



The Corporation of the Town of LaSalle

To: Mayor and Members of Council

Prepared by: Jonathan Osborne, P.Eng., Manager of Engineering and Lena Petros, CET, Manager of Water/Wastewater

Department: Public Works

Date of Report: March 15, 2021

Report Number: PW-08-2021

Subject: 207 Martin Lane Storm Outlet

Recommendation

That the report of the Manager of Engineering and Manager of Water/Wastewater dated March 12, 2021 (PW-08-2021) regarding the agreement between the Town and Mr. Dave Cowlin for the financial terms and repair of the storm outlet pipe adjacent to his property be received and that Council give Administration approval to form a legal agreement and a subsequent By-Law be passed at a future Council Meeting.

Report

The report provided is to review the partnership opportunity to repair a storm outlet adjacent to 207 Martin Lane, with funding provided by the owner of the residence, Mr. Dave Cowlin. The report will give an overview of history of the development, the existing storm system and conditions, repairs completed to date, and a potential agreement with Mr. Cowlin for this repair.

Background of the “Bondy Development”

The Bondy Development consists of a 28 lot subdivision on Martin Lane, west of Front Rd. It was developed in the late 1980’s. The engineering work was completed by Norm Becker, P.Eng.

The roadway is a rural cross-section with catchbasins located on either side of the road at about every 4 lots. Each set of catchbasins drain south from the ROW, through a 10’ wide easement, and discharge through the breakwall into the canal. There are 8 of these easements.

There are also 2 other easements closer to the east end of the development that have larger pipes and drains Front Road. The assumption is that these were existing prior to the development.

The individual lots are designed to drain to the canal through the backyards, and not to the roadway or outlet pipe. The storm outlets are to provide road drainage only.

An important design note is that it was not recommended for these homes to have basements. This would have been recommended not only because of the proximity to the outlet pipes and trenches within the easements that inherently would be saturated, but also because of the proximity to the canals and likely wet ground conditions. This was a recommendation, and not a requirement, so property owners could still build a basement following the regulations of the building code, if they chose to. The outlets are at an elevation that would have them submerged under high or low Detroit River level conditions. During high river levels, the head pressure is greater, and would potentially increase the amount of infiltration, however under low levels, some infiltration would still exist.

Town Repairs/Communication Past 5 Years

In 2017, the homeowner at 123 Martin Lane contacted the Town concerning continuous sump pump running. The Town had the storm pipe plugged and sewer videos were done. From the video, it was evident that the pipe was damaged by something external (either fence post or excavation), and was leaking. To alleviate the problem, the Town re-routed the road catch basins to another outlet, and abandoned that pipe. At the time, this was thought to have been an isolated issue.

Subsequent to that work, another resident came forward and asked for the same action. At this point we realized this problem may exist at each of these outlets, and this solution could not be done again. We then advised all of the residents that we would undertake further investigation by way of sewer video and topographic survey to identify the easements and structures. The video work produced some information, but the majority of the pipes could not be drained enough to get a proper video. We also concluded that any work to fix these pipes would be very costly, and not necessarily yield a proper solution, but more of a temporary or mitigated solution. The topo survey showed that many of the easements are incumbered with various fences, sheds, or pool aprons. Therefore, no requests were made by Administration to Council for capital money to invest in either temporary repairs, or an improved ultimate solution.

At the time of this notification, Mr. Cowlin contacted us to advise that he had the same problem occurring with his sump pumps. Through conversation with Mr. Cowlin it was communicated that the Town was not going to be conducting any work on these outlet pipes. Mr. Cowlin then proposed the idea of paying for the repair himself.

Ultimate Solution

With the original design considerations in mind, and the potential cost to replace or repair all of these outlets, it would not be recommended to conduct major work on these existing outlets. An updated storm system would likely involve a linear storm main and pump station and would be very expensive.

With the DMAF grant that the Town has recently received, we are beginning the Environmental Assessment for storm water and overland flooding in the Front Rd area. The grant was awarded to conduct the study, and implement solutions in the Front Rd commercial area. The study will look at possible solutions in this area, but implementation would likely be through separate capital work.

Proposal from Mr. Cowlin

Mr. Cowlin has proposed the idea of funding a potential repair to the pipe, in an effort to reduce the amount of infiltration to his foundation and sump pump. Mr. Cowlin has been in contact with Rudak Excavating in regards to possible repair options, and has submitted an associated quote. In response to this proposal, the Town recommended a few items to Mr. Cowlin for his concurrence in order to proceed, which include:

1. He agree to pay for the cost of work in advance in the amount of the attached quote, plus 25% to cover contingencies, any remaining funds would be refunded;
2. That administration obtain Council approval to proceed;
3. To enter into a legal agreement with the homeowner to cover the payment and proposed works;
4. That Mr. Cowlin understand that this may or may not alleviate the issues he has with regards to his sump pump;
5. That the Town hire Rudak excavating for the repair.

The repair would involve plugging the storm sewer from either end, replacement of the pipe from the catchbasin on the road to just past the garage. This location is important, as the garage footing is a few feet closer to sewer pipe, than that of house. It also does not involve removal of any above grade structures. It is possible that due to the close proximity, a large amount of infiltration takes place between the pipe or trench and the garage footing, and then makes its way down to the basement footing. Our hope is that we are able to complete the items above, and that the repair does in fact help Mr. Cowlin and the continuous flow he sees in his sump pumps.

Council should be aware that if we are to proceed, there is the potential that other residents in similar situations may come forward without knowing the details of this proposed agreement. If that occurs, we would advise of how we handled this situation, and use whatever new information we gain during this project to make recommendations in the future.

We are recommending to move forward with the legal agreement to be formed by the Town of LaSalle, and with Mr. Cowlin's signing of said agreement and financial contributions, proceed with the storm repair with Rudak Excavating.

Attachments

1. Cross Sectional Profile of subject outlet pipe;
2. Proposal and quote from Mr. Cowlin, Rudak Excavating;
3. LaSalle letter to Mr. Cowlin, February 17, 2021;
4. Response to letter from Mr. Cowlin, February 18, 2021.

Consultations

Mr. Bob Rudak, Rudak Excavating

Financial Implications

The project is to be fully funded by Mr. Cowlin, and not have an impact on the Town's budget. Staff time will be required for the legal agreement and construction oversight which will not be part of the contributions made by Mr. Cowlin.

Prepared By:



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Link to Strategic Goals

1. Enhancing organizational excellence - Not Applicable
2. Strengthen the community's engagement with the Town - Not Applicable
3. Grow and diversify the local economy - Not Applicable
4. Build on our high-quality of life - Not Applicable
5. Sustaining strong public services and infrastructure - Yes

Communications

NA

Notifications

Mr. Dave Cowlin
207 Martin Lane
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Report Approval Details

Document Title:	207 Martin Lane Storm Outlet.docx
Attachments:	<ul style="list-style-type: none">- 207 Martin Lane_Cross Section Profile Drawing.pdf- 207 Martin Lane - Rudak Quote_jan 22 2021.pdf- LaSalle Letter to Cowlin_Feb 17 2021.pdf- Terms Acceptance_207 Martin_Feb 18 2021.pdf
Final Approval Date:	Mar 15, 2021

This report and all of its attachments were approved and signed as outlined below:



Deputy Chief Administrative Officer

Peter Marra



Chief Administrative Officer

Joe Milicia