



February 17, 2023

Administrative Exception / Variance Request Review
c/o Development Services Staff
Development Services Department
City of San Antonio
1901 S. Alamo
San Antonio, TX 78204

Re: Union Pacific Railroad Del Rio Subdivision MP 225.85 to MP 228.78 Bexar
Siding Rail
AP # TRE-APP-APP22-38802212
Sec. 35-523 Tree Preservation – Buffer and Heritage Tree Requirement Variance
Request

- ☐ Administrative Exception
- ☒ Environmental Variance
- ☐ Subdivision Platting Variance – Time Extension

Dear COSA DSD,

HDR Engineering, Inc. (HDR), on behalf of Union Pacific Railroad Company (UP), is submitting this request for consideration of an environmental variance to the Tree Affidavit/Permit Application, AP # TRE-APP-APP22-38802212, on the proposed Del Rio Subdivision MP 225.85 to MP 228.78 Bexar Siding Rail Project in San Antonio, Texas. This AEVR is proposed for Unified Development Code (UDC) Section 35-523, which requires 80 percent of the total canopy area in the buffer (environmentally sensitive area) and 100 percent of heritage trees in the floodplain to be preserved.

UP plans to construct an additional track (i.e., siding track) adjacent to their existing Del Rio Subdivision mainline track about the intersection of Loop 1604 and Macdona Lacoste Road, extending west approximately 3 miles and east approximately 1.3 miles. The proposed Bexar Siding track and supporting infrastructure will allow trains to pass on the existing mainline track, which will enhance mainline traffic flow and operations in order to meet the increased demand for interstate commerce through this railroad corridor. The proposed siding is located on the north side of the existing track west of the intersection of Macdona Lacoste Road and Kearney Road and south of the existing track east of this intersection.

The proposed additional track will include grading limits that vary by location from approximately 7 feet wide to 45 feet wide from about Mile Post 225.84 to 228.78. The existing UP right-of-way (ROW) is about 50 feet on each side of the existing main line track. In order to build the embankment and drainage grading for the proposed project, two areas of new ROW of variable widths will be added, one to the north side and one to the south side of the existing track. Additionally, six small construction easements, totaling 1.8 acres will be added south of the existing ROW. Furthermore, a TXDOT easement, access easement, and construction easement are located south of the existing track ranging from 30 feet to 50 feet width. In total, the project area is calculated at 45 acres.

The project area is primarily vegetated with native, non-native, and invasive species typical of disturbed and regenerative areas, and bordered by cropland, road ROW, pasture, residential developments, or woody re-growth vegetation. This area has been impacted by agricultural, industrial, and commercial land uses. Vegetation within the wooded portion of the project area is dominated by hackberry (*Celtis laevigata*). In addition, pecan (*Carya illinoensis*) and mesquite (*Prosopis glandulosa*) are subdominant species. Other trees within the project area include eastern cottonwood (*Populus deltoides*), live oak (*Quercus virginiana*), bald cypress (*Taxodium distichum*), cedar elm (*Ulmus crassifolia*), retama (*Parkinsonia aculeata*), chinaberry (*Melia azedarach*), box elder (*Acer negundo*), and green ash (*Fraxinus pennsylvanica*).

Based on engineering design and operation requirements of the proposed project and the trees growing in the project area, the UDC Section 35-523 preservation requirement that 80 percent of the total canopy area in the buffer area and 100 percent of heritage trees within the entire site (including the floodplain) cannot be met. Four heritage trees in the floodplain will be removed. One heritage tree (Tree 240) is located too close to the proposed subgrade shoulder and steepening the embankment slopes would not resolve the conflict. The remaining three heritage trees (Tree 264, 266, and 267) are in the middle of the proposed Nelson Road that must be reconstructed for access along the proposed project. Currently, Nelson Road has a fairly severe grade that will be stepped down the side of the proposed railroad embankment. In addition, protected trees are located within the only reasonable location of the proposed project and areas for preservation of protected trees within the floodplain and buffer of the Owner's property are limited.

The proposed additional track and supporting infrastructure will allow trains to pass on the existing mainline track, which will enhance mainline traffic flow and operations. The proposed additional track requires 14-16 feet between track centerlines and approximately three miles of track length. Alternatives to locate the proposed track in a different location would not meet the purpose and need for the project to serve as a siding track for trains to pass on the Del Rio Subdivision. Additionally, the Medina River occurs to the east and Polecat Creek occurs to the south of this proposed location, so it is not feasible to shift the project in either direction due to engineering and

environmental constraints. Therefore, other alternatives to the proposed project were rejected.

Furthermore, the species of trees which are growing primarily include hackberry and mesquite which have re-grown after past disturbance. In addition, the variance request is not contrary to the spirit and intent of the UDC and Tree Preservation Ordinance because UP will pay into the tree mitigation fund for the planting of trees that can replace the quality and value of the trees removed. The applicant has taken all practicable measures to minimize any adverse impacts on the public health, safety, and public welfare through the design and planning of the proposed project. Based on the economic and logistical benefits UP operations provide in the City of San Antonio, under the circumstances, the public interest underlying the proposed exception outweighs the public interest underlying the particular regulation for which the exception/variance is granted.

Due to the necessity of tree removal to the project UP requests a variance based on the following proposed mitigation measures and nature of trees to be removed. **Table 1** provides a summary of the total tree canopy in square feet to be removed, preserved, and mitigated within the project area in the floodplain, buffer, and outside the floodplain and buffer. **Table 2** provides a summary of the total dbh inches of heritage trees to be removed, preserved, and mitigated within the project area in the floodplain, buffer, and outside the floodplain and buffer.

Total Tree Canopy

Based on the limits of grading and construction activities, the proposed project will result in the unavoidable impacts of 31,168 square feet of tree canopy in the buffer. In this area, 35,713 square feet of tree canopy will be preserved. This would result in the preservation of approximately 53 percent of tree canopy in the buffer. The Tree Protection Ordinance requires 80 percent preservation of total tree canopy in this area. To compensate for the remaining 27 percent of tree preservation of tree canopy, an additional 17,792 square feet would be mitigated. To provide this mitigation, UP would pay \$70,140 into the Tree Mitigation Fund. This amount was calculated as 17,792 square feet of canopy divided by 875 square feet of canopy per tree equals 20.33 trees, rounded up to 21 trees. This was multiplied by a conversion factor of 16.7 inches per tree, resulting in 350.7 inches. Total inches multiplied by \$200 per inch equals \$70,140.

Table 1. Total Tree Canopy Protected Tree Impacts, Preservation, and Mitigation

	Floodplain	Buffer (Environmentally Sensitive Area)	Outside Floodplain and Buffer	Total
Removed Square Feet	39,454	31,168	105,839	176,461
Preserved Square Feet	203,253	35,713	96,597	335,563
Total Square Feet	242,707	66,881	202,436	512,024
Percent Preserved	84	53	48	-
Preservation Area Required (ft ²)	194,166	53,505	70,853	-
Mitigation Area Required (ft ²)	0	17,792	0	17,792

Heritage Trees

Based on the limits of grading and construction activities, the proposed project will result in the unavoidable impacts of 213 dbh inches of heritage trees in the floodplain. In this area, 61 dbh inches of heritage trees will be preserved. This would result in the preservation of approximately 22 percent of heritage trees in the floodplain. The Tree Protection Ordinance requires 100 percent preservation of heritage trees in all areas. To compensate for the remaining 78 percent of heritage trees in the floodplain, an additional 213 inches would be mitigated. To provide the mitigation for the total 213 inches of heritage trees in the floodplain, UP would pay into the Tree Mitigation Fund using the 3:1 ratio and \$200 per inch specified in the Tree Protection Ordinance, for a total of 639 inches and \$127,800. No heritage trees would be removed by the proposed project within the buffer and outside the floodplain and buffer.

Table 2. Total Heritage Tree Protected Tree Impacts, Preservation, and Mitigation

	Floodplain	Buffer (Environmentally Sensitive Area)	Outside Floodplain and Buffer	Total
Unavoidable Impacts (Removed Inches)	213	0	0	213
Preserved Inches	61	0	69	130
Total Inches	274	0	69	343
Percent Preserved	22	0	100	-
Preservation Inches Required	274	0	69	-
Mitigation Inches Required	213	0	0	213
Mitigation Inches Required using 3:1 ratio	639	0	0	639

To provide the mitigation for the total 17,792 square feet of tree canopy and 213 dbh inches of heritage trees (639 dbh inches using 3:1 ratio), UP would pay a total of \$197,940 into the Tree Mitigation Fund.

Additionally, areas disturbed by construction would be seeded with a native grass mix. The area of seeding for re-vegetation is approximately 328,878 square feet (about 7.5 acres). The native seeding will be planted using drill seeding technique as accessible by equipment in a safe and practicable manner and generally on slopes 3:1 (horizontal to vertical) and flatter. Steeper slopes and areas that cannot be planted by drill seeding technique would be hydroseeded as applicable. The re-vegetated areas will have 85 percent cover of established vegetation within two years of planting.

The following measures will be used to ensure protection of the tree preservation areas. Within the proposed tree preservation areas, tree protection fencing will be installed as necessary to exclude construction activities. No clearing or grading will occur in these areas, and none of these areas will be used for construction staging. In addition, the under-stories of these areas will not be cleared.

The Applicant/Owner further assert that:

- *If UP complies strictly with the provisions of these regulations, they can make no reasonable use of their property; and*
- *The hardship relates to UP's land, rather than personal circumstances; and*
- *The hardship is unique, or nearly so, rather than one shared by many surrounding properties; and*
- *The hardship is not the result of UP's own actions; and*
- *The granting of the exception/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 my professional opinion, the proposed administrative exception / 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,

A handwritten signature in blue ink that reads "Ricky Wilson".

Ricky Wilson, PWS
Environmental Scientist

For Office Use Only:

AEVR #:

Date Received:

DSD – Director Official Action:

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APPROVED

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APPROVED W/ COMMENTS

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DENIED

Signature:

Date:

Printed Name:

Title:

Comments: