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May 7, 2021

Variance Request Review  
City of San Antonio  
Development Services Department  
1901 S. Alamo  
San Antonio, TX 78204

RE: San Antonio Water System Multiple Sewershed Package 18 Project  
A/P # TBD  
UDC Section 35-523

✓ Environmental Variance

Dear COSA DSD:

This project is part of SAWS' commitment to the Consent Decree with the EPA, and includes the rehabilitation of approximately 17,903 linear feet of deteriorated sanitary sewer pipe ranging between 10" and 72" inch diameter located in six different project locations. We are requesting consideration for an environmental variance for this project for two of the project locations. The first location is in the west side of the City, off of Raven Field Drive, just northwest of the SAWS Medio Creek Treatment Plant. The second location is on the east side of the City and follows Rosillo Creek between Hwy 87 (Rigsby Ave.) and Sinclair Road.

We are requesting a variance to the requirements of Section 35-523 of the UDC.

The Unified Development Code (UDC) – Article V, Section 35-523 (h), 100-Year Floodplain(s) and Environmentally Sensitive Areas states that, "Significant trees shall be preserved at eighty (80) percent preservation within both the 100-year floodplains and environmentally sensitive areas. Heritage trees shall be preserved at one-hundred (100) percent preservation within the 100-year floodplains and environmentally sensitive areas. Mitigation shall be prohibited in floodplains and environmentally sensitive area except when a variance is granted by the Planning Commission."

The existing sewer mains are between 25 and 55 years old and are in poor condition, with significantly deteriorated pipe. The pipe must be rehabilitated to prevent overflows and restore the useful life of this asset. As shown in the attached engineering documents, the sewer mains are near various creeks, with most either running parallel to and/or crossing the creek. Much of the alignments are within the 100-year floodplain or riparian buffer of the creek. We request consideration of this request for the following reasons:

- Within the floodplain, tree preservation is proposed to be just over 63%. The plans provide strict guidelines on the amount of clearing allowed to reduce the impact to the existing vegetation. Tree preservation outside of the 100-year floodplain and within the Riparian Buffer exceed the UDC requirements. All 398 inches of heritage trees have been surveyed and shown on the plans with strict requirements for 100% preservation and protection. Disturbed areas will be seeded with native seeding to restore vegetation upon completion of construction.
- In an effort to minimize disturbance to the environment, the sewer main is proposed to be

rehabilitated using Cured-in-Place Pipe (CIPP) trenchless technology. This technology allows for rehabilitation with minimal surface disturbance compared to open cut construction. While CIPP does cause less surface disruption, it is limited to the existing pipes within the existing easement.

- The design has been optimized to minimize tree removal to the maximum extent possible. The access routes proposed utilize existing SAWS easements where possible to maximize the use of existing SAWS infrastructure. However, much of the easements are overgrown and include significant tree canopies, so SAWS is allowing a flexible access route in order to provide greater flexibility to contractors to avoid existing tree stands and minimize tree removal. In order to accomplish this and preserve as much canopy area as possible, SAWS is obtaining Right-of-Entries (ROE) from property owners.
- The public interest in preventing sewer overflows outweigh the requirements for which this variance is requested as the sewer lines will continue to deteriorate with time, resulting in eventual sewer collapse if not addressed. Collapsed sewer lines cause sink holes and blockages in the sewer line, potentially resulting in sanitary sewer overflows (SSO).

To meet the 80% preservation requirement, we propose mitigation through planting more than 416,000 sq. ft. of native seed mix by drill seeding, where appropriate and safe, ensuring 85% establishment of all disturbed areas within the project corridor. This seeding restores areas where trees were removed as well as areas disturbed by construction that are devoid of trees currently. Tree removal and mitigation acreages are shown in the table below. As shown in the table, the 25% minimum preservation requirement outside the floodplain is met.

Zone	Canopy Area (Acres)	Canopy Area (Sq.Ft.)	Area Preserved (Sq.Ft.)	% Area Preserved *	Required Mitigation Area (Sq.Ft.)	No. of Trees **	No. of Inches for Mitigation Fees (in.) ***	Cost (\$) ****
Floodplain	7.1688	312,271	198,922	63.7%	50,894.80	59	985.30	\$197,060.00
Riparian Buffer	0.2891	12,595	10,083	80.1%	0.00	0	0.00	\$0.00
Not in Floodplain	2.1807	94,992	60,562	63.8%	0.00	0	0.00	\$0.00

\* 80% Preservation required inside 100-yr Floodplain and Riparian Buffer. 40% Preservation required outside of 100-yr Floodplain.

\*\* No. of Trees calculated based on shade value from Appendix E of UDC for medium sized trees. (Conversion Factor = 875)

\*\*\* No. of Inches for Mitigation calculated based on formula in Division 5 Sec. 35-523 of the UDC.

\*\*\*\* Cost calculated based on fees for medium sized trees in Appendix C of UDC (\$200/inch)

As the table shows, a total of \$197,060.00 is required to be paid into the Tree Mitigation Fund.

The following are provided in accordance with UDC Section 35-483(e):

- Strict compliance with these regulations is not possible as the existing sewer main location is fixed and is not proposed to be moved out of the floodplain with this project. Due to use of gravity to convey wastewater, the pipeline system must be located in the lowest elevations available, which are near the creeks. The proposed design complies with the spirit of the regulations and maximizes the preservation of existing tree canopy within the floodplain.
- This hardship is due to the locations of the existing lines (constructed 25-55 years ago) near various creeks.
- The public interest in reducing sewer overflows outweighs the public interest underlying the regulation for which we request a variance.

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- The granting of the variance will not be injurious to other property and will not prevent the orderly subdivision of other property in the area in accordance with these regulations.

In our professional opinion, the proposed administrative variance remains in harmony with the spirit and intent of the UDC as it will not adversely affect the health, safety, or welfare of the public.

Sincerely,



Michael Persyn, PE  
Applicant

Attachments: Engineering Plans dated 1/18/2021

<b>For Office Use Only:</b>	AEVR #:	Date Received:
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<b>DSD – Director Official Action:</b>		
<input type="checkbox"/> APPROVED	<input type="checkbox"/> APPROVED W/ COMMENTS	<input type="checkbox"/> DENIED
Signature:	<hr/>	Date: <hr/>
Printed Name:	<hr/>	Title: <hr/>
Comments:	<hr/>	
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