



June 26, 2020

City of Lee's Summit
Development Services
220 SE Green
Lee's Summit, MO 64063

RE: The Retreat at Hook Farms Resubmittal

Thank you for your review and comments regarding the Retreat at Hook Farms first construction document submittal. The revised plans are attached to this submittal. The following are the City's comments dated May 11, 2020 through May 22, 2020 from staff review. Olsson's responses are in **RED** text.

Modifications and Additions:
Street, Storm, Mass Grading

• **Engineering Review**

- Comment: "Common area tracts are shown within right of way, which is not allowed"
 - **Tracts removed.**
- Comment: "Minimum Low Openings are called out on the Master Drainage Plan. The City of Lee's Summit does not recognize MLOs, only Minimum Building Opening Elevations (MBOEs). Please correct"
 - **MLOE changed to MBOE.**
- Comment: "The ADA-accessible route across Hearthstone at Hook Road does not appear to meet the City's design standards. A maximum design cross-slope of 1.5% with a minimum width of 5 feet is required at the stop controlled intersection. Ramps must be designed with no more than 7.5% longitudinal slope, and no more than 1.5% cross slope"
 - **Grading revised to be within city tolerances.**
- Comment: "The same comments above concerning inadequate ADA-accessible routes and sidewalks apply to the details for the intersection of Harvest Moon Place and Harvest Moon Ln"
 - **Intersection grading revised to be within city tolerances.**
- Comment: "All sidewalks, including multi-use trail, must be designed with no more than a 1.5% cross slope, and no more than 7.5% running slope at ADA-accessible ramps. There are numerous violations of this rule throughout the plans, with 2.0% cross slope called-out, and 8.0% running slope for ramps which is not acceptable"
 - **All cross slopes revised to be 1.5% maximum. Running slopes revised to be within city tolerances where possible. Trail connection at Pryor Rd not changed because trail is private and not in a city easement or right-of-way.**

- Comment: “There are numerous violations of the gravity flow rule for storm lines. The 10-year design storm must be at or below the crown of the pipe, not above the crown of the pipe”
 - Pipe sizes revised to accommodate the 10-year HGL in the pipe.
- Comment: “An easement is shown from the discharge of the water quality pond. This is a private storm line, not public. An easement is not necessary or desired”
 - Easement removed.
- Comment: “Please see the comments related to the stormwater memo in Hook Farms 1st Plat. The memo is not sufficient for this project. A final stormwater study is required, with specific design information related to the water quality pond”
 - A final storm study is included with this second submittal.
- **Traffic Review**
 - Comment: “Tracts within the roadway should be ROW”
 - Tracts removed.
 - Comment: “Can a typ. cul-de-sac be designed on the south approach to the intersection of Red Barn and Harvest Moon? Recommend a cul-de-sac in lieu of the split intersections that are very closely spaced at a corner that does not provide clear right of way for traffic and pedestrians”
 - A typical cul-de-sac did not fit within this area. After a discussion with city staff, the intersection was revised to remove the additional pavement and lot lines were revised. The same number or lot are provided. Please see revision in this area that now satisfies traffic and pedestrian concerns.
 - Comment: “Could a larger K vertical profile be achieved at the end of Hearthstone approaching Hook Road to improve sight lines and crosswalk crossslope at the intersection? What is the min. cover on the water line? Review alternatives”
 - Road profile revised for ADA and waterline cover. The design meets sight distance requirement of 155 ft for 25 mph per AASHTO Green Book.
 - Comment: “Signage needed at the intersection of Harvest Moon and Red Barn”
 - Signage added.

Public Sanitary

- **Engineering Review**
 - Comment: “Wherever ductile iron pipe is required, it must be zinc coated ductile iron pipe”
 - No DIP is needed on this site as there are no creek crossings.
 - Comment: “Creek crossings must also include concrete encasement in addition to zinc coated ductile iron pipe”
 - No DIP is needed on this site as there are no creek crossings.
 - Comment: “There is an example of 8 inch line being laid at minimum slope. Please increase the slope to perhaps 0.70% to allow some tolerance. The City will not accept any slope less than 0.60%, hence the need for an increased design slop”

- Slope increased to 0.70%.
- Comment: “Are any manholes proposed to be within the 100year floodplain? If so, there are specific requirements concerning the extension of the top above grade, or watertight bolt down frame and lids”
 - No proposed manholes are in the floodplain.

Public Water

- **Engineering Review**
 - Comment: “The water line does not appear to adequately serve Lot 73 without extending the private service beneath a long distance of pavement. Wouldn't it be better to place the water main along Red Barn Ln. on the opposite side of the road? This would allow a much better access to Lots 73 and 74”
 - The geometry of this intersection has changed. The waterline was revised with this change which creates more direct service lines for all lots.
 - Comment: “The water line crossing at the KCMO water main is too deep. The maximum depth of cover is 7 feet”
 - The waterline depth has been revised in this area. The proposed water line will cross over the 18” HDPE Storm pipe, but it must cross under the 30” KCMO waterline to connect to the existing 16” waterline which currently has over 7 feet of cover.

Erosion and Sediment

- **Engineering Review**
 - Comment: “Please include enough off-site contours to show that the sediment trap overflow will travel in an appropriate manner beyond the limits of this plat”
 - View expanded to show more off-site area.
 - Comment: “Please include the area inlet protection standard detail”
 - Detail added to plans.
- **Sheet C400**
 - Comment: “Show and label the location and limits of the one percent annual chance flood, as set forth on the current FEMA maps, with reference to the panel number and effective date”
 - Floodplain boundary shown on plan.
 - Comment: “Remove the “Reviewed By” signature block, Lee’s Summit does not sign plans in that manner”
 - Signature block removed.
- **Sheet C402**
 - Comment: “Remove the notes in the upper left corner, they do not apply”
 - Notes removed.
 - Comment: “What does the shaded area represent and how does it relate to the Temporary Grading Easement shown?”
 - The shaded area is the limits of disturbance. Temporary grading easement has been removed since the owner has the right to grade within the tract adjacent to the lots.

- **Sheets C405-C407**
 - Comment: “Tables indicate which phase to install ESC items, but there is no information of when to remove them or what criteria is required for them to be removed. Please clarify”
 - Clarification notes for ESC phasing added.
 - Comment: “Label the sediment traps with their designated numbers for clarity”
 - Labels added.
 - Comment: “The emergency spillway widths do not meet the standard detail requirements. Please address”
 - Spillway widths revised to match detail.

Thank you so much for your review of our plans. If there are any questions, please contact me at 970-635-3737 or mwalter@olsson.com.

Sincerely,

Megan Walter, Senior Civil Engineer
Olsson