

June 11, 2020

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

RE: PL2019333 – Paragon Star Public Off-Site Water Main Extension

We have received your comments dated June 1, 2020 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: The plans are now very clear regarding vertical deflections. Horizontal deflections must meet the same tolerance and don't appear to show how this requirement is being met. Please clarify. **GBA Response:** Horizontal bends have been clarified.
- 2. Sheet 1: Update the Summary of Quantities Table based on comments. **GBA Response:** Summary Table has been updated.
- Sheet 3:
  - The Start Construction stationing shown on Plan and Profile views don't match. Please revise as needed.
    - **GBA Response:** Start Construction Stationing has been unified at Sta. 1+00.00.
  - The Proposed FH at Sta. 1+10.00 isn't shown on the profile view.
    - **GBA Response:** Fire Hydrant at Sta. 1+10.00 has been added to the profile.
  - The Sta. 1+18.70 leader appears to be pointing to the incorrect location. Please revise.
    - **GBA Response:** The Sta. 1+18.70 leader has been located correctly.
  - The enlargement circle at Sta. 5+01.12 appears to be shown slightly off of the correct location. Please revise.
    - **GBA Response:** Enlargement circle at Sta. 5+01.12 has been corrected.
  - The FH Stationing shown on the Plan and Profile views don't seem to match. Please verify and revise where needed on this and all other Plan and & Profile sheets.
    - **GBA Response:** Fire Hydrant stationing has been corrected across plans and profiles.

## 4. Sheet 5:

- There is a 5' dimension pointing to what appears to be a valve symbol near Sta. 30+97.64. Please clarify.
  - **GBA Response:** 5' dimension was an errant label and has been removed.
- The most upstream thrust block shown in the Profile view is located incorrectly graphically. **GBA Response:** The thrust block has been adjusted.
- There is a water line shown in the Profile view above the existing grad line. Please clarify.
  GBA Response: Vertical alignment has been adjusted, no water main is proposed to be above grade.
- The existing grade leader is not pointing to the grade line. Please revise.
  GBA Response: Existing grade leader has been corrected.



5. Sheet 6: The W/E is labeled as a 15' Water main Easement near Sta. 38+00, but other labels indicate it is a 20' easement. Please revise as needed.

**GBA Response:** From Sta. 42+11.70 to Sta. 44+55.77, where Line A follows the MoDOT RoW for I-470, the water easement is only 15' wide. Everywhere else, the easement is 20' wide. Labels have been updated to show this.

6. Sheet 7: The 2 proposed FHs shown in the Plan view aren't show in the Profile view. **GBA Response:** The two proposed Fire Hydrants have been added to the profile view.

## 7. Sheet 8:

- There are labels showing existing vertical pipe and a pipe filled with concrete that are unclear. Is this something in conflict with the proposed water line? Please clarify.
  - **GBA Response:** Line B has been adjusted to avoid the landscaping and the two pipes. GBA has no information on these two pipes beyond the survey locate noted in the plan.
- There are 2 labels for the class of pipe shown in the Profile view that don't match. Please revise where needed.
  - **GBA Response:** Pipe class corrected to Class 235 PVC.

## 8. Estimate:

- Please review the quantities for Items 4, 6, 8, 11, and 12. Revise as needed.
  - **GBA Response:** All quantities have been reviewed and updated.
- What are Items 13&14?
  - **GBA Response:** The Backflow Preventer is to be placed inside the concrete vault, where the water line switches from Lee's Summit to KCMO control; this has been clarified on the plans. The meter has been removed.
- Please include items for connection to existing mains and repair to exiting road for the Line B construction.
  - **GBA Response:** A line for connecting to existing mains has been added.

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.