

February 9, 2017

Messrs. Leo Gomez and Norman Dugas, Chairmen Utility Task Force Committee c/o North San Antonio Chamber of Commerce 12930 Country Parkway San Antonio, Texas 78217

Re: SAWS Policy to Prevent New Dead-End Mains

Dear Messrs. Gomez and Dugas:

This letter is in response to a request by members of the Real Estate Council of San Antonio (RECSA) during the regular Bi-Monthly San Antonio Water System (SAWS)/RECSA Collaboration Meetings on October 12, 2016 and January 11, 2017. Specifically, some members asked why SAWS is not allowing Developers construct dead-end mains for some new developments.

The following is the Texas Commission on Environmental Quality (TCEQ) rule that governs this issue.

TAC 30 RULE §290.46(I) Flushing of mains. All dead-end mains must be flushed at monthly intervals. Dead-end lines and other mains shall be flushed as needed if water quality complaints are received from water customers or if disinfectant residuals fall below acceptable levels as specified in §290.110 of this title.

The TCEQ had exempted SAWS from this rule until late 2015 when they notified SAWS that the rule would be enforced. SAWS has requested a permanent exception from the TCEQ requirement to flush all dead-end mains monthly. The TCEQ granted SAWS a temporary exception until February 9, 2018 in order for SAWS to gather and provide the necessary information for the TCEQ to consider the permanent exception.

Based on the TCEQ requirement, in mid-2016 SAWS began marking the plan submittals for new developments with requirements to prevent the construction of dead-end mains in the situations described in this memo.

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This change in policy is necessary due to the TCEQ enforcement and health and safety concerns. Section 1.5 of the SAWS Utility Service Regulations (USRs), states that health and safety concerns or TCEQ requirements allow for immediate change without notice. This change meets two of those requirements when only one is needed. In addition, when SAWS began implementing these changes, prior approved or reviewed plans were not affected, only new submittals.

Water is a critical element to the quality of life in San Antonio, which is even more evident during the hot summer days with water restrictions. Based on the TCEQ flushing requirements, while we are asking customers to conserve water, SAWS may be required to flush dead-end water mains every month for years to come. This is easily avoidable with a second connection at the time the property is developed which saves human resources, ratepayer funds and conserves water.

While SAWS prefers to avoid the installation of <u>any</u> new dead-end main, the policies in this memo mostly affect the installation of "manifold mains", and proposed dead-end mains into with narrow access easements for utilities, such as within the Infill Development Zone (IDZ). Dead-end mains are not easily avoidable in instances such as long cul-de-sacs or long main extensions, and SAWS has asked the development community for their input to resolve this issue.

Manifold Mains

Section 7.3 of the SAWS USRs defines the requirements for water main extensions. It is the customer's responsibility to extend a water main to their property and provide a border main across their entire frontage if a water main 20-inches or less does not currently exist or if the existing water of any size is on the opposite side of the road with a Right-of-Way (ROW) width greater than 86 feet. Section 7.3 also allows SAWS staff to waive the border main requirement if it is proven that extension beyond the customer's property for future development is not needed.

To accommodate the waiver that SAWS staff may grant, a manifold has been allowed which consists of a 12-inch water main extended from the large diameter main or main on the opposite side of the road with a minimum of a 20 linear foot water main parallel to the frontage which includes a fire hydrant or blow-off at the end. The manifold is also allowed in some situations in order to minimize the number of service connections on an existing main.

By constructing the manifold, individual service connections are then taken off the parallel extension. However, the manifold creates a dead-end main that will not be looped in the future.

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As one remedy, SAWS could stop allowing manifolds in lieu of full border mains. However, the easier resolution is to adjust the waiver that SAWS staff allows in lieu of full border mains. In essence, SAWS will allow the manifold, but require an additional connection to the supplying main to make a loop. This loop allows circulation of the water and eliminates the dead-end main issue. An added benefit is that most of the looped manifolds can be reduced from 12-inch mains to 8-inch mains and still meet the required fire flow demands. For situations where an existing main already fronts the property, SAWS already allows service connections directly to mains with a diameter of 20-inches or less.

Areas with Limited Access

In February of 2016, SAWS amended the USR to facilitate water service to IDZ projects by allowing service lines to cross property lines under certain conditions. Section 8.1 of the USR is shown below, with the amended language underlined:

Each parcel, lot, tract, or separate property to be served by SAWS shall have an individually metered service line connection from a public water main. These services cannot cross private lot lines, except if approved by SAWS for private lines within irrevocable private easements to be owned and maintained by the applicable Property Owners Association under certain conditions such as plats approved within an Infill Development Zone (IDZ) district by the City of San Antonio.

The USR amendment was made to accommodate requests from Developers of IDZ projects. In these situations, the meters are installed along the perimeter of the project along the street ROW, usually in the driveway. Installing the meters along the perimeter avoids a dead-end main into the site, especially within the property's narrow ingress/egress easement. However, a looped main may be installed through the site if constructed within an easement with sufficient width for SAWS maintenance crews,

The above policies are currently in effect. If the TCEQ approves SAWS request for a permanent exception to monthly flushing of dead-end mains, SAWS will consider other options to looping manifold and limited access mains. If the TCEQ does not approve the permanent exception, SAWS will continue to require the above policies, and will likely develop additional requirements to prevent new dead-end mains in cul-de-sacs and other situations.

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If you have additional questions or concerns, please feel free to contact me at 210-233-3742 or smills@saws.org.

Sincerely,

Sam Mills, P.E.

Director, Development

cc: Mayor Ivy Taylor

Robert R. Puente, President / Chief Executive Officer

Genoveva G. Gomez, P.E., Vice President, Engineering and Construction