

PUBLIC WORKS ENGINEERING DIVISION

Date: Tuesday, June 13, 2017

To:

ENGINEERING SOLUTIONS

Matt Schlicht, P.E.

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From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2016152

Application Type: Engineering Plan Review

Application Name: Village at View High Drive On-Site and Off-Site Water Line Plans

The Development Services Department received plans for this project on May 26, 2017. We have completed our review and offer the following comments:

Engineering Review

- 1. Please refer to comment #2 of the applicant letter dated May 5, 2017 (hereinafter referred to as "the comment letter"). Grading is shown in the profile view, but there is no grading plan shown in the plan view. It appears that preliminary road grading of Kessler Dr. is going to occur, and in some cases, as much as 12 feet of cut is shown, and in other segments there is 3 feet of fill with nothing shown in a plan view. A detailed grading plan must be developed, showing contours, contour intervals, spot elevations, preliminary road grading, future roadway extension, etc.
- 2. Sheet C.501: A 12" by 8" tee is called-out at the intersection of Village Park Dr. and View High Dr. Shouldn't this be a 12" by 12" tee, with a 12" by 8" reducer on the south leg of the 12" line?
- 3. Please refer to comment #5 of the previous applicant letter. The sanitary sewer crossing at station 5+80 is now shown, but it is too close to the water line.
- 4. Please refer to comment #7 of the previous applicant letter. An additional fire hydrant appears warranted near station 4+50 along Village Park Dr.
- 5. Please refer to comment #15 of the previous applicant letter. A detailed grading plan is required where the new 12" water line loop is proposed. It should also account for a specific future road design, and should address any drainage concerns due to fill. It is likely that storm structures and pipes will be required. Slopes should be no greater than 3:1, with less slope desired for potential long term maintenance issues.

- 6. The casing carrier pipe beneath 3rd St. is not required. These are only required in the case of a public sanitary sewer line installed beneath paved right of way.
- 7. Please see comment #12 of the previous applicant letter. Discrepancies remain in the valve call-outs. To reiterate, 12" butterfly valves are required on 12" water lines. Gate valves are required on all water lines less than 12" in diameter.
- 8. Sheet C.503: Shouldn't the tee called-out at station 0+00 be a 12" by 12" tee? Please see previous comment concerning a 12" by 12" tee with an 8" reducer on the 8" leg.
- 9. Sheet C.504: Please specify fusible C900 DR18 pipe for the portion of the water line to be installed via pipe bursting.
- 10. Sheet C.505: Shouldn't the tee called-out at station 14+03 be a 12" by 12" tee, with a 12" by 8" reducer on the 8" leg?
- 11. Sheet C.505: A 12" gate valve is called-out at station 18+81, as well as an 8" butterfly valve. These call-outs are reversed. Please go through and perform a thorough QA/QC check to ensure that 12" butterfly valves are called-out for 12" lines, and 8" gate valves for 8" lines.
- 12. It appears that an additional fire hydrant is needed on the future Kessler Dr. alignment, near station 14+00. Please ensure that a maximum of 500 feet between fire hydrants is maintained.

In order to calculate the Engineering Plan Review and Inspection Fee, a sealed Engineer's Opinion of Probable Construction Costs shall accompany your final submittal copies. The itemized estimate (material and installation) shall be sufficiently broken down and shall include the following items, as applicable.

- Public infrastructure, both onsite and offsite.
- Private street construction, including parking lots and driveways.
- Sidewalks located within the right-of-way.
- ADA accessible ramps.
- Sanitary sewer manholes and piping between manholes, including private mains.
- Connection of the building sanitary sewer stub to the public main.
- Waterlines larger than 2 inches in diameter, valves, hydrants, and backflow preventer with vault, if outside the building.
- Stormwater piping greater than 6 inches in diameter, structures, and detention / retention facilities public or private.
- Water quality features installed to meet the 40-hour extended duration detention requirements.
- Grading for detention / retention ponds.
- Grading to establish proper site drainage.
- Utility infrastructure adjustments to finished grade (i.e. manhole lids, water valves, etc.).
- Erosion and sediment control devices required for construction.
- Re-vegetation and other post-construction erosion and sediment control activities.

Electronic Plans for Resubmittal

Begining Monday, May 23, 2016, all Planning application and development engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies. Electronic copies will not be required for initial application submittals at this time as the plans are subject to change.

Electronic copies shall be provided on CD in the following formats

- Plats All plats shall be provided in Tagged Image Format File (TIFF) Group 4 compression.
- Engineered Civil Plans All engineered civil plans shall be provided in Tagged Image Format File (TIFF) Group 4 compression. All sheets shall be individually saved and titled with the sheet title.
- Architectural and other plan drawings Architectural and other plan drawings, such as site electrical and landscaping, shall be provided in Portable Document Format (PDF).
- Studies Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).
- It is requested that each plan sheet be a maximum of 2MB.

Please contact Staff with any questions or concerns you may have.

If you have any questions or comments, please contact me, Gene Williams either at (816) 969-1223 or e-mail to Gene. Williams@cityofls.net.

Sincerely,

Original Signed

Gene Williams, P.E. Senior Staff Engineer

cc: Development Engineering Project File