

Meeting Minutes

Project: Bonwood Drive SDIP

Subject: Preferred Alternative Public Meeting

Date: Thursday, January 30, 2020

Location: Christ Church, Providence Road

Attendees: Danee McGee, City of Charlotte Storm Water Services Josh Letourneau, Armstrong Glen, PC

Doug Lozner, City of Charlotte Storm Water Services

Kim Calhoun, City of Charlotte Real Estate Division

- The public meeting was held on Thursday, January 30th, 2020 at 6:00 PM at Christ Church. See attached mailer and agenda.
- The meeting space was set up with a sign-in and Storm Water Services materials table, two exhibit boards, and a presentation area for a PowerPoint presentation. The PowerPoint presentation will be converted to a PDF for hosting on the City's project website.
- A list of public attendees is attached to the meeting minutes.
- Residents living in the Bonwood Drive Project Area were invited to attend the meeting.
- The presentation began at 6:10p.
 - Danee introduced City Staff and the engineering consultant. Danee also explained the need for the project and the project process.
 - Josh explained the existing condition of the storm drain system as well as the hydraulic modeling results. He explained the current issues such as system failure and property flooding which are the primary catalyst for the project.
 - Josh explained the need for improvements and presented the Alternative options for resident input.

Alternative #1-System Replacement

- Josh explained the system replacement strategy and the potential construction impacts, foundation protection and easement needs.

Alternative #2-System Rehabilitation

- Josh explained the system rehabilitation strategy (CIPP -Cured in Place Liner or Polyethylene Line-Slip Lining), potential construction impacts, Junction box replacement, foundation protection and easement needs.

The following questions were asked by residents:

1. Will you put the same type of pipe (metal) back in place for this system?
Answer: No, reinforced concrete pipe (RCP) is the preferred type of pipe replacement.
2. What do the green stars on the map represent?
Answer: They represent modeled flooding such as low-lying areas where water from a rainstorm would collect. This is not property owner reported flooding.
3. What do the purple dots represent?
Answer: These represent property owner requests for service (311) that are closed either because they were addressed or did not qualify for service.
4. What is the difference between an A request and a B request?
Answer: An A request would include structural flooding such as crawl space or finished flood flooding in a home (structure), roadway flooding or potential roadway failure which would be a potential safety hazard to the public. An example of a B request would be pipe that is structurally failing but is not in the City Right of Way. This pipe may be in a yard but not close to a home.
5. Why are the engineering models showing flooding when the residents have not experienced flooding?
Answer: Engineering models are accurate from the standpoint that they are built utilizing survey data and storm runoff data. This does not mean flooding has occurred. They are calculated to show the potential of flooding during specifically analyzed storm events. These models report potential impacts and the City will follow up with residents to determine if the impacts represent what residents are experiencing.
6. Why is the pipe on Canterbury Road shown as being located in the park on the map?
Answer: The GIS maps are not as accurate as a survey map. The location and thickness of the lines is approximate.
7. Is 48" pipe going to be placed in the entire project area?
Answer: No, the pipe size varies throughout the project area. The larger pipe sizes are at the downstream end of the system (outfall) and the smaller pipes are at the upstream end of the system.
8. What is Foundation Protection and why is it needed?
Answer: A geotechnical engineer, who is typically a subcontractor to the construction contractor, will inspect the home foundation in areas where excavation for pipe installation is close to the home. The geotechnical engineer will recommend stabilization methods to the home such that the foundation of the home will be protected from shifting soils due to excavation. FP is placed deeper than the drainage system and remains in place. A benefit is that if there are future issues with the drainage system the home is protected. A Right of Entry agreement is executed to allow the contractor access to the home for installation purposes.
9. If the property owner is trying to sell their home how does the project impact the sale?
Answer: The project can impact a property owner's ability to sell the home. The project impacts must be disclosed by the seller's realtor. The realtors for the buyers and sellers can call the Project Manager to discuss benefits and impacts to the property. One benefit is that future system failures would not be at the expense of the buyer. Buyer would need to be made aware that there are currently issues which the project will address.
10. How long will the Project take?
Answer: The schedule is not set. The project schedule will be conveyed to property owner at the start of the design phase. and The construction duration will be finalized during bid phase of the project.
11. Where does the water go during construction?

Answer: The drainage system is installed a few pipe sections at a time and the water is pumped through a hose like system until installation in a specific area is complete.

12. How do property owners access their homes?

Answer: Road lanes may be closed one at a time to allow access. The contractor may shore up work at the end of the day by providing metal plates over the open holes in the road. Driveways may be inaccessible at times during construction. If feasible and warranted, temporary gravel parking pads may be used in front yards. The gravel would be removed and the disturbed area reseeded after construction.

13. How is the project constructed?

Answer: The work is performed downstream to upstream for replacement but for rehab the contractor has more flexibility with construction efforts.

14. Are trees replaced?

Answer: Tree roots can cause damage to the system and trees are not allowed to be replaced in permanent easement area.

15. Are driveways replaced?

Answer: Photos are taken pre and post construction and all impacted areas of the driveway by construction will be repaved.

16. What is Temporary Construction Easement?

Answer: Temporary Construction Easement is only utilized during the construction phase of the project to allow additional access for the contractor to construct the project. This easement goes away after the project is completed. A Storm Drainage Easement is permanent.

17. What are the square boxes?

Answer: These are drainage structures that allow for pipe size changes, a change of direction of water flow and future maintenance access.

18. Is it possible to install smaller pipes?

Answer: The pipes are sized based upon current design standards to convey water safely in the street row and to help alleviate flooding of structures.

19. Is the City replacing Trees? Compensation for Tree loss?

Answer: The City is not replacing or compensating for trees that need to be removed for the project.

20. If tree roots are not an issue in this location, why are trees not allowed?

Answer: This is in order to prevent future maintenance issues and costs

21. If the dirt has washed out around the pipe how are the voids addressed to make the pipe stable so that rehabilitation works?

Answer: Grout or other materials will be injected in the voids surrounding the pipe prior to the installation of the pipe liner.

22. How is it possible to not replace the pipe with a larger size? What about capacity issues?

Answer: The flooding in the project area is modeled but there are not reported flooding issues, so it makes it feasible to line the existing pipe. The liner takes up a minimum of space but allows the water to flow more quickly through the pipe due to a lower coefficient of friction.

23. Are the new junction boxes below ground and what does the top look like?

Answer: Yes the junction boxes are below ground and there will be a standard sized manhole on the top to allow for future maintenance access.

24. Will utility lines be relocated?

Answer: Impacted utility lines may be relocated if necessary for construction. There may be impacts such as tree removal and construction access for equipment to relocate utilities.

25. Will irrigation Systems be relocated?

Answer: The contractor can work with property owners to flag sprinkler heads and temporarily relocate lines during construction if necessary, as well as relocate back after construction.

26. Are the Alternative #2 pipes smaller than the Alternative #1 or existing pipes?
Answer: The Alternative #2 pipes are smaller than Alternative #1 because pipe replacement for Alternative #1 allow for upsizing if the system. Also, Alternative #2 pipes are the same size as the existing pipes since we are expecting to line existing pipes or replace with the same size but different material (reinforced concrete pipe-RCP).
27. Will tree be removed for Alternative #2?
Answer: In some instances where new pipe is being placed, junction boxes are being installed or access is necessary there may be tree removal etc. However, the impacts will not be as severe as Alternative #1.
28. What will you do in areas where there are dual (two) pipes side by side?
Answer: We would rehabilitate both pipes if it's possible to do so.
29. How do you know there are holes in the pipes?
Answer: We have utilized confined space entry (a person climbs into the pipe) for pipe larger than 36" and CCTV rover to video smaller pipes.
30. What happens if there is a shed in the easement area?
Answer: If the shed is not on a permanent foundation, does not have electric service and is in good condition it can most likely be temporarily relocated outside of the easement area during construction.
31. Will the grass be replaced?
Answer: Yes, the area will be seeded and stabilized at the end of construction.
32. Will the higher water velocity coming out of the lined pipe erode the outfall area at the creek?
Answer: The consultant will analyze the flow and provide rip rap or energy dissipation as needed.
33. What is the project website?
Answer: Stormwater.Charmeck.org is the Charlotte-Mecklenburg Storm Water Services homepage. On this page click on the "Projects" pull down menu and select "List of Active Projects." On this active projects page select the "Bonwood" link to go to the project webpage.
34. Can the downstream system remain a 48" pipe?
Answer: Residents of Chadsford Place can decide on either Alternative #1 or Alternative #2 independently of the remainder of the project due to this portion of the system being unaffected by upstream improvements.
35. Why would property owners donate easement?
Answer: Maintenance of the system is currently the responsibility of respective property owners. By donating a drainage easement, the maintenance becomes the responsibility of the City.
36. Does donation of easements have a market impact to property owners?
Answer: Donation of an easement does encumber the property and potential buyers will have to decide if easements affect their intentions for the property (i.e. not being able to build a swimming pool in the backyard). Realtors must disclose the project and the risks associated with pipe failure if costs for replacement or maintenance are not shifted to the City.
37. How will property be accessed during maintenance?
Answer: Access will be through the drainage easement. The City will try to provide notice to property owners before performing maintenance activities. This may not be possible if there is an immediate public safety need.
38. What is the timing for determining the Alternative and signing the easement agreement?

Answer: The project team is asking for input from residents regarding their Alternative preference and the willingness to donate easements prior to February 21, 2020. Easements will be signed during Design Phase, after preliminary construction plans have been produced.

39. Does the easement language change?

Answer: The easement agreement language does not change, but the Storm Drainage Easement limits in the PowerPoint presentation are approximate. The exact areas will be determined by platted survey during Design Phase. The plat and easement will then be recorded at the Register of Deeds.

40. How much time with the Alternatives take to construct?

Answer: Alternative #1 will take longer than Alternative #2. We do not have a timeframe yet but a ballpark figure for Alternative #2 is 8-12 months.

- The public meeting was concluded around 8:30 PM with no other attendees present.