Little Hunting Creek Community Meeting
Mt. Vernon High School
12/11/2018

Start 7:15 PM
Approximately 27 people in attendance.

Tom Grala, Meredith Raetz went through a presentation of the results of the project study and anticipated design and construction activities.

Questions and discussions were held both during the presentation and during a question and answer period after the presentation.

The following is a summary of questions raised and discussions:

Q1. Where is the Noman Cole Treatment Facility located?
A1. It is in Lorton off Richmond Highway

Q2. Where does the proposed replacement pipe (purple line) start and end?
A2. The conceptual layout has the pipe starting at Woodland Park and crosses the creek to Stockton Parkway.

Q3. Woodland "Park" discussion, where is it?
A3. Woodland Park is an HOA owned park/boat ramp located near 3201 Woodland Lane.

Q4. There is a pair of telephone lines crossing near the proposed sewer line. Have the telephone lines in the area been located?
A4. They were not identified in initial survey, but will be located during design phase

Q5. How deep is the sewer below the waterline of the creek?
A5. The pipe varies from approximately 12-15' below the water level of the creek.

Q6. Soils in the creek are poor what's going to hold up sewer?
A6. We will be doing soils investigations during design. We will investigate different types of pile support systems during design depending on soil bearing capacity.

Q7. What alternatives did we investigate?
A7. Explained all explored alternatives, including pump station alternatives.

Q8. How will this solve the problem we have now with the gravity pipe freezing and causing backups?

A8. The sag in alignment can cause flows to stagnate and may cause backups. The replacement pipe will have proper alignment which will allow continuous flow of sewage and reduce the possibility of freezing and subsequent back-ups.

Q9. The area to be excavated is contaminated. Has the cost to dispose of the contaminated soil been included?

A9. The costs presented tonight are planning level costs. The contamination issue will be Investigated further during design. If contamination becomes a cost prohibitive issue, other alternatives than what has been selected may need to be evaluated further.

Q10. Soil borings have been taken in the Creek before about 15 years ago. Did the project team review those reports?

A10. No, the team is not aware of such reports but will look into it and will be doing its own analysis.

Q11. There is a potential for population growth as smaller houses are replaced by larger houses. Will this affect capacity?

A11. During the study, we looked at planned growth in the area and determined that the 12" pipe will be sufficient.

Q12. Is the Army Corps of Engineers (ACOE) aware of the project?

A12. We have had preliminary contact with the ACOE about some project related issues during the study. They are aware of the concept of the project, but we have not submitted any information yet for a permit application or review. We will be doing this during the design.

Q13. Explain the coffer dam, dewatering, trenching, construction methods.

A13. A coffer dam is used to isolate the creek and expose the area of the creek bottom we will be doing construction. The area inside the coffer dam will be dewatered to allow the new pipe to be constructed. An excavator will be used inside the coffer dam to dig the trench for the replacement pipe. Various dump trucks, compressors, and other typical construction equipment will also be sued on site.

Q14. The river height fluctuates, will that be an issue with the coffer dams?

A14. During design, we will look at tide range and peak creek flows. A safety factor will also be added to determine the height of coffer dam needed.

Q15. What will be the staging area for construction?

A15. Will be working at Woodland Park and along Stockton Parkway. The site is constrained and we will be looking at off site staging and storage area. Will be limiting vehicles on site. The use of the Little Hunting Creek Pump Station was mentioned as a potential staging area.

Q16. Could you go through the alternatives in more detail?

A16. Slide 7 of the presentation was reviewed in detail. Pipe bursting is a way to insert a new pipe into an existing pipe using a mandrel and "bursting" the old pipe in the process. The method requires proper pipe alignment and was not valid for our project. Cured in place lining allows a fiberglass lining to be inserted into the existing pipe and cured. The method will not improve pipe alignment issues and was not considered a viable alternative. Several pump alternatives were investigated including pumping into the existing force main and pumping across the creek. Pumping alternative were evaluated in detail but were not recommended due to higher lifecycle costs and long term impacts to the community. Jack and bore is a method that creates shafts on each side of the creek and then "tunnels" the pipe. The method was not considered further because the pipe is too shallow under the creek bed. A rule of thumb is 3 pipe diameters of soil above the pipe and that is not available for our pipe configuration. Horizontal directional drilling is a way to use a drill head to guide a new pipe. Generally, this is typically done with smaller pipe sizes. It would also create a curved pipe, or siphon, under the creek which is not as desirable a condition for hydraulics of the sewer and long term maintenance. The open cut and replacement alternative involves isolating the creek, digging a trench for the pipe, installing the pipe, and backfilling the trench. This was the alternative selected. The do nothing alternative is a standard used to compare alternatives to existing conditions. It is clear improvements to our pipe are necessary.

Q17. Why can't you line the pipe?

A17. Lining would improve the structure of the pipe, but will not improve alignment and eliminate sags. An important goal of the project is to improve the current pipe alignment to assure proper flow of sewage.

Q18. Why not select one of the pump station alternatives?

A18 Our analysis showed that the lifecycle costs of pumping alternatives were higher than the pipe replacement alternative. Lifecycle costs included both capital construction costs and costs to operate and maintain the facilities. Additionally, pump alternatives rated poorly in long term neighborhood disturbance. A pump station would require regular maintenance and could produce odors and noise, which are disruptive or a nuisance to the community.

Q19. Can the new alignment be parallel to the existing pipe so both can be exposed in coffer dam and the new pipe be set deeper to allow the more depth in the channel?

A19. The proposed alignment in our presentation is conceptual. Will be optimizing the alignment during design. The grade and depth of the pipe will be evaluated further in design. We will also be evaluating removing, or abandoning the existing pipe in place during design.

Q20. What is the timing for construction?

A20. A preliminary schedule in of July, 2019-November, 2019 was included in the presentation. We anticipate time of year restriction for stream habitat in the creek. We also will be considering the boating season as we refine the design and construction methods to be used. A more refined schedule will be developed during design.

Q21. What will be done to protect animals and wildlife?

A21. The permit process has a component of evaluating the project and assuring protections are included for both creek based and land based wildlife. Provisions will be included in the construction documents to assure protections that are acceptable to the permitting agencies.

Q22. What construction equipment will be used?

A22. Equipment will be used to install the coffer dam. Once the dam is in place an excavator will be used inside to dig the trench for the new pipe. Dump trucks, generators, compressors and other construction equipment will be on site. Bulldozers, or other grading equipment may be used during site restoration.

Q23. Will construction activities cause vibration?

A23. Depending on the method selected, installation of the coffer dam may cause vibrations. Installation of the pipe supports may also cause vibrations. Provisions will be included in the contract documents for noise limits. Pre-construction surveys will be done and we will be monitoring these conditions during the project.

Q24. Has proper notice been given to upstream and downstream community who have boating activities affected?

A24. Discussed notice methods used for the meeting including direct mail, use of NextDoor website, and notice posted by the Supervisors office. We will work with the Supervisors office to improve communications for the next meeting. A suggestion made to post a notice in the newspaper in the newspaper. The team will consider expanding the notification radius. It was also noted that the notice was sent too close to the meeting date. More lead time will be considered in future notices.

Q25. Barges were used to install pipe 15-20 years ago, can't this be done again?

A25. We think soils present will require techniques other than those that can be done by barge. We will know more when we do soil samples and develop the design further.

Q26. Will Woodland Park be out of use during the project?

A26. We do anticipate impacting the park during construction. We hope to be able to allow some access. This will be evaluated further during design.

Q27. Will there be any traffic restrictions?

A27. Woodland Lane will have construction traffic to access the Woodland Park boat ramp area. We hope to keep Stockton Parkway open, but may need a possible single lane restriction, or short term closures.

Q28. Will vegetation be cleared for the staging areas?

A28. We will do some clearing for construction activities. We generally try to select staging areas that minimize need for clearing. We will be evaluating this further during design.

Q29. Will wetlands approvals be needed?
A29. Yes, we anticipate a wetlands approval being obtained through the joint permit application process.

Q30. How will the project affect someone not directly along the creek?
A30. There may be an increase in construction related vehicles in the neighborhoods delivering materials to the site, etc.

Q31. Where will the soil come from for the coffer dam?
A31. We don't anticipate any additional soils being needed for the dam. Examples of coffer dams shown in the presentation were reviewed. Soils shown in the examples are from the exposed stream bed.

Q32. Will contaminated soil be removed and replace with clean soil?
A32. We will do testing during design. Any unsuitable soil found during construction would be removed and suitable soil brought in for backfill.

Q33. How will the project be paid for?
A33. Fairfax County has a sewer fund that is funded through the current rate structure. This sewer fund is used for capital improvement and repair projects in the sewerage system. This project will be using this fund.

Q34. Are their health concerns for humans due to disruption of contaminated soil?
A34. Soil testing done during design will help us understand the present conditions and risks.

Q35. A previous project tracked contaminated mud around the neighborhood. What will be done to prevent this?
A35. The project will require what is known as erosion and sediment controls. The permit review process will evaluate and approve the measures proposed for the project. These provisions may include a truck wash station at construction site entrance/exit points where mud is washed from vehicle prior to leaving the site.

Q36. Will access on Woodland Lane be a problem as it is narrow and has no sidewalks?
A36. Due to site constraints, we will be looking for offsite storage and staging areas. We will also consider vehicle sizes and access available.

Q37. Can the existing Little Hunting Creek Pump Station be used for staging?
A37. It has potential and will be evaluated further during design.

Q38. What is the date for next meeting?
A38. We have not set a date, but anticipate approximately 7 months from now when we have made progress on the design and are closer to construction.

Q39. Has someone been keeping track of meeting comments?
A39. Yes, two note takers from project team are tracking discussions. A summary will be distributed to attendees. People were reminded to use the meeting sign in sheet.

Q40. Did we look at an old rail line crossing during our alternative analysis?
A40. Discussion was held on the location. It was determined to be considerably south of project site and abutted a nation park. It did not appear to offer a cost-effective location for our pipe issue.

Meeting ended at 8:40 PM

Some attendees spoke to project team that stayed after the meeting.

Additional Notes:

One resident made the argument that the new sewer should be installed 1' lower than the existing pipe to enhance recreational use of the creek. The same resident believes that it is unacceptable to dam the creek in the summer months and that planning around recreation activities is very important. He suggested that the best time for construction would be from November - February.

There was significant discussion on the timing and means of notification of the public. Many community members did not feel like enough notice was give. They also would prefer more "formal" notifications such as direct mailing or Washington Post notices over NextDoor. Another attendee felt that the Riverside Estates and Gum tree neighborhoods should be included in notices.

Several community members recollected a separate creek crossing sewer project about 15 years ago. There was also mention of a Little Hunting Creek Study Master Plan and "EPA Reports" identifying PCB and chlordane as contaminates in the reverbed. A community member also said that soil boring had been done in the past and were analyzed for toxins, which is how they know there is PCP's and chlordane in the soils.