

Date: Thursday, December 26, 2019

To: ENGINEERING SOLUTIONS
Matt Schlicht, P.E.
50 SE 30TH ST
LEES SUMMIT, MO 64082

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

Application Number: PL2019414

Application Type: Engineering Plan Review

Application Name: MAIN ORCHARD - MASTER DRAINAGE PLAN

The Development Services Department received plans for this project on December 11, 2019. We have completed our review and offer the following comments listed below.

- Resubmit three (3) full size sets of plans (no larger than 24"x36") folded to 8-½"x11", one (1) comment response letter, and one (1) digital copy following the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within ten (10) business days of the date received.

Engineering Review

1. The Master Drainage Plan was submitted in conjunction with the sanitary sewer extension plans. The Master Drainage Plan should be a separate, standalone plan. As discussed in previous phone calls, construction of the detention pits shall be performed during individual home construction, and as such, a standalone plan is required.
2. No detail whatsoever was provided concerning the construction of the detention pits. Dimensions were missing, materials, depth, etc. The are not even labeled on the sheets, nor is there any indication concerning their construction, naming convention, etc.
3. No further review is being conducted at this time, due to the incomplete nature of these plans. Detention pits are not even called-out, nor are there any notes concerning the deferred construction during the construction of individual homes.

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,

Original Signed

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

cc: Development Engineering Project File