PAPE-DAWSON ENGINEERS

April 8, 2024

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

Re: Stonehill Off-site Sewer Extension – Phase I – 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 Stonehill Off-site Sewer Extension – Phase I Project is a necessary improvement to the San Antonio Water System (SAWS) sewer system in the western area of San Antonio. The Stonehill Off-site Sewer Extension – Phase I Project will construct approximately 1.75 miles (9,285 LF) of gravity sewer main across US Hwy 90 between its intersection with Jungman Rd and TX-211. This project is part of SAWS' efforts to accommodate future flows along the US Hwy 90 corridor.

The proposed sanitary sewer project will include the construction of approximately 9,285 LF of 30-inch FRP gravity main that begins north of US Hwy 90 and will connect to the SAWS Echtle Offsite Sewer Main Extension Project that is currently under construction south of US Hwy 90. The project is located on private tracts of land within a 40' wide permanent easement for SAWS future operation and maintenance of the sewer main. A 30' wide temporary construction easement is also utilized to allow access and sufficient space for contractors to install the proposed sewer infrastructure. Significant and heritage 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. To further promote the preservation of tree canopy and heritage trees, a total of 1,016 linear feet (LF) will be bored throughout the project, 561 LF of which will be located within the floodplain and ESA Buffer area. Boring these sections will save approximately 35,787 SF of canopy located within the floodplain and ESA Buffer area. 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 Stonehill Off-site Sewer Extension – Phase I 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. As indicated on the Project's Tree Preservation Plan, no heritage trees are located inside the 100-year FEMA floodplain. Due to the size and location of the proposed sanitary sewer pipeline, the project does not satisfy the canopy preservation requirements inside the floodplain or ESA buffer area. A total of approximately 171,170 SF of canopy will be located within the floodplain work limits, and a total of approximately 15,450 SF of canopy will be located within the floodplain buffer work limits. This results in a required 23,244 SF for canopy mitigation in the overall project 100-year FEMA floodplain, and 1,059 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. A total of 1,283,499 SF (142,611 SY) of revegetation by drill seeding is proposed for this project, approximately 444,824 SF (49,425 SY) of which is located within the floodplain and ESA Buffer area. Although tree removal for the portion of the Stonehill Off-site Sewer Extension – Phase I Project located north of US Hwy 90 will be mitigated by the tree permit associated with the Stonehill MDP, revegetation is still proposed for this portion of the project within the sanitary sewer and temporary construction easement limits.

An environmental variance has already been approved for this project under REQ-CMRORAEVR-23-44400554 on February 8, 2024, which mitigated 18,729 SF of canopy in the floodplain and ESA buffer area. Upon completion of final design of the sanitary sewer main, it was determined that the bore shown on Sheet C6.00 may be shortened, placing the bore pit locations in an area previously designated for preservation (Station 34+00 and 37+50), which will require an additional 5,574 SF of canopy removal (5,168 SF in the floodplain, and 406 SF in the ESA buffer area). No heritage trees will be removed as a result of this work. This variance request is being submitted to account for the difference in the previously approved canopy removal and the revised total removal required as a result of the reduced bore shown on C6.00.

See Tables 1 and 2 below for a summary of the canopy area to be removed and preserved as part of the SAWS Stonehill Off-site Sewer Extension – Phase I Project within the amended floodplain and ESA buffer area.

Table 1. Tree Canopy Preservation Inside Floodplain – Amendment

Total Canopy in Area of Amendment (SF)	Canopy Required to Be Preserved in Area of Amendment (SF)		Canopy To Be Removed in Area of Amendment (SF)	Canopy To Be Preserved in Area of Amendment (SF)		Canopy Required to Be Mitigated in Area of Amendment (SF)
5,168	4,134	80%	5,168	0	0%	4,134

Table 2. Tree Canopy Preservation Inside ESA Floodplain Buffer - Amendment

Total Canopy in Area of Amendment (SF)	Canopy Required to Be Preserved in Area of Amendment (SF)		Canopy To Be Removed in Area of Amendment (SF)	Canopy To Be Preserved in Area of Amendment (SF)		Canopy Required to Be Mitigated in Area of Amendment (SF)
406	325	80%	406	0	0%	325

See Tables 3 and 4 below for a summary of the additional fees required to mitigate the amended canopy area, prior to consideration of revegetation efforts.

Table 3. Required Mitigation Fees (Floodplain) - Amendment

Additional Required Canopy Mitigation (SF)	Required Canopy Mitigation (IN) IN = SF ÷ 875 SF/Tree x 16.7 IN	Required Heritage Tree Mitigation (IN) (To Be Mitigated 3:1)	Total Mitigation Fee = $200/IN
4,134	84	0	$16,800

Table 4. Required Mitigation Fees (ESA Buffer Area) - Amendment

Additional Required Canopy Mitigation (SF)	Required Canopy Mitigation (IN) IN = SF ÷ 875 SF/Tree x 16.7 IN	Required Heritage Tree Mitigation (IN) (To Be Mitigated 3:1)	Total Mitigation Fee = $200/IN
325	17	0	$3,400

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 Stonehill Off-site Sewer Extension – Phase I 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 sanitary sewer 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 sewer main for maintenance and operation of the sewer 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 any questions or require additional information, please do not hesitate to contact our office.

Sincerely,
Pape-Dawson Engineers, Inc.

Marshall Preas, P.E.
Associate Vice President

For Office Use Only: AEVR #: _____ Date Received: _____

DSD – Director Official Action:

☐ APPROVED ☐ APPROVED W/ COMMENTS ☐ DENIED

Signature: _____ Date: _____

Printed Name: _____ Title: _____

Comments: _____

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