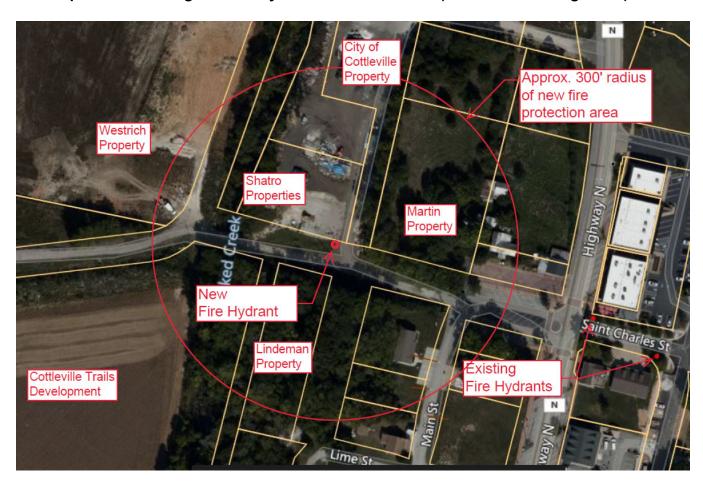
MAWC RESPONSES

- 1. Paragraph 22 of the Stipulation of Facts states "As part of the water main extension needed for the development, DCM is installing a 12" main in place of an existing 4" main in Old Town Cottleville. That replacement would improve fire protection in the area and provide water main access to several additional properties nearby."
- a. What area(s) will be provided fire protection through the expansion of the main?

See map below showing new fire hydrant with 300' radius (estimated coverage area).



b. Does this fire protection cover areas besides DCM's development of Cottleville Trail Development?

Yes. It also covers all or portions of several properties just west of downtown Cottleville (see map above).

c. Is the fire protection capacity for areas outside of the Cottleville development for immediate needs or future needs?

It will improve fire protection immediately for existing buildings in Cottleville.

- 2. Please clarify what "water main access to several additional properties nearby" means.
- a. Are these properties outside of the Cottleville Trail Development?

Yes, see the map above. The Lindeman, Westrich, Shatro, Martin, and City of Cottleville properties labeled above previously did not have frontage to an existing MAWC water main.

b. Are these existing properties or future development?

Some of these properties are developed (with existing structures) and some are undeveloped (currently without structures).

3. Has MAWC had other similar multi-phased developments in its service area that have been constructed over several years?

MAWC has previously had multi-phase developments in its service area; but, to the best of my knowledge, they were not of the size of Cottleville Trails.

a. If yes, given that MAWC has never previously requested a waiver to tariff PSC MO. No. 13, 1st Revised Sheet No. R 48, Rule 23A.2; how did MAWC resolve the timing issues with other developers?

Developers were only able to recoup funds for those connections that occurred within the currently specified timeframe. However, no prior developer has requested a variance based on similar facts.

- 4. For the Commission to understand how much of the increase in the main from 2-inches to 12-inches is attributed to the DCM Cottleville Trail Development:
- a. What flow capacity is needed to meet the needs solely of the development?

Fire flow of 2000 gpm, plus residential flow ranging from 75 – 500 gpm, is needed to meet the needs of the development.

b. What is the flow capacity of the current 2-inch main?

The capacity of a 2" diameter main is around 150 gpm.

c. How will the flow capacity increase with the replacement of the 2-inch main with a 12-inch main?

Fire flow is the most measurable benefit and changes from zero fire flow to over 2000 gpm.

d. If the increase in the flow capacity with the addition of the 12-inch capacity is more than that of the increased capacity needed to meet the needs of the development, what will the excess capacity be used for?

A 12" main was needed as the development's required capacity exceeds the capacity of the next smaller standard water main diameter for MAWC (8" diameter). As noted previously,

however, fire flow is a primary and immediate use for the greater area; and the excess capacity is available to be used for domestic service needs of future developments on surrounding adjacent properties, as well as redundancy during emergency events for existing facilities.

I, Derek Linam, under penalty of perjury, and pursuant to Section 509.030, RSMo, state that I am Engineering Manager for Missouri-American Water Company, that the above responses have been prepared by me or under my direction and supervision; that if inquiries were made as to the facts in said testimony, I would respond as therein set forth; and that the aforesaid responses are true and correct to the best of my knowledge and belief.

— DocuSigned by: Derek Linam —A8**D&™**&ks**LiNam**

February 4, 2022 Dated