

Date: Thursday, December 13, 2018

To:

HG CONSULT, INC
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From: Gene Williams, P.E.
Senior Staff Engineer

Application Number: PL2018211

Application Type: Engineering Plan Review

Application Name: Cobey Creek 1st Plat - Sanitary Sewer

The Development Services Department received plans for this project on November 21, 2018. 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 five (5) business days of the date received.

Engineering Review

1. Most of the comments are provided from the standpoint of the overall geometry shown on the General Utility Layout sheet 2 of 10. There are questions concerning the necessity of Sanitary Line D shown along Cobey Creek Dr., since the majority of Sanitary Line D appears to serve the future phase shown in the southwest corner of the Preliminary Development Plan, and nothing else. Was there any consideration to direct this sanitary sewer from the southwest corner of the area shown on the approved Preliminary Development Plan, to the future sanitary sewer along Road C (i.e., Corbin Dr. on the engineering plans) and/or Road D shown on the Preliminary Development Plan?
2. Please see above comment. The placement of the majority of sanitary sewer Line D along Cobey Creek Dr. appears to create a parallel sanitary sewer line, where no parallel sanitary sewer is needed or desired by the City.
3. Given the discussion above, it does not appear that Sanitary Sewer Line D serves anything, other than future subdivision phases. It is for this reason that Line D should be removed completely from the plans, with the exception of the segment from manhole D4 to D3. It appears that the other portion of future phases can be routed in alternative directions, such as Road D shown on the Preliminary Development Plan, or Corbin Dr. shown on these plans.

4. Sheet 2 of 10: The stub-off segment at the midpoint of Riley Way (i.e., at Melissa Dr.) should be removed. Stub-offs are not allowed. Manholes must be core-drilled for future extensions as specified in the Design and Construction Manual.
5. Sheet 2 of 10: The sanitary sewer segment between manhole F1 and D4 should be removed. This line should be installed during a future phase.
6. Sheet 2 of 10: The sanitary sewer segment between manhole C2 and C3 should be removed. This segment serves no purpose.
7. Sheet 2 of 10: It appears that a drafting "remnant" is shown in the rear of Lots 22 through 27. Sanitary sewer is not only prohibited in rear yards, but serves no purpose in the rear yard since sanitary sewer is available along the street frontage.
8. Sheet 3 of 10: The sanitary segment between B3 and B2 is shown at minimum slope, with no margin for error. Why was the minimum selected, when there appears to be the ability to lower manhole B1 to achieve a slope in the neighborhood of 0.40%.
9. Sheet 5 of 10: A prohibited stub-off is shown at manhole C3. Stub-offs are specifically prohibited in the City of Lee's Summit. Future connections must be core-drilled. In order to ensure a contractor will not order pre-fabricated manholes with these stub-offs, please provide a bold note stating that all future connections shall be core-drilled.
10. All Profile Sheets: Ensure all lines which are to be deleted, are also deleted from the profile view.
11. Sheet 6 of 10: Why is the segment between manhole D3 and D4 shown with minimum slope, with virtually no margin for error in installation? We recommend the downstream portion be adjusted to provide a better slope. In addition, please remove the section upstream of manhole D4 (see previous comments about the removal of this unnecessary sanitary sewer line segment, and realignment further east to serve the future southwest phase of the development).
12. Standard details were missing for the following items: 1) lateral connection and tracer wire standard detail, 2) manhole frame and lid, with the word "SEWER".
13. A typical section view for sanitary sewer trenching and backfill is required. MDNR will request it and reject the plans if it is missing.
14. Are shallow manholes being proposed on this project? If not, then please remove the standard detail for shallow manholes. Also,

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

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cc: Development Engineering Project File