

Date: Monday, May 11, 2020

To: OLSSON ASSOCIATES
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116

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

Application Number: PL2020110

Application Type: Engineering Plan Review

Application Name: Hook Farms First Plat- Streets, Storm and Mass Grading

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 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. Temporary swale #2 is shown with a slope less than 2.0%. This is not allowed by the Design and Construction Manual.
2. Temporary swale #3 is also less than 2.0%.
3. ADA-accessible routes at stop-controlled intersections are shown with a maximum cross slope of 2.0%. The maximum design slope in these instances is 1.5%. However, the details sheets appear to show acceptable cross-slopes, it is only on those sheets showing the plan and profile of the road where the cross-slope call-outs are not correct.
4. The "design memo" for stormwater is not adequate for the final design. A final stormwater report is required, including the final study which discusses the peak attenuation waiver for stormwater, the results of the study, etc. It should also include any updated design within the report for the water quality basin.
5. Common area tracts are shown within the right of way. This is not allowed, and should also be changed on the final plat.

6. There are discrepancies between what is shown in the plans, versus what is shown on the Final Plat. Please reconcile these discrepancies.

7. Off-site easements for storm drainage must be acquired for areas that are not included with the plat.

Traffic Review - Corrections

1. Extend sidewalk to connect with paved shoulder on Pryor Road.
2. Curve data on some intersection details is missing.
3. Street Name Signs needed at the intersection of Hook Farm Drive and Farm Field Court. Post signs on the southwest/inside curve. Verify Street Names based on Plat Comments. Farm Field Court may not be a Court.
4. Verify a 39' Radius (to Back of Curb) typical dimension for the 'knuckle' on each end of Hook Farm Dr. could not be centered to provide a pavement area that is normally the same as a cul-de-sac, which is used in reference for consistent 'knuckle' designs in consideration of 25 mph road design criteria for a 90-degree horizontal curve. As designed, there is some minor deviations from this guidance, with a little less area than a typical cul-de-sac would otherwise provide. Similar acknowledgements to this exception and acceptance by the engineer (and note of non-precedent) were provided on the Osage project with the same situation due to an omission of correction during the preliminary approvals that significantly impacts layout if applied in Final plans.

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,

/Gene Williams

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cc: Development Engineering Project File