

July 17, 2024

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

Re: Luensmann Off-site Water Main Extension (Phase 2) – Capital Improvement Project
Environmental Variance
Request for UDC Section 35-523 (2010 Tree Ordinance – 80% Preservation Within Floodplain and Buffer)

Dear Development Services:

Kindly consider this letter as a formal request for an Environmental Variance from Section 35-523 “Tree Preservation” of the Unified Development Code. It is the intent of Section 35-523 of the Unified Development Code *“to allow the reasonable improvement of land within the city and the city’s ETJ, while maintaining to the greatest extent possible, existing trees within the city and the ETJ and to promote a high tree canopy goal”*. For the reasons herein described by the following letter, this project requests an Environmental Variance from the portion of the Unified Development Code that requires *“maintaining to the greatest extent possible, existing trees within the city and the ETJ”*.

The Luensmann Off-site Water Main Extension (Phase 2) Project is a necessary improvement to the San Antonio Water System (SAWS) water system in the eastern area of San Antonio. The Luensmann Off-site Water Main Extension (Phase 2) Project will construct approximately 4.5 miles (23,606 LF) of 24” water main between US Hwy 87 East and FM 1346. This project is part of SAWS’ efforts to accommodate future flows on the far east side of San Antonio.

The proposed water main project will include the construction of approximately 23,606 LF of PVC water main that begins approximately 0.3 miles northwest of the intersection of Real Rd and Zigmont Rd and will connect to Phase 1 of the Luensmann Off-site Water Main Extension (SAWS Job No. 23-1043). The project will extend approximately 4.5 miles to the northeast, connecting to the existing 12” PVC SAWS water main within the ROW of FM 1346 in the City of St. Hedwig. The project is primarily located on private tracts of land within a 24’ wide permanent easement for SAWS future operation and maintenance of the water main, but is also located within the ROW of Zigmont Rd, Stuart Rd, and La Vernia Rd. A 16’ wide temporary construction easement is also utilized to allow access and sufficient space for contractors to install the proposed water infrastructure. Significant trees have been preserved, to the extent possible, to meet the intent of Section 35-253 “Tree Preservation” of the Unified Development Code at all feasible locations throughout the project limits.

Many factors were considered to determine the most viable and cost-effective project alignment that would also promote the preservation of trees within the project limits. The majority of the easements utilized for this project were chosen to be placed in agricultural fields in order to preserve adjacent tree canopy. In trying to keep with the spirit and intent of the preservation ordinance, a diligent effort was made to comply with the minimum preservation requirements for the 2010 Tree Preservation Ordinance within the variable width permanent and temporary construction easements as indicated on the Luensmann Off-site Water Main Extension (Phase 2) Tree Stand Delineation Plan.

Portions of the project site are located within the 100-year regulatory Federal Emergency Management Agency (FEMA) floodplain. Per Table 523-1B of the 2010 Tree Preservation Ordinance, the minimum preservation requirement is 80% of the total existing canopy area, and 100% of the heritage trees within the 100-year FEMA floodplain. The project is primarily located within City of San Antonio ETJ, but is also located within the ETJ and City limits of the City of St. Hedwig; the requirements and tree calculations provided herein only reflect the portion of the project located with the City of San Antonio ETJ. As indicated on the Project's Tree Preservation Plan, 10 heritage trees are located inside the 100-year FEMA floodplain or ESA buffer area within the limits of the project. Due to the size and location of the proposed water pipeline, the project does not satisfy the canopy preservation requirements inside the floodplain or ESA buffer area. A total of approximately 101,008 SF of canopy will be located within the floodplain work limits, and a total of approximately 7,701 SF of canopy will be located within the floodplain buffer work limits. This results in a required 28,173 SF for canopy mitigation in the overall project 100-year FEMA floodplain, and 2,618 SF for canopy mitigation in the overall project ESA buffer area as shown on the Tree Preservation Plan. This disturbed area will be revegetated by drill seeding with a native seed mix and ensuring 85% establishment, where practicable. Per landowner request, approximately 5,890 SY of disturbed area will be revegetated with Coastal Hay Sprigging on Plan Sheet C5.01. A total of 725,562 SF (80,618 SY) of revegetation by drill seeding is proposed for this project, approximately 106,326 SF (11,814 SY) of which is located within the floodplain and ESA Buffer area. See Tables 1 and 2 below for a summary of the canopy area to be removed and preserved as part of the SAWS Luensmann Off-site Water Main Extension (Phase 2) Project within the floodplain and ESA buffer area.

Table 1. Tree Canopy Preservation Inside Floodplain

Total Existing Canopy (SF)	Canopy Required to Be Preserved (SF)		Canopy To Be Removed (SF)	Canopy To Be Preserved (SF)		Canopy Required to Be Mitigated (SF)
101,008	80,806	80%	48,374	52,634	52%	28,173

Table 2. Tree Canopy Preservation Inside ESA Floodplain Buffer

Total Existing Canopy (SF)	Canopy Required to Be Preserved (SF)		Canopy To Be Removed (SF)	Canopy To Be Preserved (SF)		Canopy Required to Be Mitigated (SF)
7,701	6,161	80%	4,158	3,543	46%	2,618

Table 3 shown below provides a summary of the required canopy and heritage tree mitigation and anticipated fee amount required to mitigate the removed canopy tree inches and floodplain heritage tree inches, prior to consideration of revegetation efforts.

Table 3. Required Mitigation Fees

Required Canopy Mitigation (SF) (Inside Floodplain + ESA Buffer Area)	Required Canopy Mitigation (IN) IN = SF ÷ 875 SF/Tree x 16.7 IN	Required Heritage Tree Mitigation (IN) (To Be Mitigated 3:1) (Floodplain + ESA Buffer Area)	Total Mitigation Fee = \$200/IN
30,791	603	81	\$136,800

Although SAWS will have the right for ingress and egress to access the permanent easements for operation and maintenance requirements, the hardship for complying totally with the minimum preservation requirements are:

- The construction of the Luensmann Off-site Water Main Extension (Phase 2) Project is critical to SAWS and the City of San Antonio as it pertains to the health and welfare of the public. The diameter, depth of installation, and overall magnitude of the project require SAWS to procure necessary space for the construction contractor to successfully complete the project. The contractor will have to use the total easement area for the duration of the project, thus limiting the amount of easement area potentially available to preserve trees.
- SAWS requires removal of all vegetation within the permanent easement to facilitate construction of the proposed water project. Newly planted trees are not an option for this project as SAWS requires the easement area to be clear for future access to the water main for maintenance and operation of the water main.
- The granting of this 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.

It is our professional opinion that the proposed environmental variance remains in harmony with the spirit and the intent of the UDC as it will not adversely affect the health, safety, or welfare of the public, nor does it weaken the general purpose of the tree preservation regulation.

We respectfully request your consideration for this variance. The Environmental Variance Request Application is attached, as required.

If you have questions or require additional information, please do not hesitate to contact our office.

Sincerely,
Pape-Dawson Engineers

Marshall Preas, P.E.
Associate Vice President

Attachment

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

P:\124\73\09\Word\Letters\240717 Floodplain Tree Mitigation Variance.docx