
DEVELOPMENT SERVICES

Date: Saturday, February 12, 2022

To: ENGINEERING SOLUTIONS
Matt Schlicht, P.E.
50 SE 30TH ST
LEES SUMMIT, MO 64082

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

Application Number: PL2021295

Application Type: Engineering Plan Review

Application Name: NAPA VALLEY 5TH PLAT - Street, Stormwater, and Master Drainage Plan

The Development Services Department has completed its review of the above-referenced plans (questionable date and questionable revision date - see notes in Cityview) and offer the following comments listed below.

- See comments below to determine the required revisions and resubmit to the Development Services Department public portal located at devservices.cityofls.net. Digital documents shall follow the electronic plan submittal guides as stated below.
- Revised plans will be reviewed within ten (10) business days of the date received.

Engineering Review

1. Sheet C.200 shows two (2) swales aligned roughly north/south. No cross-section labeling was done for these two (2) swales. Proper labeling is required.
2. None of the swales denoted by cross-sectional call-outs show any specific cross-section along suitable intervals (e.g., 20 feet?). Cross-sections of the swale are required along suitable intervals for all swales. The "Typical Channel Section" at the top of this sheet is not a detail, but rather, a generic cross-section. Provide site-specific cross sections for each swale, and include sufficient number of cross-sections along the route.
3. Sheet C.201: Grayed-out contours are shown which do not match Sheet C.200.
4. Please refer to the email dated Feb. 10, 2022 sent at 12:53 pm. A copy is included in Cityview for your reference, and is included with the one sent on the same date at 2:22 pm (i.e., it is the second email in the thread). As stated in this email, I had placed a revision cloud around the area we discussed during our Zoom meeting on Feb. 10, 2022. Although it was difficult to determine proposed grading due to drafting lineweights that did not follow generally-recognized standards, it appeared you had created a berm along the east side of the plat boundary, and graded to the property line which is not allowed unless suitable agreements are reached with adjoining property owner. If I remember correctly, this is a wood fence

along their west property boundary, and drainage from the top of the berm to the bottom of the berm will be directed onto their property and towards the fence. Despite its low drainage area, this still creates adverse impact to the adjacent property owner, who has had issues with his in-ground pool due to groundwater issues. Any further impact will likely be assigned by the homeowner to this alteration to existing drainage patterns. I had suggested a swale be created to the east of the berm, all contained within the plat boundary, and the 100 year WSE contained within the plat boundary. I had asked whether this is possible. I then stated "if not, other alternatives should be explored." When revising the Master Drainage Plan for this area, please review this email and determine what can be done to eliminate these concerns.

5. Please refer to the email dated Feb. 10, 2022 at 2:22pm. A copy is uploaded into Cityview for your reference. As stated in the email, in the long term, the area at and near Lot 183 is going to be filled-in, which would appear to alter the drainage flow patterns toward the adjacent owner's property and fence. I would suggest detailed notation on the MDP, along with a supplementary sheet showing what the homebuilder must do during construction to eliminate these concerns. Whatever is done to eliminate these concerns, they shall be clearly visible on the MDP, and contain sufficient detail for plot plan review.
6. Sheet C.205: ADA-accessible ramp details are grayed-out along the outline of the ramps, indicating these are existing features, rather than features to be constructed with these plans. Please provide bold lineweight for ADA-accessible ramps to be built during the subdivision improvements. Detail 2 construction shall include all features denoted by "R", "TS", and the area of ramp shown between the curb ramp and the turning space.

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,

/s/ electronically signed Feb. 12, 2022

Gene Williams, P.E.
Senior Staff Engineer
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Gene.Williams@cityofls.net

cc: Development Engineering Project File