

DEVELOPMENT SERVICES

Date: Wednesday, May 17, 2023

To: ENGINEERING SOLUTIONS

50 SE 30TH ST

LEES SUMMIT, MO 64082

From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2022248

Application Type: Engineering Plan Review

Application Name: THE VILLAS OF CHAPEL RIDGE 2ND PLAT, LOTS 43-74 AND TRACTS C-1 AND D-1

- Street, Stormwater, Master Drainage Plan, and Erosion and Sediment Control

The Development Services Department has completed its review of the above-referenced plans dated Apr. 26, 2023 and offers the following comments listed below.

- See comments below to determine the required revisions and resubmit to the Development Services
 Department public portal located at <u>devservices.cityofls.net</u>. 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. Please refer to comment #11 in the previous applicant letter. Rather than providing excess cover at the end of storm line 1 entering the off-site detention basin, the pipe is now above-ground near the discharge point. In addition, the entry appears too high, and consideration should be made for lowering the entrance elevation to closer match the permanent pool elevation. It should be noted there are notes saying the permanent pool elevation is approximate, and recommend obtaining a shot on the upper weir outlet control structure to determine the permanent pool elevation. Unless this large pipe discharge point is adequately designed, this will be an ongoing maintenance issue for City staff, and in an area with very little access. Recommend deepening the storm line at the junction and lessening the slope to mitigate this issue, and placement of a concrete collar and foundation at the end of pipe to mitigate "floating" over time, as well as backcutting issues over time. Recommend lowering the discharge elevation to no more than 6 inches above the permanent pool elevation, to be obtained by survey. Please review and revise as appropriate.
- 2. Please refer to comment #12 in the previous applicant letter. Although the note is provided, it was provided on the wrong sheet. This note should be shown on Sheet C.201 since this is the sole sheet used during the plot plan process. Please revise.
- 3. Please refer to comment #5 in the previous applicant letter. The response to comments refers me to Sheet C.100. The notes on Sheet C.100 state that specific owners of lots shall install sidewalk along

common area tracts, which is not allowed. These shall be installed with the subdivision improvements. In addition, the sidewalk and ADA accessible ramps near Dick Howser Dr. are not labeled with any notation, nor is a legend provided to specify these are to be constructed with the subdivision improvements. Please update and revise as appropriate.

4. Provide a revised erosion and sediment control plan within these plans which eliminate gutter buddies on "at-grade" curb inlets. The placement of gutter buddies in any fashion at "at-grade" curb inlets prevents stormwater from entering the inlet, and causes downstream street and structure flooding. They may be utilized in sump locations, as long as a 100 year pathway is established for overflow. Please add the erosion and sediment control plan to these plans, and revise as specified.

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 mulit-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 May 17, 2023

Gene Williams, P.E. Senior Staff Engineer (816) 969-1223 Gene.Williams@cityofls.net

cc: Development Engineering Project File