
PUBLIC WORKS ENGINEERING DIVISION

Date: Friday, May 19, 2017

To:

BHC RHODES

Patrick Joyce, P.E.

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Fax #: (913) 663-1633

From: Gene Williams, P.E.

Senior Staff Engineer

Application Number: PL2017090

Application Type: Engineering Plan Review

Application Name: The Grove at Lee's Summit LLC - Phase 1A -Sanitary Sewer - On-Site and Off-Site

The Development Services Department received plans for this project on April 21, 2017. We have completed our review and offer the following comments:

Engineering Review

1. Please add a note stating that "...all construction shall follow the City of Lee's Summit Design and Construction Manual as adopted by Ordinance 5813. Where discrepancies exist between these plans and the Design and Construction Manual, the Design and Construction Manual shall prevail."
2. Sheet 2: Ductile iron pipe is required at all stream crossings. This would appear to apply to three (3) separate locations shown on this sheet. Encasement is also required beneath stream crossings. The length of the ductile iron pipe shall extend from manhole to manhole, with restrained joints installed. The concrete encasement should extend a minimum of ten (10) feet behind the bank of the stream. Depth of the sanitary sewer line shall comply with Section 6500 of the Design and Construction Manual.
3. All Sheets Pertaining to the Existing Downstream Manhole: Please label the existing manhole on the extreme southern portion of the project as City Manhole No. 46-047.
4. Sheet 1: The maximum length between manholes is 500 feet in the City of Lee's Summit. As such, the following geometry change is recommended. Place a manhole on the west side of Decker St. approximately 490 feet south of A11, eliminate manhole A10 at the location shown and move it across the roundabout to the general location of manhole A8, but a few feet to the west of the proposed location of manhole A8. This will allow for a straight run to manhole A6 without an intervening manhole. It will also eliminate the sanitary sewer line beneath the splitter island.
5. Are private sanitary sewer laterals going to be installed as part of this project? If so, then please show

their location on the plans. Laterals must be connected via a wye connection rather than a tee. Tracer wire and box must also be installed as per the City standard detail.

6. Sheet 3: Is there a particular reason that manhole A8 is shown one (1) foot above grade?
7. Sheet 4: Manhole A10 appears to be installed within a sump?
8. Off site easements shall be required for the portions of the sanitary sewer shown extending beyond the plat boundary. These easements shall be required prior to approval of the plans. The easements shall be in a form acceptable to the City, and shall use the standard template for sanitary sewer easements. This standard template can be requested at any time by the applicant.
9. Sheet 7: Please insert the City standard details for manholes, manhole connections, concrete encasement, wye connection and tracer wire connection to the main, frame and lid details (including City of Lee's Summit lettering requirements), and trench and backfill detail. Remove the details on this sheet since they are not correct.

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

Beginning Monday, May 23, 2016, 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 will not be required for initial application submittals at this time as the plans are subject to change.

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 Staff with any questions or concerns you may have.

If you have any questions or comments, please contact me, Gene Williams either at (816) 969-1812 or e-mail to Gene.Williams@cityofls.net.

Sincerely,

Original Signed

Gene Williams, P.E.
Senior Staff Engineer

cc: Development Engineering Project File