
DEVELOPMENT SERVICES

Date: Friday, December 15, 2023

To: Matt Kriete, P.E.
Engineering Surveys and Services
1113 Fay St., Columbia, MO 65201

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

Application Number: PL2023171

Application Type: Engineering Plan Review

Application Name: Wilshire Hills 4th Plat - Public Street and Stormwater

The Development Services Department has completed its review of the above-referenced plans dated Nov. 28, 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. In the "Hydraulic Report" dated Nov. 28, 2023 (hereinafter referred to as "the stormwater report"), Page 1 in the introduction states that a detention basin will be constructed, and Phase III will include Wilshire Hills Phase III and future projects. Please clean this up, as it doesn't appear to make sense. It is our understanding this stormwater report addresses Wilshire Hills Phase III, and future improvements. However, Wilshire Hills Phase III is one (1) project, but does not include future projects. Please clarify.
2. Page 2 of the the stormwater report states "The City of Lee's Summit has requested for detention to not be designed for the site". This is not the case. During our phone conversation, I requested that you look into how detention might lead to worsening of flooding issues downstream, as well as timing of the peaks associated with this watershed, and that if detention using the Comprehensive Control Strategy showed adverse impact to the downstream system, detention to decrease the peaks might be waived if supported by evidence. Any conclusions, recommendations, or findings shall be the responsibility of the Engineer-of-Record, not the City of Lee's Summit. Please revise.
3. The stormwater report is missing key elements within the text of the report, including the following: 1) analysis of the downstream peak flows as a function of time if Comprehensive Control Strategy is utilized, 2) where the downstream analysis was conducted, 3) assumptions made for the analysis, 4) discussion of upstream detention basins, and 5) other factors related to watershed analysis. Please provide a comprehensive document that discusses all aspects of the watershed.

4. Exhibit C2.21 and C2.22 in the stormwater report do not show sufficient detail. For instance, no road references are shown, nor existing detention basins such as the large one between Jones Industrial and Strother Rd., or the large basin south of Jones Industrial Dr., or the underground detention basin at Wilshire Hills Phase 1 to the north, or the one at the corner of Meadowview Dr. and Akin Blvd. Airport is not shown, nor the downstream receiving floodplain to the north of this development. It is difficult to determine whether valid assumptions were made without this information shown on the exhibits. Please revise these exhibits as necessary.
5. Considerable work needs to be done to evaluate the stormwater report. As presented, the report is incomplete. Please be aware that while appendices are required for a complete report, it is not the City's job to review these appendices to support one conclusion over the other. A thorough analysis shall be required within the text of the report, and this analysis shall be based on the findings of the study. No further review was conducted.
6. Please see comments related to the plat. Since the plat cannot be approved as shown in the non-contiguous manner, revisions shall be needed on the plans. Please revise as appropriate on the engineering plans.
7. Please see previous comment letter. The skimmer design was shown, but I could not find the sizing information for the skimmer. Please provide the sizing for the skimmer.
8. Please see comment #8 in previous applicant letter. Instead of an 8 inch orifice, a smaller orifice is shown. However, there does not appear to be any method shown to prevent clogging on the 4.55 inch orifice. There are various methods that have been used to prevent clogging, and this shall be required. Please be aware a simple screen has been proven ineffective since it is prone to clogging and frequent cleaning by the owner. A more robust method is needed than a simple screen across the small orifice. Please evaluate and revise as appropriate.
9. Sheet C2.10: There are still issues with the storm lines shown toward the north side of the project. Please see GIS markup for a pictorial representation of what I had in mind. It would appear a curb inlet could be installed where the private 24 inch line on the west side of Wilshire Dr. enters public right of way, and this would denote the extent of public versus private in terms of the storm line. This will enable the corner to be cleaned-up in terms of storm lines, and will better serve the entire subdivision. Please evaluate the existing 24 inch public storm line to beneath Wilshire Dr. to ensure it has sufficient capacity, and ensure the downstream system after this point has sufficient capacity.

Traffic Review - No Comments

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 Dec. 15, 2023

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