

July 30th, 2021

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

RE: PL2021229 - Paragon Star Village, Multi-Family - Mass Grading and Storm Sewer

We have received your comments dated July 12, 2021 for the above referenced project. Our responses follow each comment. The comment responses have been organized by the review section they pertain to.

Engineering Review

- 1. General:
 - Submit an Engineer's Estimate of Probable Construction Costs. **GBA Response:** Engineer's estimate is attached.
 - Remove the approval signature block for the City. A stamp will be provided electronically when approved.
 GBA Response: Approval signature block removed.
 - Show location of all oil/gas wells, or indicate none are present, and cite the source.
 GBA Response: None present, note 11 added to general notes on sheet 2.
 - Please add a note stating: "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."
 GBA Response: Noted added to sheet 2 as general note 12.
 - The stream buffer boundary doesn't appear to match the final stream buffer boundary included in the approved Design Modification Request. Please revise throughout the plan set accordingly.
 - **GBA Response:** Modified stream buffer exhibits submitted separately.
- 2. Sheet 2: Please delete Permitting Note 14, there is no work within KCMO city limits on this project.

GBA Response: Note deleted.

- 3. Sheet 4:
 - Proposed building footprints are labeled but the rectangular area with double lines, which I am assuming is the future parking garage, is not. Please label for clarity.
 GBA Response: Parking garage labeled.



 There is an end section shown just outside of the project boundary at the SE corner that appears to be shown as proposed by line weight. Please either include in this plan set if that is the intent or revise the line weight accordingly on this sheet and throughout the plan set.

GBA Response: Line weight revised.

4. Sheet 5: Structure 5100 size appears to be wrong in the Plan view label. Please revise. **GBA Response:** Structure revised.

5. Sheet 6:

 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.

GBA Response: Added 100 year HGL to storm profile views and noted overflow route.

- Enclosed storm sewer systems will use the open channel, or gravity, flow design method for the appropriate design storm (LS Section 5603.1).
 GBA Response: The open channel flow design method has been used.
- 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.

GBA Response: Note and hatching added to sheet 7.

- Structure 5100 size appears to be wrong in the Profile view label. Please revise.
 GBA Response: Structure revised.
- 6. Sheet 8: Please include calculations for the 100-year storm. **GBA Response:** Added calculations to sheet 9.

7. Sheet 9:

• There is no asphalt pavement or concrete building slab included in the project. Please remove those standard sections.

GBA Response: Details removed.

 Please provide calculations and/or information that shows the proposed grates will allow the required surface drainage into the enclosed storm sewer system.
 GBA Response: Added table and calculations to sheet 10.



• Please provide width dimensions in addition to length dimensions for the proposed riprap.

GBA Response: Width added to dimension plan and SY of riprap added to utility plan.

8. Stormwater Drainage Study: Please include the fact that the CLOMR has been approved and include the case number. Update the exhibits in the study to match the revised plans.

GBA Response: Added CLOMR information and case number to narrative. Included 2/14/2020 FEMA letter to Lee's Summit in Appendix C. Added current FIRM panels to Appendix B.

We believe we have addressed all comments on this project. If you have any additional questions or concerns, please feel free to contact us.

Sincerely,

GEORGE BUTLER ASSOCIATES, INC.

Jay Healy, P.E.