

## City Comment Response #1

Project: Lakewood Business Center on I-470 Watermain Extension

Owner: Ward Development

Powell CWM Project Number: 21-1883

Application Number: PL2022162

Date: 08/23/2022

---

The responses below are in regard to the **Engineering Plan Review** received on May 8<sup>th</sup>, 2022. The necessary drawings have been updated and our responses are listed below.

---

Plan Reviewer: Gene Williams, P.E.

Item Review: Engineering Review

Email address: Gene.Williams@cityofls.net

Phone number: (816) 969-1223

1. According to our GIS, we are showing 16-inch line at Hagan rather than a 12 inch line. Was this determined using as-builts? Please Reconcile.

**Revised, waterline size was not field verified**

2. In commercial, industrial, and apartment houses areas, fire hydrants shall be provided so that in no case shall more than 300 feet of fire hose, using an approved route, be required to reach any point at the base of any exterior building wall from the nearest fire hydrant to supply the stipulated fire flow. Please review and ensure these conditions are met for all future customers. It appears at least one (10 additional fire hydrant is required, and it also appears the spacing needs to be adjusted.

**Spacing and hydrant count revised.**

3. Plan view of water line does not appear to show locations of bends in vicinity of Cargo and Maguire. It appears there is a reliance on bending the pipe to fit. This is not allowed. The only deflection that may be allowed is within the joint itself, and only 1 degree of deflection s allowed in that case. This equates to roughly

1200-foot radius of curvature. The only deflection that may be allowed is within the joint itself, and only 1 degree of deflection is allowed in that case. This equates to roughly a 1200-foot radius of curvature. No bend is allowed within the body of the pipe itself, as this degrades the pipe and lessens the life of the pipe. Please show the location of all bends on the plan view, along with the magnitude of the bend.

***Revised as needed to maintain  $\leq 1$  degree of deflection at joints, no bends necessary.***

4. Sheet C-512: Will a vertical bend be required at this location? It is difficult to determine based on the exaggerated vertical scale. Please see above comments concerning deflection of pipe.

***Vertical bend not needed deflection meets requirement.***

Please feel free to contact me with any questions.

Sincerely,

Jadrienne Rodell-Tipton, PE  
816-642-2433  
[Jrodell-tipton@powellcwm.com](mailto:Jrodell-tipton@powellcwm.com)