

2505-068
4703 88th Ave SE
Mercer Island
TV inspection report.

To the attention of Ruji Ding, City of Mercer Island

As requested, the stormwater system at the above referenced project site has been inspected by TV camera. The videos were reviewed by my office in detail. This memorandum serves to summarize the findings of the inspection and provide action items that may be needed. The overall system is relatively clean, without damage and will function as needed for this project. There are two areas that were revealed during the inspection to have minor obstructions that should be resolved prior to completion of the project. Please refer to the map at the end of this memo for location references.

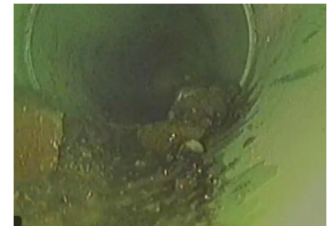
Specific locations of potential concern

West Side of House:

The conveyance pipe between Downspout 1 and Downspout 3 appears to have accumulated a small amount of rock and soil. The soil at the time of inspection was mostly

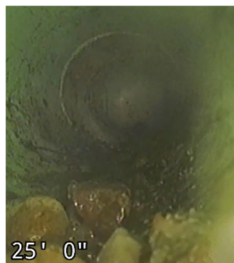


in a small clump that had not been washed down the pipes (like a clump of mud). This soil has most likely been washed down the pipes with the rainfall events that have occurred since the inspection was conducted. The rocks may have



washed down the system to the bottom catch basin. I would

recommend a quick jetting of the stormwater system on the west side of the house with a



flexible hose that could physically push heavier rocks to the downstream catch basin. The catch basin at the rear of the house that discharges to the HDPE pipe down the slope should be cleaned of debris.

North/east corner

The video inspection from downspout 5 going downstream shows sediment and standing water in the 6" conveyance pipe. The pipe between downspout 6 and the two 90 degree bends downstream from there was holding water that appeared to be 1" – 2" deep (less than 1/3 of the pipe).



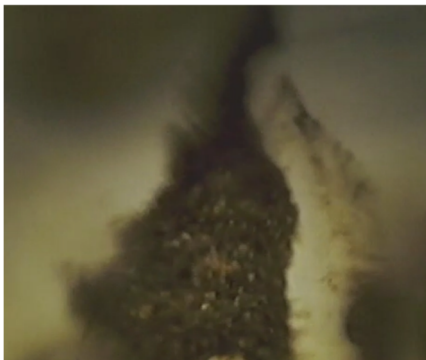
The retained water ends prior to the first of the two bends gradually, indicating that this portion of the pipe is sloping backward. There is also a fair amount of sediment at the bottom of the pipe along this section. The sediment should be removed and the pipe slope adjusted to provide positive drainage.

While the portion of the pipe that is not submerged may have capacity to convey the runoff from the project, the sedimentation in place indicates that it will continue to accumulate, eventually blocking the pipe in this location.

At the first of the two 90 degree bends in the north corner of the house, we observed a fairly small, but lodged wooden obstruction. The wooden obstruction should be removed.



Rear of house:



Inspection from the catchbasin directly behind the house revealed a collection of organic sediment directly west of the catch basin. This length of pipe should be flushed and debris removed from the downstream catch basin.

Closing Summary

The installed stormwater system is in generally good condition with no signs of damage or portions that were not installed. The system will generally function as designed provided the above-mentioned cleaning and adjustment are performed.

Actions to take:

1. Flush system and remove rocks, sediment and other debris from the downstream catch basin.
2. Adjust the pipe slope at the north corner of the house to allow gravity flow at 2% slope.

We trust this analysis will provide the information needed to allow this project to proceed. While there were locations within the pipe that had retained rocks and sediment, a flush of the system should result in clearing those obstructions. Removal of the wooden obstruction can be accomplished while the slope of the reverse sloped pipe is being adjusted in that same corner.

Additional TV inspections do not appear to be warranted at this time. Please contact our office if you need additional information or insight into the review of the inspection videos.

Sincerely,

A handwritten signature in blue ink, appearing to read "Edward Mecum".

Edward Mecum, PE

Principal

EdM@G2Civil.com

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System Map

