
DEVELOPMENT SERVICES

Date: Tuesday, November 26, 2024

To: MATT SCHLICHT
50 SE 30TH ST
LEES SUMMIT, MO 64082

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

Application Number: PRSUBD20245707

Application Type: Public Infrastructure

Application Name: Oldham Village - Street and Storm, Sanitary, and Water

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. The sidewalk along the south/west side of Oldham from Jefferson to the fieldhouse should be a 10 FT multi-use path. Please change.
2. Plans should include demo of the driveway at the church property.
3. A traffic phasing plan will need to be included with plans, i.e. how will traffic be handled during construction and any detour routes that may be needed.

Engineering Review - Street and Storm

Reviewed By: Gene Williams, P.E.

Corrections

1. See streetlight plans for street and storm comments.

Engineering Review - Streetlight

Reviewed By: Gene Williams, P.E.

Corrections

1. Sheet C.200: Scale appears to be incorrect. Corrections required.
2. A rendering of the retaining wall should be provided. Corrections required.
3. 3:1 slope appears to be exceeded on the grading plan in the detention basin. Corrections required.
4. Plans are missing the ADA-accessible ramp details. Corrections required.

5. Plans are missing the ADA-accessible route details across intersections. Corrections required.
6. Signing plan was missing. Correction required.
7. Standard details for inlets was missing. Correction required.
8. Standard details for trenching and backfill were missing. Correction required.
9. Retaining wall should be labeled and shown on the plan view of all relevant sheets. Correction required.
10. Retaining wall shall be shown on the profile view of the storm lines of all relevant sheets. Correction required.
11. Public storm line is shown beneath a retaining wall, which is not allowed. Correction required.
12. Public storm line 100 is too deep near the detention basin. Correction required.
13. Sheet C.301: A pipe is shown entering a larger pipe below the crown. Correction required.
14. Rendering of the retaining wall should be presented for all sides of the retaining wall, and include in a general sense, the height of the retaining wall in relation to adjacent property. Correction required.
15. There are numerous stikeovers throughout the plans. Corrections required to ensure the strikeovers are removed.
16. Preliminary Development Plan showed no retaining walls. It appears there will be very high retaining walls constructed along the backs of properties, and another running east/west. These retaining walls were not considered as part of the Preliminary Development Plan in terms of the adjacent property owners, and hence, it may need to go back through the process of public hearing. Informational comment.
17. A shared access was shown on the Preliminary Development Plan. I did not see any shared access pathway on the plans. Correction required.
18. HGL for design storm, including labels for the design storm, were missing on the profile view. Correction required.
19. Drainage tables and drainage area maps were missing. Correction required.
20. Sheet C.303: A pipe is shown entering into a larger pipe below the crown. Correction required.
21. Sheet C.303: The right side of the profile view appears to be missing. Correction required.
22. Rip rap dimensions are missing. All relevant dimensions, materials, depths, and calculations are required. Corrections required.
23. Sheet C.304: Pipe slopes are missing. Corrections required.
24. All pipes below collector streets (i.e., Oldham and Jefferson St.) shall be either RCP or CPP. Correction required.
25. Typical section views including stationing missing from all street sections. Corrections required.
26. Streetlight plans and traffic signal plans were missing. Correction required.
27. Sheet C.307: A pipe is shown entering a larger pipe below the crown. Corrections required.
28. Sheet C.308: Curb inlet 12-3 is shown out of the ground. Correction required.

29. Ten (10) foot shared use path typical section is required. Corrections required.

30. Cost estimate required prior to formal approval. Informational comment.

Engineering Review - Water

Reviewed By: Gene Williams, P.E.

Corrections

1. 1. Sheet C502:

- a. Connect to the existing 12" water main near Sta. 0+70. Add a note to abandon or remove the existing 12" water main to the north.
- b. Show storm crossing in the profile near Sta. 2+75. Add pipe crossings to the profiles in all plan sheets.
- c. Call out the fitting south of Sta. 2+89.61. Call out fittings in all plan sheets.
- d. At Sta. 2+89.61, There should be a 12"X12" cross installed here with a 12"X8" reducer on the north side of the cross. Four valves are needed at crosses and three valves are needed at tees which applies to all plan sheets.
- e. The Water main looks like it has a radius less than 1146'. Add bends to the water main. This applies to all plan sheets.
- f. What is planned between Sta. 7+00 and 8+00? Label the bends in the water main where radius of curvature is less than 1200 feet.
- g. hydrant spacing might be too far south of Sta. 8+84.31.

2. Sheet 503: The note "EX. 8" WATER LINE" is incorrect. The existing water main is 12". Add a note stating to abandon or remove the water main.

3. 3. Sheet C504:

- a. Line 2: Do not install the water main under the street. Do not install a hydrant across the street from the water main.
- b. Line 3:
 - i. Install the water main east of the curb inlet near Sta. 2+50, not under the curb. Where is the right of way or easement line? Please label.
 - ii. Move the cross at Sta. 0+00 away from the curb so the valves won't be in the street.

4. 4. Sheet C505: Abandon or remove the existing 12" water main east of Line 5. Add a note stating what will be done. The tee and valves near the beginning of Line 1 on the east side of Jefferson need to be removed and replaced with 12" pipe.

5. Show all easements on the plans, and ensure they match with what is shown on the Final Plat. Correction required.

6. General Layout Sheet: Label the line numbers and water line sizes. Correction required.

7. Estimate 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. The north arrow is wrong on Sheet C-401. Correction required.

2. Existing manholes are not labeled, or any manholes on Sheet C-401. Correction required.

3. Sheet C.402: Two (2) manholes are shown below finish grade. Correction required.

4. Sheet C.402: Scale is incorrect. Correction required.
5. Where is the retaining wall(s) in relation to the sanitary sewer? Show on plan view and any relevant profile views where there are potential conflicts. Correction required.
6. Lot 1 appears to be unserved by sanitary sewer. Correction required.
7. Move manhole B-1 outside the limits of the intersection. Place it outside the limits of the wheeltrack area. Correction required.
8. Move manhole A-3 outside the limits of the intersection. Place it outside the limits of the wheeltrack area. Correction required.
9. Move manhole A-5 outside the limits of the intersection. Place it outside the limits of the wheeltrack area. Correction required.
10. Center manhole B-3 better so it does not interfere with the wheeltrack. Correction required.
11. Utility crossings are not shown in profiles. Correction required.
12. Manhole A-2 station 7+00: Raise MH A-2 above grade. I'm concerned that it will be buried in the future due to being located in the middle of a steep incline like that. Maybe raise it 2-3 feet above grade. Correction required.
13. Manhole C-2 is shown below finish grade. Correction required.
14. Manhole A-5 is shown below finish grade. Correction required.
15. Manhole C-4 is shown below finish grade. Correction required.
16. No notes provided on plan view for placement of "Manhole in Paved Area Detail". The notation shall include a reference to the sheet number and detail number for the "Manhole in Paved Area Detail" in accordance with recognized drafting standards. Correction required.
17. Plans are missing standard detail for wye connection and tracer wire installation. Correction required.
18. Sanitary sewer line A is too deep near manhole A-2. Maximum depth to flowline is 20 feet. It appears to be 25 feet in some cases along the line (i.e., upstream of A-2). Correction required, possibly with a drop manhole.
19. Has there been any discussion with City of Lee's Summit Parks Department on the placement of the new sanitary sewer on Park's property? Shared-use path? We have had no discussions with Parks concerning this sanitary sewer line installation. Recommend meeting with Parks. Informational comment.
20. You are showing a 15 inch sanitary sewer connecting to existing sanitary sewer manhole 38-248. Manhole 38-248 appears to be connected a 10 inch line downstream, but is neither labeled nor scaled correctly. Label the existing line, and scale it properly for the existing condition. Provide a note stating "existing line downstream of 38-248 to be upsized at a later date" or equivalent language. Recommend raising the incoming line slightly to account for any future issues with downstream line sizing. Corrections required.
22. Estimate required prior to formal approval. Informational comment.

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