

June 25, 2020

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

RE: PL2019024 – Paragon Star Street & Storm Plan Review

We have received your comments dated June 9, 2020 for the above referenced project. Our responses follow each comment.

Engineering Review

1. Sheet 1:

- KCP&L is now Evergy. Please update the plan set.
- Remove the approval signature block for the City. A stamp will be provided electronically when approved.

GBA Response: KCPL revised to Evergy. Signature block removed.

2. Sheet 2: Also reference the CLOMR as a part of the FEMA Floodplain information.

GBA Response: CLOMR information added.

3. Sheet 3: Since the referenced items have been issued, should Permitting Notes 13 & 14 be revised or deleted?

GBA Response: Notes revised.

4. Sheet 4: Revise both the pavement and sidewalk aggregate base labels to more closely match City terminology.

GBA Response: Pavement and sidewalk aggregate labels revised.

5. Sheet 5:

- Revise the sidewalk aggregate base label to more closely match City terminology.

GBA Response: Label revised.

- Relocate the Typical Section River Road asphalt base label for clarity.

GBA Response: Note relocated.

6. Sheet 7:

- Structure 4001 does not meet the minimum allowed inside "L" dimension as shown in the standard detail. Please revise.

GBA Response: Note revised.

- Label the street name west of the roundabout.

GBA Response: Label added.

- Consider rotating the Plan view 180 degrees for easier referencing.

GBA Response: Plan view situated to match stationing left to right.

7. Sheet 8:

- Relocate the proposed retaining wall located between View High Drive and View High Pkwy. Retaining walls are not allowed within public right-of-way.
GBA Response: A waiver for retaining wall in R/W is to be acquired from KCMO, as this portion of R/W is in KCMO.
- Retaining walls are not allowed over public storm sewer. Structure 204A and the pipe between Structures 204A and 204 shall be private. Please clearly label as such where appropriate throughout the plan set.
GBA Response: Pipe labeled as private throughout the plan set.
- Please bring "View High Parkway" to the front, or top, layer in the Profile view. Review the entire plan set to ensure the information is presented clearly. When layers are out of order, text can become very difficult to read.
GBA Response: Profile view layering revised.

8. Sheet 9:

- The standard pavement section for View High Parkway, on Sheet 4, stops at Sta. 24+19. There is no standard section provided for Sta. 24+19 to Sta. 29+07.30. Please revise.
GBA Response: Section revised/added.
- Since Structure 501A is being constructed over an existing storm sewer line, should this be labeled as a Doghouse structure?
GBA Response: Structure label revised to doghouse.

9. Sheet 15:

- Label the streets.
GBA Response: Street labels added.
- Please label the dashed line along the water line south of the roundabout.
GBA Response: Storm sewer and easement labeled.
- Design and Construction Manual Section 6901.D.1.d.i.(b) requires 5' clearance between water mains and storm sewer structures.
GBA Response: Horizontal clearance added.
- What is the end section shown just north of the water line at approximate Sta. 8+00?
GBA Response: End section is part of existing storm sewer. Connecting pipe layer revised to show.
- 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."
GBA Response: Note added.
- Show and label the limits of the compacted fill placement in the Profile view. Use hatching for clarity.
GBA Response: Limits of fill added.
- Adjust the Final Grade leader arrow to point to the grade line.
GBA Response: Leader adjusted.

10. Sheet 16: Revise the material type in the "Construct 8"..." label in the Profile view.

GBA Response: Note revised.

11. Sheet 17: Consider removing information not pertinent to this exhibit for clarity. Items such as existing plat labels, boring hole locations, ownership and zoning information, parking lot striping are all the types of items that help make this sheet very crowded and more difficult to read.

GBA Response: Plan revised for clarity.

12. Sheets 18-20: The Intersection Detail Legend doesn't include all of the sidewalk ramps, the labels don't make sense, and only one of the numbers (4) is shown in the Plan view.

GBA Response: Intersection detail legend and labels revised to match plan view.

13. Sheet 20: Adjust the Proposed Waterline leader to point to the water line.

GBA Response: Leader adjusted.

14. Sheet 21: The specific details of all ADA-accessible sidewalk ramps 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.

GBA Response: Slopes and ramp IDs added to sheet 21. Ramp ID table with details added to construction detail sheet 38.

15. Sheets 22-25:

Please review the grading sheets to ensure all proposed contours tie back into existing contours. Revise proposed contours to be only within the Limits of Disturbance boundary. Include TW & BW wall elevations on the grading sheets in order to verify the proposed wall elevations make sense.

GBA Response: Contours revised to tie into existing within the limits of disturbance. TW and BW elevations added.

16. Sheets 26-28: Please either refer to project phases or stages, don't mix the two.

GBA Response: Stages revised to phases.

17. Sheets 29-30: Include APWA inlet protection standard details.

GBA Response: APWA inlet protection added to sheet 30.

18. Sheets 33-34:

- Review all text line weight for consistency. Revise as needed.

GBA Response: Text revised.

- Relocate any connection numbers that overlap other text for clarity.

GBA Response: Connection numbers relocated.

- The grid used on these Profile sheets make the information very hard to read. Please only provide stationing grid lines every 25 feet for clarity.

GBA Response: Grid revised.

- Please review profiles to ensure all grade lines are correctly labeled and are of consistent line types.

GBA Response: Grade lines revised.

- Please label or remove the double lines shown between Structures 203 & 205.

GBA Response: Lines removed.

- Please review the Line 200 10-yr HGL and revise as needed.

GBA Response: Grade line revised.

- APWA 5600 requires Collector roadway crossings to convey the 4%, or 25-year, storm event. Please ensure this requirement is being met and include the 25-year HGL in Profiles as appropriate.

GBA Response: All grade lines revised for minimum 25 year storm.

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

GBA Response:

Traffic Review

1. All review comments from 2/11/19 need to be referenced; none appear to be addressed. A majority of those comments are supplemental calculations and plans that need to be submitted in support of the design for the project record (e.g. vehicular turning movements at the roundabout, roundabout design speeds, sight distance illustrations at the roundabouts, lighting design calculations). This supplemental information is typically not included in the plans, but submitted separately for review concurrently with the plan set.

GBA Response: Comments addressed below.

Several other comments pertained to receipt of KCMO approvals for various plan elements to include in the project file (e.g. Marking/Signing, Lighting and TTC on View High Drive/Roundabout).

All prior comments should be checked and addressed.

GBA Response: Acknowledged.

2. Plan review will be completed upon receipt of the requested design information. Additional comments may or may not be forthcoming.

GBA Response: Acknowledged.

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.

GBA Response: Estimate included with resubmittal.

2/15/19 Traffic Review

1. For each roundabout, submit a tabulation of design speeds calculated for each of the curves to include approach, curve, radius, circulation, exit, speed and speed differential of all movements at all legs of the roundabout. See Roundabout Design Criteria Table in the DCM for typical design speeds and information required for review.

GBA Response: Roundabout design speed attached.

2. For each roundabout, submit drawings illustrating that design vehicle(s) can be accommodated for all movements at all legs of the roundabout. The vehicle path shall maintain a minimum 2-foot clearance between the tire track and the curb. Drawings shall be submitted illustrating each vehicle path and per design vehicle (e.g. P, SU, WB).

GBA Response: Drawings added as sheets 86 through 103.

3. Additional review comments are pending further review dependent upon direction and decisions from

KCMO regarding ownership and standards for View High Drive and View High Parkway. I assume KCMO will also review and approve these roadway plans, including marking, signing, and lighting in coordination with Lee's Summit; especially for View High Drive and View High Parkway.

GBA Response: Acknowledged, plans have been submitted to KCMO.

4. Drawings that illustrate the intersection and stopping sight distances within, approaching and departing the roundabout need to be submitted for each roundabout for staff to review in reference to monument signing and any other potential landscape obstruction proposed within or adjacent to the roundabouts.

GBA Response: Intersection and stopping sight distances added as sheets 83 – 85.

5. Lighting is assumed private along View High Drive, View High Parkway and River Road...The lighting will need to be included in the maintenance agreement(s). What standards and specifications are the lighting designed to meet; KCMO or LSMO? How are the proposed lights on View High Drive powered and controlled? Provide a table of lighting design calculations, avg. illuminance, avg. to min. ratios, circuit loading, voltage drops, etc. for each system.

GBA Response: Acknowledged, private lighting will be included in the maintenance agreement. Lighting designed to meet LSMO standards. The lights on View High Drive will be connected to the lighting system for the I-470 DDI. Design tables added to sheet 51.

6. Revisions to shown ROW and shown easements are pending decisions of ownership.

GBA Response: Acknowledged.

7. Pavement Marking along View High Drive and within the View High Drive roundabout should meet the requirements of KCMO and MUTCD. KCMO plan approval should be sent to LSMO for record.

GBA Response: Acknowledged, plans have been submitted to KCMO and are under review.

8. Signing along View High Drive and within the View High Drive roundabout should meet the requirement of KCMO and MUTCD. KCMO plan approval should be sent to LSMO for record.

GBA Response: Acknowledged, plans have been submitted to KCMO and are under review.

9. Signing:

a.) Advance warning signs and advisory speed signs for the roundabouts are missing.

b) The roundabouts should include street name signs.

Marking:

c) Note the materials for marking symbols (including stop lines, yield lines, diagonals, arrows, crosswalk lines) and longitudinal lines; LS requires preformed thermoplastic and high-build paint, respectively.

GBA Response: Advance warning, advisory speed, and street name signs added. Marking materials noted.

10. Signing and Marking along View High Parkway is pending determination of ownership, but shall comply with the standards and specifications of KCMO and/or LSMO, as applicable, and the MUTCD.

GBA Response: Acknowledged.

11. The TTC and Detour Plan needs to be reviewed by KCMO and approved. MoDOT permitting will be required for the Detour Route. Submit KCMO approvals as applicable.

GBA Response: Acknowledged, plans have been submitted to KCMO and are under review.

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.

GBA Response: Estimate included with resubmittal.

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.

Clint Loumaster, P.E.