

**Date:** Wednesday, October 09, 2019

**To:** SCHLAGEL & ASSOCIATES  
14920 W 107TH ST  
LENEXA, KS 66215

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

**Application Number:** PL2019078

**Application Type:** Engineering Plan Review

**Application Name:** Winterset Valley 13th Plat - Street, Storm, MDP, and ESC

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The Development Services Department received plans for this project on Sep. 27, 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 three (3) business days of the date received.

**Engineering Review - Corrections**

1. Page 3-3 of the "Final Stormwater Management Plan" dated Oct. 3, 2019 states that "...to reach the 900.65 elevation, there would have be effectively 15.8 inches of rain (two 7.90 inch 100 year events) in a 48 hour period and zero discharge from the nearly 18 square feet of the outlet opening." We do not agree with this, since clogging of the primary outlet structure can occur without a 100 year storm event. Also, isn't the outlet opening 36 square feet rather than 18 square feet?
2. It would appear the 100% clogged/zero available storage 100 year water surface elevation will encroach upon Lots 1474 and 1473. Can the grading on these lots be revised, to remove the encroachment? Can the outlet structure sizing be increased, and/or the 48 inch pipe be increased? There is mention of the outlet structure acting under inlet control during the clogged condition, but as was evident during the upsizing of this structure from a 5 foot by 5 foot top, to a 6 foot by 6 foot top, the 100 year water surface elevation for the clogged condition/zero available storage decreased. Internal discussions concerning this issue were relayed to you in a previous email, where it was concluded that the 100% clogged/zero available storage 100 year water surface elevation should be fully-contained within the tract boundary.
3. We received the application for the United States Army Corps of Engineers (USACE) 404 permit, but will need the actual USACE permit prior to formal approval of the plans.

**Additional Comment: The previous plan set showed a table of basement types on Sheet 9. The most recent submittal omitted this sheet. Basement types must be assigned to each lot.**

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,

*Original Signed*

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Senior Staff Engineer  
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cc: Development Engineering Project File