

TPV 18-015



January 30, 2018

Administrative Variance Request
c/o Mr. Mark Bird, City Arborist
City of San Antonio
Development Services Department
1901 S. Alamo
San Antonio, Texas 78204

Re: South Comal Water Supply Corporation – Project 3
A/P No. 2318369
Administrative Variance
Request for UDC Section 35-523 (2010 Tree Ordinance)

Dear Development Services:

Kindly consider this letter as a formal request for an Administrative 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"*.

The South Comal Water Supply Corporation's (SCWSC) Project 3 is an integral water main project for future developments located in northern portions of the COSA ETJ and southern Comal County. The proposed project will create a regional organized potable water supply.

The SCWSC pipeline is approximately 2.3 miles of 24-inch water pipeline which extends from a proposed pump station located near the intersection of Crazy Horse Dr. and Nakoosa Dr. to approximately 1,700 feet south of Obst Rd.

The Tree Stand Delineation Alternative was used to meet the 2010 Tree Preservation Ordinance. The preservation requirements outlined for the SCWSC Project 3 were to preserve 80% of the significant trees inside the floodplain and environmentally sensitive areas. The SCWSC Tree Preservation Plan was submitted to COSA for review. Our summary of tree preservation determined the preservation of 29% of trees inside the floodplain, and 19% of trees inside the floodplain riparian buffer.

The SCWSC Project 3 is to begin construction in January 2018. Due to the depth of the water main, the easement width for the 24-inch diameter pipe is 50-feet (30-ft permanent easement and a 20-ft temporary construction easement). The proposed easement widths are wide enough to accommodate access for construction equipment, stock piles of excavated material, trenching, staging areas for pipe and bedding materials and for SCWSC future operation and maintenance of the water main.

The SCWSC project will traverse across approximately 17 land parcels. These parcels are used for farmland, residential home sites, and mixed-use developments. Many factors were considered while developing the SCWSC alignment. The goal was to minimize impact of the project on private properties and extend the alignment along the perimeter of the property if practicable. Efforts were also made to minimize the impact of existing trees by surveying the heritage trees within the easement and making a diligent effort to avoid the trees.

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 50-foot easement (30-foot permanent and 20-foot temporary construction) as indicated on the SCWSC Tree Stand Delineation Plan. Reseeded areas (approximately 118,016 SF) will be planted with a native seed mixture using a drill seed technique and reseeded areas will achieve 85% establishment. Although SCWSC will have the right for ingress and egress to access the easements for operation and maintenance requirements, the hardship for complying totally with the minimum preservation requirements are:

- Property owners will be allowed to build or farm over the easement area as long as a permanent structure is not constructed over the easement. Without knowing the future plans for each of the 17 parcels, acquiring additional easement for tree preservation poses a hardship to each property owner in developing their property in the future.
- Planting of new trees within the easement area would not be practicable because the majority of the alignment is located within rural areas with no access to irrigation for maintaining the planted trees.
- Newly planted trees could be damaged as SCWSC requires the easement area to be clear for future access to the water main for maintenance and operation of the water main.

We are requesting your approval of allowing SCWSC to pay into the Tree Mitigation Fund in order to meet the minimum tree preservation requirements. Please see the tree mitigation fund calculations below:

Tree Stand Delineation Summary – Inside Floodplain

Total Work Area	118,016 SF
Preserved Canopy	975 SF
Removed Canopy	2,377 SF
Total Canopy	3,352 SF
% Preserved	29%
% Required	80%

Tree Stand Delineation Summary – Inside Floodplain Riparian Buffer

Total Work Area	5,951 SF
Preserved Canopy	166 SF
Removed Canopy	728 SF
Total Canopy	894 SF
% Preserved	19%
% Required	80%

Tree Canopy Mitigation Calculations Inside Floodplain

- A. Canopy Area Preserved: 975 SF
 B. Canopy Area Required to be Preserved: $100\% \times 3,352 \text{ SF} = 3,352 \text{ SF}$
 C. Canopy Area Required to be Mitigated: $3,352 \text{ SF} - 975 \text{ SF} = 2,377 \text{ SF}$

Tree Canopy Mitigation Calculations Inside Floodplain Riparian Buffer

- A. Canopy Area Preserved: 166 SF
 B. Canopy Area Required to be Preserved: $100\% \times 894 \text{ SF} = 894 \text{ SF}$
 C. Canopy Area Required to be Mitigated: $894 \text{ SF} - 166 \text{ SF} = 728 \text{ SF}$

Mitigation Measures

- A. Canopy Area Required to be Mitigated: $2,377 \text{ SF} + 728 \text{ SF} = 3,105 \text{ SF}$
 Seeding (50% Reduction in Canopy to be Mitigated): 1,553 SF
 Total Canopy Area to be Mitigated: 1,553 SF
 B. Payment to the Tree Mitigation Fund:
 \$200/inch for Significant Trees: \$5,928
Total Payment to the Tree Mitigation Fund: \$5,928

Mitigation Fees

$$\text{Significant Trees: } \frac{1,553 \text{ SF}}{875} = 1.77 \text{ Trees}$$

$$1.77 \text{ Trees} \times 16.7 \frac{\text{in}}{\text{Tree}} = 29.64 \text{ in}$$

$$29.64 \text{ in} \times \$200/\text{in} = \$5,928$$

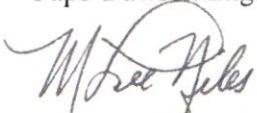
$$\$5,928 \times (1:1 \text{ Ratio}) = \$5,928$$

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We believe the variance request adheres to its spirit and intent and 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. If you have any questions or require additional information, please contact our office.

Sincerely,
Pape-Dawson Engineers, Inc.



M. Lee Niles, P.E.
Sr. Project Engineer

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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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