

DEVELOPMENT SERVICES

Date: Tuesday, October 22, 2024

To: ENGINEERING SOLUTIONS
50 SE 30TH ST
LEES SUMMIT, MO 64082

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

Application Number: PRSUBD20240980

Application Type: Public Infrastructure

Application Name: Tailormade Landing - SE Hamblen Road Improvement Plans

The Development Services Department received record drawing documents for this project and we have completed our review 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 five (10) business days of the date received.

Traffic Review - Streets

Reviewed By: Erin Ralovo

Corrections

1. These improvements will extend past the shoulder and into the ditchline. Additional grading will be needed the reestablish a ditch through these improvements.
2. Please include a reestablishment plan for the disturbed area outside of the widening.
3. The left side of the roadway shows 3 R/W lines. There should only be one.

Engineering Review - Street and Storm

Reviewed By: Gene Williams, P.E.

Corrections

1. One hundred feet of cross-section interval is too high for this project. Recommend no more than 25 feet due to the flatness of this project. Correction required.
2. Center line cross-sections required at all intersecting streets and private driveways. It would appear at least two (2) additional cross-sections required above and beyond the additional cross-sections necessary to meet the 25 foot guideline. Corrections required.
3. Cross-sections shall include all utilities. It appears the cross-sections are missing water mains, sanitary line, and storm line, and any other utilities that may impact this project. Corrections required.
4. Sheet C.251: Stationing is obscured by strikeover errors. Corrections required to eliminate strikeover errors.
5. Sheet C.251: Title of sheet is "Overall Grading Plan". No grading is shown. Correction required.

6. Previous applicant letter provided a markup of the cross-sections. Comments were not addressed. Correction required.
7. Stormwater structures exist along the east side of Hamblen that could be utilized to manage stormwater after construction of a ditch along Hamblen Rd. Some are public, and some are private. Other alternative is to design and install new underground system along the new ditchline. Recommend evaluating which stormwater structure(s) to utilize for draining the new ditch along Hamblen Rd., either by utilizing the public stormwater structures (i.e., field inlet(s)), private stormwater structures (i.e., field inlet(s)), or new underground pipe system to be installed with this project. Correction required.
8. An erosion and sediment control plan was missing. Correction required.
9. Subgrade stabilization or geogrid was missing from the shoulder typical section. Correction required.
10. Recommend a minimum of two (2) sheets showing the overall grading plan. As presented, it is impossible to read due to strikeovers, missing contour elevation contours for existing elevations, and crowded labels. Correction required.
11. KCMMB concrete for new driveway within right of way shall not include woven wire fabric, and shall be minimum 8 inches non-reinforced concrete within the right of way. Understand this removal and replacement will likely be expanded since the existing drainage will need to be expanded in this area to construct a ditch in accordance with City standards. It is likely the entire driveway shall be removed and replaced, not just a short piece at the end. Correction required.
12. Sheet C.253: This sheet presents nothing concerning the grading, and appears impossible to construct with the new ditchline and 3:1 slope. Correction required.
13. Sheet C.253: Both views are not identified and have to be identified using the process of elimination. This is a questionable way to prepare plans to be utilized in the field. Provide a clear identification of every item shown on this sheet. Clarify what the typical section view is to be used. Correction required.
14. Final Comment: The objective of the design shall be to: 1) construct a drainage swale/ditch along the east side of Hamblen Rd. in accordance with City standards, 2) divert the stormwater collected in this ditch toward public and/or private stormwater structures such as field inlets or other drainage ways, and 3) provide final restoration to those property owners and City facilities affected by this project. As presented, these objectives have not been met. Corrections required.

Engineering Review - Streetlight

Reviewed By: Gene Williams, P.E.

Not Required

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,

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

cc: Development Engineering Project File