

Date: Wednesday, April 07, 2021

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

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

Application Number: PL2021101

Application Type: Engineering Plan Review

Application Name: Park Ridge 8th Plat - Streets, Storm and Mass Grading

The Development Services Department received plans for this project on March 17, 2021. 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. General:
 - Submit an Engineer's Estimate of Probable Construction Costs.
 - Please include a trench and backfill detail.
 - Please show and label all underdrain locations.
2. Sheet C.001:
 - The plans use both "Park Ridge" and "Manor at Park Ridge" as the plat name. Please clarify and revise throughout the plan set.
 - Please remove the tracts from the project name, they are in 7th Plat.
 - Please revise the geogrid reference in the Street & Storm Sewers Note 1 and the Residential Street Typical Section to one on the City's Approved Product List. Please correct the detail numbers in Street & Storm Sewer Note 3.
 - Please revise General Note 4 to the following: "The contractor shall contact the City's Development Services Engineering Inspection to schedule a pre-construction meeting with a Field Engineering Inspector prior to any land disturbance work at (816) 969-1200."
 - The General Notes are cut off on the right by the Site Location Map. Please relocate slightly for clarity.
 - Please remove the duplicate Utility Company list on the left side of the sheet, it is incorrect.
 - The FEMA Map Panel is incorrect. Please revise.
 - Update the Index of Sheets to match the plan set.

3. Sheets C.050-C.052: Please revise to match the overall development ESC plans.
4. Sheet C.100: Some proposed structures are labeled as “NEW” and some are not. Please be consistent on this sheet and throughout the plan set.
5. Sheet C.200:
 - There are several swales graded along lot lines. Are any of them engineered swales? If so, please include all design information.
 - Please include a table showing house type and MBOE information.
6. Sheet C.201: 100-year water surface elevations are missing.
7. Sheet C.202:
 - The line weights of all of the lines make it difficult to differentiate between grading, plat boundaries, drainage areas, etc. Please revise for clarity.
 - The calculations appear to be for another project. Please revise.
8. Sheets C.203-C.206:
 - Please revise the street name labels in the Plan views for clarity.
 - Please include the street name between the Plan and Profile views.
9. Sheet C.205: ADA-ramp comments to be sent under separate cover.
10. Sheet C.301:
 - Include the following note on any profile sheet applicable: “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 view. Use hatching for clarity.
 - Include all crossings in the Profile views.
 - Please show the hydraulic grade line for the design storm on the profile view of the storm system. If the pipe cannot manage the 100 year event without surcharging, then a suitable overflow route must be established for the excess. Finish floor elevations must be a minimum of 2 feet higher than the calculated 100 year water surface elevation.
 - The stationing shown in the CI A-3 Profile view label is incorrect. Please revise.
 - CI A-2 does not meet the 0.5’ minimum drop through the structure requirement. Please revise.
 - Please include stationing in the Profile view label for the existing structure at the downstream end of Line A.
 - Please include both Line A and Line B flowlines into CI A-1 in both Profile views.

11. Sheet C.303: This information appears to be for another project. Please revise.

12. Sheet C.601: Please remove the end section detail as it isn't used.

Traffic Review - Corrections

1. Horizontal alignment information not shown.

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.
Senior Staff Engineer
(816) 969-1245
Sue.Pyles@cityofls.net

cc: Development Engineering Project File