

October 1, 2020

Gene Williams, P.E., CFM Senior Staff Engineer, City of Lee's Summit, MO 220 SE Green Street Lee's Summit, MO 64063

Re: Seguoia – Public Infrastructure (PL2020140)

Gene:

Please find our responses to your comments below regarding the Sequoia Public Infrastructure Plans submitted to you for review in September 2020. The revised Public Infrastructure Plans are also enclosed. The supporting documents have been updated to address the comments we received as follows:

## **Engineering Review - Corrections**

- 1) Please label the existing sanitary manhole with the City manhole number 30-051.

  RIC Response: City MH 30-051 renamed in plan and profile views on Sheet 11 Sanitary Plan and Sheet 12 Sanitary Plan and Profile.
- 2) Please gray out the existing sanitary sewer line north of the existing manhole described above (i.e., to make it appear as an existing feature).

RIC Response: Existing MH and Sanitary Main screened back to appear as existing features on Sheet 11 – Sanitary Plan and Sheet 12 – Sanitary Plan and Profile.

- 3) Please show the flowline "out" on the existing manhole described above. It is impossible to determine if the drop across the manhole is at least 0.5 feet.
- RIC Response: FlOut on the existing MH added to Sheet 12 Sanitary Plan and Profile. Per City of Lee's Summit Design Criteria Section 6501 D.2.g a drop of 0.2 feet was used based on a pipe deflection angle of 45° or less.
- 4) The sanitary sewer is shown with absolute minimum slope. It is recommended that the slope be increased slightly to account for tolerance during construction. The City shall not accept any construction of the sanitary sewer less than 0.60% slope.

RIC Response: Proposed Sanitary Sewer slope revised to 0.65% to account for construction tolerance. Note added to Sheet 12 stating, "The City of Lee's Summit shall not accept any construction of the sanitary sewer less than 0.60% per City of Lee's Summit Design Criteria Section 6501 D.2.d."

5) Please label the utility easement on the easement document exhibit as "existing U/E". After this change has been made, please execute and record the document, and provide the City with a document number for verification on the Jackson County website, or provide a recorded copy of the easement. Final approval of these plans is contingent upon the execution and recording of this document.

RIC Response: Easement exhibit revised to show "EXISTING 20" U/E."



6) Service lines for the sanitary sewer are shown without a direct path to the sanitary sewer line. The Design and Construction Manual requires that all private sanitary sewer laterals be installed with the shortest route possible. Please be aware that the City no longer requires the wye to be places outside pave area. It appears this older requirement was trying to be met, hence the bends in the private sanitary sewer laterals.

RIC Response: Private sanitary sewer laterals have been revised to reflect the shortest route possible. See Sheet 11 – Sanitary Plan for revised sanitary location and design table.

7) Please show the limits of backfill to be performed where fill is being places in relation to the water line. The City now requires all plans to include the limits of backfill and sufficient notes to be shown on the profile view of the water line, to ensure that the contractor knows that backfill will be provided to a plane that is 18 inches to the proposed grade of the water line, compacted according to City standards, and then the backfill will be trenched and the water line installed.

RIC Response: Backfill hatch 18" above the proposed water line has been added to the profile on Sheet 13 – Waterline Plan & Profile. Note added stating, "Compacted fill shall be placed to a minimum of 18" above the top of the proposed water line prior to the installation of the pipe. Reference City of Lee's Summit Standard Specification Section 2100 for Trench Backfill and Compaction Requirements."

Please feel free to contact me with any questions or additional comments.

Thank you,

Mick Slutter P.E.

RENAISSANCE INFRASTRUCTURE CONSULTING