S LEE'S SUMMIT MISSOURI

PUBLIC WORKS ENGINEERING DIVISION

Date: Thursday, April 19, 2018 To: CMH PARKS INC Email: Fax #: <NO FAX NUMBER> From: Sue Pyles, P.E. Staff Engineer Application Number: PL2017184

Application Number:PL2017184Application Type:Engineering Plan ReviewApplication Name:The Reserve at Stoney Creek 3rd Plat
Construction Plans

The Development Services Department received plans for this project on September 01, 2017. 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. Sheet C.210: It appears that the location of Section B-B is shown on the wrong side of the baffle wall in the Detention Outlet Structure plan view. Please verify.
- 2. There is a 5' Sidewalk label on the east side of Lodestone, but there is no sidewalk proposed on that side of the street. Please remove the label throughout the plan set.
- 3. Please check and revise, as needed, the following from the storm sewer calculation tables and include the updated tables in the Drainage Study, as well:
 - Pipe Size, Pipe Slope, Inv Elev (Dn) for both segments of Line 9
 - Pipe size for line segment 10.2-10.3
 - Line length for pipe segment 10.3-10.4
- 4. Drainage Study:
 - Please explain how the Culvert/Orifice Structures information on Page 6 corresponds to the openings in the Outlet Structure included in the plans. This may be done by email.

• The Drainage Study does not include addressing detention for the Water Quality event. Please revise to include.

• Please clearly indicate the 100-year WSE in the Drainage Study. It appears that Section 7 may include this information, but it is not clear.

• Please revise the Conclusions & Recommendations section to address The Reserves at Stoney Creek 3rd Plat and The Manor at Stoney Creek 3rd Plat.

- 5. Please check and revise, as needed, the Engineer's estimate of Probable Construction costs as follows:
 - 15" 36" HDPE: The overall total matches the plans, but not the length for each individual size.
 - End Sections: The plans show 1-18" FES, 1-24" FES, and 0-30" FES.
 - It appears that not all of the plan revisions were included in the revised estimate.

Traffic Review

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,

Sue Pyles, P.E. Staff Engineer (816) 969-1245 Sue.Pyles@cityofls.net

cc: Development Engineering Project File