

Date: Tuesday, April 21, 2020

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

From: Sue Pyles, P.E.
Senior Staff Engineer

Application Number: PL2020100

Application Type: Engineering Plan Review

Application Name: The Estates of Chapel Ridge 2nd Plat
The Townhomes of Chapel Ridge 2nd Plat - Public Water

The Development Services Department received plans for this project on April 08, 2020. We have completed our review and offer the following comments listed below.

- Resubmit 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. Sheet C.500:
 - Water Note 2 references standards that pertain to ductile iron pipe, which are already in the Design and Construction Manual and don't need referenced separately. In any case, since the plan set calls for C900 PVC pipe, this note is not necessary.
 - The gate valve listed in Water Note 4 is not on the City's Approved Product's List for Water Utilities. The approved model for Mueller is the 2360 Series.
 - Water Note 5 is not needed. It references Clay and Bailey P-108, which is not on the City's Approved Product's List for Water Utilities.
 - KCP&L is now Evergy. Please update the plan set.
2. Sheet C.501:
 - The line type used for existing sanitary and water aren't the typical dashed lines. Is there a reason for the change?
 - The existing water line that extends south from the removal location across NE Lone Hill Drive is shown south to the existing sanitary. For clarity, as a cut off point for this water line in the drawing, please extend it slightly beyond the sanitary line.
 - Label the street names on this sheet and throughout the plan set.

3. Sheets C.502 – C.503:
 - Include the following note: “Compacted Fill shall be placed to a minimum 18” above the top of the pipe prior to installation.
 - Show and label the limits of the compacted fill placement in the Profile views. Use hatching for clarity.
 - The FH graphic is difficult to read. Please revise for clarity.
 - Is there a FH at the Line 1 connection location with the existing water main? If so, is it permanent to be kept or temporary to be removed?
 - Deflection in the water line is only allowed in the joints, and only within tolerances approved by the manufacturer. Please provide the manufacturer’s tolerances and include the radius of curvature of all pipe to ensure it meets those tolerances. In all locations necessary, show and label all horizontal and vertical bends required.
4. Submit an Engineer's Estimate of Probable Construction Costs.

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

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,

Sue Pyles, P.E.
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cc: Development Engineering Project File