

Date: Monday, February 03, 2020

To: Matt Eblen
McClure

From: Loic Nguingiri, E.I.

Application Number: PL2019390

Application Type: Engineering Plan Review

Application Name: Saint Luke's East - Flex Facility Pre Utility Work

The Development Services Department received plans for this project on November 18, 2019. We have completed our review and offer the following comments listed below.

- Resubmit three (3) full size sets of plans (no larger than 24"x36") folded to 8-½"x11", one (1) comment response letter, and one (1) digital copy following the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within five (5) business days of the date received.

Engineering Review - Pending

1. General: While tree(s) removal is acceptable, Please consider replacing or relocating tree(s) for environmental and landscape beautification purposes. Discussion or correction regarding this topic can also occur during the FDP stage.
2. General: Please update cost estimate to match summary of quantities shown of the set of plans. Items 6-10 should be listed as L.S. (Lump Sum)
3. Water: Please add vertical and horizontal scales on profile view on pages C302, C303 and C401.
4. Water: The water line profile seems to exceed the 1 degree angle allowed for vertical deflection at joints. Please verify and revise. Running an overall straight pipe line with horizontal bends only could also be an option.
5. Water: 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."
6. Water: Show and label the limits of the compacted fill placement in the Profile view. Use hatching for

clarity.

7. Water: From STA 2+70 to STA 4+70, there appears to be 5 bends. Numerous bends along a section of the pipe line comes with a greater risk of leaking and an upper maintenance cost. Please consider reducing the number of bends.

Traffic Review - No Comments

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.

- Public infrastructure, both onsite and offsite.
- Private street construction, including parking lots and driveways.
- Sidewalks located within the right-of-way.
- ADA accessible ramps.
- Sanitary sewer manholes and piping between manholes, including private mains.
- Connection of the building sanitary sewer stub to the public main.
- Waterlines larger than 2 inches in diameter, valves, hydrants, and backflow preventer with vault, if outside the building.
- Stormwater piping greater than 6 inches in diameter, structures, and detention / retention facilities - public or private.
- Water quality features installed to meet the 40-hour extended duration detention requirements.
- Grading for detention / retention ponds.
- Grading to establish proper site drainage.
- Utility infrastructure adjustments to finished grade (i.e. manhole lids, water valves, etc.).
- Erosion and sediment control devices required for construction.
- Re-vegetation and other post-construction erosion and sediment control activities.

Electronic Plans for Resubmittal

All Planning application and development engineering plan resubmittals shall include an electronic copy of the documents as well as the required number of paper copies.

Electronic copies shall be provided in the following formats

- Plats – All plats shall be provided in multi-page Portable Document Format (PDF).
- Engineered Civil Plans – All engineered civil plans shall be provided in multi-page Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).

Please contact me if you have any questions or comments.

Sincerely,

Loic Nguingiri, E.I.

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cc: Development Engineering Project File