

Date: Friday, December 16, 2022

To: SCHLAGEL & ASSOCIATES - Mark Breuer, P.E.
14920 W 107TH ST
LENEXA, KS 66215

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

Application Number: PL2022419

Application Type: Engineering Plan Review

Application Name: Residences at Blackwell - Blue Pkwy. Road Improvements

The Development Services Department has completed its review of the above-referenced plans (undated and unsealed, submitted by Powell Architects and Engineers) 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 - Corrections

1. Hydraulic grade line shall be shown on the profile view of all storm lines greater than 6 inches diameter. The hydraulic grade line shall also include the design storm. Please revise.
2. Off-site easements and right of way should be dedicated by separate document since it was not dedicated on the proposed plat. Please submit courtesy review copies prior to execution and recording. Please be aware an 8.5 by 11 inch exhibit is required for each easement or right of way dedicated by separate document.
3. Sheet 32: North arrow does not appear correct. Please evaluate and revise as appropriate.
4. The colored and stamped concrete within the roundabout should be specified as KCMMB mix. Please revise.
5. A 3 inch sanitary sewer force main was installed along the north side of Blue Pkwy., but does not appear anywhere on the plans. Please show the location of the 3 inch sanitary sewer force main, and ensure there are no conflicts.

6. Pavement sections do not meet the Design and Construction Manual in terms of pavement thickness or subgrade design. Please see the Design and Construction Manual for Commercial Collector street standards. In general, there are two (2) options. Option A includes 1) 2 inch surface course AC over 5.5 inches base course AC, 2) 6 inch MoDOT type 5 aggregate, 3) 9 inches chemically-stabilized subgrade. Option B includes 1) same AC thickness for surface and base as above, 2) 12 inches MoDOT Type 5 aggregate, and 3) geogrid. Please revise as appropriate.
7. The 3 inch sanitary force main discussed in the above comments may need to be relocated due to conflicts with the roundabout or other features. We will wait until this line has been shown on the plans to make this determination.
8. The typical pavement section view from sta 17+53 to 27+15 appears to narrow. Typical minimum width should be 36 feet from back of curb to back of curb. Please evaluate and revise as appropriate.

Traffic Review - Corrections

1. General: This section of Blue Pkwy is MoDOT R/W. These plans have been reviewed by the City but will also need to be reviewed and approved by the state.
2. Sheet 29-31: The contractor will need to pull a TTC permit from the City and State when this work occurs. Closure and detour route will be reviewed at that time.
3. General: Please show the size of signs intended to be used.
4. Sheet 26: Add "Keep Right" signs at the splitter island noses.
5. Sheet 26: Add Type 4 Object Markers at the roundabout leg that is a dead end.

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 Dec. 16, 2022

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

cc: Development Engineering Project File