## CITY OF LEE'S SUMMIT Development Services Department 220 SE Green Street Lee's Summit, MO 64063 (816)969-1200

## **DEVSERVICES.CITYOFLS.NET**

## **Inspection Summary**

Permit #: PRSUBD20215636

Address: 451 SW LONGVIEW BLVD, LEES SUMMIT, MO 64081

This work has been inspected and the inspection results noted below. Please schedule inspections once all corrective actions have been completed. Do not cover any work until approved.

Inspection: Inspector: Outcome: Date:

Sanitary Sewer Construction Devon Perry Partial Tuesday, May 21, 2024

Inspection

Informational:

1 Misc Tony's crew was onsite digging holes for sanitary sewer wye cut ins. 10/4/22

ES

Tony's crew had exposed 8" pvc sewer main and were setting their trench boxes to begin cutting out sections to install wyes. They had SDR26 wyes and max adapter couplings onsite. Will begin work tomorrow if they receive their pump to perform bypass on sewer main. Also let them know we needed at least 4' in between any fittings, this might require them to cut out a little further if they encountered bells in their connection holes. 10/5/22 ES

Spoke with Tony and Scott with Trinity Excavating about concerns with location of lot 71's sanitary sewer stub in correlation to the new MH 2-1. It appears this connection will be too close(within 4' of outside wall of the new MH) and will need to most likely be moved to the East side of this new MH. 10/5/22 ES

Tony's crew had fusible pipe completed today. Plugged MH 35-411 and bypass pumped to MH 35-410 and installed wye connection for lot 66 on existing 8" SDR26 sanitary sewer line. 10/6/22 ES

Tony's crew worked on installing wyes on existing 8" public sanitary line.

Installed lots 67 and 69 wyes while bypass pumping using MH 35-411 to 35-410 again. 10/7/22 ES

Tony's crew working on laying out laterals for the wyes they had cut in. Had lot 66 laid and working on lot 67. 10/10/22 ES

Tony's crew working on backfilling pipe lot 66 and 67, They had placed a solid block under each wye connection for additional support. We also talked about getting their impervious trench checks put in and explained specs from the detail sheet for those. 10/11/22 ES

Tony's crew poured ditch checks for lot 66, 67, and 69 laterals. Backfilled lots 67 and 69 lateral lines marking end of pipe with white pvc standpipes. Also began digging for lot 68 lateral install. While digging for lot 68 uncovered 2 existing Tee connections. Spoke with Steve and Kent regarding these and it was determined they will need to cut both Tee connections out and replace with just the single wye as indicated on plans. Shared an older set of prints with Tony showing him we might run into this same scenario as we work closer towards lot 75. 10/12/22 ES

Tony's crew finished backfilling open holes from lots 66 and 69 lateral installs. Then they completed the cut in of the new wye on lot 68 using 2 max adapters, and cutting out the two existing tee connections that were exposed in their hole. They ran 1 stick of 4" SDR26 pipe out of wye to continue their lateral construction. 10/14/22 ES

Trinity crew set MH 2-1 and service wye for lot 71. The wye for lot 71 was installed  $\sim$ 4.5' to the east of MH 2-1 as where it was designed on plans was outside of DNC specs. 10/27/22 ES

Tony's crew worked on laying pipe out for lot 71 service, and began working out on private line 2 from MH 2-1. 10/28/22 ES

Trinity crew installed 3 sticks of 8" SDR26 pipe from MH 2-1 towards MH 2-2 and plugged pipe and marked at ground level. Also began digging holes to prepare for installation of MH 1-1 and service for lot 65. These installations will take place early next week, they are closing NB Longview Blvd in order to pump around existing manholes. 10/29/22 ES

Trinity crew installed MH 1-1 inline on existing public main for new private sanitary line 1. Also installed service wye for lot 65. 10/31/22 ES

11-2-22 RH. Sanitary MH 4-1 was placed connecting to exciting Sanitary. They used Max adapters to connect to the main line. The inlet will not be poured until tomorrow. One of the sides of the pipe did not line up correctly vertically but contractor installed and said that it was ok.

Trinity crew worked on pouring inverts in new manholes 1-1, 2-1, and 4-1. Also began stacking out MH 1-1 and 2-1 and backfilling in prior to rain. 11/3/22 ES

Informational:

2 Misc

Trinity crew worked on digging out service for lot 65 to run lateral pipe. Also began putting barrel sections on MH 2-1 and 4-1. 11/7/22 ES

11-14-22 RH. Lateral continue to be dug and placed connecting to exciting Sanitary main between Exciting Sanitary MH and MH 4-1. 3 Y's were placed today.

11-16-22 RH. Crew started connecting stubs to Y's placed on the 14th. Rock had to be broke out to place stubs.

Trinity crew working on lateral for lot 76, had lots 77 and 78 dug up, but had not cut in wye connections. 11/17/22am ES

11-17-22 RH. Contractor started setting up to cut in Y's for Lots 78 and 79. Contractor plugged the area up stream and cut in Y. Y was then plugged.

Trinity crew continued work on sanitary wye cut ins. Ran stub for lot 79 and backfilled and then cut in wye for lot 80 and began laying stub line out. 11/18/22 ES

Trinity crew was working on laying pipe towards 4-2 and set base for 4-2. 11/21/22 ES

- 11-22-22 RH. Sanitary crew is just placing MH lids on structures until they finish pumping out hole where they will continue to dig out more sanitary.
- 12-2-22 RH. Sanitary crew began digging out tench from sanitary from 1-1 to 1-2.
- 12-5-22 RH. Contractor started filling around Sanitary MH 1-1 and while compacting moved the top sections. They are now going to take apart and put back together before continuing toward 1-2.
- 12-6-22 RH. Contractor has decided to use aggregate to encase sanitary in the ground instead of fill on jobsite.
- 12-7-22 RH. Contractor is continuing toward MH 1-2. The y for Lot 1 was placed.
- 12-14-22 RH. Contractor installed Sanitary MH 1-2. They then started running the Stubs for Lots 65 and 66. They planned to continue to lots 67 and on now that the old storm structure pipe was out of the way.
- 12-15-22 RH. Contractor continues to install stubs for Lots. Stubs 67 and 68 were being placed while on site. Contractor plans to install stub 69 as well today. Stub was place for lot 69.
- 12-16-22 RH. Contractors are breaking out rock to continue to place sanitary line. Contractor is also placing the stub for Lot 70.

12-28-22 RH. Contractor is starting to dig the Sanitary Line 1 again. They are going to dig stubs as they dig the main.

1-4-23 RH. Contractor started on sanitary today on Line 1. Contractor will dig a long trench installing the 8" main and then start installing rest of the stubs for each property. Contractor was able to get to 11+00 when they had to stop work.

1-5-23 RH. Contractor continued to dig the Sanitary Line 1 starting at 11+00. AM inspection showed they had placed line up to lot 5 with Y's being installed as they dug out the trench. Contractor got to lot 7.

1-6-23 RH. Contractor continues to lay sanitary line 1 with trench falling in. Once the trench box is moved the sides of trench fall in. They will dig out the material that fell in to start compacting over the line. Contractor has placed line up to Lot 9 station 12+20.

1-9-22 RH. Contractor continued on Sanitary Line 1 from 12+20 Lot 9 and was at Lot 10 by AM. Work will stop once all Y's are installed that are on site. Contractor is looking into soil conditions.

2-21-23 RH. Sanitary stubs were being dug up from lot 1 to 14. All fill was being removed from site and woul be replaced from the stockpile on site.

3-14-23 RH. Sanitary laterals started to be installed on sanitary line 1. Fill was all removed and laterals were installed onto the y's.

3-15-23 RH. Sanitary laterals continued to be placed from lots 4 to lots 8. Laterals will continued to be installed and filled in.

3-16-23 RH. Sanitary laterls were installed from Lots 15 to Lots 18. Contractor was reminded Y's coming off the main needed to between 30 and 45 degrees.

3-20-23 RH Sanitary lateral for Lot 19 was installed. Contracotor has started filling over the laterals now that they are placed for lots 15-19.

3-23-23 RH. Saniatry Line 1 continues to have laterals place off of the Y's. Contractor is pumping water out of hole in the morning and will continue to place fill and test compaction on site.

3-29-23 RH. Sanitary Line 1 was found to be out of grade when installing laterals. When investigated it was found to be due to MH 1-2 being off grade so entire main and laterals were removed. MH 1-2 will be adjusted.

Corrective Action Required:

3 Miscellaneous Correction

7-28-23 DP. General Contractor O'Reilly Build was sent over the inspection videos and report from the Water department this week. The repair list is substantial and is going to require removing most of Curry to fix issues. They are game planning ideas of next steps.

Informational:

8-10-23 DP. Contractor decided to replace the entire existing sewer main down Curry instead of trying to fix all of the required repairs. They have started exposing the pipe on the far east end of Curry today. The water department wants the sewer main installed and tested before put back in service. Contractor has Sunbelt rentals on site currently installing their pump system.

8-11-23 DP. Contractor is continuing to replace the sewer main on curry.

8-15-23 Crew is still working on replacing sewer.

8-15-23 DP. Trench had water in it from all of the rain we have had recently. I stressed making sure to not let the pipe float. Which will make sags. I also saw 1 service that looked flat, (i'll update location when on site) but the contractor said it was good. They are moving along nicely.

8-17-23 DP. Crew finished reinstalling pipe up Curry.

9-1-23 DP. Crew is still working on reinstalling pipe up curry. Once finished, they can do the air pressure test and mandrel test. That will also start the 30 day clock for water to come do their camera inspection.

9-27-23 DP. Crew is still working on passing air pressure testing. They also need to fix a leak at the MH across from SW Brummel.

10-3-23 DP. Crew has dug up the section between MH 35-635 and MH 35-410 again. They told me that once they removed the pipe, it held pressure. I assume it wasn't chalked under very well. There is a large amount of groundwater. This is all new pipe that the contractor installed and it wasn't reinstalled with a laser level or transit. The crew they have on site today is using a transit stick and laser level to try and work some of the sags and deficiencies out of the pipe, which will be hard with the amount of groundwater. I also noticed that the tracer wire on most of the stubs has been torn out or removed. I mentioned to the contractor today that tracer wire on the service stubs should be connected at the wye. They still haven't fixed the groundwater infiltration that has been allowing groundwater to flow into the sanitary system for multiple weeks now. The problem area is where the contractor set new MH 35-411 and tied it into existing pipe.

10-6-23 DP Crew fixed the leak and performed the air pressure test on the line from MH 35-635 and MH 35-410. The air pressure test passed. The entire line has passed the air pressure test. We still need to perform the mandrel test. There are also still odds and ends that need to be corrected before reinspection.

10-11-23 DP. Contractor had to move a wye which made it to where they needed to use a max adapter for the connection. Contractor is having trouble getting the max adapter to clamp right. My only options for them going forward is to find a way to make the max adapter work or to replace the pipe and put it back bell and spigot. When I left this afternoon it looked

like they made progress on getting the max adapter to work. Spencer is calling Ryan for more ideas.

10-13-23 DP. Contractor ended up getting the max adapter to work on the far east end. That line has been backfilled and is ready for retesting. Contractor is now exposing the problem area just east of MH 35-411. Once fixed that line will need to be jetted and possibly retested.

10-17-23 DP. Contractor fixed the loose max adapter up by MH 35-411, which stopped the intruding groundwater there. After that they were digging up a service just east of there that was allowing intruding ground water to enter the sanitary system.

10-19-23 DP. Contractor was able to pass mandrel down Curry The final 2 far east Manholes need to be mandreled tomorrow as long as 4-1 to 4-2 which will be complete tomorrow. Contractor had Redi services out today to jet the main down curry. After talking with the jet crew, against what I said, they did not use a basket or vac truck to catch debris. Which means they sent it all downstream. I informed trinity that any back ups will be on them, also forwarded this message to the water department.

10-26-23 DP. Crew finished pulling Mandrel today. They had trouble getting the mandrel out into the trough at MH 35-638. On their push camera this was where existing white pipe met up to new green pipe which has a different "ID". Crew removed the "pump around" system and has put the sewer main on Curry in service. Today starts the 30 day clock for water department to come out and do their sewer bond inspection which can start on or after 11/26/23.

11-27-23 DP. Met water onsite today to perform another sewer bond inspection. Will have the results on wednesday.

Corrective Action Required:

5 Misc

11-29-23 DP. I was presented the current sewer bond inspection today from the water department. There is improvement overall. There are still repairs that are needed. A majority of the repairs are to manholes or to the troughs inside the manholes but the few repairs listed as "joint offset" which are mainly sags due from being too high and the spot with a "pvc shard" will require another 30 day wait once fixed and backfilled due to disturbing the pipe. The troughs inside the manholes need attention. Some are lower than the pipe on the outflow side. This can cause a backup. Adding grout to the bottom of this area isn't the best options due to it being so thin. The water department would recommend that it is easiest to remove troughs and replace. The easiest way for me to explain what an acceptable trough would look like is to picture a service WYE cut in half and laid over. Talking with Brent at MH 35-630 there are chunks of concrete that look to be 4"-6" in diameter. Also, from MH 35-629 to MH 35-628 the pipe is packed so full of mud/debris/concrete that they can't even camera the area. I have presented this "repair map" to Mike and Jacob with O'Reilly this morning. I will need to be kept in the loop on the repair plan. I am still unsure if a pump around will be necessary for repairs or not at this time.

Please reach out with any questions.

## Informational: 6 Misc

- 12-11-23 DP. Met with Lafe from Bair onsite today. They were awarded the contract to fix sewer repairs. Trinity no longer is working on the sewer main. Bair hopes to mobilize next week.
- 12-20-23 DP. Bair has not been working on sewer repairs yet. They have been on site working on evergy trenches.
- 1-3-24 DP. Bair is on site today and has started digging on sewer repairs. The storm that crosses over the sewer was patched with zip ties from previous contractor so they are also dealing with that at the same time.
- 1-3-24 DP. When Bair exposed the pipe between MH 35-631 and MH 35-411 there is a section of pipe that actually lays the wrong way which restricts flow. To get proper fall and to eliminate the fall going the wrong way, the sewer pipe will need to be relaid between these two manholes.
- 1-4-23 DP. Bair is waiting on parts so has backfilled the area between the above listed man holes. They jumped down to the joint offset just west of MH 35-638. It is where the previous contractor stubbed out of the MH and where it tied into existing.
- 1-5-23 DP. Bair is on site, they have removed the broken cone section from MH 35-630 and are working on replacing that. They are currently inside MH 35-410 and are working on the trough.
- 1-29-23 DP. Bair is on site today, They have removed the sewer pipe between MH 35-631 and 35-611. Crew has a pump around set up in MH 35-631
- 1-30-24 DP. Bair is still working towards connecting 35-631 to 35-611. They are struggling with caving walls. They are hoping to tie in this evening or in the morning. The public storm pipe that was pieced together has been taken out. They are planning on replacing the pipe as soon as they get the sanitary pipe under it.
- 2-1-24 DP. Contractor finished installing pipe between MH 35-631 and MH 35-611. They are currently excavating out to fix the storm pipe that crossed the sewer main that was poorly patched by previous contractor.
- 2-5-24 DP. Bair repaired/replaced the storm pipe that was above the sanitary line due from it being patched so poorly. The Storm pipe is replaced from storm structure 259256-259255. They are now working on backfilling.
- 2-6-24 Bair has got alot done. They have replaced the cone and reddi service is on site trying to knock off the bur in the pipe. Bair still has the metal slip in riser to replace and need to grout the lifting lugs on the same manhole. They are currently back filling and laying geogrid back down.

- 2-7-24 Crew finished repairs on the bond inspection list. Reddi services were running the camera and jetting throughout yesterday. They cleaned from MH 35-628 to 35-629 and MH 35-629 to MH 35-630. While jetting and cleaning the line down Curry there was alot of rock the scooped out of 35-635 and were sucking out of MH 35-410. Noticed Flow in MH 35-631 slower than any other down hill stream. The 5' pipe that trinity installed on the upstream side of MH 35-411 slopes the wrong way. Bair used a knock on to connect to that pipe and ran new pipe back up to 35-631. They are going to be digging down to replace the section going into the manhole. I am assuming at this point the trough will need redone.
- 2-8-24 DP. Bair was on site today. They looked to be working on electrical trenching for evergy.
- 2-9-24 DP. Bair is on site trying to fix the pipe that has the backwards fall. This has been an all day chore as they work around cave offs.
- 2-9-24 DP. Crew got the sag out of the sewer main. Gained over 1" from the flow line. Sewer is also flowing well. When I left they had 1 side of the pipe left to connect and backfill.
- 2-15-24 DP. Repairs made to the sanitary line are complete. Next step is for the water department to come and do a bond inspection again.
- 3-11-24 DP. LS water department started camera testing the SS onsite friday. They are back this morning finishing up.
- 3-11-24 Met Ryan McCormick on site and gave Mike with O'reilly build a thumb drive and a print out of places repairs are needed.
- 4-12-24 DP. Bair is back on site today. They are fixing the area of infiltration between the buildings. It was luckily a cracked street 45 fitting. They didn't have to disturb the main ot wye on the main.
- 4-12-24 DP. Bair ran the push camera down some areas that are still full of gravel. They will need to get a jet crew on site before I will schedule another camera inspection with the water department.
- 4-16-24 DP. I stayed late with Zach's crew with Bair on friday evening to figure what is going on with the section of pipe called out on the sewer bond inspection between MH 35-638 and 35-637. MH 35-637 is suppose to have downhill fall to 35-638 and it is holding water. The pipe exposed at the manhole shows the pipe coming out of 35-637 has a backwards fall, the second piece of pipe also has a backwards fall. They shot flow lines and determined both above mentioned manholes are each 6 tenths high. It should work fine if the MH in curry road, 35-638 stays. But i think they are going to have to raise 35-637 and rerun the sewer pipe between the two manholes. I touched base with the general contactor today. He is going to talk with Bair and get a gameplan.

5-21-24 DP. Redi Service was on site today jetting and camering the sewer mains. They were told to use a basket when jetting and are leaving a thumb drive with the Superintendent on site. I will review video before rescheduling a camera inspection from our water department.

**Comments:**