

**DEVELOPMENT SERVICES**

**Date:** Tuesday, December 29, 2020

**To:** ENGINEERING SOLUTIONS  
50 SE 30TH ST  
LEES SUMMIT, MO 64082

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

**Application Number:** PL2020376

**Application Type:** Engineering Plan Review

**Application Name:** The Ridge at Winterset Summit - Sanitary Sewer

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The Development Services Department has completed its 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 five (5) business days of the date received.

**Engineering Review - Corrections**

1. Note 4 on the Cover Sheet needs to be updated. This note would apply to sanitary sewer manholes installed outside of paved areas.
2. Manhole A-3 is shown as a drop manhole. There is only a small amount of drop at this location, and the City would prefer if this manhole be converted to a standard manhole. Only one (1) additional foot of excavation is needed in the vicinity of manhole A-3 to allow this manhole to remain a standard manhole. If not, then a higher priced drop manhole would be allowed, and the City standard detail would need to be provided.
3. Anchors appear to be shown on the profile view, with no identification, design information, etc. An excerpt from the Design and Construction Manual is provided in the form of a note, but an actual design is required. Please provide appropriate labels, with a reference to the actual design in graphical format (i.e., not a note or an excerpt from the Design and Construction Manual).
4. A trenching and backfill detail was missing. Please be aware the aggregate requirements for the top of pipe have recently changed. The new requirement has increased to 12 inches of aggregate over the top of the pipe.
5. Please provide a trench check detail.

6. A frame and lid detail was missing.
7. It would appear manhole A-4 could be eliminated with some minor changes to the geometry.

### **Traffic Review - Not Required**

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**

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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/ Gene Williams electronically signed Dec. 29, 2020

Gene Williams, P.E.  
Senior Staff Engineer  
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Gene.Williams@cityofls.net

cc: Development Engineering Project File