

May 6<sup>th</sup>, 2020

Sue Pyles, PE  
Sr. Staff Engineer  
City of Lee's Summit  
220 SE Green Street  
Lee's Summit, MO 64063

**RE: WOODLAND GLEN 2<sup>ND</sup> PLAT PL 2020042 – STREET, STORM, MASTER DRAINAGE  
AND EROSION CONTROL PL2020042**

Dear Sue:

This letter is regarding comments dated March 16, 2020 for the above referenced project to which we have the following responses:

**Engineering Review -  
Corrections**

1. Public infrastructure plans must match the associated plats for location of improvements. When resubmitting, please provide separate plan sets for Woodland Glen 2<sup>nd</sup> Plat and Woodland Glen 3<sup>rd</sup> Plat, unless the two plats are combined into a single plat.

**Response: 2<sup>nd</sup> and 3<sup>rd</sup> Plats have been combined into the now Woodland Glen 2<sup>nd</sup> Plat.**

2. General:

- Submit an Engineer's Estimate of Probable Construction Costs.

**Response: Completed**

- Submit the SWPPP and a copy of the MDNR Land Disturbance Permit.

**Response: Completed**

3. Sheet 1:

- Add the plat number to the project title on this sheet and the title block on all sheets.

**Response: Plat number added to all title blocks.**

- Revise the phone number to 816-969-1200 in General Notes 14.

**Response: Changed number**

- Remove General Notes 14 & 15, they are not applicable.

**Response: Deleted notes 15 and 16.**

- Include a Vicinity Map with nearby streets labeled.

**Response: Added vicinity map**

- Revise "Public Works" to "Development Services" in Street Note 2.

**Response: Revised note**

4. Sheets 2-4:

- Show and label the existing detention basin.

**Response: Added label for existing basin.**

- Label the sediment traps. Include design calculations, show and label emergency spillway location and dimension, and ensure all standard detail requirements are met.

**Response: Added sediment traps and calculations.**

- Clearly indicate that the sediment traps, where the proposed detention basins are proposed, are to be constructed prior to any site grading.

**Response: Added sediment traps.**

- Include ESC for Lots 56-58 & Tract A3.

**Response: Added ESC**

- The "Tract A3" label overlaps the easement label on Sheet 3.

**Response: Moved label overlap.**

5. Sheet 7:

- Revise SW 14<sup>th</sup> Street to terminate at SW Winthrop Terrace.

**Response: Revised access easement.**

- Retaining walls are not allowed in utility easements or over public storm sewer. Revise as needed to meet this requirement with the proposed retaining walls.

**Response: Adjusted walls to move outside easements.**

- Label "Winthrop Terrace" to "SW Winthrop Terrace" on this sheet and throughout the plan set.

**Response: Adjusted alignment name.**

- Label SW Heartwood Drive on this sheet and throughout the plan set.

**Response: Added label to plans.**

- Revise the temporary turnaround to meet the Design and Construction manual requirements.

**Response: Changed temporary turnaround.**

- Show and label a 5' sidewalk on the east side of SW Heartwood Drive on this sheet and throughout the plan set.

**Response: Added sidewalk.**

6. Sheet 8: The storm sewer labeled as private should be public. Revise accordingly.

**Response: Adjusted runs of private and public storm.**

7. Sheet 9:

- All lots must have a designed MBOE. This information may be included in a table for clarity.

**Response: MBOE table added.**

- Show and label the 100-year WSE for each detention basin. Verify it is a minimum of 20' from all property lines.

**Response: 100-yr WSE added.**

8. Sheet 10:

- Revise the leader line weights for Inlets 104, 1001, and 1001 drainage areas.

**Response: Edited leaders.**

- Label Structure 201.

**Response: Added label.**

- Show and label the drainage area that encompasses the area draining to the existing detention basin.

**Response: Added drainage area to existing basin.**

9. Sheet 12: Add underdrains at the low points of SW Winthrop Terrace.

**Response: Added underdrain.**

10. Sheets 14 & 15:

- All ADA-accessible ramps and ADA-accessible ways must have a specific detail associated with them. The specific details of these features must include, at a minimum, the design details specified in Section 5304.8 of the Design and Construction Manual. Elevation call-outs, although required, are not sufficient. Other design details specified in this section are required, including slope call-outs which comply with the criteria listed in Table LS-5, and section views specified in 5304.8.

**Response: Added ramp details**

- Include Ada-accessible route details, using the City of Lee's Summit design standards, across intersections under stop control. In addition, the profile view of the roadway sections must be updated to clearly show the locations of these stop controlled intersections.

**Response: Used midblock ramps instead of intersection ramps.**

11. Sheet 16:

- Label SW Ward Road on this sheet and throughout the plan set.

**Response: Added label.**

- Show and label the existing storm sewer on the south side of SW Ward Road.

**Response: Added linework for existing storm**

- Label the detention basins.

**Response: Added detention labels**

- Revise the description for Structure 2 from “4x4 Junction box” to “Outlet Structure” to match the other outlet structure descriptions in the Storm Sewer Construction Notes.

**Response: Changed label to outlet structure.**

- The minimum crossing angles for sanitary sewer and water mains is 45 degrees. The storm sewer crossing a water main upstream of Structure 802 and a sanitary sewer downstream of Structure 301 don't appear to meet this requirement. Revise as needed.

**Response: Crossings did not meet 45 degrees. Crossing near structure 802 could not be avoided and still keep 30” pipe out of lots rear yard. Crossing near structure 301 was to avoid adding junction box and have slope for detention basin.**

- Remove the partial profile from this sheet.

**Response: Partial profile removed.**

12. Sheets 17-19:

- Please depict the orifice plate accurately for each structure. Label the dimension between the top of the plate and the flowline of the next higher orifice to verify elevations make sense.

**Response: Dimensioning was added.**

- Label the dimension between the top of the 10” and the flowline of the 24” orifice for EDDB 2 Outlet Structure. It appears to close from proper construction.

**Response: Dimensions added.**

- Clarify construction of the outlet structures. Is the intent to have to main structure follow junction box detail, or something different? Please clearly indicate requirements.

**Response: Outlet structures intended to follow detail.**

13. Sheet 20:

- Relocate overlapping text on the Line 100 & 300 Profiles.

**Response: Adjusted labeling.**

- Revise the Structure 201 description as discussed above.

**Response: Revised label.**

- Label the structure numbers with description as well as Flowlines Out at Structures 200, 600 and 700.

**Response: Added flowlines out with structure numbers.**

- 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.”

**Response: Note added.**

- Show and label the limits of the compacted fill placement in the Profile view. Use hatching for clarity.

**Response: Hatch added.**

14. Sheet 21:

- Label the water crossing upstream of Structure 802 in the Line 800 Profile.

**Response: Water crossing updated.**

- Revise the Line 900 Flowline in at the existing curb inlet to provide a minimum 0.2' drop through the structure.

**Response: Drop was added.**

- 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."

**Response: Note added.**

- Show and label the limits of the compacted fill placement in the Profile view. Use hatching for clarity.

**Response: Hatch added.**

15. Final Stormwater Management Report:

- Revise the study to depict the proposed layout.

**Response: Revised to only the platted area of the project.**

- Label the existing and proposed detention basins.

**Response: Labeled existing on Overall Drainage Map Sheet 1 of 3.**

- Include and/or clarify the following additional information in the body of the report:

- Drainage areas to each proposed detention basin.

**Response: Provided the requested information in the body of the report and in the accompanying tables.**

- Water Surface elevations for 2/10/100 year events as well as the Water Quality event for each proposed detention basin.

**Response: Provided in the plan set on the detention outlet structures.**

- Emergency overflow: location, calculations showing the spillway can pass the 100-year flow in a fully clogged condition.

**Response: provided table in the report with flows and elevations to show that the storm event doesn't pass the top elevation of the detention ponds.**

Traffic Review – Corrections

1. Plans are missing roadway typical sections, sidewalk and ADA ramp information, pavement design, street signs (e.g. stop signs/street name signs), and a temporary traffic control plan. The TTC Plan should also address issues/commitments noted during the PDP Public Hearing(s) for phasing and routing construction related traffic.

**Response: Ramp information and signing plan were added.**

2. A temp cul-de-sac is required that complies with the Design and Construction manual. The "turn around" proposed is not acceptable.

**Response: Temp cul-de-sac was changed to comply with design and construction manual.**

Please contact me if you have any questions or comments. If you have any further comments or questions regarding this survey, please do not hesitate to contact me. Thank you.

Sincerely,

SCHLAGEL & ASSOCIATES, P.A.



Mark A. Breuer, PE  
Principal / Engineering Manager  
Direct 913-322-7154  
[mab@schlagelassociates.com](mailto:mab@schlagelassociates.com)

MAB/RM/mdr  
Enclosures