## Comment Responses- June 14, 2018

## **Planning Review:**

1.See sheet C7.0- Landscape plan has been updated to provide the 'Option C' low impact screening within the 20' rear buffer. Fence waiver has been updated, and attached.

## **Engineering Review:**

- 1. Existing and Proposed Exhibits now show areas A, B and C with points A, B and C respectively.
- 2. Existing and Proposed Exhibits now show areas A, B and C with points A, B and C respectively.
- 3. Existing and Proposed Exhibits now show areas A, B and C with points A, B and C respectively.
- 4. Soil group changed to D.
- 5. The grass lined weir is now the emergency spillway for the 100-year event when the riser orifices and grate are clogged.
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- 7. The lowest top of pond elevation is now 975.75. The 100-year WSEL through the emergency spillway during 100% clogging is 974.75. This provides 1.00 feet of freeboard. The rim elevation of the outlet structure is now at 973.40. The 100-year WSEL under normal operation is now 973.47. This is 0.78 feet below the emergency spillway elevation of 974.25.
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- 11.All outlet structure details have been provided. Pond is designed for a 40-hour residence time for the water quality event.
- 12. Waiver request has been revised.
- 13. See sheet C3.0 for added dimensions and northing/easting labels on ADA ramps
- 14. See sheet C2.0- callouts for KCMMB concrete in entrances have been added

- 15. Chief Austerman is to follow up with the water department & CC Gene on those emails to show that we have approval of being 56 feet away
- 16. See sheet C5.0 and C5.1 for plan and profiles for private sanitary sewer lines and profiles. Others (the city or John Knox Village) will design the sanitary line to the north of our clean out (tying in at clean out: elevation: 974.07±), and/or the temporary line routed to the south east.
- 17. The lowest top of pond elevation is now 975.75. The 100-year WSEL through the emergency spillway during 100% clogging is 974.75. This provides 1.00 feet of freeboard. The rim elevation of the outlet structure is now at 973.40. The 100-year WSEL under normal operation is now 973.47. This is 0.78 feet below the emergency spillway elevation of 974.25.
- 18. See sheet C4.0- contour labels have been added to the proposed surface.
- 19. Grading for the emergency overflow spillway to the east has been provided. This includes a berm to protect home owners from potential flooding.
- 20. Calculations are for the concrete flume with a very conservative assumption that the entire 100-year 17.88 cfs discharge enters the pond at that point at 12fps. That riprap D50 was then doubled.
- 21. The single pipe used (P-1) to drain the outfall structure is now shown in the table with its 100-year analysis.
- 22. See sheet C5.0 for updated note and sheet C10.1 for standard detail
- 23. See sheets 10.0-10.2- unnecessary details have been removed, and sanitary sewer details are shown
- 24. 100-year HGL label added.
- 25. Ladder rungs extended and manhole offset for access.
- 26. See sheet C5.0 and C5.1 for plan and profiles for private sanitary sewer lines and profiles. Others (the city or John Knox Village) will design the sanitary line to the north of our clean out (CO elevation: 974.07±), and/or the temporary line routed to the south east.
- 27. Naming of pipes and sections have been cross referenced for clarification—see sheet C5.0, C5.1 and C9.0 for utility plans and sections.
- 28. See sheet C2.0- Water meter has been located in the 10' water easement
- 29. Understood—According to conversations with Dena Metzger, John Knox Village will take care of the blanket easements
- 30. Toe walls have been added. Roof drains have been routed to the east end of the pond as a cost saving measure.
- 31. A final restoration plan has been added (C6.1). Notes on both C6.0 and C6.1 have been updated to more clearly define the timing of erosion control measures.
- 32. We are no longer connecting to the existing junction box with storm sewer, so this issue is resolved.
- 33. The engineer's cost estimate has been updated to include the detention pond outlet structure, MoDot aggregate base, landscape costs (seeding, sodding, mulch, soil, etc.). The backflow preventer will be in the building- therefore no vault needed- refer to comment 15 response.

## Fire Review

1. The location of the FDC on the building has been noted on sheet C5.0- Utility Plan.