

DEVELOPMENT SERVICES

Date: Wednesday, September 07, 2022

To: SCHLAGEL & ASSOCIATES

14920 W 107TH ST LENEXA, KS 66215

From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2022051

Application Type: Engineering Plan Review

Application Name: The Retreat at Bailey Farms, 1st Plat - Public Streets, Storm and Master

Drainage Plan

The Development Services Department has completed its review of the above-referenced plans dated Aug. 29, 2022 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 <u>devservices.cityofls.net</u>. Digital documents shall follow the electronic
 plan submittal guides as stated below.
- Revised plans will be reviewed within five (5) business days of the date received.

Engineering Review - Corrections

- 1. A new field inlet is called-out as "109". The stormwater collection system was designed what appears to be the 10 year event, and it appears the 100 year event will surcharge out of the throat of field inlet 109. It should be noted that the minimum level of service for all stormwater systems within the City of Lee's Summit is the 100 year event, with an overflow system designed for the system in the event the 100 year event cannot be managed by the underground system. Lot 13 and Lot 14 therefore should include an MBOE which is a minimum 2.0 feet above the calculated 100 year water surface elevation interpolated along this water surface. An overflow route shall be established and a design provided for this overflow system. Alternatives include the design of an underground system capable of managing the 100 year event without surcharging from field inlet 109 and progressing downstream withiin the stormwater system that is capable of managing the 100 year event without surcharging (i.e., defined as being a minimum of 6 inches below the lowest throat opening of any field inlet or curb inlet or other structure). The City would prefer the system be capable of managing the 100 year event without surcharging, and it would appear this could be achieved with relative ease. If this can be achieved, the MBOEs along Lots 13 and Lot 14 would not be necessarily required. Please evaluate, and revise as appropriate.
- 2. Wouldn't the new field inlet 109 be better configured with additional openings? As proposed, it appears only one (1) opening to the north is proposed. Please evaluate, and revise as necessary with the previous comment in mind.

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 Sep. 7, 2022

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

cc: Development Engineering Project File

2	220 SE Green Street Lee's Summit, MO 64063 816.969.1200 816.969.1201 Fax <u>cityofLS.net/Development</u> Page 3