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TO: Mayor and Council
Borough of Rocky Hill

FROM: William C. Tanner, P.E.
Borough Engineer

DATE: July 16, 2017

SUBJECT: REPORT ON STAGE II PLANT

Attached is a partial copy of one of the two documents I received from Montgomery Township in a meeting I attended last Thursday at the Montgomery Township Municipal Building. This is the report that the Township promised to provide the Borough earlier this year. The Township initiated the study and report as result damages sustained to the plant over the past years caused by storm flooding of the site. The multiple incidents of flooding to the site and equipment have resulted in notice from the insurers that future damages might not be covered. In anticipation of this potential, the Township initiated a study of potential repairs and their costs for discussion with the Borough.

In discussing this report and the problems it is addressing, the Council should understand that the in general all sewer treatment plants, over a certain age, were built adjacent to and within the flood areas of large streams. While this was hydraulically the best location for the plants, it also exposed the plants to the potential flooding in large rain events.

The Stage II plant is located on River Road just after the bridge and adjacent to the Millstone River. The Millstone River has a drainage area that extends south to Cranbury Township and includes Parts of Princeton, South Brunswick, Plainsboro and the Windsors. Over the years the development of these upstream areas as well as other climatological issues have created additional runoff and increased floodwater elevations. As a result of these two factors the depth of the floodwaters has increased as have the number of incidents where severe flooding has occurred.

The following is a summary of the four (4) alternatives the Township has explored. A more complete discussion is outlined in the attached report.

The Alternatives are as follows:

1. Construct a Flood wall around the entire site to prevent flooding of the plant area.
Under this scenario the plant would stay where it is currently. In addition to the wall additional plant modifications would also be required to upgrade treatment systems in the plant.
Total Cost \$5.1 Million.
2. Hardening/ flood-proofing of structures and equipment below the flood elevations as well the movement of other items to areas above the flood elevation.
Total Cost \$5.2 Million

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3. Movement of the plant to an elevation above the existing flood area. This essentially would be a completely new plant at a higher elevation and the removal of the old plant.
Total Cost \$12.7 Million

4. Essentially the abandonment of the existing treatment plant and the construction of a pump station and forcemain to the Skillman Village Sewer Treatment Plant. This would also include renovations and expansion to the existing Skillman plant to allow the acceptance of the additional flow from the Stage II plant as well as certain upgrades for future Montgomery flows.
Total Cost \$17.1 Million

A more complete explanation of the renovations and costs can be found in the Kleinfelder report. (Due to the size of the report I will send it under separate email. I will also bring copies of both reports for all on Monday evening.)

There will also need to be a discussion regarding the potential costs to the Borough for any of these alternatives which Mr. Monzo will need to investigate. However be advised that the costs above are total costs and do not reflect the reductions that will result from the Borough's current percentage of flow to the plant. The 2017 percentage is 16% and therefore the Borough share of the \$5.1 Million would be \$820,000. The Township is also looking to potentially spread the cost over 30 years using a State Loan which currently would be approximately 1% per year.

If you have any questions, I will be at the meeting Monday evening.