



Water Board Building
735 Randolph Street
Detroit, MI 48226

Customer Care: 313-267-8000
Emergencies: 313-267-7401
detroitmi.gov/dwsd

March 15, 2019

Daryl L. Edwards
1547-49 Clairmount
Detroit, MI 48206

Re: Public Comment

Please accept this letter as a follow-up to your concern addressed to the Board of Water Commissioners (BOWC) at the February 20, 2019 Board of Water Commissioners Meeting.

Detroit Water and Sewerage Department (DWSD) has investigated the complaint regarding the basement backup and cave-in of the rear alleyway. A review of all work orders regarding this address indicate that 1547-49 Clairmount and 1550 Taylor both have private issues with the sewer service connection. The defect in the private connection for both properties is the proximate cause for the cave-in. Per our discussion at the BOWC meeting, you believed that the stone fill used to secure the cave-in caused the basement backups. A review of the video inspection which was done after the hole was filled with stone, does not show stone in the public sewer or the riser to the private connection servicing 1547-49 Clairmount. This further substantiates that the public sewer is free from defect. With the offset of the services for both 1547-49 Clairmount and 1550 Taylor, the unrestricted flow of sewage over multiple years caused soil erosion which led to the cave-in of the rear alleyway, as illustrated by the graphic below:



Enclosed is a letter dated January 18, 2019, with the findings regarding 1547 Clairmount and a letter dated January 23, 2019, provides the findings of the cave-in in the rear alleyway of 1550 Taylor.

Thank you for contacting DWSD.

Respectfully,

Palencia Mobley, P.E.
Deputy Director and Chief Engineer

Cc: Honorable Board of Water Commissioners

Enclosures



DETROIT
**Water & Sewerage
Department**

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January 18, 2019

Homeowner/Resident
1547 Clairmount
Detroit, Michigan 48206

Dear Homeowner/Resident;

RE: Water in Basement/Cave-in Complaint at 1547 Clairmount, Detroit MI 48206

In June 2018, the customer at **1547 Clairmount** complained to the Detroit Water and Sewage Department (DWSD) about a Water-In-Basement (WIB) incident and cave-in in rear of **1547 Clairmount**. **Between June and October 2018, DWSD conducted** thorough investigations as to the facts in the complaint regarding the WIB and cave-in at **1547 Clairmount**. The complaint suggests that the WIB and cave-in at **1547 Clairmount** was caused by failure or malfunction in assets maintained by the Department. DWSD's investigation included Closed Circuit TV (CCTV) inspection of the 24-inch public sewer and manholes in the Alley-way in rear of



1547 Clairmount – Private Service Connection



1547 Clairmount – Positive Dye Test

the property at **1547 Clairmount**. The investigation also included a Dye Test at the location of the cave-in. The result of the investigation is explained below. The CCTV inspection of the 24-inch public sewer and manholes in the rear of the property at **1547 Clairmount** involved televising the public sewer and all sewer service connections along the public sewer from the manhole located in the middle of the Alley-way between Clairmount and Taylor west of Byron to where the 24-inch sewer blind ties into the 3'-10"x5'-9" sewer in Woodrow Wilson. The investigation also included a dye test at the location of the cave-in behind **1547 Clairmount** to help determine the cause of the cave-in. In this particular case, the dye test was positive at the service connection from **1550 Taylor** and also from **1547 Clairmount**. The investigation also showed that the private sewer connection for **1547 Clairmount** was about 40% offset.

The positive dye test along with 40% offset of the private sewer connection suggest that the private sewer line from **1547 Clairmount** has failed with a direct opening to the cave-in and is allowing water flow and soil migration from the cave-in through the private sewer service connection to the 24-inch public sewer. However, no blockage or failure was found on the 24-inch public sewer that could be associated with the causes of the cave-in or affect the flow in the 24-inch public sewer to cause the WIB at **1547 Clairmount**. A "Fix It" letter is also being mailed to the neighbor at **1550 Taylor** whose private sewer connection was also found to be a contributing cause of the cave-in.

The failed private sewer connections from **1550 Taylor** and **1547 Clairmount** are the cause of the cave-in in the alleyway. The private sewer failures may also cause sewer back up at both properties. Please be advised that customers are responsible for the up keep of their private sewer service lines from the domicile up to the point of connection with the public sewer.



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Before excavating to repair the failed private sewer line/connection, obtain Right-of-Way and DWSD permits, and contact Miss Dig. DWSD permit can be obtained at the Water Board Building located at 735 Randolph in Suite 104, Detroit, Michigan 48226.

I hope that the information provided above will be helpful in resolving this situation. If you have any further questions, please feel free to call Mr. Pei Boayue at 313-267-1255.

Respectfully yours,

Mohamad Farhat, P.E.
Engineering Manager

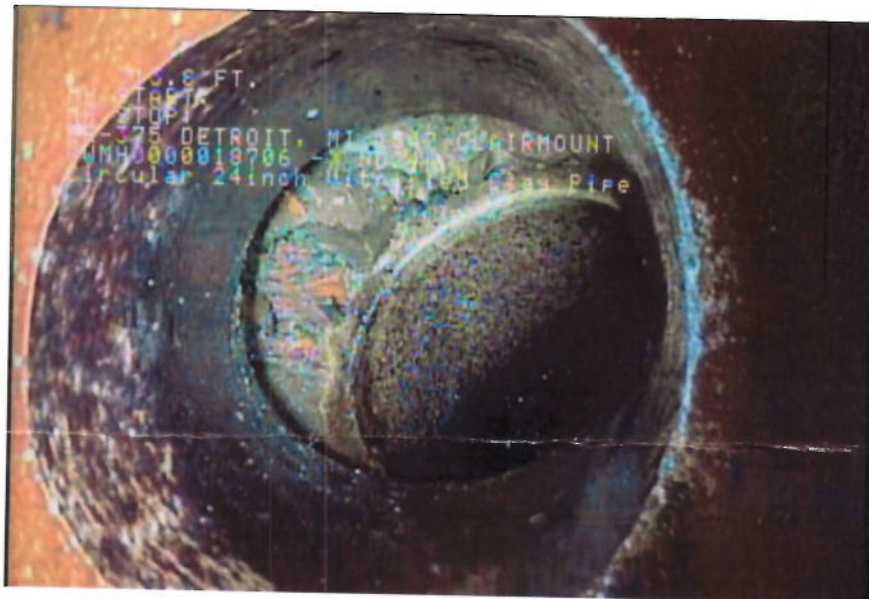
Cc: File/DWS-903 ER-375



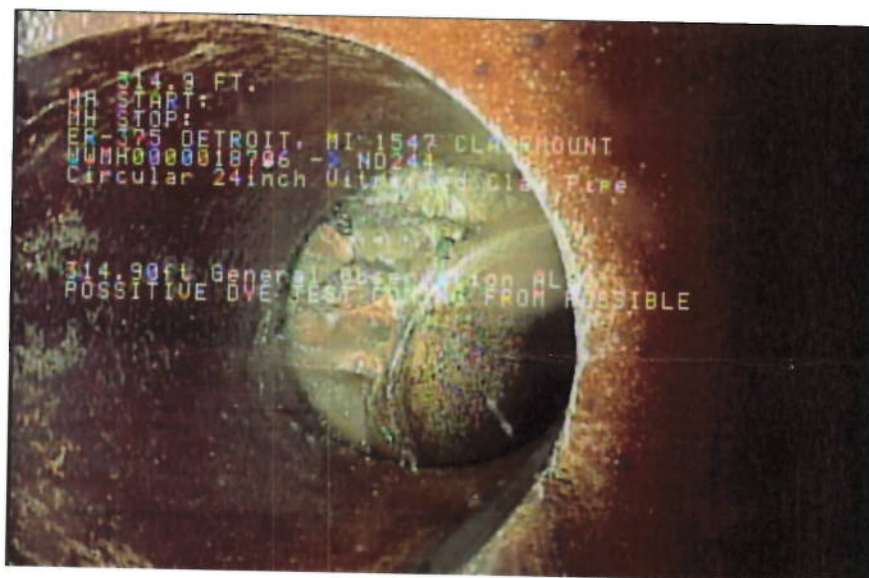
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**View Looking up Private Sewer Connection at 1547
Clairmount Showing 40% Offset**



1547 Clairmount – Positive Dye Test



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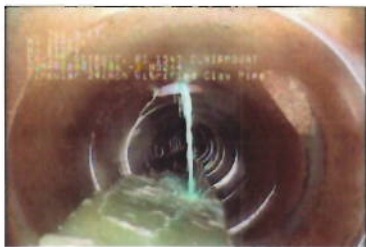
January 23, 2019

Homeowner/Resident
1550 Taylor
Detroit, Michigan 48206

Dear Homeowner/Resident;

RE: Cave-in Complaint in Rear Alleyway at 1550 Taylor, Detroit MI 48206

In June 2018, the customer at **1547 Clairmount** complained to the Detroit Water and Sewerage Department (DWSD) about a Water-In-Basement (WIB) incident and cave-in in rear of **the property**. **Both properties at 1547 Clairmount and 1550 Taylor are drained by the same 24-inch public sewer. Between June and October 2018, DWSD conducted** thorough investigations as to the facts in the complaint regarding the WIB and cave-in at **1547 Clairmount**. The complaint suggests that the WIB and cave-in were caused by failure or malfunction in assets maintained by the Department. DWSD's investigation included Closed Circuit TV



1550 Taylor - Positive Dye Test at service



1550 Tayloy - Positive Dye Test at Service

(CCTV) of the 24-inch public sewer and manholes in the alleyway in rear of both properties. The investigation also included a Dye Test at the location of the cave-in. The result of the investigation is explained below. The CCTV inspection of the 24-inch public sewer and manholes in the rear of the properties involved televising the public sewer and

all private sewer service connections along the public sewer from the manhole located in the middle of the alleyway between Clairmount and Taylor Avenues west of Byron Avenue to where the 24-inch sewer blind ties into the 3'-10"x5'-9" public sewer in Woodrow Wilson Avenue. The investigation also included a dye test at the location of the cave-in behind **both properties** to help determine the cause of the cave-in. In this particular case, the dye test was mostly positive at the service connection from **1550 Taylor and also from 1547 Clairmount**. The positive dye test suggests that the private sewer service line from **1550 Taylor** has failed with a direct opening to the cave-in and is allowing water flow and soil migration from the sinkhole through the private sewer service connection to the 24-inch public sewer. However, no blockage or failure was found on the 24-inch public sewer. DWSD has also sent a letter to the customer at 1547 Clairmount informing the customer of this finding.

The failed private sewer lines from 1550 Taylor and 1547 Clairmount are the cause of the cave-in in the alleyway. The sewer lead failure at 1550 Taylor may also cause sewer back up at 1550 Taylor. Please be advised that customers are responsible for the up keep of their sewer service connections from the domicile up to the point of connection with the public sewer.



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I hope that the information provided above will be helpful in resolving this situation. If you have any further questions, please feel free to call Mr. Pei Boayue at 313-267-1255.

Respectfully yours,

A handwritten signature in black ink, appearing to read "Mohamad Farhat".

Mohamad Farhat, P.E.
Engineering Manager

Cc: DPW/File/DWS-903 ER-375



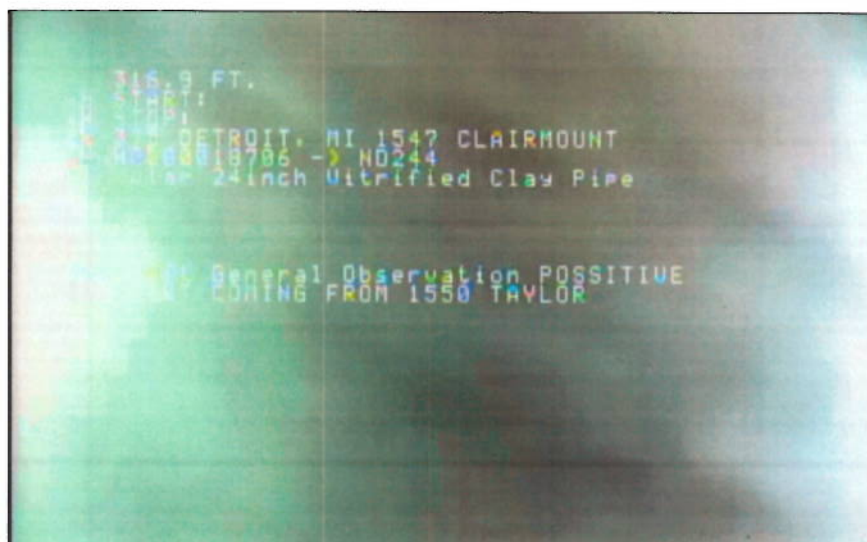
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**Looking Down 24-inch Public Sewer at Connection for 1550 Taylor
With Positive Dye Test**



1550 Taylor – Positive Dye Test