March 8, 2011

MEMO

TO: Samantha Reiner

FROM: Walter Fazler, Bradford Engineering Associates

RE: Sewers in Castle Rock

Samantha,

The following is a response to the questions that I received from you via email concerning the sanitary sewer in Castle Rock, which will be installed as part of the Crum Creek Sewer Project. The questions are shown in bold followed by my answer:

1. **What guide line will be in place in case of failure to mains and/or pumps?**

The current plan contemplates Delaware County Regional Water Quality Control Authority (DELCORA) will build, finance, own and operate the sewer system. DELCORA is responsible for the safe collection, conveyance and treatment of close to 90 million gallons per day of sewage in Southeastern Pennsylvania. They employ the necessary equipment and personnel to properly maintain and monitor the system proposed in Edgmont.

1. **Will the Township have an environmental protocol in case a malfunction/failure to protect the watershed?**

DELCORA will be responsible for the maintenance and monitoring of the sewer system. They are required by Pennsylvania Department of Environmental Protection (PaDEP) and US EPA to have the necessary protocols in place to protect the Environment and Public.

1. **What happens during power failures, mechanical failures and blockage what is the protocol?**

DELCORA will need to provide this information, however depending of the situation, bypass equipment can be employed to divert sewage around blockages. Publicly owned pump stations will be equipped with backup power generators in case of power failures. Publicly owned pump stations have redundant systems in place in the case of mechanical failures. Individual grinder pumps will be the responsibility of the homeowner. Options for back up pumps and power generators are available.

1. **Have there been thoughts of installing a second forced main from one pump station to another to eliminate the issue of shutting down the system during repairs or failures?**

A second force main is not necessary as long as the primary force main is properly designed, installed and maintained. A second main will only add to the cost of the project.

1. **During shut downs will the residents of Edgmont be notified prior to any schedule work?**

For non emergency work, the resident will be given as much notice as reasonably possible.

1. **Will there be emergency generators install at all pump stations?**

Yes

1. **Will the Township have control of the easements within Castle Rock Community?**

DELCORA will be the grantee of the easements in Castle Rock.

1. **Would the Township agree to be a party with the Castle Rock Community on the easement agreements?**

This question should be addressed by the Township Solicitor.

1. **What responsibly will the Township have to protect the residents of Edgmont from over charging and quality of service from the independent company?**

This question should be addressed by the Township Solicitor or Board of Supervisors.

1. **Does the township have a proposed ordinance for the sewer systems, giving guidelines for the independent Company/Contractors to be required to follow?**

The sewer system will be designed and installed in accordance with PaDEP standards.

1. **Will the Township/independent Company have control of the grinder pumps as to the service and replacement of parts for the residents that are required to have them installed?**

The grinder pump installation and maintenance will be the responsibility of the individual homeowner.

1. **Will this project be required to follow DEP and all federal laws? If so any federal grants available from them?**

The sewer system will be designed and installed in accordance with PaDEP standards. Grant money in the amount of $871,000 has already been secured.

1. **How much thought or planning has been taken to provided a gravity system where possible?**

Gravity sewer will be installed where possible. Final design will be accomplished within the next year.

1. **Bradford Engineering report August 2010 states on pg 6 & 7 due to physical constraints of the area the 2007 lists the community for a low-pressure system, would like to review the reports.**

The reports should be on file at the Township.

1. **Will there be options on low pressure pumps type and sizes?**

Each homeowner is welcome to investigate the type of pump they would like installed. The Township will review all applications.

1. **Will an indoor low-pressure system be allowed?**

Most likely no. This will need further review.

1. **What is the expected life of the pumps for a family of five?**

As with any appliance, if it is properly maintained, pump should provide several years of service. Homeowners are encouraged to contact vendors for additional information.

1. **How many homes can be put on one grinder pump system?**

Each home must connect to the sewer system with their own pump.

1. **Will the Township/independent Co. sign for extended warranty on the pumps if possible?**

Most likely no. DELCORA may entertain this proposition.

1. **What steps will be taken if a resident is unable to pay anything?**

This question should be addressed by the Township Solicitor or Board of Supervisors.

1. **If a lean is applied to the property would this effect the owner's credit?**

This question should be addressed by the Township Solicitor or Board of Supervisors.

1. **Will grinders mean more cost to Castle Rock residents apposed to others in the Township?**

The cost of equipment will generally be higher then a conventional gravity sewer, however, the installation costs are usually much lower. A small diameter force main can be installed at a relatively shallow depth.

1. **Why are grinders needed for Castle rock only?**

Grinder pumps may be needed elsewhere in the project area, however, due to the amount of rock, in Castle Rock, conventional gravity sewers may not be cost effective. This can be explored further during the design phase.

1. **Can residents "opt-out" if they are not interested, or have a working system?**

This question should be addressed by the Township Solicitor or Board of Supervisors.

1. **Is there a final plan in place?**

Final design is expected to be completed within a year, pending PaDEP approval.

1. **Can the sewer main coming down West Chester Pike be installed on the southern side of the Pike for some residents to have the option of a gravity feed system?**

This can be explored further during the design phase.

1. **When will the Township be visiting our community to perform the survey?**

Survey work may begin sometime this spring or early summer.

1. **Will the Township maintain the system and grinder pumps in Castle Rock?**

The grinder pump installation and maintenance will be the responsibility of the individual homeowner.

1. **Will the Township assist in low interests loans?**

This question should be addressed by the Township Solicitor or Board of Supervisors.

1. **How will the cost be determined for each homeowner?**

This question should be addressed by the Township Solicitor or Board of Supervisors.

1. **What happens to homeowners who cannot afford the cost of the system that may be forced on them?**

This question should be addressed by the Township Solicitor or Board of Supervisors.

1. **Where will the sewer lines be run in Castle Rock, in the road?**

Options for location of the sewer will be completed during the design phase.

1. **Will old systems need to be removed?**

Yes, existing onsite systems will need to be dismantled and filled in.

1. **Why is there a need for the sewers in Edgmont Township?**

The 2007 Act 537 Plan addresses this question. This report is on file with the Township.

1. **If the need for sewers is due to commercial development, why do the residents of the township need to incur the cost if they have working systems?**

The Act 537 plan identifies a need for sewers in the entire Crum Creek Watershed.

1. **Who take ownership of the sewer system in Edgmont Township?**

The current plan contemplates DELCORA will build, finance, own and operate the sewer system.

If there are any questions concerning this matter, please don't hesitate to contact me.



Walter A. Fazler, P.E.