Date: November 2, 2020

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

RE: Osage Second Plat – 1st Review

We are responding to your comments dated October 14th, 2020 and October 15th, 2020 and are submitting with this letter revised plans, as well as other required documents. Please find the original comments below; our responses are below in ***bold italics***.

If you have any questions or need additional information, please do not hesitate to contact us.

Thanks,

Julie E. Sellers

Grading & Site Disturbance Plans – Engineering Review

1. Please include a FEMA National Flood Hazard information note.

   Note added.

2. Please show location of all oil/gas wells, or indicate none are present, and cite the source.

   Note added.

3. Please show a vicinity map with surrounding streets labeled.

   Streets labels added to vicinity map.

4. Please relocate overlapping A & C information on the grading sheet, for clarity purposes.

   Information is not supposed to be on this sheet and has been removed.

5. As shown in ESC-03, J-hooks are required within the ESC plan. Given the silt fence 100'

maximum runs for J-hooks, please locate the needed J-hooks on the plan.

J-hooks have been reflected in the plans.

6. Please revise the numbers of rock ditch check and curb inlet protection on to sheet C402.

Quantities revised.

7. Please revise staging chart activities to match the proposed work shown on the plan(s) for each project stage. Feel free to remove non-applicable items.

Staging chart revised.

8. Please remove non-applicable items from the legend.

Legend revised.

9. Please provide a SWPPP.

The SWPPP narrative was included in this resubmittal. The MDNR permit will be provided to the city prior to issuance of the City Land Disturbance Permit.

10. Please provide an Engineer's Opinion of Probable Construction Cost (EOOPCC) sheet, listing cost estimates for the proposed work shown on the ESC set of plans only.

Separate Engineer's Opinions of Probable Construction Cost were included for each set of plans with this resubmission.

11. Comments on the Street, Stormwater, and Master Drainage Plan are being provided by separate cover. Please ensure the comments on the Street, Stormwater, and Master Drainage Plan are also reflected in the Mass Grading and Erosion and Sediment Control Plans for this project.

Acknowledged.

Sanitary Plans – Engineering Review

1. The plans appeared to be missing the private lateral location and design table.

Per discussion with Gene, the issue was when printing the tables are not showing. We re-printed plans and when we print the tables are showing. If issue still exists for city, please let us know.

2. The standard detail for the private sanitary sewer connections appeared to be missing.

Sanitary sewer connection detail was shown on sheet C210. Not sure if this is also link to the printing issues of the design tables, but when we print the detail is showing. If the issue still exists please let us know.

Water Main Extension Plans – Engineering Review

1. Casing carrier pipe standard detail was provided, but does not appear to be used on this project. If not, please remove the detail.

   Detail removed.

2. Sheet C307: The temporary fire hydrant on Line 3 is shown as being removed. It would appear an additional fire hydrant is needed on Osage Dr. to meet the 500 foot rule. If so, then please show the new location of the fire hydrant on Osage Dr.

   Fire hydrants along Osage drive have been shifted. The end hydrant at station 10+00, has been changed from a temporary one to a permanent off-set style to make sure it stays when the property to the west develops. A gate valve has also been added at the end of the line to assist with water shut off for future connections.

Street & Storm Plans – Engineering Review

1. Swale 1, 2, and 3: Please provide clear references to the swales on the Master Drainage Plan, which include the Sheet number, the general location of the swale, etc. The swale details on Sheets C106 through C109 are thorough, but lack overall context of their location within the overall Master Drainage Plan.

   References to the swales added.

2. Master Drainage Plan Sheet C126: Please consider grouping the swale detail sheets described above near the Master Drainage Plan. At a minimum, please show the general location of the swales on the Master Drainage Plan, along with Sheet numbers for reference.

   Per our discussion, sheet order has not been adjusted. In our experience we have found the swale plan and profiles sheets by the grading is the best location to get contractors to reference them. Notes have been added to the Master Drainage Plan regarding swales though.

3. Lots 60 through 67 appear to be shown with MBOEs below the 100 year water surface elevation within the rear yard swale. This swale would appear to be functioning as a "diversion berm" and swale. While the MBOE might be allowed below the 100 year water surface elevation within the "diversion berm" and swale, certain conditions are required for this to be allowed. Typically, the "diversion berm" should be designed to provide a minimum of 2.0 feet of freeboard between the calculated 100 year water surface elevation, and the top of the berm. It is unclear whether this requirement has been met. Please verify.

   The swale behind these lots is to control off-site drainage areas and not have it running down lot lines. The design intent was to have a berm before the lots. The grading has been modified to provide this berm high point at the rear lot lines.

4. Lots 42 through 44 appear to show the MBOEs below the 100 year water surface elevation. Please see the above comment concerning this situation. If constructing a "diversion berm" and swale, the same criteria should be met for its design.

The swale behind these lots is to control off-site drainage areas and not have it running down lot lines. The design intent was to have a berm before the lots. The grading has been modified to provide this berm high point at the rear lot lines.

5. Sheet C115: The ADA-accessible route across Clayton Place appears to be designed with a higher slope on the east side of the crown (i.e., 1.67%). It would appear the ADA-accessible ramp could be redesigned slightly to achieve the 1.5% slope required by the Design and Construction Manual. If not, please discuss why this cannot be achieved.

Per our conversation, the design has not been changed for the roadway in this area. The challenge we have found is that it is hard for contractors to lay asphalt much flatter than designed. Also, when we try to flatter to under the 1.5% desired slope other areas get even flatter causing drainage concerns. The slope areas are for closer to center of the roadway and as you get farther out the asphalt gets flatter. With the current design slopes, there is still some room for construction tolerance.

6. Sheet C116 and C117: The same comment discussed above pertains to the east side of the ADA-accessible route across Rivengate Place, and both sides of the ADA-accessible route across Rutherford Dr. The Design and Construction Manual requires a design slope of 1.5%.

Per our conversation, the design has not been changed for the roadway in this area. The challenge we have found is that it is hard for contractors to lay asphalt much flatter than designed. Also, when we try to flatter to under the 1.5% desired slope other areas get even flatter causing drainage concerns. The slope areas are for closer to center of the roadway and as you get farther out the asphalt gets flatter. With the current design slopes, there is still some room for construction tolerance.

7. Please call-out specific notes, cross-hatching, etc. on the plan view for the "Roadway Plan and Profile" sheets which show the ADA-accessible ramps will be constructed with the street improvements, along with sidewalks which are adjacent to common area tracts.

Notes added.

Street & Storm Plans – Traffic Review

1. Add City Typical End of Road Sign Treatment (e.g. 4 evenly spaced 18" Object Markers OM4-3) at the end of all dead end streets.

End of road signs callouts have been added to the street plan and profile sheets, where required.

2. The proposed stop sign and street name sign installation at the SE corner of

Clayton Place/Holdbrooks Drive should be removed from the plans. The 1st Plat should have installed stop signs and street name signs for this intersection; with stop signs on the NE and SW corners for stop control on Holdbrooks Drive.

Proposed stop sign and street name sign installation removed.

3. Osage Drive Sta. 16+22.74, Existing Tie-In, has different profile grades 1.50% Proposed vs. 1.48% Existing.

Revised.