
PUBLIC WORKS ENGINEERING DIVISION

Date: Monday, February 26, 2018

To:

CMH PARKS INC

Email:

Fax #: <NO FAX NUMBER>

From: Sue Pyles, P.E.
Staff Engineer

Application Number: PL2017184

Application Type: Engineering Plan Review

Application 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:

Engineering Review

1. Sheet C.205:
 - Revise the overlapping text/graphics in the Profile view near Sta 5+00.
2. Sheet C.208:
 - It does not appear that the turning space for the Type B ramp at the SE corner of Georgetown and Amethyst meets the maximum slope requirements. Please revise.
3. Sheets C.208-C.209:
 - Include spot elevation information at all accessible routes through intersections at stop conditions, regardless of proposed street grades.
4. Sheets C.301-C.305:
 - Field Inlets 1-7 & 6-2 are shown in a sump condition, with openings on all sides. However, the profile views do not show this condition. Please revise.
 - Storm Line 10 connects to an existing storm line after removal of an existing FES. The plan view correctly indicates this connection, but the profile view still shows a structure at that location. Please revise the profile view and add the existing pipe size, slope and flowline elevation at that point.
 - Please verify that the riprap dimensions shown in the riprap calculations, Plan view, and Profile view all match.

- Please verify that the Q used in the riprap calculations and matches the Q in the Storm Sewer tables.
- The riprap calculations for FES 13-3 appear to be incorrectly labeled as FES 13-1.
- Riprap is shown at FES 13-1 in the Line 13 Profile view, but nowhere else in the plan set. Please revise as needed.

5. Engineer's Estimate of Probable Construction Costs

- Verify quantities for Asphalt paving, MoDOT Type 5 Base, Geogrid, 15" HDPE, 18" HDPE, and Rip Rap.
- Replace the item for Curbing with items for Type CG-1 and Type CG-2 Curbing.
- Include items for 30" End Section and Connection to Existing (Line 10).

6. For each accessible route through an intersection at a stop condition, include a note on the applicable street profile referencing the intersection detail, with page number, for specific design elevations.

Traffic Review

1. The typical section should note the change in curb type as shown on C.100.
2. Street name signs are needed at the intersection of Amethyst/Hightown Dr (SW corner/inside turn).
3. Add intersection detail for Amethyst/Hightown Dr.
4. Plan detail and completeness review performed by Development Engineering

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
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cc: Development Engineering Project File