
PUBLIC WORKS ENGINEERING DIVISION

Date: Tuesday, April 10, 2018

To:

PHOENIX ENGINEERING & SURVEYING LLC

Brian Glenn, P.E.

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From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2017194

Application Type: Engineering Plan Review

Application Name: Whispering Woods 1st Plat - On-Site Sanitary

The Development Services Department received plans for this project on Apr. 5, 2018. We have completed our review and offer the following comments:

Engineering Review

1. During a final QA/QC check, it was discovered that proposed manhole A-1 is actually the existing City manhole #51-003, and the existing conditions shown on the plans (i.e., Sheet 5 of 10) do not appear to reflect the as-built condition. Were elevations obtained at this location during the survey? The F/L in and out elevations are greater than 2 feet difference in elevation, and a drop manhole should likely be constructed if using these incoming flowline elevations. Alternatives may be deepening the incoming sanitary sewer, provided that the depth of cover requirement or maximum slope is not exceeded.

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

Development engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies.

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 me if you have any questions or comments.

Sincerely,

Gene Williams, P.E.
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cc: Development Engineering Project File