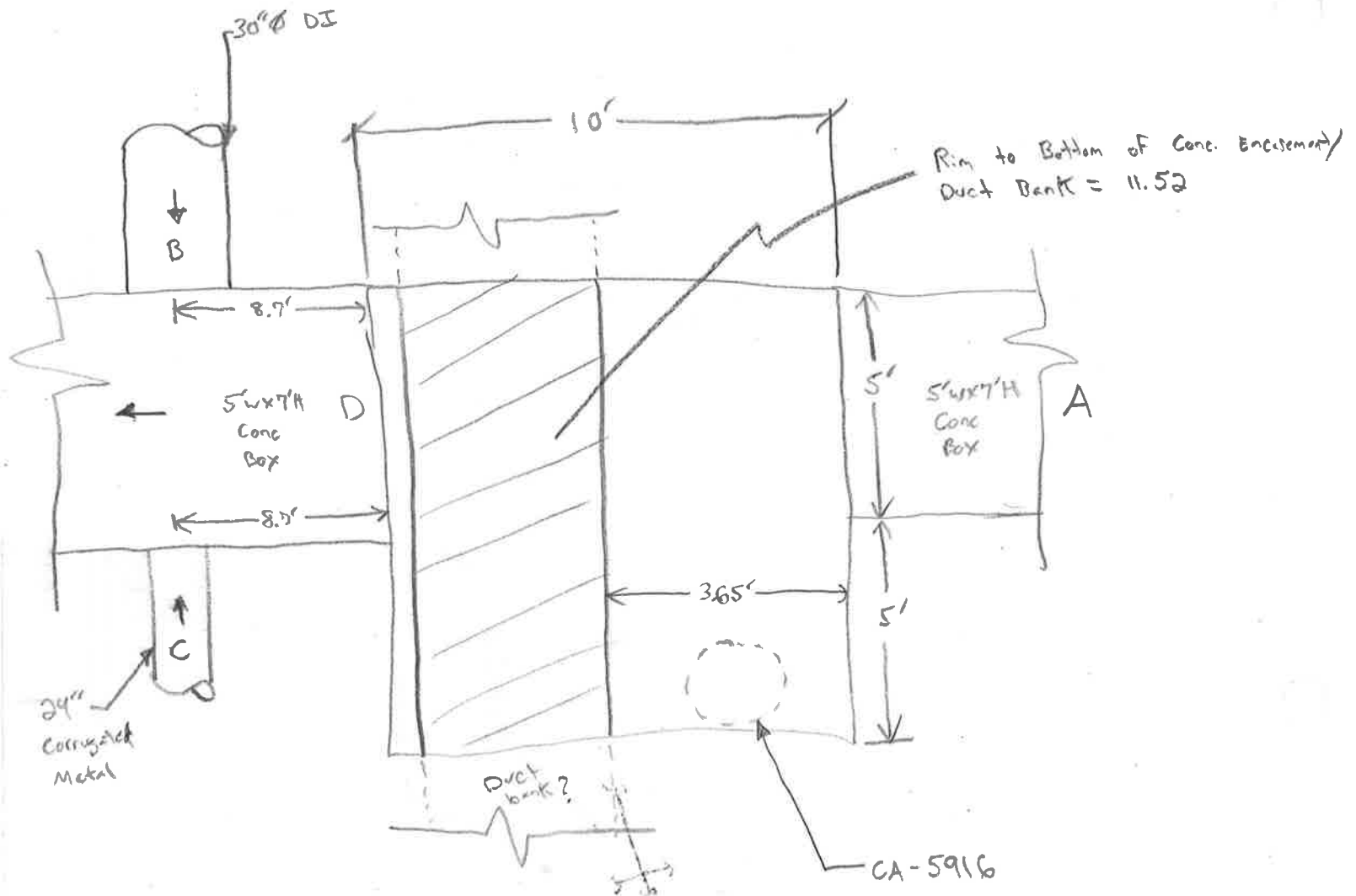
10' x 3.65' to Statue Park
college Ave

November 16, 2018

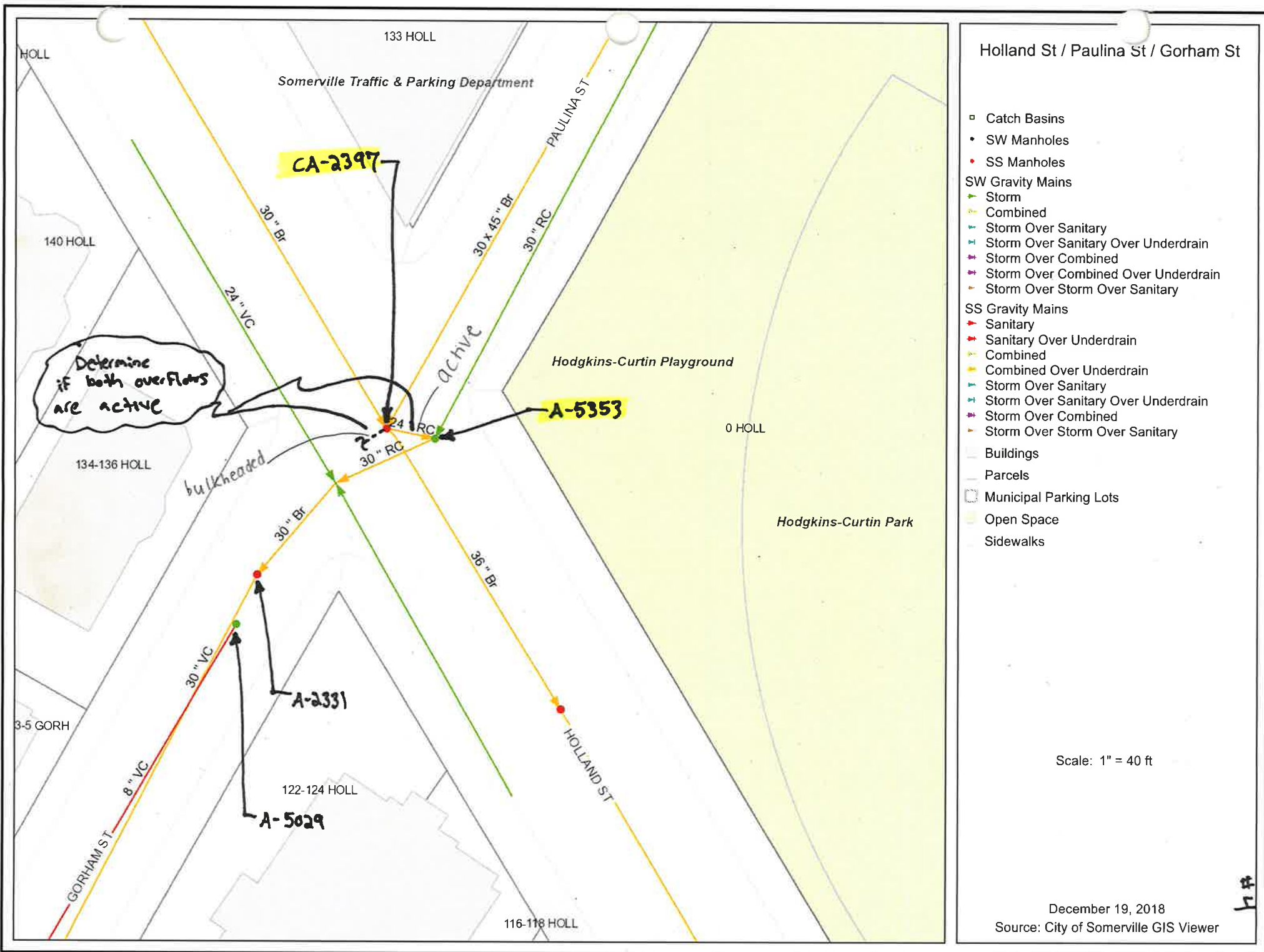
Source: City of Somerville GIS Viewer

• from ceiling, 3.4' to inv of inlet of 30" pipe

87



	Size	Material	Invert Depth From RIM
A	5'W x 7'H	CONC	15.27'
B	30"Ø	DI	9.77'
C	24"Ø	Corrugated Metal	9.07'
D	5'W x 7'H	CONC	15.27'



Clarendon Ave (Tannery Brook)

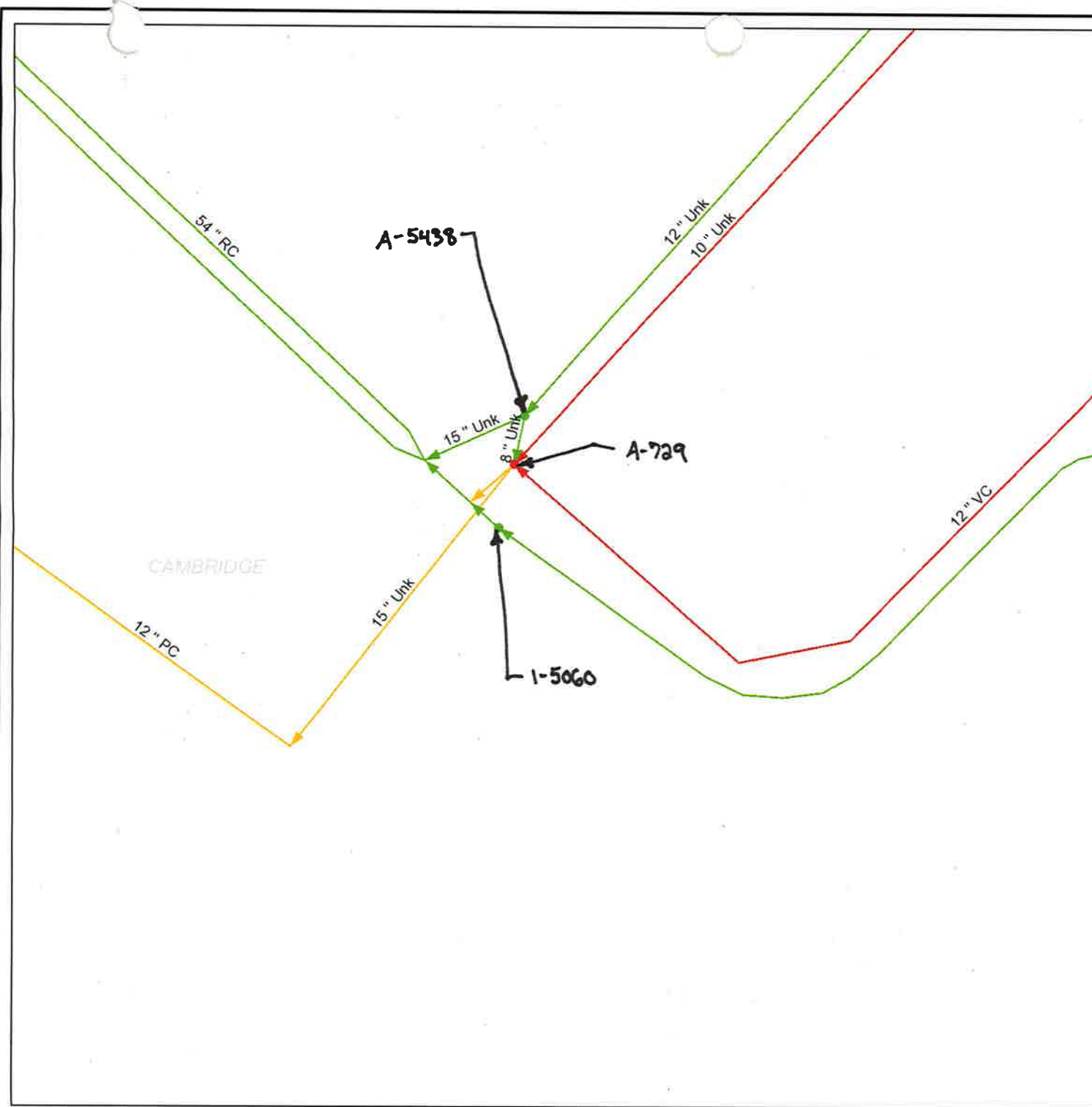
- ▣ Catch Basins
- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- ▬ Buildings
- ▬ Parcels
- Municipal Parking Lots
- Open Space
- ▬ Sidewalks

Scale: 1" = 40 ft

December 19, 2018

Source: City of Somerville GIS Viewer

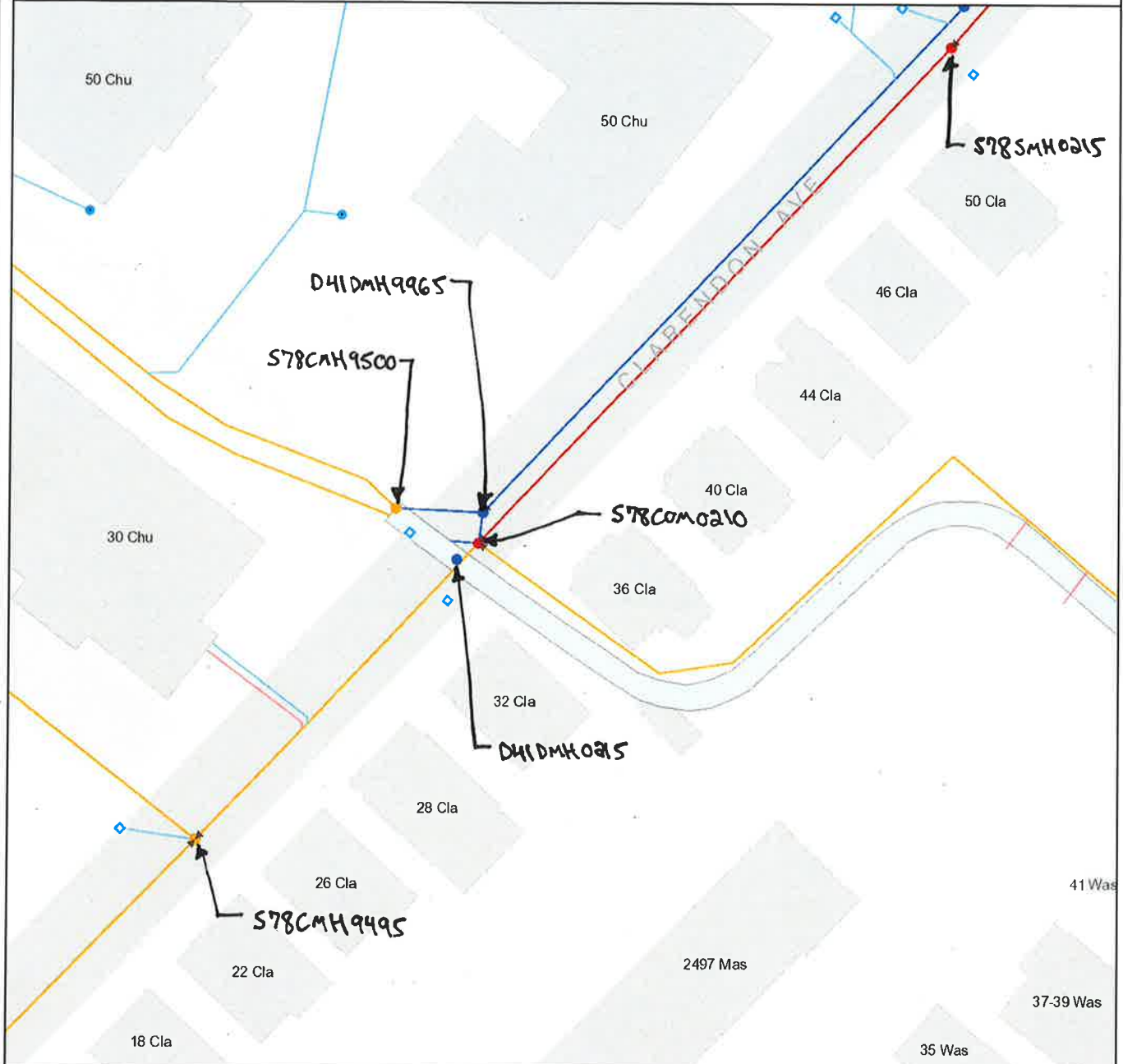
(Somerville GIS) #5



City of Cambridge

Tannery Brook @ Clarendon Ave

November 2, 2018



City of Cambridge
Massachusetts

1" = 40 ft

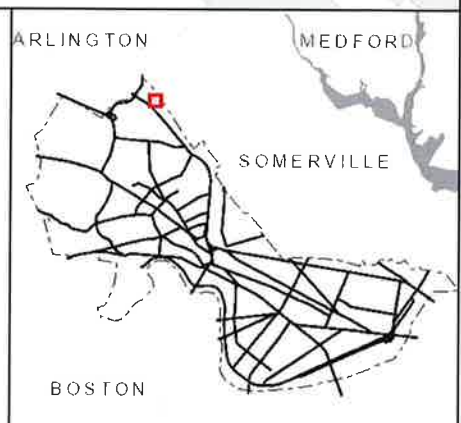
All data is provided for graphic representation only. The City of Cambridge expressly disclaims all warranties of any type, expressed or implied, including, but not limited to, any warranty as to the accuracy of the data, merchantability, or fitness for a particular purpose.

www.cambridgema.gov/gis



- Outfalls**
 - Stormwater
 - Combined Sewer Overflow
 - Abandoned
- Pumping Structures**
 - Pump Station
 - Lift Station
- Manholes**
 - Stormwater
 - Sewage
 - Combined Sewage
 - Abandoned
- LampHoles**
 - LampHole, Sewage
 - LampHole, Storm Runoff
- Catchbasins**
 - Standard Sump
 - Drop Inlet
 - Area Drain
 - Drywell
 - Oil/Water Separator
 - Abandoned
- Trench Drains**

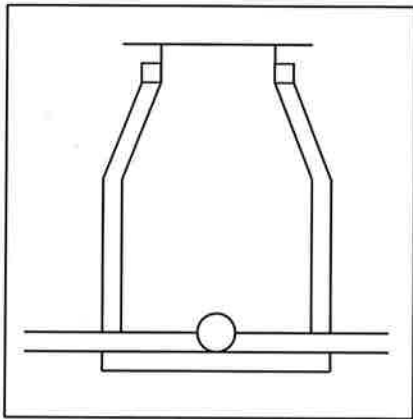
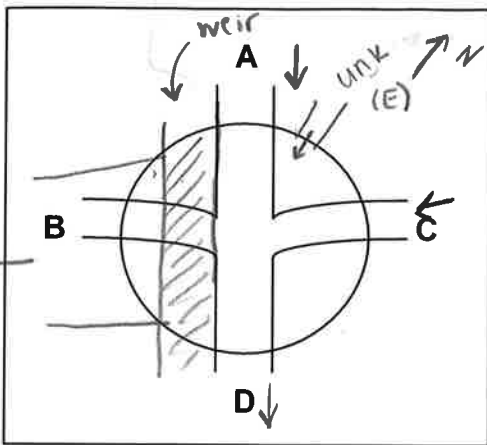
- Service Laterals**
 - Combined Wastewater, In
 - Stormwater
 - Sewage
 - Abandoned
- Force Mains**
 - Combined Wastewater
 - Sewage
 - Storm Runoff
- MWRA Mains**
 - Abandoned
 - In Service
- Underground Structures**
 - Stormwater
 - Sewage
 - Combined Sewage
- Zoom Three Paved Surfaces**
 - Paved Roads
 - Other Paved Surface
 - Bridges
 - Public Footpath



At #2

Manhole Inspection Report

~~PREVIOUS~~ ~~DATE~~ ~~NO~~ ~~2018~~ ~~3-12-18~~ 52-26 86
MH# 30-5112A



MANHOLE TYPE

Sanitary Manhole; Combine Manhole; Storm Manhole; Common Manhole

Area Around Manhole

Paved: Satisfactory Cracked
Missing Pavement Vegetation Growth
Unpaved: Satisfactory
Eroded

Pipe size	Material	From / To MH#	Invert Depth (from Rim)	Flow Depth (from Invert)	Debris Depth (from Invert)	Condition
A. <u>2.3'</u>	<u>brick</u>		<u>7.15</u>	<u>1ft</u>	<u>1"</u>	
B.			<u>5.43 to top of weir*</u>	<u>—</u>	<u>—</u>	
C. <u>2.8' x 24" W</u>	<u>brick</u>		<u>6.81</u>	<u>7-8"</u>	<u>2"</u>	
D. <u>unk</u>	<u>CIPP</u>		<u>7.15 to top of debris</u>	<u>1ft</u>	<u>4"</u>	
E. <u>8"</u>	<u>VC</u>	<u>unk?</u>	<u>2.53'</u>	<u>—</u>	<u>4"</u>	

Location of MH - ROADWAY, SIDEWALK, ROADSIDE, ALLEY, EASEMENT, Other _____

Manhole Material - Brick, Clay Block, Poured Concrete, Manhole Block, Precast Concrete, Other _____

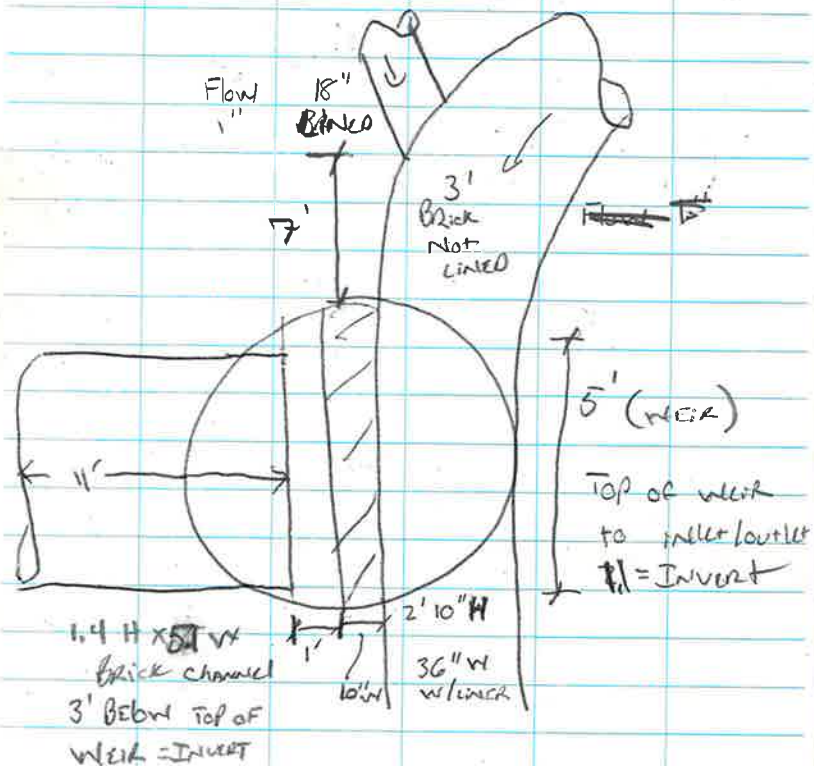
Flow - Steady, Pulsing, Turbulent, Surcharging, Stagnant, Sluggish, No Flow, Other _____

Clarity of Flow - Normal Sewer Appearance, Cloudy, Clear, No Flow.

Recommendations - No Action, Rebuild, Line Manhole Wall, Reset Frame, Clean / Remove debris from Invert

[illegible]

Cross St / Broadway



WEIR 10' W x 5' L

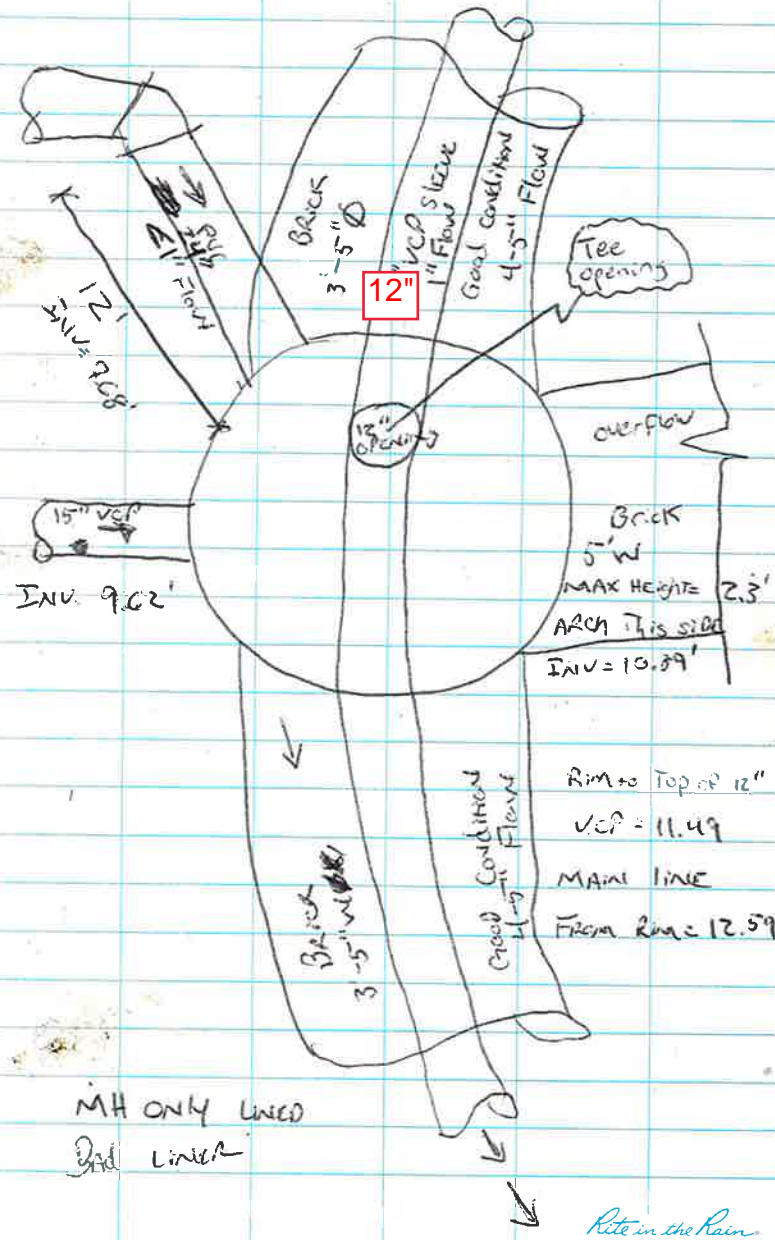
~~XXXXXXXXXXXXXXXXXXXX~~

MH	Lined	3'	Circular	Brick
Flow	3"			
Weld	SAME	Height	AS	18"

Rite in the Rain

52-2141

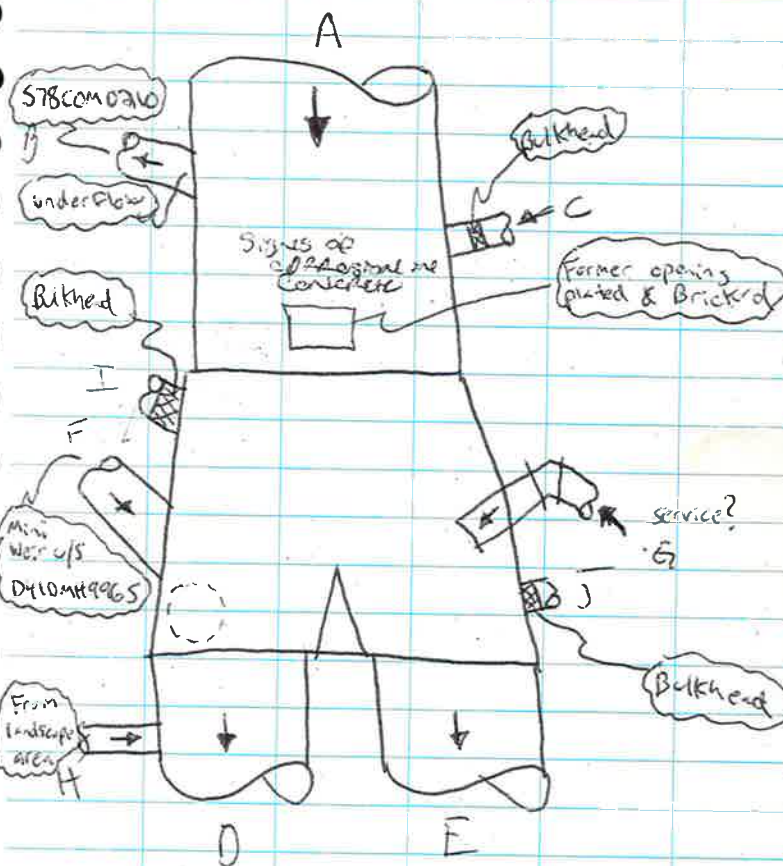
Cross/Broadway



	H1	H2		
A	7.3' w	4.1'	4.4'	Concrete Bottom
B	10" Ø VCP	2" Flow	1" Ø Chrs	Grick Top
C	8" Ø VCP	bulkhead		
D	RCP	4.5' (54")	1" Flow	
E	54" Ø RCP	1" Flow		
F	15" Ø VCP	No Flow		
G	8" Ø PVC	No Flow		
H	6" Ø VCP	No Flow		
I	8" Ø VCP	Bulkhead		
J	8" Ø VCP	Bulkhead		

	<u>Inverts</u>	
A	(rim to crown = 2.2) + 4.1 = 6.3	
B	6.8	
C	N/A	
D	6.29	
E	6.29	
F	5.3	
G	4.25	
H	3.1	
I	N/A	
J	N/A	

S78CMH9500 - Clarendon Ave



← MEASUREMENTS

Prof

APPENDIX I

City GIS Markups



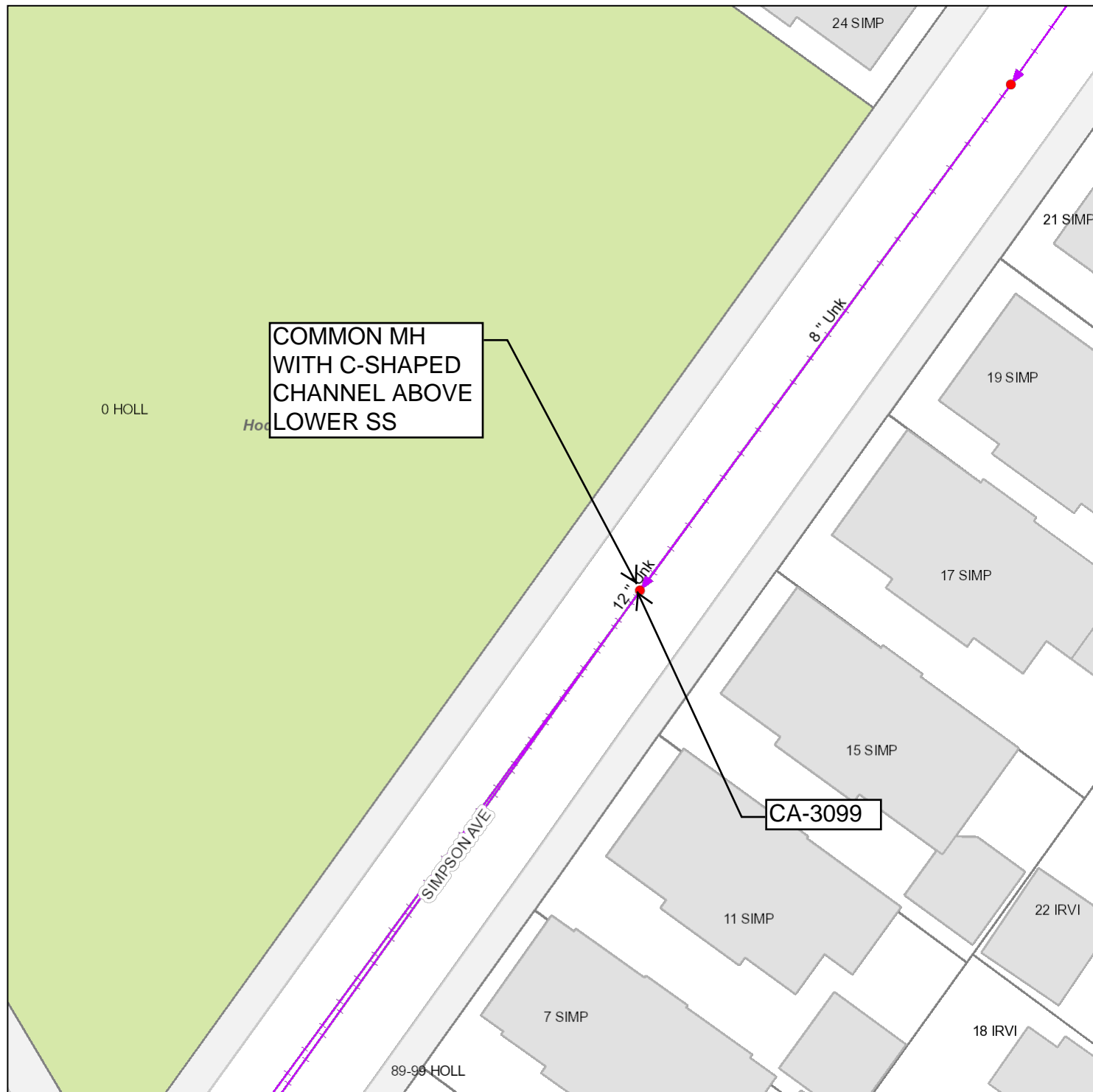
Simpson Ave (#15)

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

March 1, 2019

Source: City of Somerville GIS Viewer





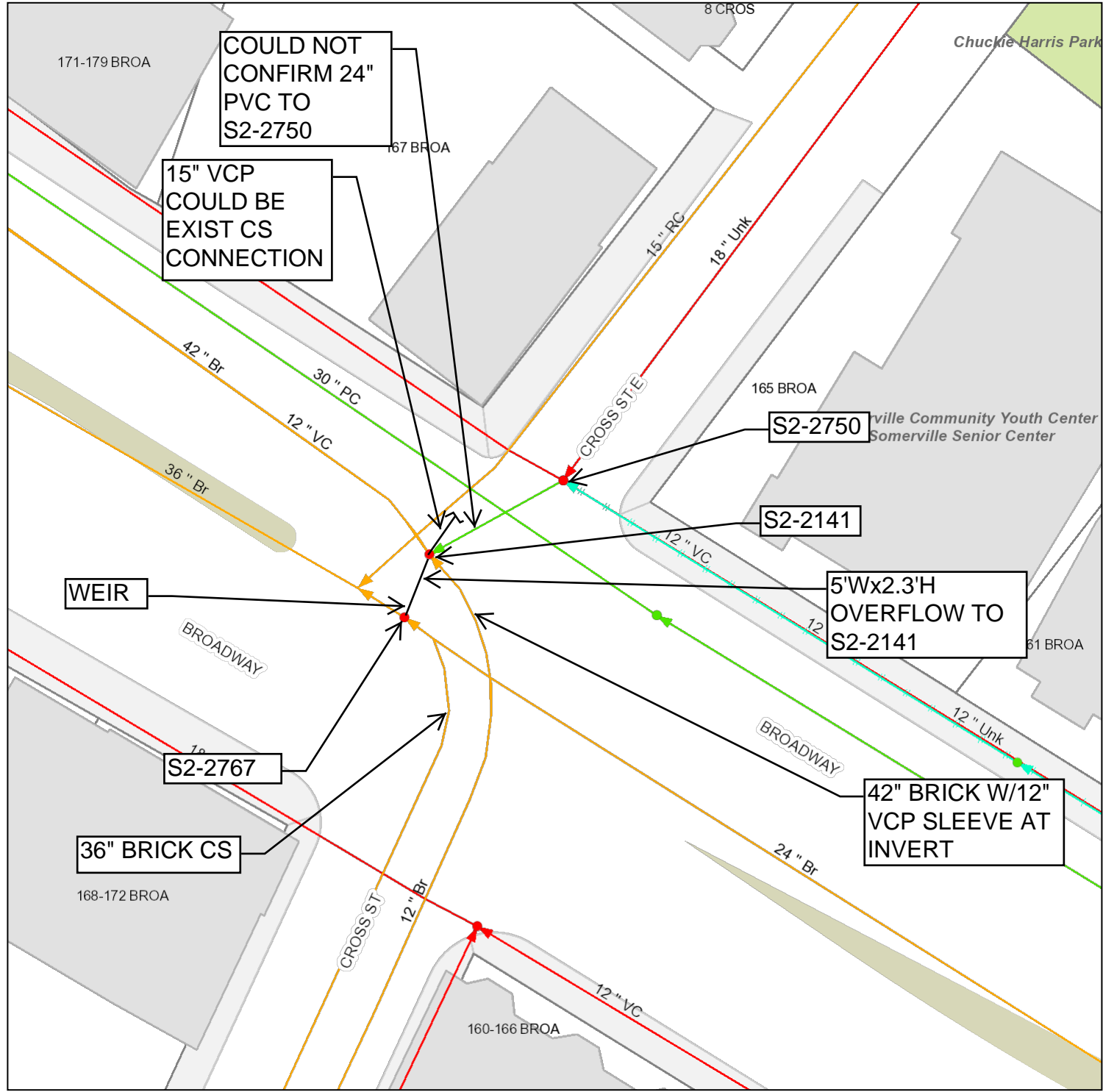
Simpson Ave (#47)

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - ▶ Storm
 - ▶ Combined
 - ▶ Storm Over Sanitary
 - ▶ Storm Over Sanitary Over Underdrain
 - ▶ Storm Over Combined
 - ▶ Storm Over Combined Over Underdrain
 - ▶ Storm Over Storm Over Sanitary
- SS Gravity Mains
 - ▶ Sanitary
 - ▶ Sanitary Over Underdrain
 - ▶ Combined
 - ▶ Combined Over Underdrain
 - ▶ Storm Over Sanitary
 - ▶ Storm Over Sanitary Over Underdrain
 - ▶ Storm Over Combined
 - ▶ Storm Over Storm Over Sanitary
- ▒ Buildings
- ▒ Parcels
- ▒ Municipal Parking Lots
- ▒ Open Space
- ▒ Sidewalks

Scale: 1" = 40 ft

March 1, 2019

Source: City of Somerville GIS Viewer

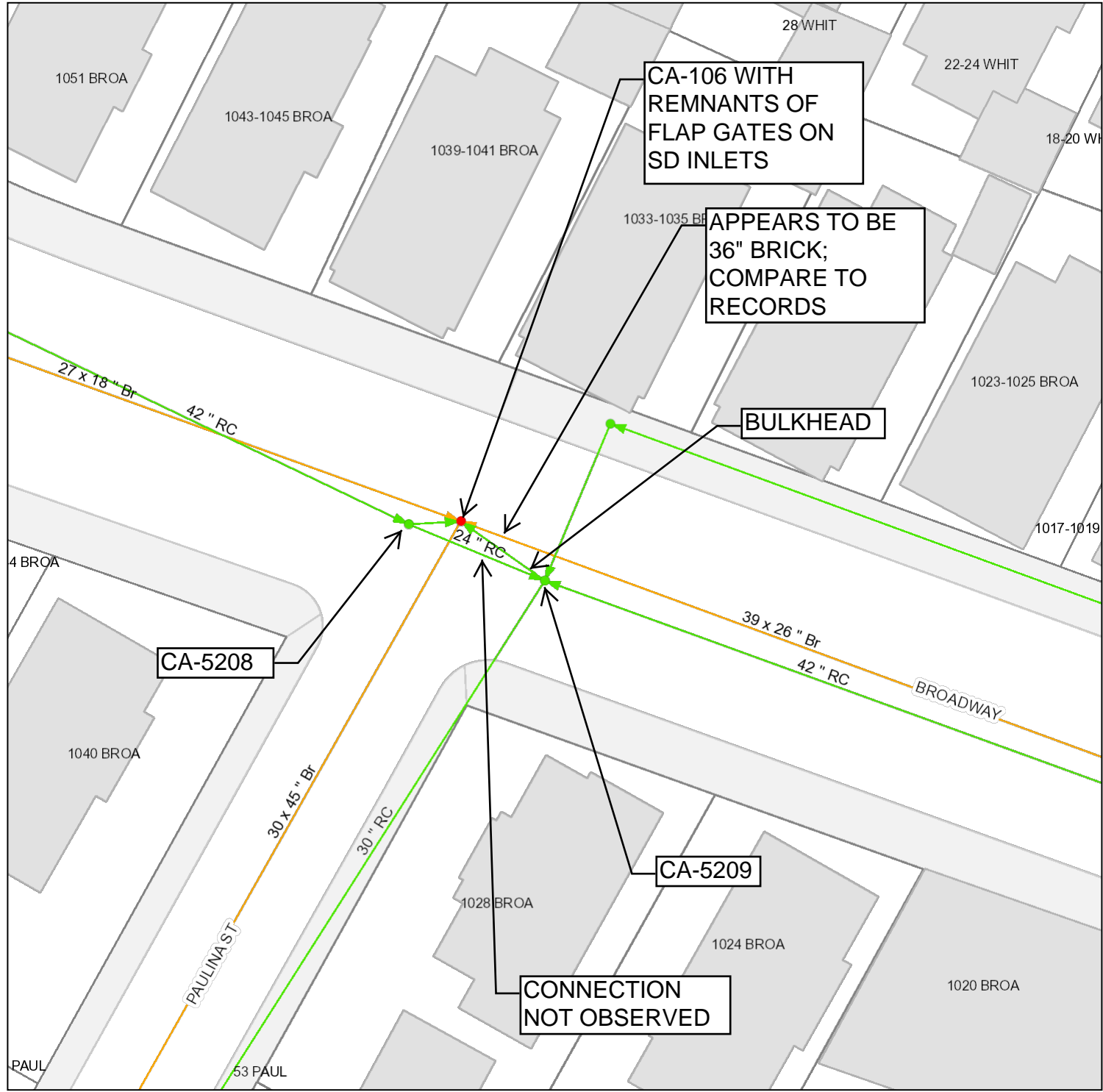


Broadway / Cross

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

November 16, 2018
Source: City of Somerville GIS Viewer



Broadway / Paulina

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

February 15, 2019
Source: City of Somerville GIS Viewer

Cameron Ave / Mead St

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

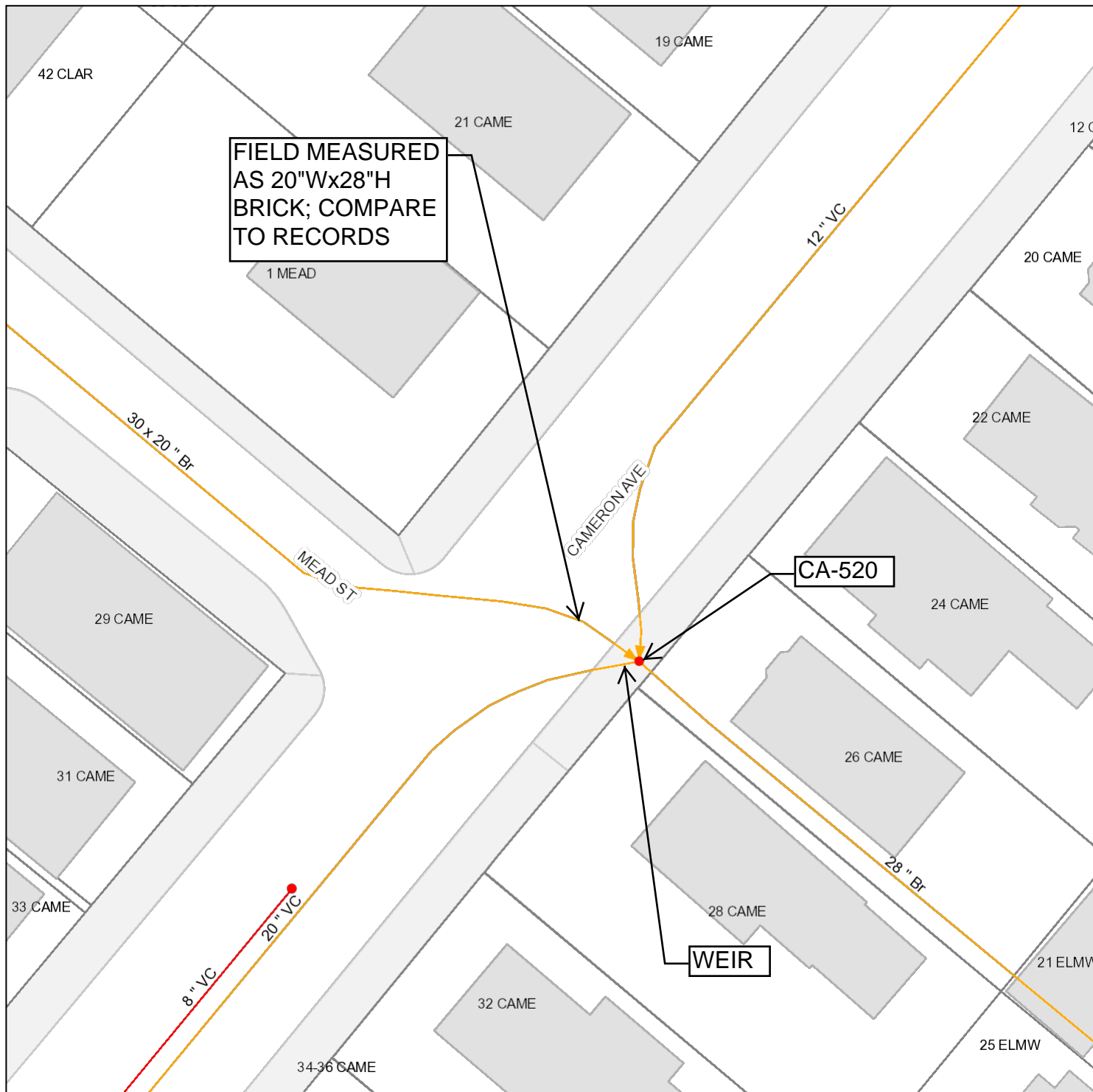
February 15, 2019

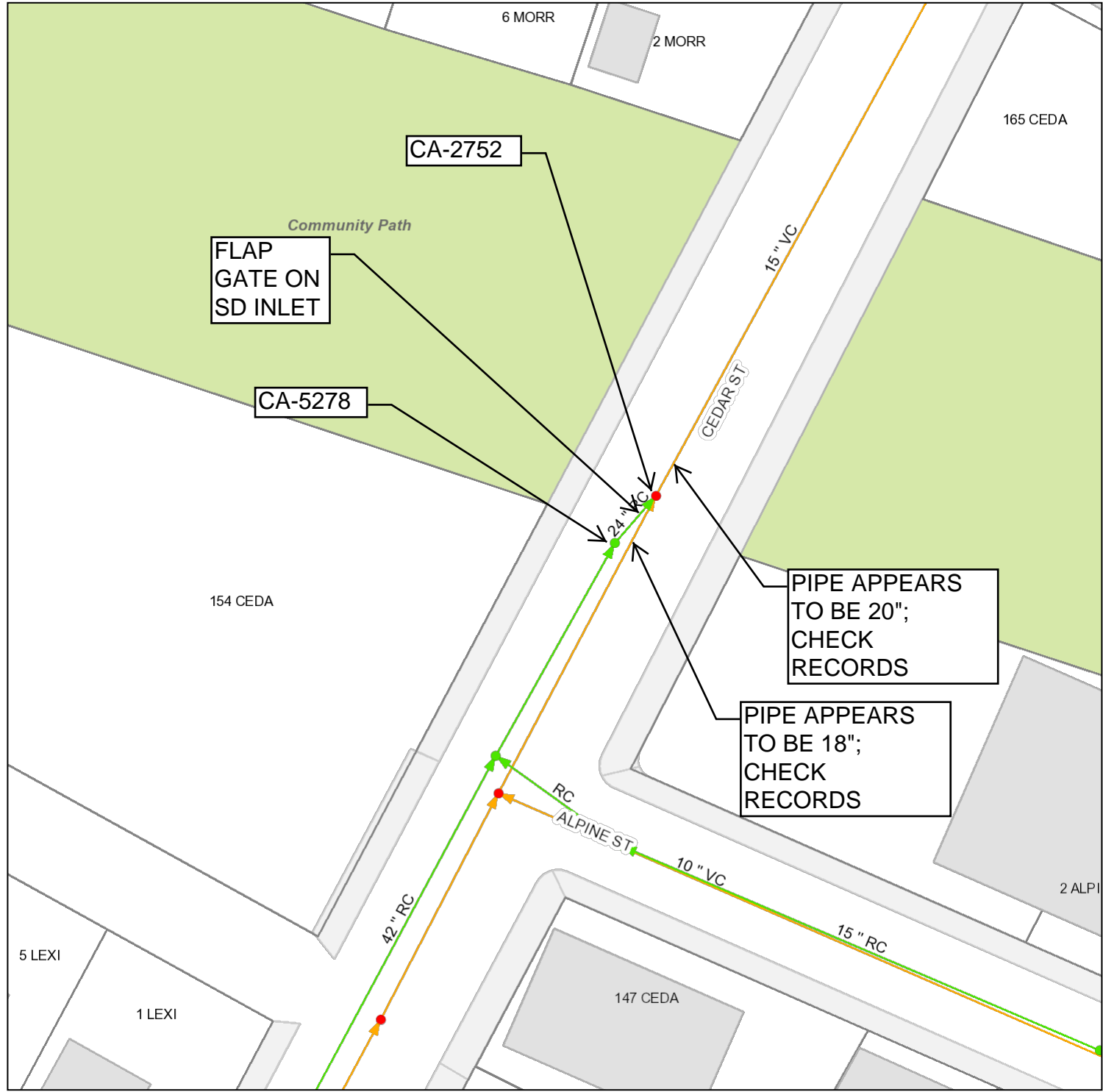
Source: City of Somerville GIS Viewer

FIELD MEASURED
AS 20"Wx28"H
BRICK; COMPARE
TO RECORDS

CA-520

WEIR



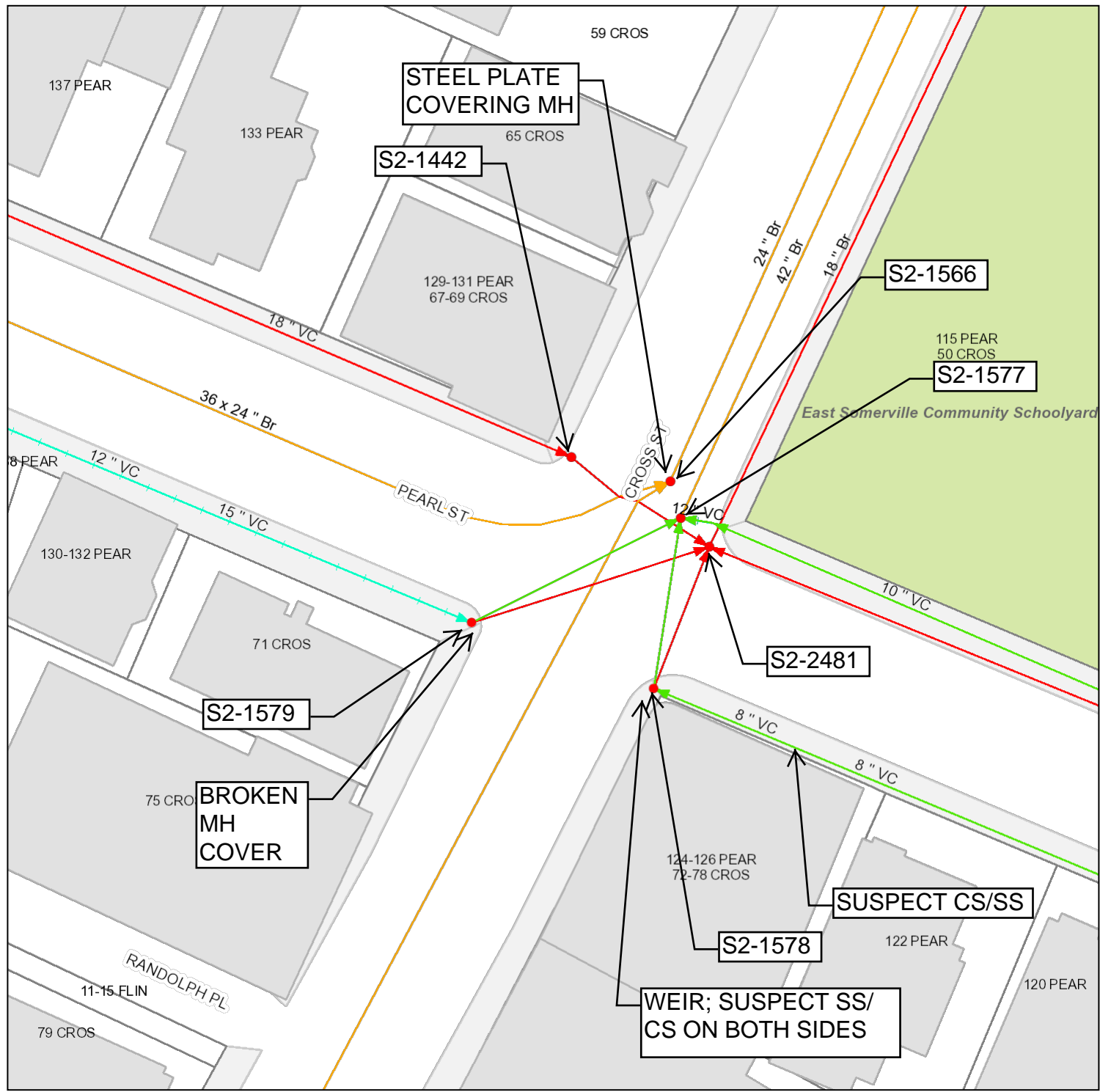


Cedar St / Community Path

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- ▭ Buildings
- ▭ Parcels
- ▭ Municipal Parking Lots
- ▭ Open Space
- ▭ Sidewalks

Scale: 1" = 40 ft

November 16, 2018
Source: City of Somerville GIS Viewer

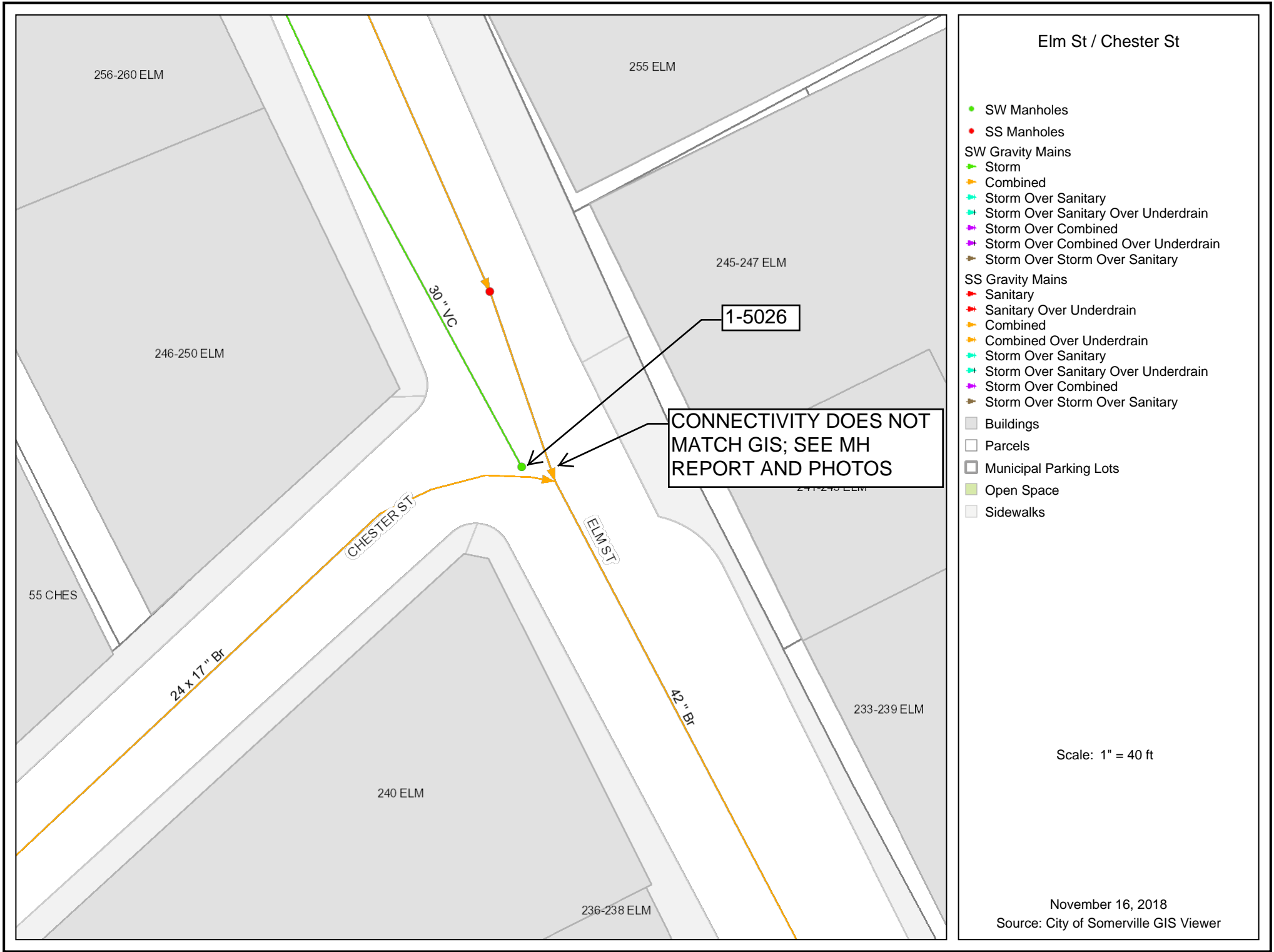


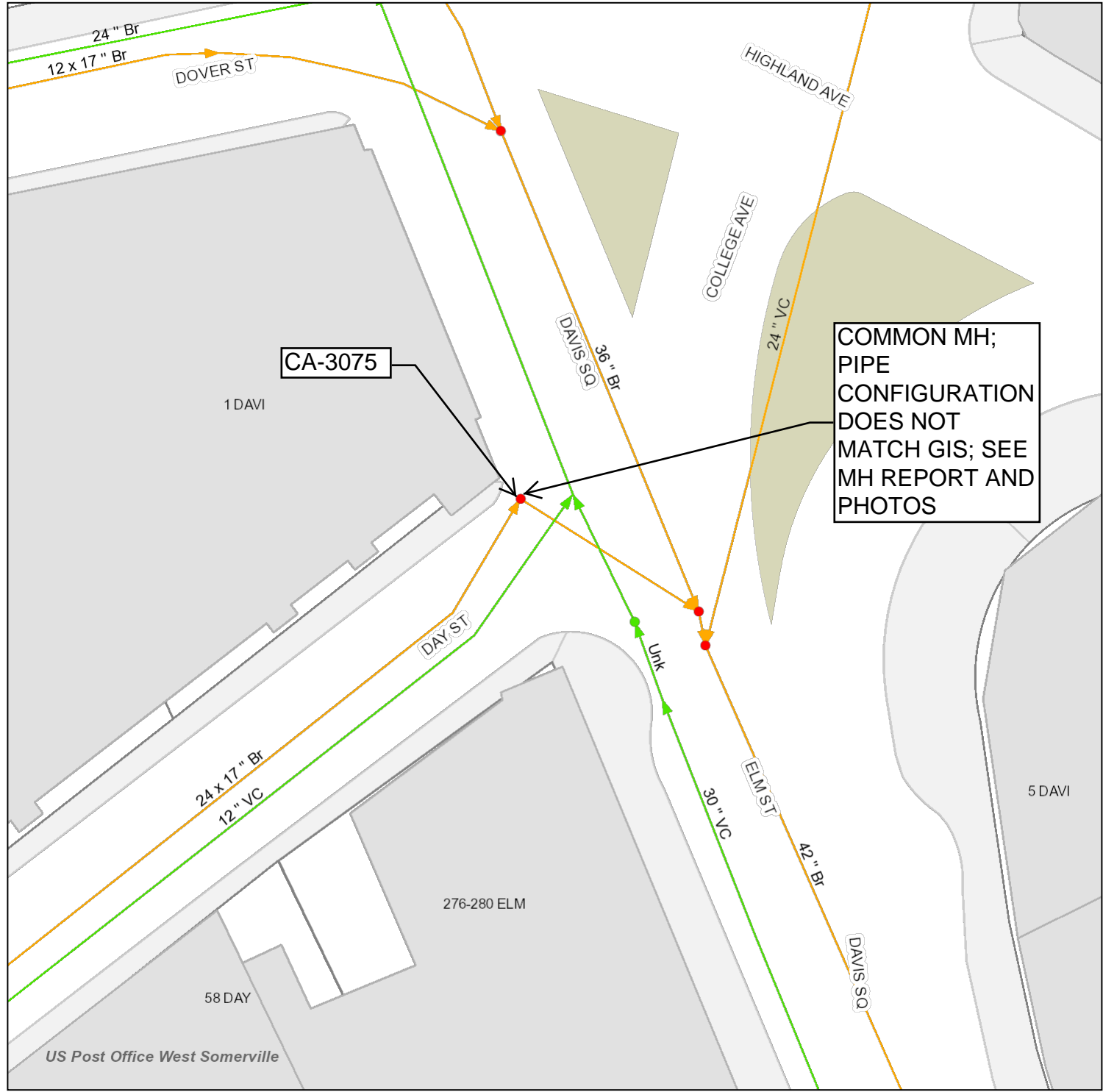
Cross / Pearl

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

RECOMMEND CCTV TO
CONFIRM
CONNECTIVITY AT
INTERSECTION

Scale: 1" = 40 ft





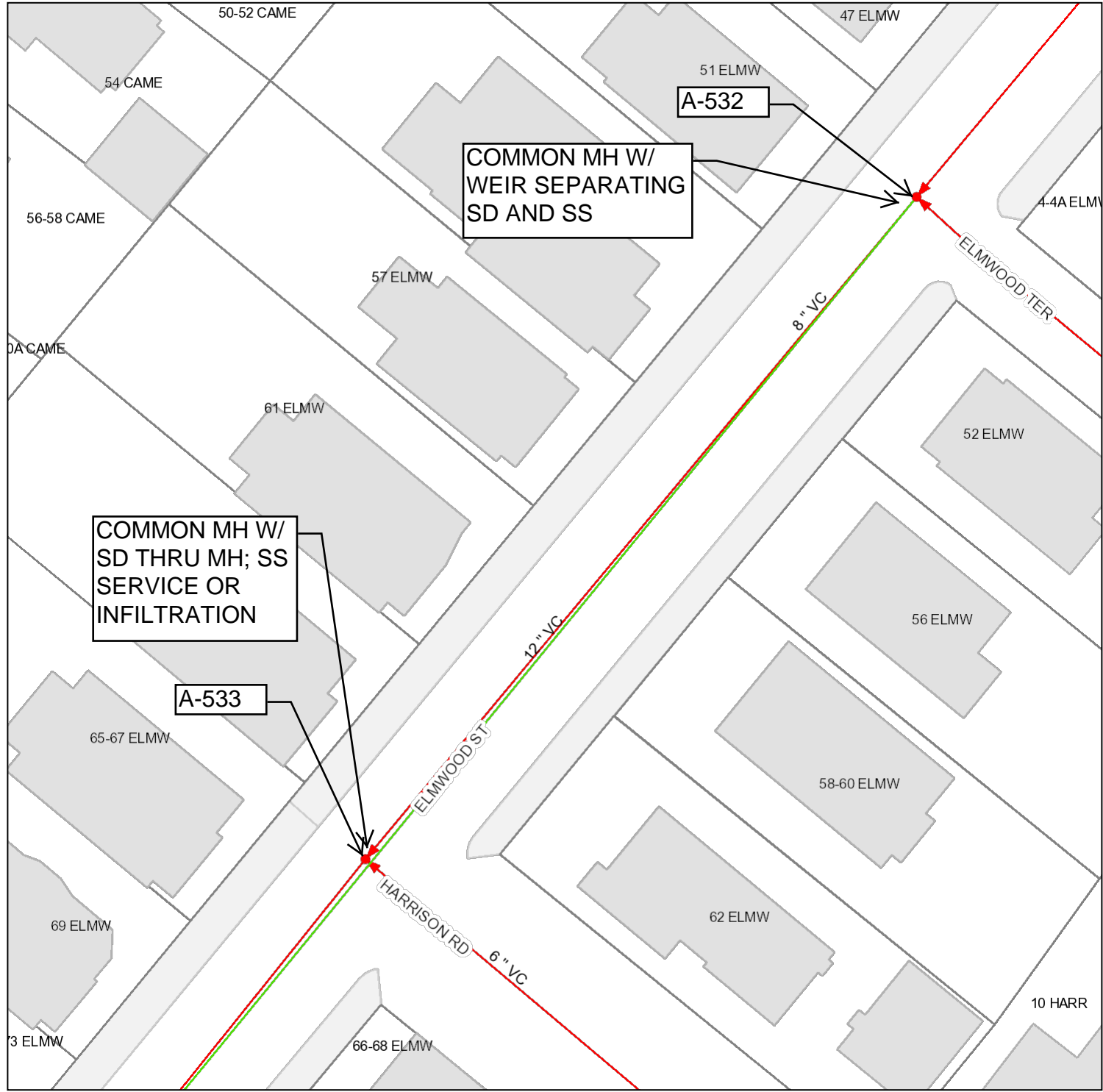
COMMON MH;
PIPE
CONFIGURATION
DOES NOT
MATCH GIS; SEE
MH REPORT AND
PHOTOS

Elm St / Day St

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

November 16, 2018
Source: City of Somerville GIS Viewer

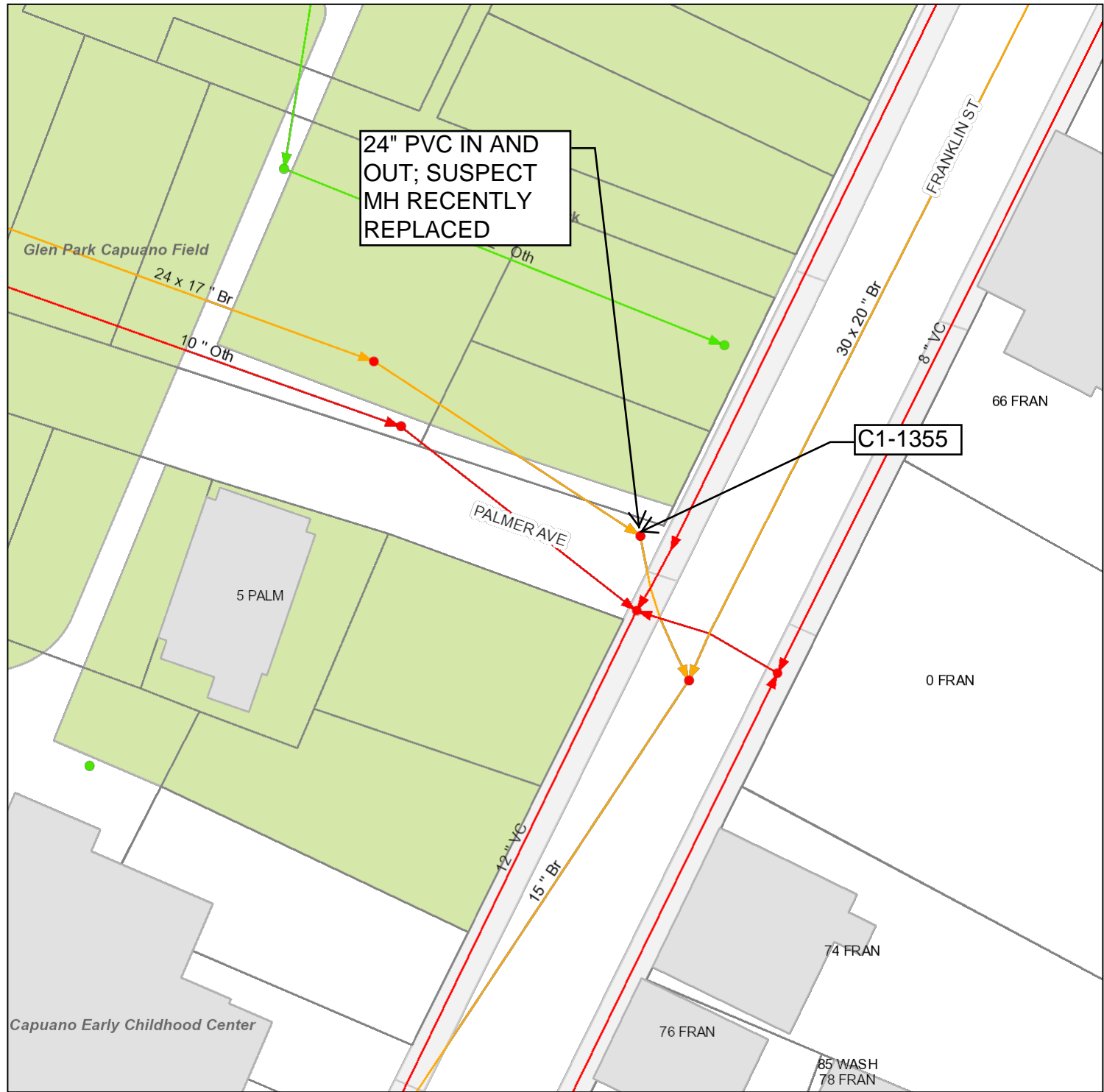


Elmwood St

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

February 15, 2019
Source: City of Somerville GIS Viewer

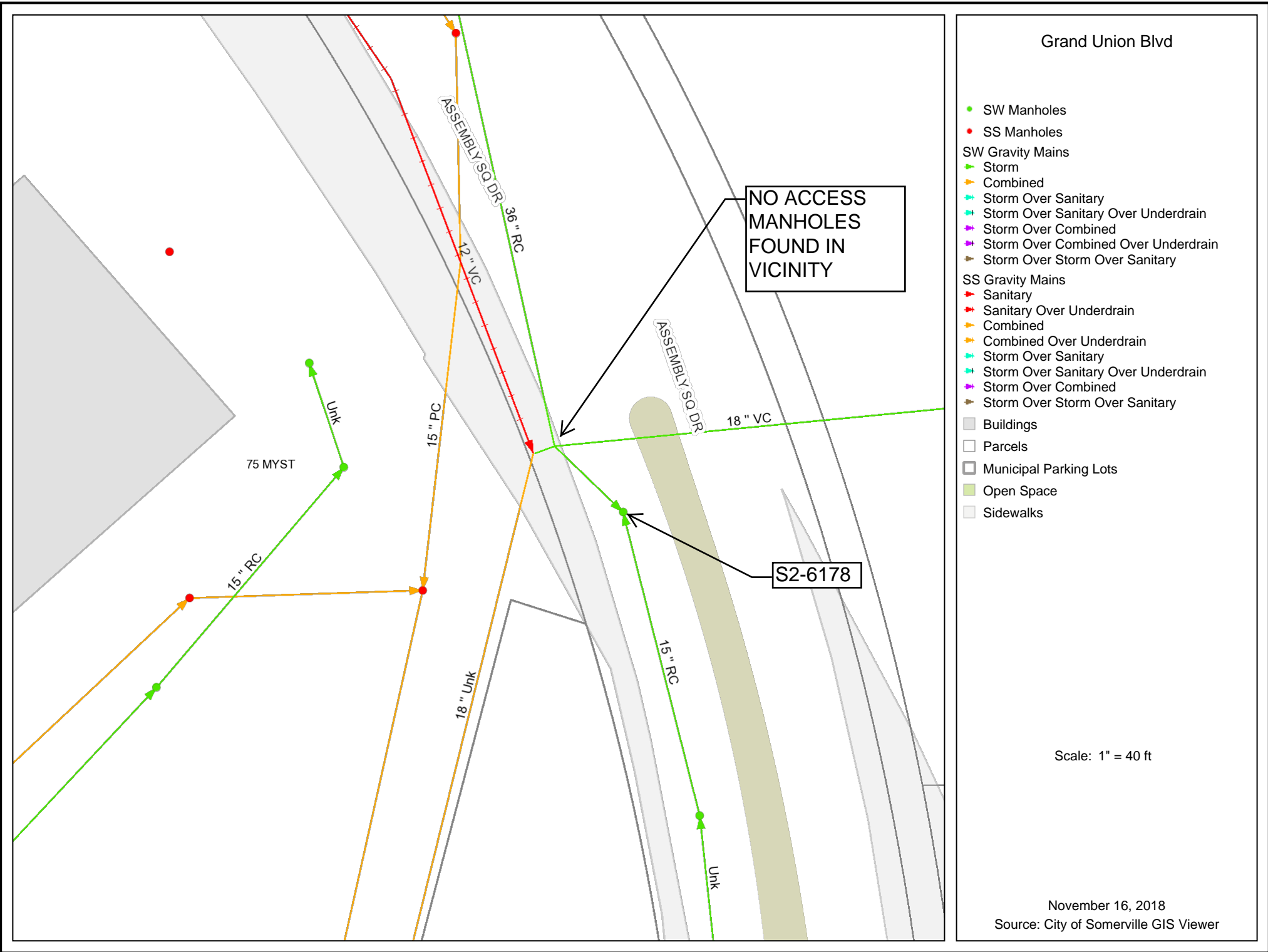


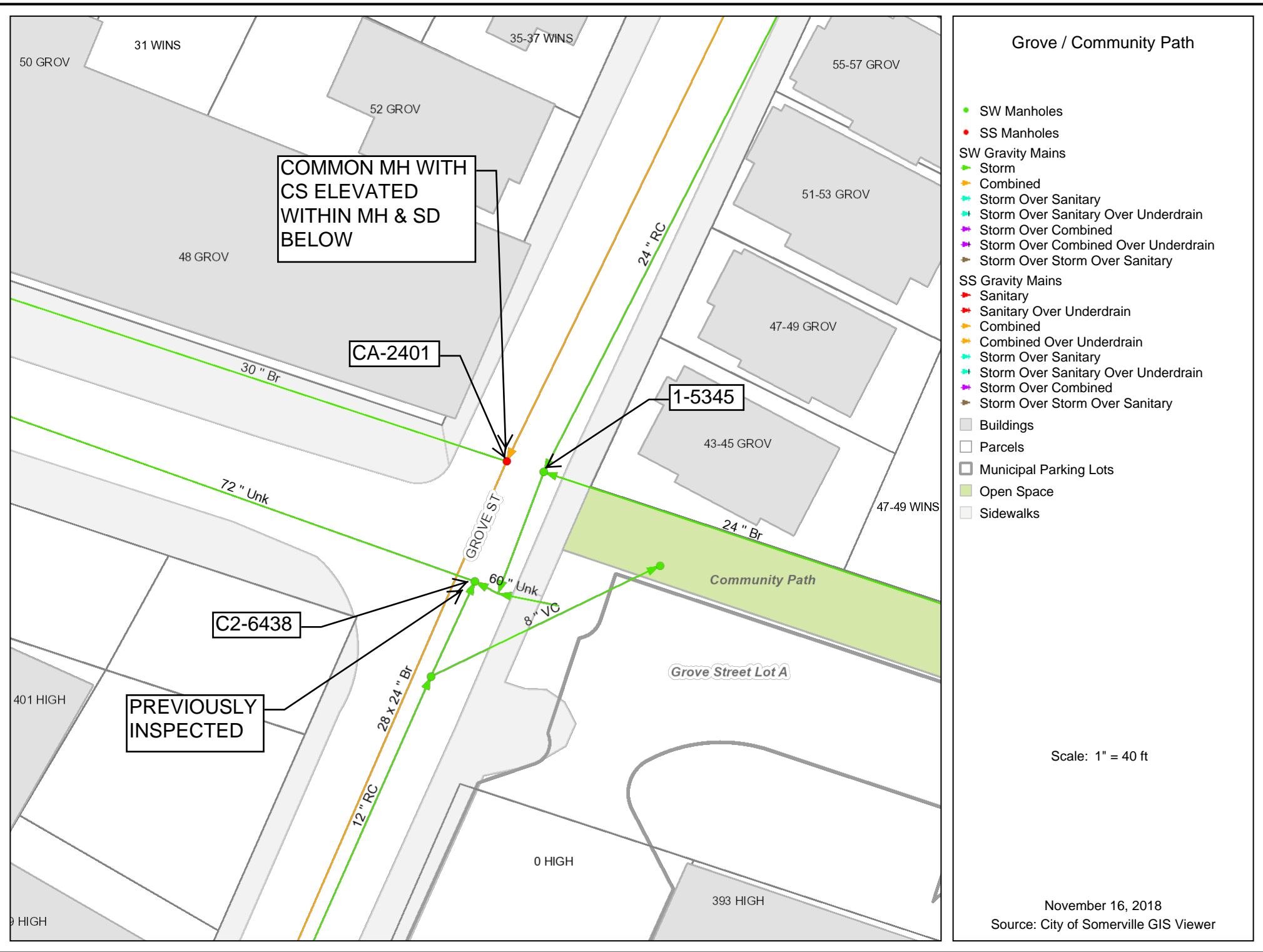
Franklin St / Palmer Ave

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

March 1, 2019
Source: City of Somerville GIS Viewer



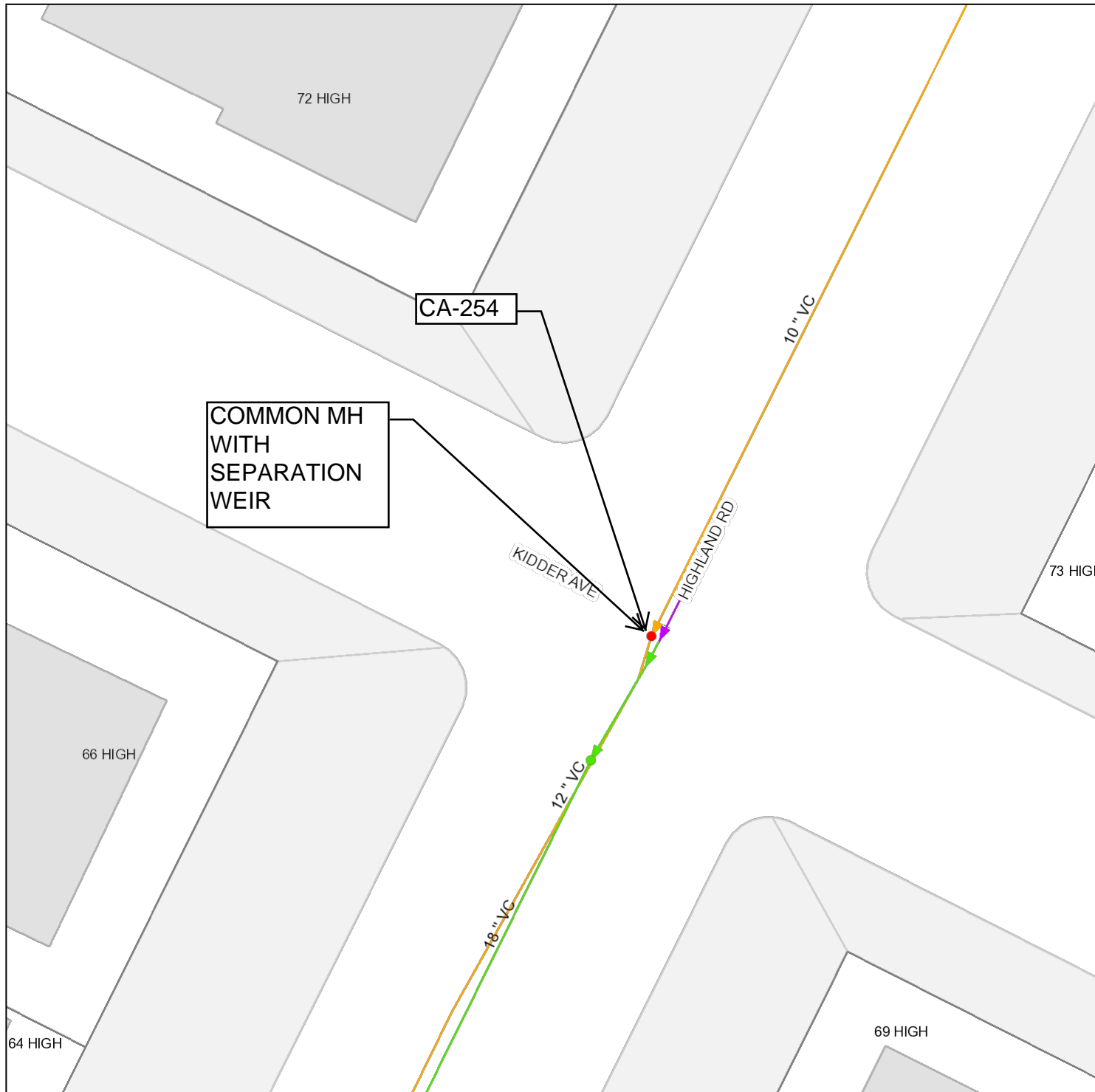


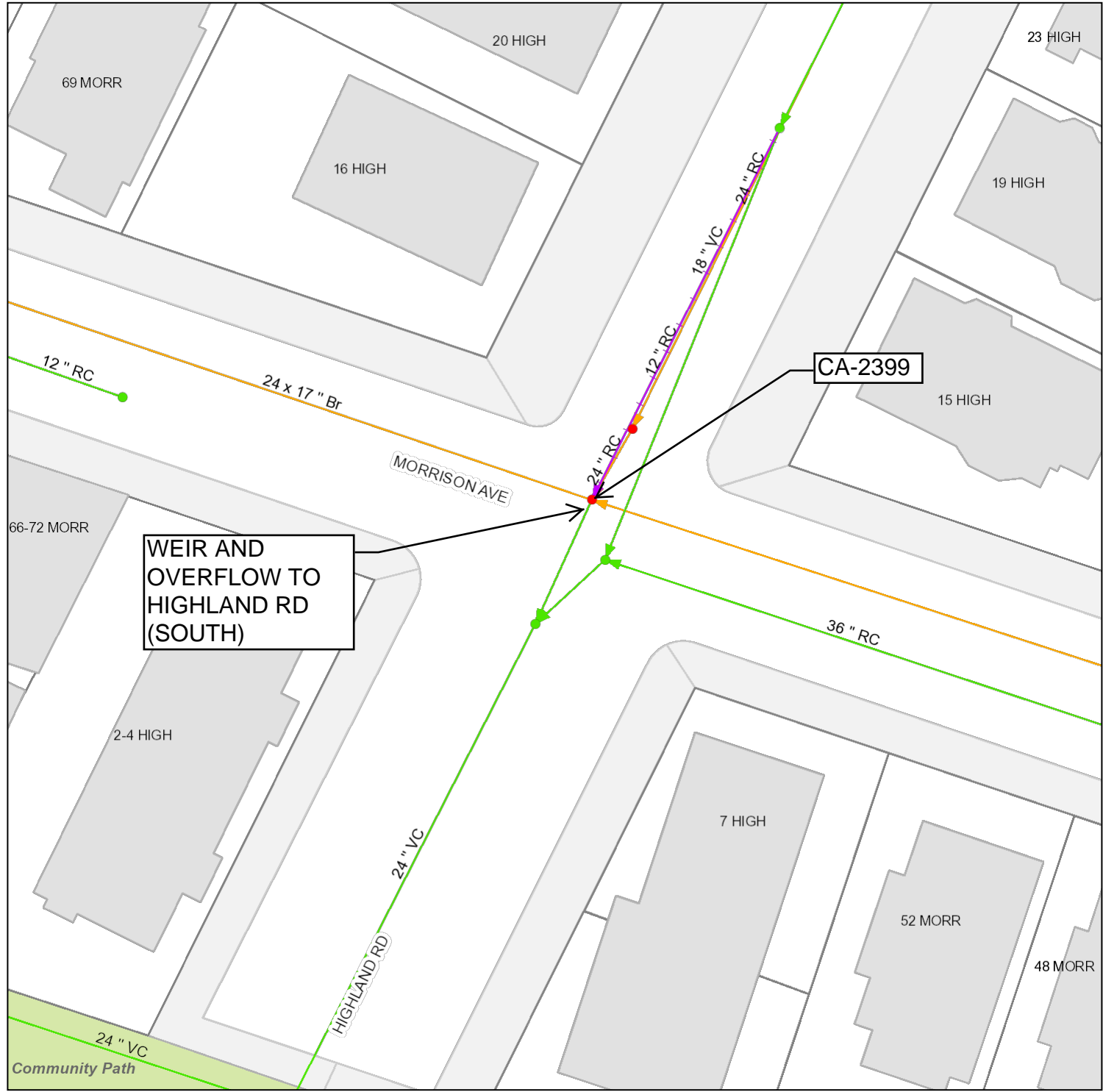
Highland Rd / Kidder

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - ▼ Storm
 - ▼ Combined
 - ▼ Storm Over Sanitary
 - ▼ Storm Over Sanitary Over Underdrain
 - ▼ Storm Over Combined
 - ▼ Storm Over Combined Over Underdrain
 - ▼ Storm Over Storm Over Sanitary
- SS Gravity Mains
 - ▼ Sanitary
 - ▼ Sanitary Over Underdrain
 - ▼ Combined
 - ▼ Combined Over Underdrain
 - ▼ Storm Over Sanitary
 - ▼ Storm Over Sanitary Over Underdrain
 - ▼ Storm Over Combined
 - ▼ Storm Over Storm Over Sanitary
- ▒ Buildings
- ▒ Parcels
- ▒ Municipal Parking Lots
- ▒ Open Space
- ▒ Sidewalks

Scale: 1" = 20 ft

November 16, 2018
Source: City of Somerville GIS Viewer



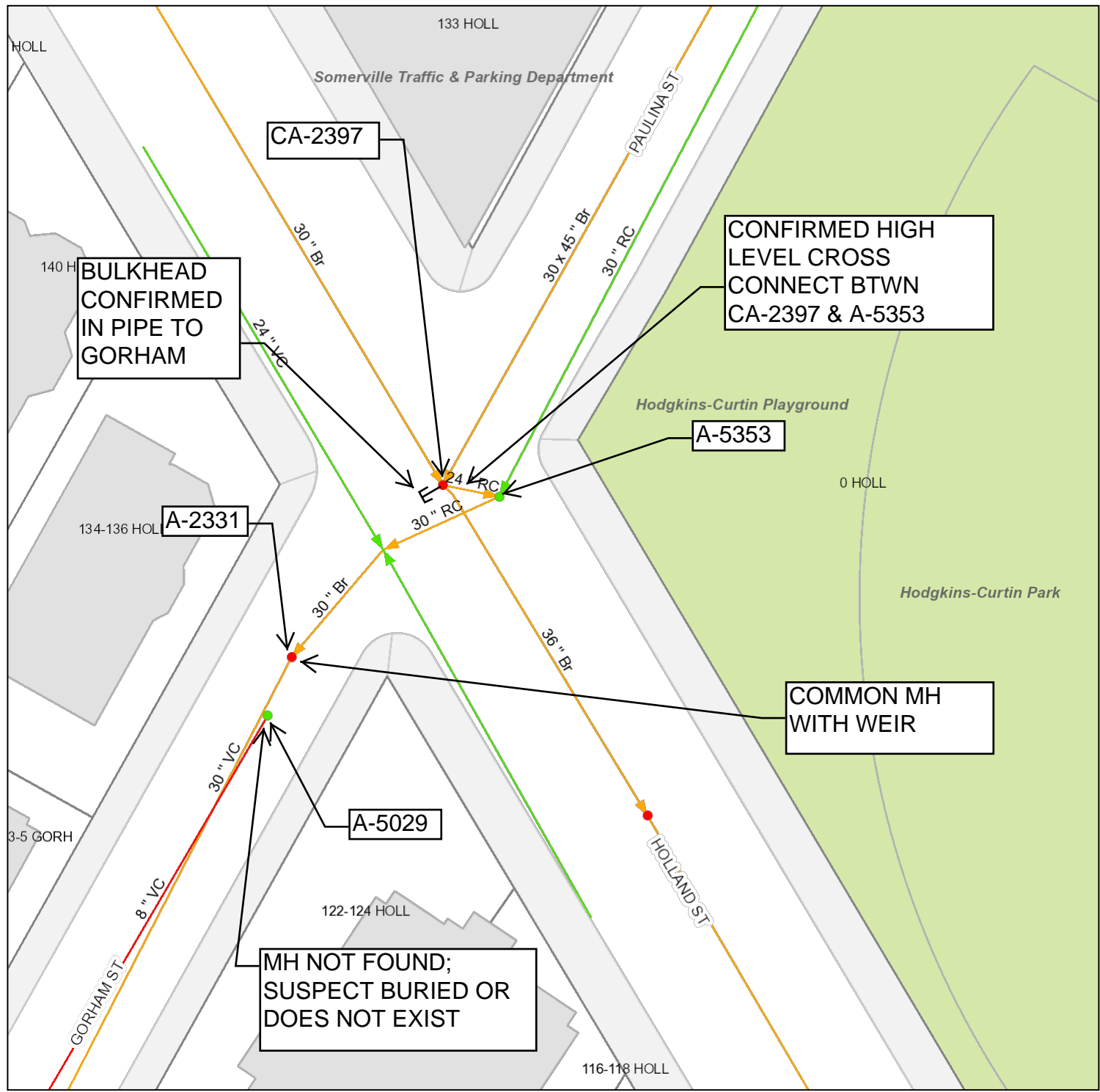


Highland Rd / Morrison Ave

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

November 16, 2018
Source: City of Somerville GIS Viewer

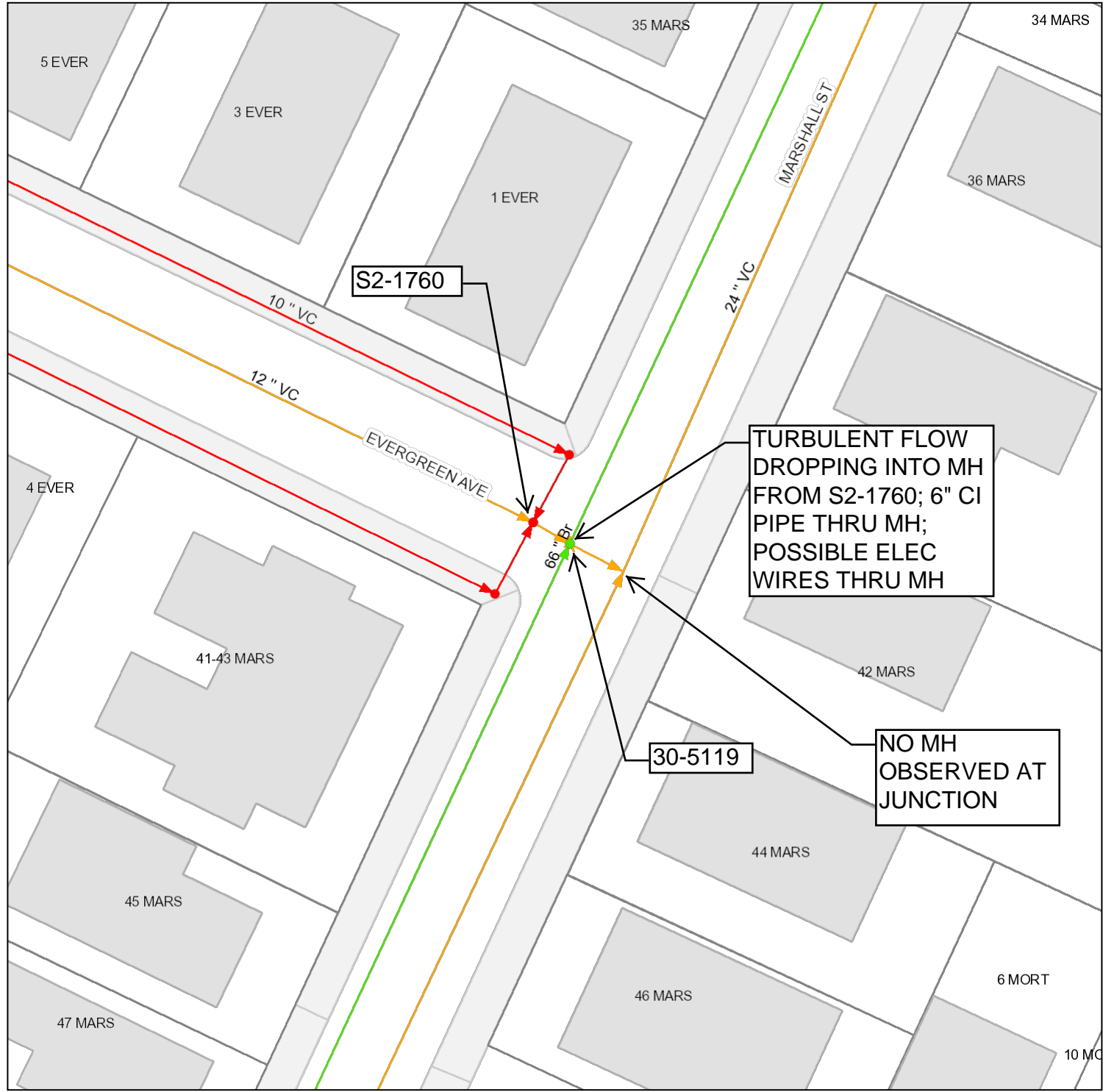


Holland St / Paulina St / Gorham St

- Catch Basins
- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

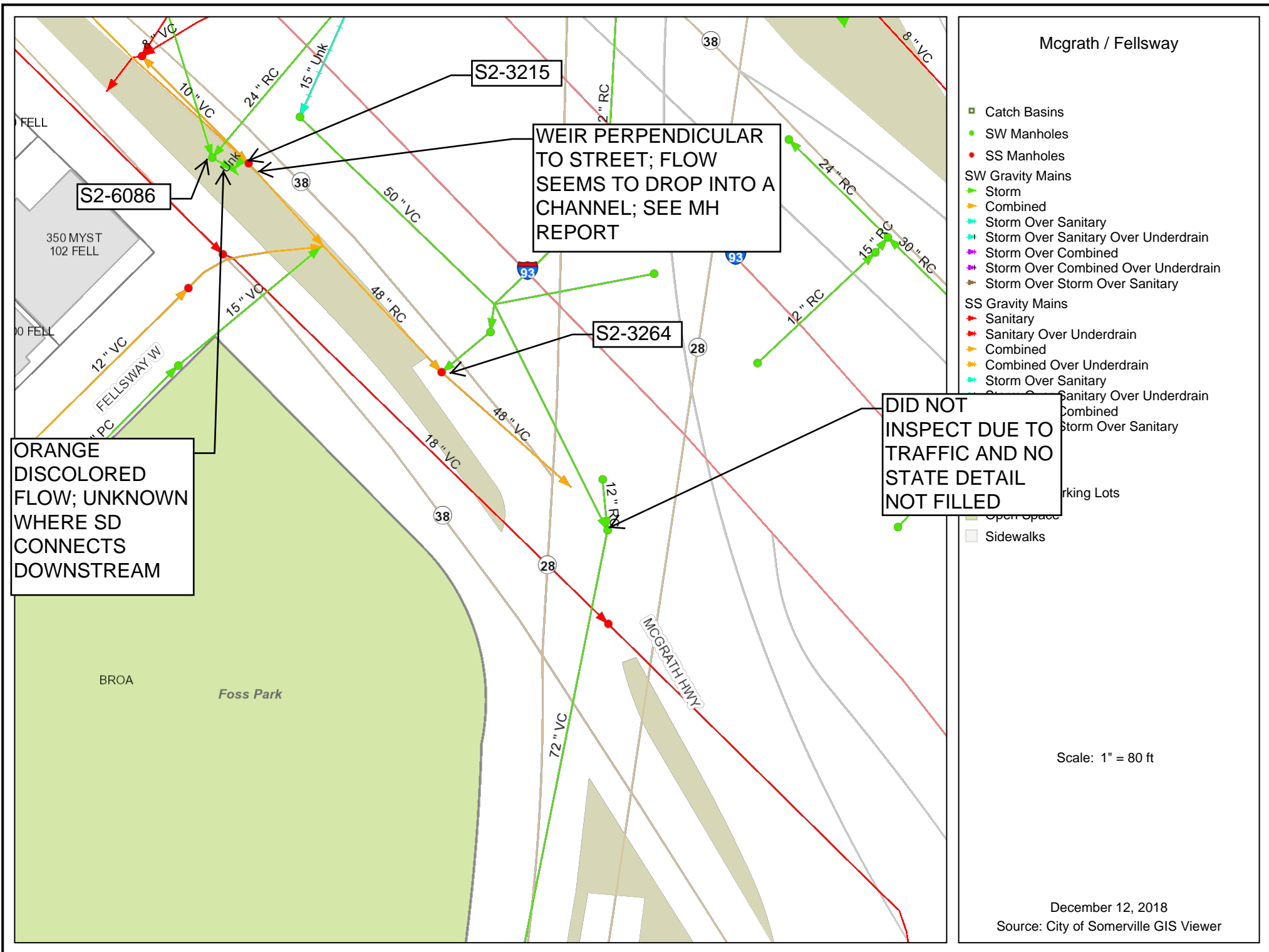
December 19, 2018
Source: City of Somerville GIS Viewer

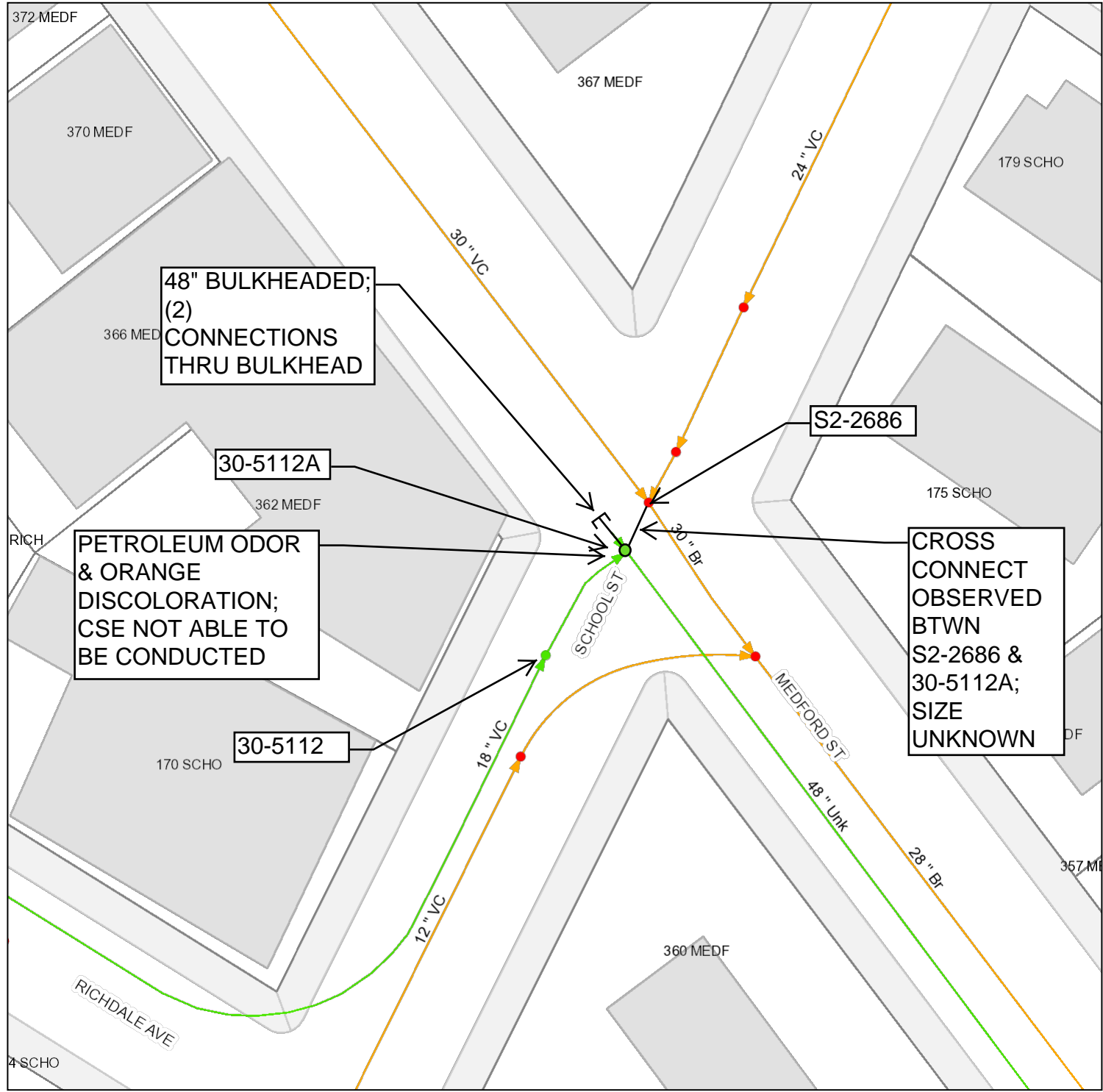


Marshall / Evergreen

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft



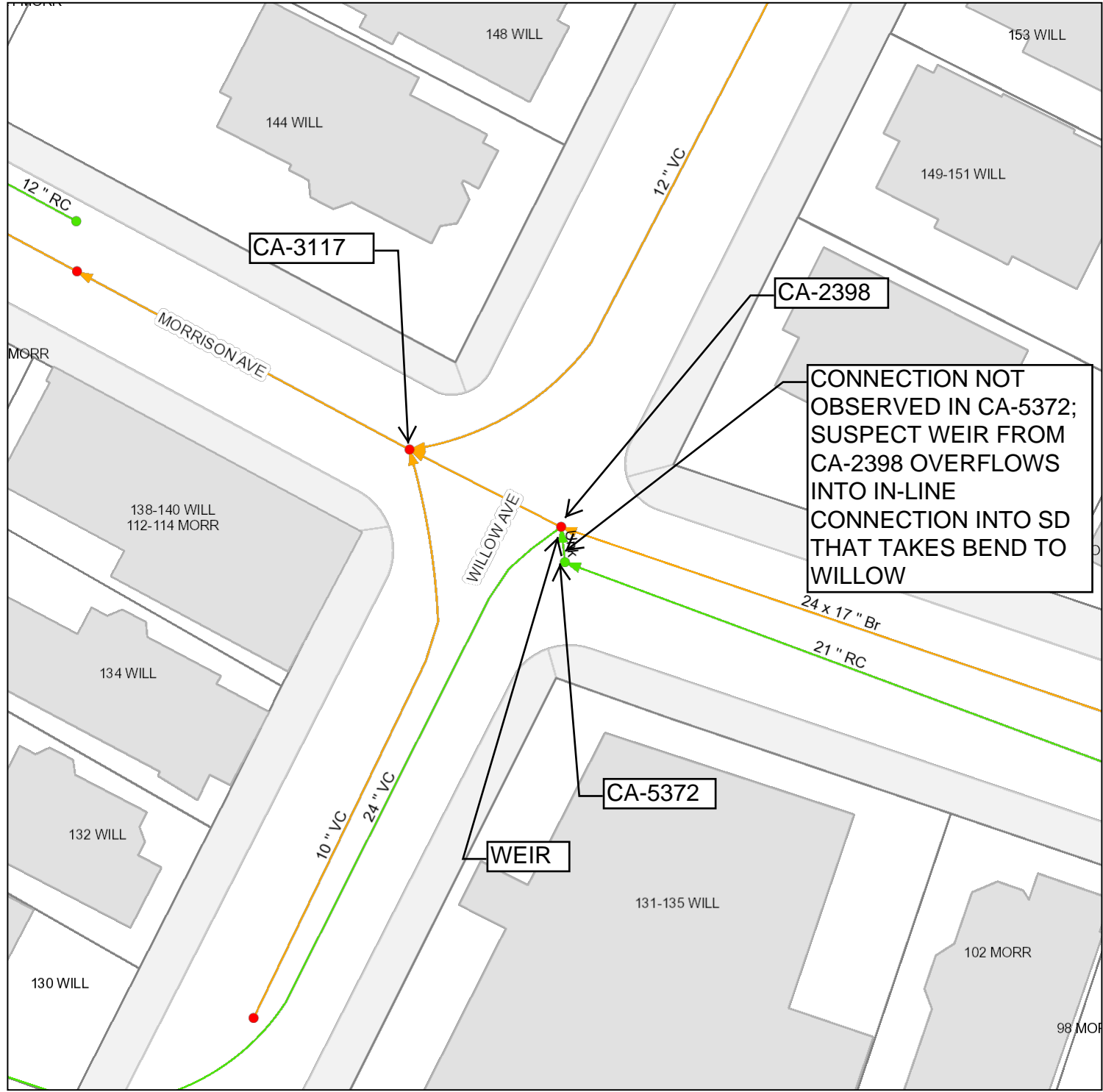


Medford St / School St

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- ▭ Buildings
- ▭ Parcels
- ▭ Municipal Parking Lots
- ▭ Open Space
- ▭ Sidewalks

Scale: 1" = 40 ft

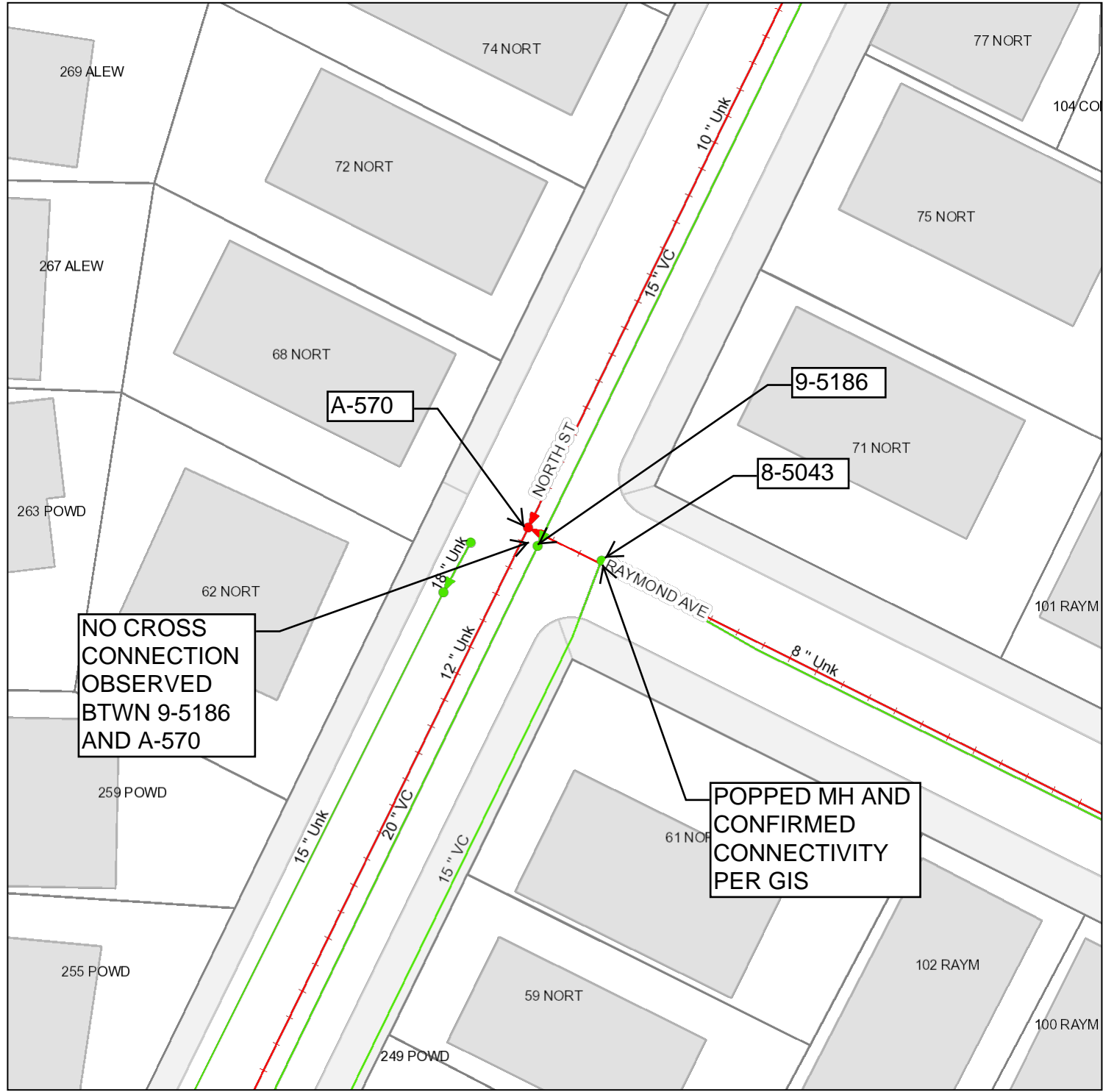
November 16, 2018
Source: City of Somerville GIS Viewer



Morrison Ave / Willow Ave

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- ▒ Buildings
- ▒ Parcels
- ▒ Municipal Parking Lots
- ▒ Open Space
- ▒ Sidewalks

Scale: 1" = 40 ft

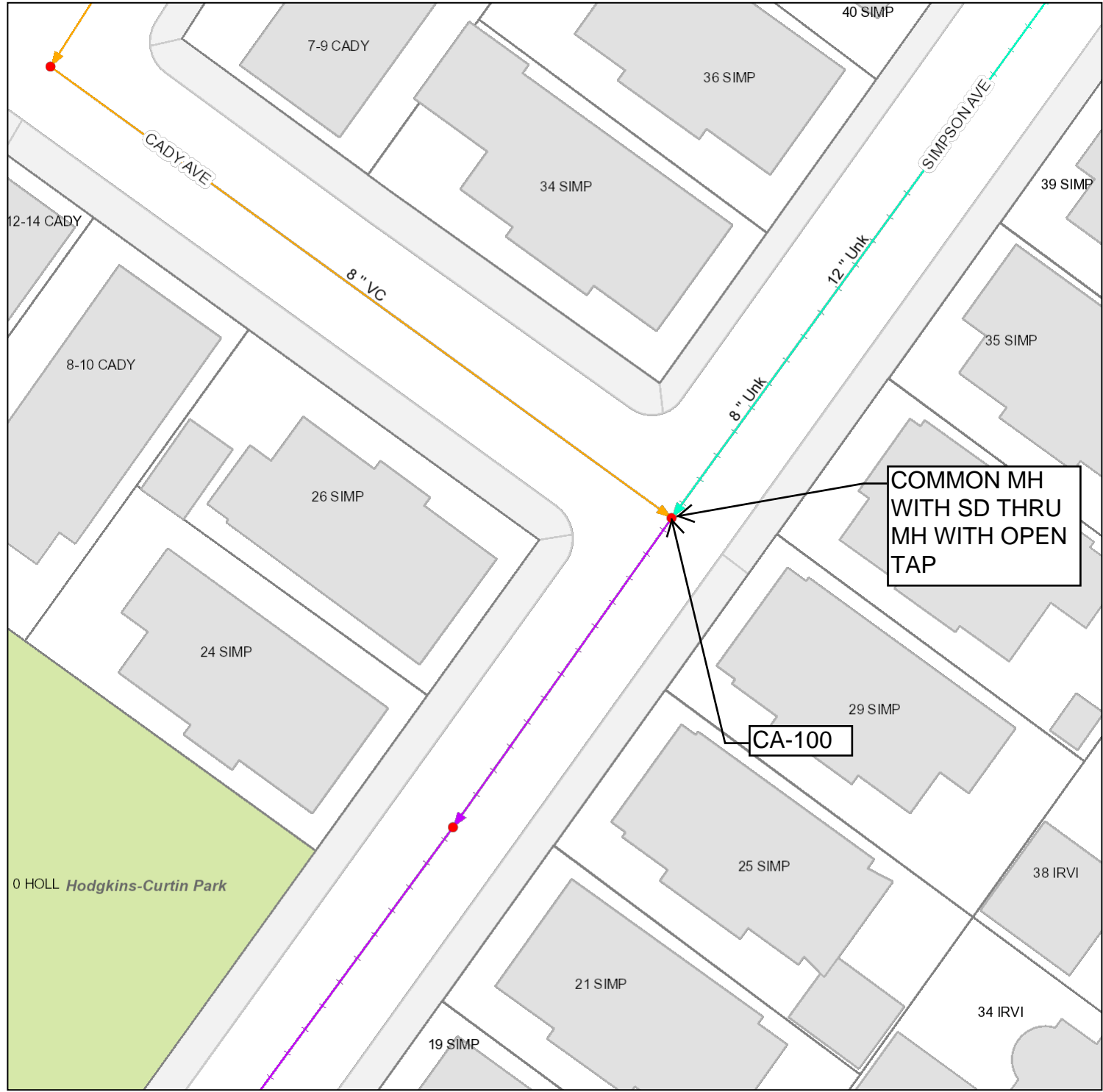


North St / Raymond Avet

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- ▒ Buildings
- ▒ Parcels
- ▒ Municipal Parking Lots
- ▒ Open Space
- ▒ Sidewalks

Scale: 1" = 40 ft

March 1, 2019
Source: City of Somerville GIS Viewer



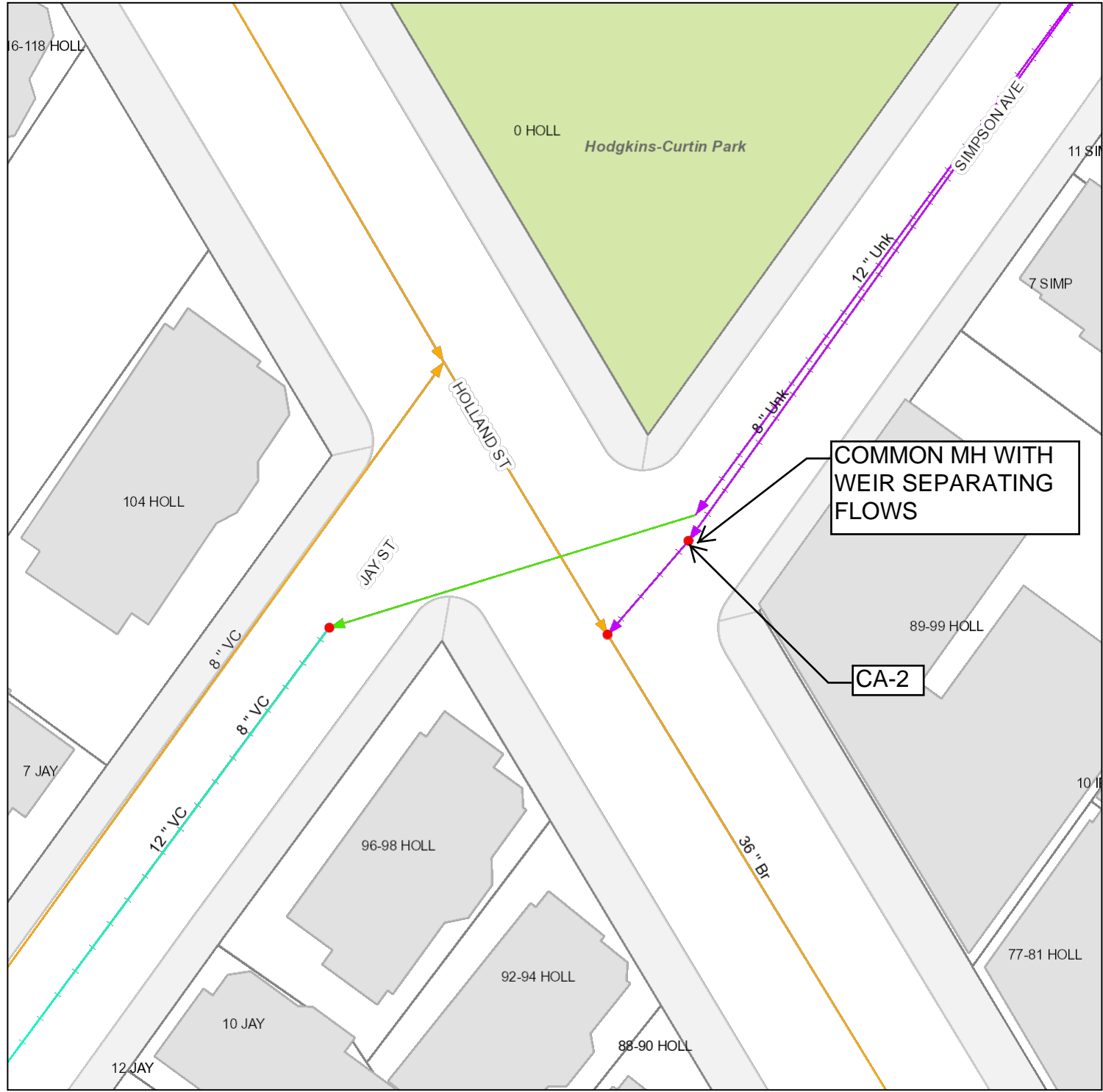
Simpson Ave / Cady Ave

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

COMMON MH
WITH SD THRU
MH WITH OPEN
TAP

CA-100

Scale: 1" = 40 ft

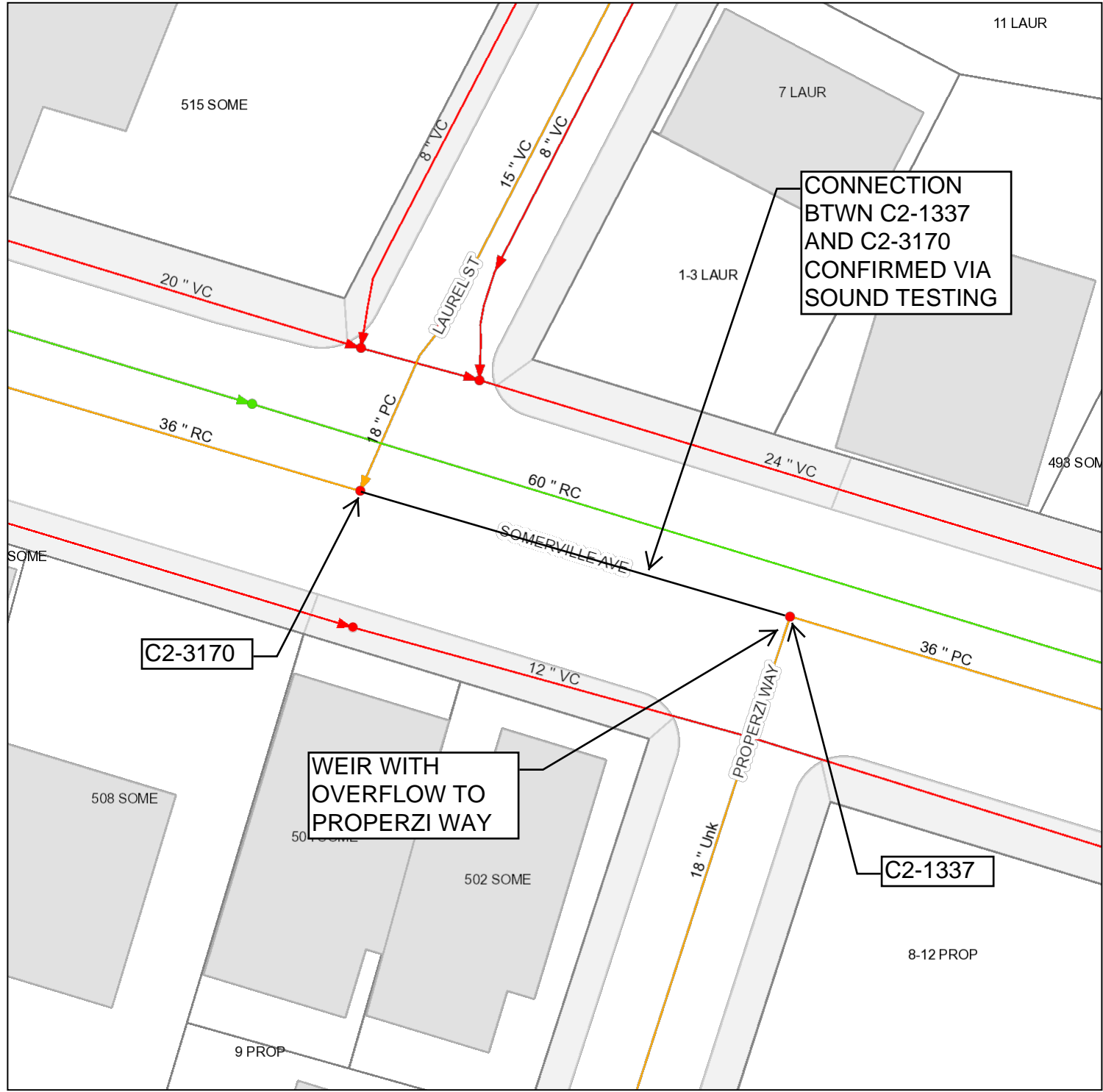


Simpson Ave / Holland Ave

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

March 1, 2019
Source: City of Somerville GIS Viewer



Somerville Ave / Properzi way

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- ▭ Buildings
- ▭ Parcels
- ▭ Municipal Parking Lots
- ▭ Open Space
- ▭ Sidewalks

Scale: 1" = 40 ft

Tannery Brook / Gold Star Rd

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - ▶ Storm
 - ▶ Combined
 - ▶ Storm Over Sanitary
 - ▶ Storm Over Sanitary Over Underdrain
 - ▶ Storm Over Combined
 - ▶ Storm Over Combined Over Underdrain
 - ▶ Storm Over Storm Over Sanitary
- SS Gravity Mains
 - ▶ Sanitary
 - ▶ Sanitary Over Underdrain
 - ▶ Combined
 - ▶ Combined Over Underdrain
 - ▶ Storm Over Sanitary
 - ▶ Storm Over Sanitary Over Underdrain
 - ▶ Storm Over Combined
 - ▶ Storm Over Storm Over Sanitary
- ▒ Buildings
- ▒ Parcels
- ▒ Municipal Parking Lots
- ▒ Open Space
- ▒ Sidewalks

Scale: 1" = 40 ft

February 19, 2019
Source: City of Somerville GIS Viewer

CS APPEARS TO
GO UNDER #69
GOLD STAR RD

A-732

NO CROSS CONNECT
OBSERVED OVER TO
TANNERY BROOK SD/CS

1-5057

CAMBRIDGE

10" VC

12" VC

10" VC

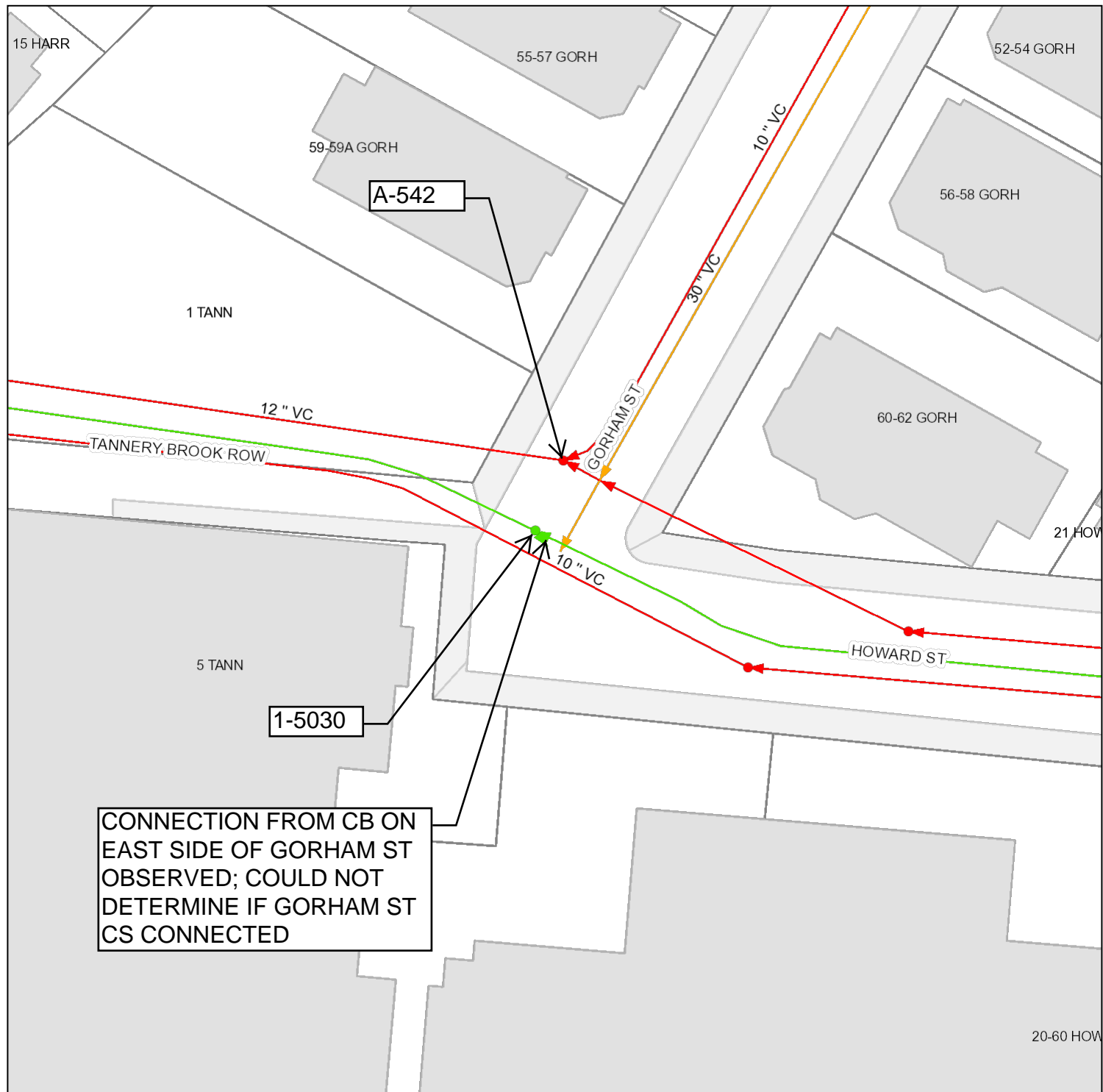
82 YORK

78 YORK

41 SEVE

26 G

37 SEVE



Tannery Brook @ Gorham St

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - Storm
 - Combined
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Combined Over Underdrain
 - Storm Over Storm Over Sanitary
- SS Gravity Mains
 - Sanitary
 - Sanitary Over Underdrain
 - Combined
 - Combined Over Underdrain
 - Storm Over Sanitary
 - Storm Over Sanitary Over Underdrain
 - Storm Over Combined
 - Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 40 ft

November 2, 2018
Source: City of Somerville GIS Viewer

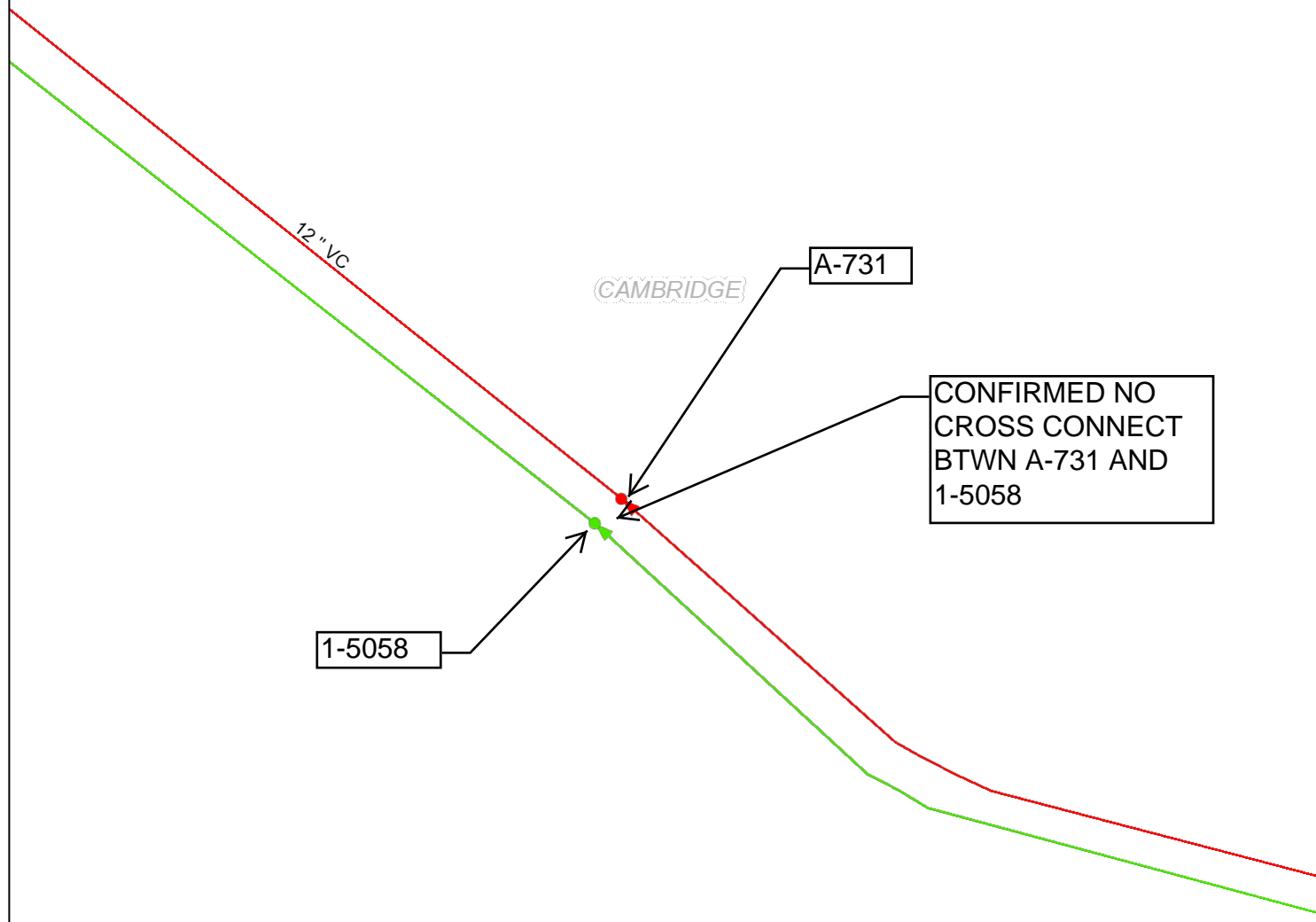
Washburn Ave / Tannery Brook

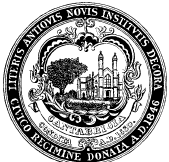
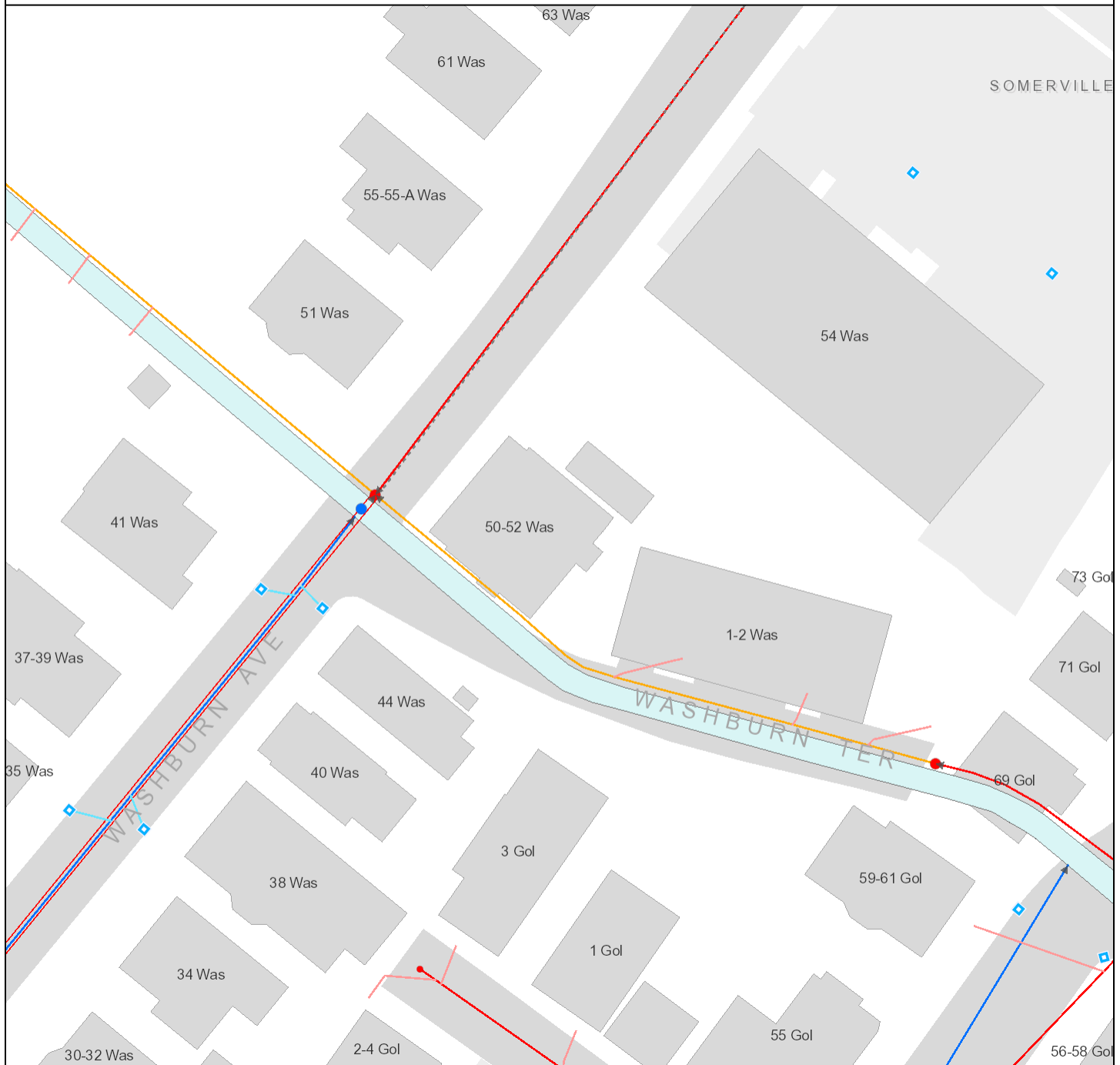
- SW Manholes
- SS Manholes
- SW Gravity Mains
 - ▼ Storm
 - ▼ Combined
 - ▼ Storm Over Sanitary
 - ▼ Storm Over Sanitary Over Underdrain
 - ▼ Storm Over Combined
 - ▼ Storm Over Combined Over Underdrain
 - ▼ Storm Over Storm Over Sanitary
- SS Gravity Mains
 - ▼ Sanitary
 - ▼ Sanitary Over Underdrain
 - ▼ Combined
 - ▼ Combined Over Underdrain
 - ▼ Storm Over Sanitary
 - ▼ Storm Over Sanitary Over Underdrain
 - ▼ Storm Over Combined
 - ▼ Storm Over Storm Over Sanitary
- ▭ Buildings
- ▭ Parcels
- ▭ Municipal Parking Lots
- ▭ Open Space
- ▭ Sidewalks

Scale: 1" = 40 ft

March 1, 2019

Source: City of Somerville GIS Viewer





City of Cambridge
Massachusetts

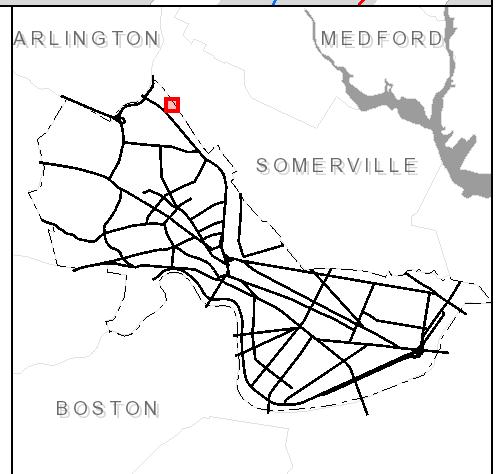
1" = 40 ft

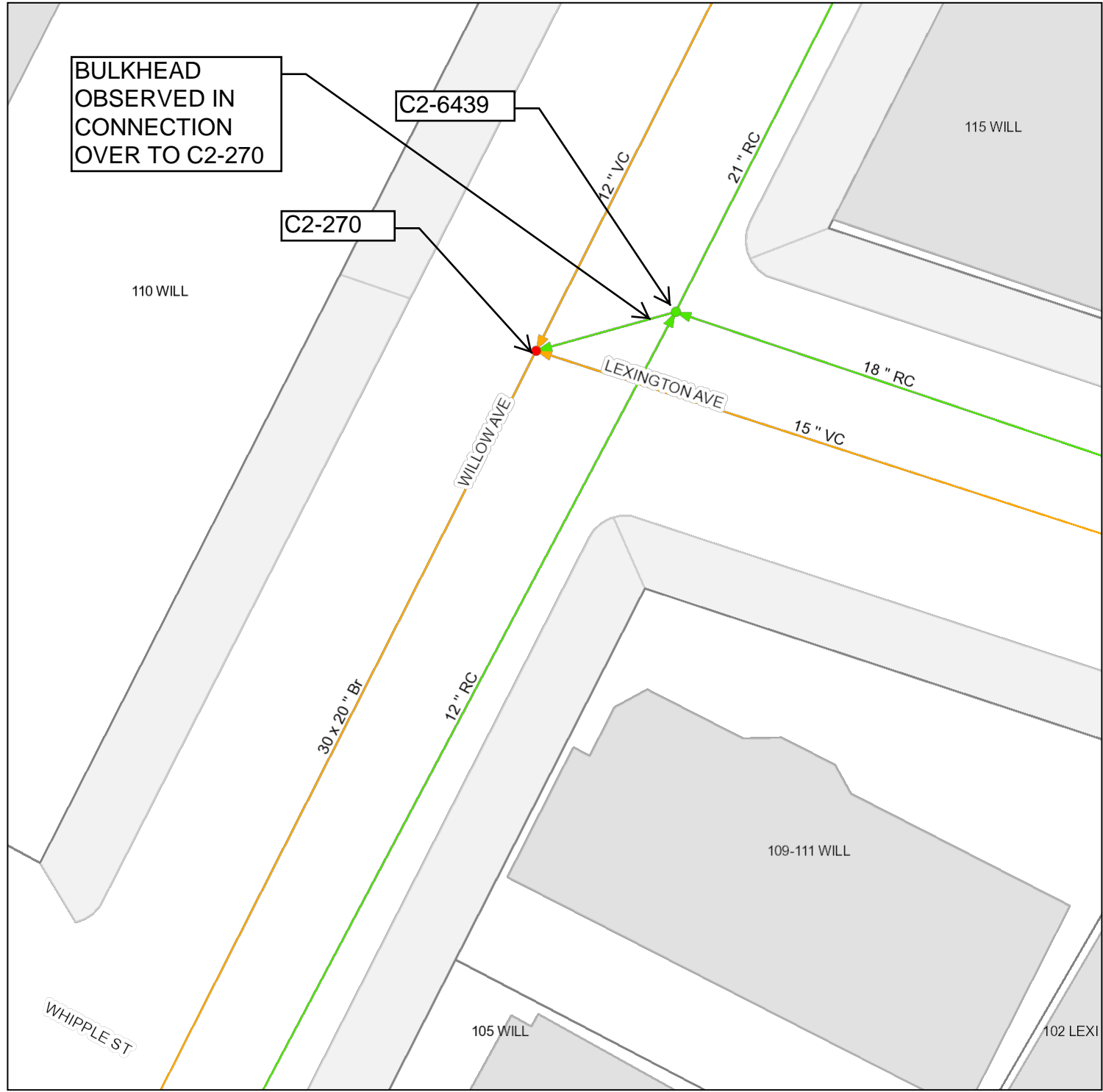
All data is provided for graphic representation only. The City of Cambridge expressly disclaims all warranties of any type, expressed or implied, including, but not limited to, any warranty as to the accuracy of the data, merchantability, or fitness for a particular purpose.

www.cambridgema.gov/gis



- | | |
|---|--|
| Outfalls
<ul style="list-style-type: none"> ● Stormwater ● Combined Sewer Overflow ● Abandoned Pumping Structures
<ul style="list-style-type: none"> ■ Pump Station ■ Lift Station Manholes
<ul style="list-style-type: none"> ● Stormwater ● Sewage ● Combined Sewage ● Abandoned Lampholes
<ul style="list-style-type: none"> ● LampHole, Sewage ● LampHole, Storm Runoff Catchbasins
<ul style="list-style-type: none"> ■ Standard Sump ■ Drop Inlet ■ Area Drain ■ Drywell ■ Oil/Water Separator ■ Abandoned Trench Drains
<ul style="list-style-type: none"> — | Service Laterals
<ul style="list-style-type: none"> — Combined Wastewater, In — Stormwater — Sewage — Abandoned Force Mains
<ul style="list-style-type: none"> ■ Combined Wastewater ■ Sewage ■ Storm Runoff MWRA Mains
<ul style="list-style-type: none"> — Abandoned — In Service Underground Structures
<ul style="list-style-type: none"> ■ Stormwater ■ Sewage ■ Combined Sewage Zoom Three Paved Surfaces
<ul style="list-style-type: none"> ■ Paved Roads ■ Other Paved Surface ■ Bridges ■ Public Footpath |
|---|--|





Willow / Lexington

- SW Manholes
- SS Manholes
- SW Gravity Mains
 - ▶ Storm
 - ▶ Combined
 - ▶ Storm Over Sanitary
 - ▶ Storm Over Sanitary Over Underdrain
 - ▶ Storm Over Combined
 - ▶ Storm Over Combined Over Underdrain
 - ▶ Storm Over Storm Over Sanitary
- SS Gravity Mains
 - ▶ Sanitary
 - ▶ Sanitary Over Underdrain
 - ▶ Combined
 - ▶ Combined Over Underdrain
 - ▶ Storm Over Sanitary
 - ▶ Storm Over Sanitary Over Underdrain
 - ▶ Storm Over Combined
 - ▶ Storm Over Storm Over Sanitary
- Buildings
- Parcels
- Municipal Parking Lots
- Open Space
- Sidewalks

Scale: 1" = 24 ft

November 16, 2018
Source: City of Somerville GIS Viewer