

DEVELOPMENT SERVICES

Date: Thursday, October 31, 2024

To: CLAYTON PROPERTIES GROUP INC
120 SE 30TH ST
LEES SUMMIT, MO 64082

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

Application Number: PRSUBD20245195

Application Type: Public Infrastructure

Application Name: Cobey Creek 2nd Plat Public Infrastructure

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. Improvements along 150 HWY should be included with this submittal. MoDOT will have to give final approval but the staff will need to review as well.
2. Speed Limit sign at Sta. 4+28.73 should be 25 MPH not 15.
3. The merge lane for northbound traffic seems unnecessary. A single lane with a wider island may be a better fit.
4. Divided Road sign at Sta. 5+69.76 should be a Keep Right (R4-7).
5. Stop Sign at Sta. 6+72.45 should be removed.
6. Stop signs on side streets should also have street name signs (D-3)
7. Both Sta. 1+83.32 4" solid white are pointing to the wrong lines.
8. The striped out lane should have 24" chevrons not 18".
9. The through arrows going NB are not needed.

Engineering Review - Street and Storm

Reviewed By: Gene Williams, P.E.

Corrections

1. Stormwater manhole lid shall meet new requirement for lettering. Standard detail to be sent separate from this applicant letter. Corrections required.
2. Sheet C051: All asphaltic concrete to be KCMMB mix. Correction required.
4. Typical Pavement Section Views: Recommend a re-review by the engineer for the most up-to-date design criteria for residential local access, and residential collector. Design criteria is shown on Table LS-2 of the most up-to-date version of the table within Section 5200 of the Lee's Summit Design and Construction Manual. Some criteria became less stringent, others more. Most changes are related to aggregate thickness, which mostly were decreased from the past version of the Design and Construction Manual. Correction required.
5. Recommend removing the light blue, blue, and purple phasing lines from Sheet C101. These plans are for Cobey Creek 2nd Plat, and Sheet C101 should concentrate on the 2nd plat/phase rather than showing the entire phasing of the project. Recommend "graying-out". Correction required.
6. Master Drainage Plan was missing the basement type for each lot (e.g., walkout, daylight, or standard). Correction required.
7. Sheet C501: A cross-hatched area representing what is shown in the legend to be a drainage swale does not appear to make sense. Correction required.
8. Offsite existing elevation contours shown on Sheet C104 do not appear to match what is shown on Sheet C500 "Inlet Drainage Area". Reviewing Sheet C500, it would appear additional inlets and pipe are needed. Reviewing other sheets, it would appear this is not necessary. Evaluate and correct if necessary.
9. There are mid-block crossings shown on the plans with 1.5% maximum cross-slope callouts. This may introduce a bump in the road, and is not desired. Mid-block crossings can match existing grade as long as the running slope does not exceed 5%. Evaluate and revise as appropriate.
10. The existing north detention basin shall include a detailed design showing how the basin will be converted to a sediment basin. This shall include any skimmer(s) to be installed, sizing of the skimmers, installation of the skimmers, block-offs of the existing outlet structure water quality orifices, etc. Correction required.
11. A note shall be provided on the erosion and sediment control plan in bold lettering that states "SEDIMENT BASIN CONVERSION TO OCCUR PRIOR TO ANY CONSTRUCTION ACTIVITIES" or equivalent language. Correction required.
12. Master Drainage Plan: Label finished elevation contours to the extent they can be understood (i.e., not all need be labeled, only to the extent that others can be interpolated). Correction required.
13. Sheet C400: Notes on bottom left hand corner are incomplete with the "xxxx" designation. Correction required.
14. Sheet C401: The truncated domes on bottom right exceed the maximum 5.0 feet distance to back of curb. Correction required.
15. ADA-accessible routes across intersections: Ensure non-stop controlled intersections match road grade (max 5%) to eliminate any bump (i.e., change in grade) at the non-stop controlled intersection. It appears all ADA-accessible routes across intersections were designed with 1.5% cross-slope, which is not desirable for non-stop controlled intersections. Correction required.
16. Many of the notes for the ADA-accessible routes across streets and intersections state "5.00 ft. max". This should be called out as 5.00 feet, not "max". Correction required.
17. SWPPP is required prior to formal approval. Correction required.

Engineering Review - Water**Reviewed By: Gene Williams, P.E.****Corrections**

1. Sheet C201: Change Line 2-FF to "PROP 12" WATER". Correction required.
2. Sheet C202: The limits of the casing pipe appear to extend to the 12" water main running along HWY 150 at Sta. 1+15.00. The casing pipe should start north of the butterfly valve. Correction required.
3. Sheet C202: Three (3) valves are required at all tees. There should be three valves installed at the tee at Sta. 1+00. Correction required.
4. Sheet C204: Why move the 12" water main to the west side of Sunset Ridge? There is room to place the 12" water main in the 15' UE on the east side of Sunset Ridge, and avoids jogs and reducers. Correction required.
5. Overview Sheet: Label all street names on overview sheet. Correction required.
6. Overview Sheet C201: Line FF is mislabeled as an 8 inch line. This should be a 12 inch line. Correction required.
7. Sheet C202: Gate valves are desired for 12 inch lines. Butterfly valves should only be used for valves larger than 12 inch. Correction required.
8. An MDNR permit shall be required prior to formal approval. Informational comment.

Water Utilities - Water Review**Reviewed By: Kevin York****Corrections****Engineering Review - Sanitary****Reviewed By: Gene Williams, P.E.****Corrections**

1. Label all street names on the general overview sheet. Correction required.
2. Please label existing manholes with the official City manhole number. Connection point of line D is 58-063. Line H is 58-067. Line B is 58-051. Correction required.
3. Relocate manhole H-3 to not exceed 400 feet in length from the next manhole H-4. Correction required.
4. Eliminate manhole H-2 and direct connect to existing City manhole 58-067. Correction required.
5. Line B appears to be located in an easement that is too narrow. Required width is twice the depth assuming the line is centered within the easement. Correction required on plans and plat.
6. An MDNR permit shall be required for this project. Informational comment.

Water Utilities - Sanitary Review**Reviewed By: Amanda Bagwell****Corrections****Engineer Review - Grading****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