

Date: Monday, July 17, 2023

To: ENGINEERING SURVEYS & SERVICES
1113 FAY ST
COLUMBIA, MO 65201

From: Gene Williams, P.E.
Senior Staff Engineer

Application Number: PL2023170

Application Type: Engineering Plan Review

Application Name: Wilshire Hills 4th Plat - Public Sanitary

The Development Services Department has completed its review of the above-referenced plans dated Jun. 27, 2023 and offer the following comments listed below.

- See comments below to determine the required revisions and resubmit to the Development Services Department public portal located at devservices.cityofls.net. Digital documents shall follow the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within ten (10) business days of the date received.

Engineering Review - Corrections

1. Why are there two (2) cover sheets for this project?
2. Please rename the plans to "Wilshire Hills 4th Plat - Sanitary Sewer" or equivalent.
3. Normal procedure is to show a general overview of the entire sanitary sewer line in plan view format on one (1) sheet if possible. It appears this is possible. Please provide a general overview sheet of the entire line shown on one (1) sheet.
4. The general overview sheet discussed above should provide proposed lot lines that correspond with the plat. No such lot lines appear to exist. Please provide the lot lines to determine whether the length of the sanitary line extension is sufficient to serve all lots within Wilshire Hills 4th Plat.
5. Provide a callout of all existing city manhole numbers on all plan sheets. In this instance, the existing manhole that is being connected is #11-277. Please update as appropriate.
6. Sheet C4.02: It appears there is a missing storm crossing in the profile at around 7+65.

7. Sanitary lines shall be SDR 26 rather than SDR 35. Please revise.
8. Sanitary sewer stubs shall be SDR 26 rather than SDR 35. Please revise.
9. The service connection called "standard" at 7+78.96 is approx. 7' deep at the cleanout and 11.5' where it connects to the sewer main. The service connection at 3+82.71, labeled a deep service connection, is approx. 7' deep at cleanout and 13' where it connects to the sewer main. One doesn't seem to be deeper than the other. Is there a difference in these connections?
10. Tracer wire called out for service at 2+24.74 but none of the others. Tracer wire required for all service connections/stubs
11. We noticed an existing flow line "in" elevation listed on manhole 11-277. We checked an old manhole inspection photo and identified a pipe in, and a pipe out on what is indicated to be a dead end manhole so I suspect that there is an existing stub with a cap on it. The stub should be removed and a new pipe shall be installed into the manhole in lieu of using a coupling to connect to the end of the stub.

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

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 shall be provided in the following formats

- Plats – All plats shall be provided in multi-page Portable Document Format (PDF).
- Engineered Civil Plans – All engineered civil plans shall be provided in multi-page Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).

Please contact me if you have any questions or comments.

Sincerely,

/s/ electronically signed Jul. 17, 2023

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cc: Development Engineering Project File