

PUBLIC WORKS ENGINEERING DIVISION

Date: Thursday, August 02, 2018

To:

ENGINEERING SOLUTIONS
Matt Schlicht, P.E.
Email: MSCHLICHT@ES-KC.COM
Fax #: (816) 623-9849

From: Gene Williams, P.E.
Senior Staff Engineer

Application Number: PL2018116
Application Type: Engineering Plan Review
Application Name: Napa Valley 4th Plat - Waterline

The Development Services Department received plans for this project on July 13, 2018. 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

1. Water line is shown within right of way. The water line should be located within an easement, and centered within the easement as close as possible.
2. The location and magnitude of bends were not provided. C900 pipe is not meant to be placed where bending moments can be induced into the pipe. The only allowable deflection within this pipe is located at the joint, and only at 1 degree maximum deflection at the joint. This equates to roughly 1200 foot minimum radius if using a standard 20 foot stick of pipe.
3. Existing and proposed fire hydrants were not shown. In addition, it appears a fire hydrant is shown at the intersection of Sage Canyon Rd., well inside the 20 foot distance required from a fire hydrant, to the beginning of the radius. Please show the new location of the relocated fire hydrant, and provide the location of new fire hydrants to meet the 500 foot maximum spacing requirement. It appears that one (1) fire hydrant will need to be relocated, and one (1) additional fire hydrant placed along Sage Canyon Rd.
4. Sheet C.503: Trench check detail is shown, but is not relevant to this project. Please remove.

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

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 on CD in the following formats

- Plats – All plats shall be provided in Tagged Image Format File (TIFF) Group 4 compression.
- Engineered Civil Plans – All engineered civil plans shall be provided in Tagged Image Format File (TIFF) Group 4 compression. All sheets shall be individually saved and titled with the sheet title.
- Architectural and other plan drawings – Architectural and other plan drawings, such as site electrical and landscaping, shall be provided in Portable Document Format (PDF).
- Studies – Studies, such as stormwater and traffic, shall be provided in Portable Document Format (PDF).
- It is requested that each plan sheet be a maximum of 2MB.

Please contact me if you have any questions or comments.

Sincerely,

Original Signed

Gene Williams, P.E.
Senior Staff Engineer
(816) 969-1223
Gene.Williams@cityofls.net

cc: Development Engineering Project File