



ITEM FOR ENVIRONMENTAL COMMISSION AGENDA

COMMISSION MEETING DATE: May 18, 2022

NAME & NUMBER OF PROJECT: 1881 Westlake Drive
SP-2021-0349D

NAME OF APPLICANT OR ORGANIZATION: Joseph William Lee

LOCATION: 1881 Westlake Drive

COUNCIL DISTRICT: District #8

ENVIRONMENTAL REVIEW STAFF: Eric Brown, Senior Environmental Scientist
Watershed Protection Department,
Eric.Brown@austintexas.gov

WATERSHED: Lake Austin and Bee Creek watersheds, Water Supply Rural, Drinking Water Protection Zone

REQUEST: Variance request is as follows:
Request to vary from LDC 25-8-281(C)(2)(b) to allow the construction within 150-foot of a rimrock Critical Environmental Feature (CEF).

STAFF RECOMMENDATION: Staff recommends this variance with conditions, having determined the findings of fact to have been met.

STAFF CONDITION: Remove existing boat dock and access path as specified on plans; restore disturbed areas per City Standard Specification 609S. All construction to occur via barge.

Staff Findings of Fact



Watershed Protection Department
Staff Recommendations Concerning Required Findings

Project Name &

Case Number: **1881 Westlake Drive SP-2021-0349D**

Ordinance Standard: **Watershed Protection Ordinance**

Variance Request: **LDC 25-8-281(C)(2)(b) - To allow construction within 150 feet of a Rimrock Critical Environmental Feature (CEF) .**

Include an explanation with each applicable finding of fact.

A. Land Use Commission variance determinations from Chapter 25-8-41 of the CityCode:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes. A variance from 25-8-281(C)(2)(b) allowing for construction of a boat dock and shoreline access has been granted for similarly situated properties with approximately contemporaneous development subject to similar code.

2. The variance:
 - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes. No disturbance of the rimrock CEF is proposed, all proposed construction activities are to occur downgradient of the rimrock CEFs, and construction is to occur from the lakeside by barge. The proposed construction to be performed from a barge provides greater overall environmental protection.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes. The variance is the minimum deviation from the code requirement to allow for a reasonable use of the property. The code requires a 150-foot critical environmental feature buffer. This buffer is not being reduced. The scope of the variance is limited to allowing construction activities to occur within a critical environmental feature buffer only for the proposed boat dock replacement.

- c) Does not create a significant probability of harmful environmental consequences.

Yes. The variance does not create significant harmful environmental consequences. The construction of the boat dock from barge will not disturb the rimrock critical environmental feature.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes, the variance will result in water quality that is at least equal to the water quality achievable without the variance. The construction activities will not disturb the rimrock critical environmental features.

Staff Recommendation: Staff recommends the variance as the Findings of Fact have been met, with the staff recommended condition that all construction be completed by barge.

- B. The Land Use Commission may grant a variance from a requirement of Section 25-8-422 (*Water Supply Suburban Water Quality Transition Zone*), Section 25-8-452 (*Water Supply Rural Water Quality Transition Zone*), Section 25-8-482 (*Barton Springs Zone Water Quality Transition Zone*), Section 25-8-368 (*Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long*), or Article 7, Division 1 (*Critical Water Quality Zone Restrictions*), after determining that:

1. The criteria for granting a variance in Subsection (A) are met;

Yes / No N/A

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

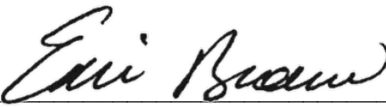
Yes / No N/A

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Yes / No N/A


Staff Recommendation: N/A.

Hydrogeologic Reviewer
(WPD)


Eric Brown

Date: 4/29/2022

Deputy Environmental
Officer (WPD)


Liz Johnston

Date: 4/29/2022

Applicant Form and Findings of Fact



ENVIRONMENTAL COMMISSION VARIANCE APPLICATION FORM

PROJECT DESCRIPTION

Applicant Contact Information

Name of Applicant	<i>Joseph William Lee</i>
Street Address	<i>5809 Lookout Mountain Drive</i>
City State ZIP Code	<i>Austin, TX 78731</i>
Work Phone	<i>714-608-2852</i>
E-Mail Address	<i>c/o chris@anderssonwise.com</i>

Variance Case Information

Case Name	<i>1881 Westlake Drive</i>
Case Number	<i>SP-2021-0349D</i>
Address or Location	<i>1881 Westlake Drive</i>
Environmental Reviewer Name	<i>Eric Brown</i>
Environmental Resource Management Reviewer Name	
Applicable Ordinance	<i>LDC 25-8-281(C)(2)(b)</i>
Watershed Name	<i>Lake Austin</i>
Watershed Classification	<input type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Water Supply Suburban <input checked="" type="checkbox"/> Water Supply Rural <input type="checkbox"/> Barton Springs Zone

Edwards Aquifer Recharge Zone	<input type="checkbox"/> Barton Springs Segment <input type="checkbox"/> Northern Edwards Segment X Not in Edwards Aquifer Zones
Edwards Aquifer Contributing Zone	<input type="checkbox"/> Yes X No
Distance to Nearest Classified Waterway	<i>The boat dock is in Lake Austin.</i>
Water and Waste Water service to be provided by	NA
Request	<p>The variance request is as follows (Cite code references:</p> <p><i>To allow construction in rimrock CEF setbacks.</i></p>

Impervious cover	Existing	Proposed
square footage:	_____	_____
acreage:	_____	_____
percentage:	_____	_____
Provide general description of the property (slope range, elevation range, summary of vegetation / trees, summary of the geology, CWQZ, WQTZ, CEFs, floodplain, heritage trees, any other notable or outstanding characteristics of the property)	<p><i>1881 Westlake Drive is a 1- acre homesite on the shoreline of Lake Austin containing a home, dock, and dock access. The current home, dock, and dock access date back to the early seventies. This project proposes to replace a non-compliant dock with a compliant dock and complete necessary repairs to the deteriorating dock access. Attachment 1 contains an aerial photo of the site. It's located about 1.5 miles northeast of the intersection of Westlake Drive and Redbud Trail. The site contains four rimrock CEFs, all of which are upgradient of the proposed dock. Portions of the dock access are upgradient of the rimrocks, but the LOC is lined in mulch sock to contain any sediment produced by the dock access construction.</i></p>	

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)	<i>The limit of construction for the proposed dock and access repairs fall within the rimrock CEF setbacks. Please see Attachment 2 for the Proposed Conditions Site Plan Sheet; Attachment 3 for the Basis of Determination for the Findings of Fact; and Attachment 4 for the Environmental Resource Inventory.</i>
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FINDINGS OF FACT

As required in LDC Section 25-8-41, in order to grant a variance the Land Use Commission must make the following findings of fact:

Include an explanation with each applicable finding of fact.

Project:

Ordinance:

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes / No *Please see Attachment 4, Basis of Determination.*

2. The variance:
 - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes / No *Please see Attachment 4, Basis of Determination.*

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes / No *Please see Attachment 4, Basis of Determination.*

- c) Does not create a significant probability of harmful environmental consequences.

Yes / No *Please see Attachment 4, Basis of Determination.*

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes / No Please see Attachment 4, Basis of Determination.

- B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-422 (Water Quality Transition Zone), Section 25-8-452 (Water Quality Transition Zone), Article 7, Division 1 (Critical Water Quality Zone Restrictions), or Section 25-8-368 (Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long):

Not Applicable

1. The criteria for granting a variance in Subsection (A) are met;

Yes / No [provide summary of justification for determination]
2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

Yes / No [provide summary of justification for determination]
3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Yes / No [provide summary of justification for determination]

**Variance approval requires all above affirmative findings.



Exhibits for Commission Variance

- Aerial photos of the site
- Site photos
- Aerial photos of the vicinity
- Context Map—A map illustrating the subject property in relation to developments in the vicinity to include nearby major streets and waterways
- Topographic Map - A topographic map is recommended if a significant grade change on the subject site exists or if there is a significant difference in grade in relation to adjacent properties.
- For cut/fill variances, a plan sheet showing areas and depth of cut/fill with topographic elevations.
- Site plan showing existing conditions if development exists currently on the property
- Proposed Site Plan- full size electronic or at least legible 11x17 showing proposed development, include tree survey if required as part of site or subdivision plan
- Environmental Map – A map that shows pertinent features including Floodplain, CWQZ, WQTZ, CEFs, Setbacks, Recharge Zone, etc.
- An Environmental Resource Inventory pursuant to ECM 1.3.0 (***if required by 25-8-121***)
- Applicant's variance request letter

Applicant Exhibits

ATTACHMENT 1

AERIAL SITE PHOTO



ATTACHMENT 2
PROPOSED CONDITIONS SITE PLAN SHEET
AND EROSION CONTROLS

1881 WESTLAKE DRIVE

NOTES:

1. ALL WORK SHALL OCCUR WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLAN. ALL MATERIALS WILL BE TRANSPORTED TO THE SITE FROM WATER. ALL CONSTRUCTION ACTIVITY, INCLUDING STAGING AND SPOIL STORAGE, WILL BE COMPLETED BY WATER.
2. SHORELINE IMPROVEMENTS, INCLUDING GANGWAY ACCESS, ARE AUTHORIZED WITH THIS SITE PLAN.
3. CONTAINERS OF HAZARDOUS MATERIALS, FUEL, OIL, HERBICIDES, INSECTICIDES, FERTILIZERS, OR OTHER POLLUTANTS WILL NOT BE STORED ON DOCKS EXTENDING INTO OR ABOVE LAKE AUSTIN.
4. FOR LA ZONING, PERMANENT IMPROVEMENTS ARE PROHIBITED WITHIN THE SHORELINE SETBACK AREA, EXCEPT FOR RETAINING WALLS, PIERS, WHARVES, BOATHOUSES, MARINAS, OR A DRIVE TO ACCESS THE STRUCTURES [LDC 25-2-551 (B)(2)].
5. NO WATER OR WASTEWATER UTILITIES ARE PROPOSED WITH THIS DEVELOPMENT.
6. DOCK SHALL BE AT LEAST 66% OPEN.
7. PILINGS SHALL BE 6-5/8" DIAMETER STEEL PIPE.
8. THE PROJECT SITE IS WITHIN THE CITY OF AUSTIN LIMITED PURPOSE BOUNDARIES.

ATTENTION INSPECTOR NOTES:

1. COMPLIANCE WITH BUILDING CODE REQUIRED AND IS TO BE REVIEWED FOR COMPLIANCE DURING BUILDING CODE REVIEW.
2. FOR THE BUILDING PERMIT, A SIGNED AND SEALED LETTER SHALL BE SUBMITTED TO THE CITY OF AUSTIN, PER THE LAND DEVELOPMENT CODE, 25-12-3 1612.4, CERTIFYING THAT THE STRUCTURE IS IN ACCORDANCE WITH ASCE 24, FLOOD RESISTANT DESIGN AND CONSTRUCTION.
3. ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS.

PLANT NAME	NUMBER OF PLANTS	TYPE OF MITIGATION
Bald Cypress (Taxodium distichum)**	1	Floodplain
Mexican Plum (Prunus mexicana)**	1	Floodplain
White Mistflower (Ageratina havanensis)^	2	Floodplain
Barbados Cherry (Malpighia glabra)^	2	Floodplain
TOTAL = 6 PLANTS		

** 2" caliper trees
^ Native shrub with low water needs
Alternative native and adapted species may be substituted with the same quantity of another species and plant planting location maybe modified as approved by the PDR Environmental reviewer, ERM Wetland Biologist or ERM Landscape Architect.

TOTAL 609S SHRUBS REQUIRED = 4 SHRUBS. 4 SHRUBS ARE PROPOSED
TOTAL 609S UNDERSTORY TREES REQUIRED = 1 TREE. 1 UNDERSTORY TREE IS PROPOSED
TOTAL 609S SHADE TREES REQUIRED = 1 TREE. 1 SHADE TREE IS PROPOSED
TOTAL 609S PLANTS REQUIRED = 6 PLANTS. 6 PLANTS PROPOSED

REMOVED	
DDI APPENDIX F INCHES REMOVED	0.0
DDI HERITAGE INCHES REMOVED	0.0
DDI NON-APPENDIX F INCHES REMOVED	0.0
DDI INVASIVE INCHES REMOVED	0.0
SURVEYED	
TOTAL APPENDIX F TREE INCHES SURVEYED	1052.0
HERITAGE TREE INCHES SURVEYED	25.0
NON-APPENDIX F TREE INCHES SURVEYED	27.5
INVASIVE TREE INCHES SURVEYED	27.5
MITIGATION	
TOTAL MITIGATION REPLACEMENT INCHES PLANTED	0.0
TOTAL REPLACEMENT INCHES PLANTED ON SITE (PRIVATE TREES)	0.0
TOTAL REPLACEMENT ROW INCHES PLANTED	0.0
PRIVATE INCHES OWED TO UFRF	0.0
PUBLIC INCHES OWED TO UFRF	0.0
TOTAL NON-MITIGATION INCHES PLANTED ON-SITE (ECM 3.5.4)	4.0

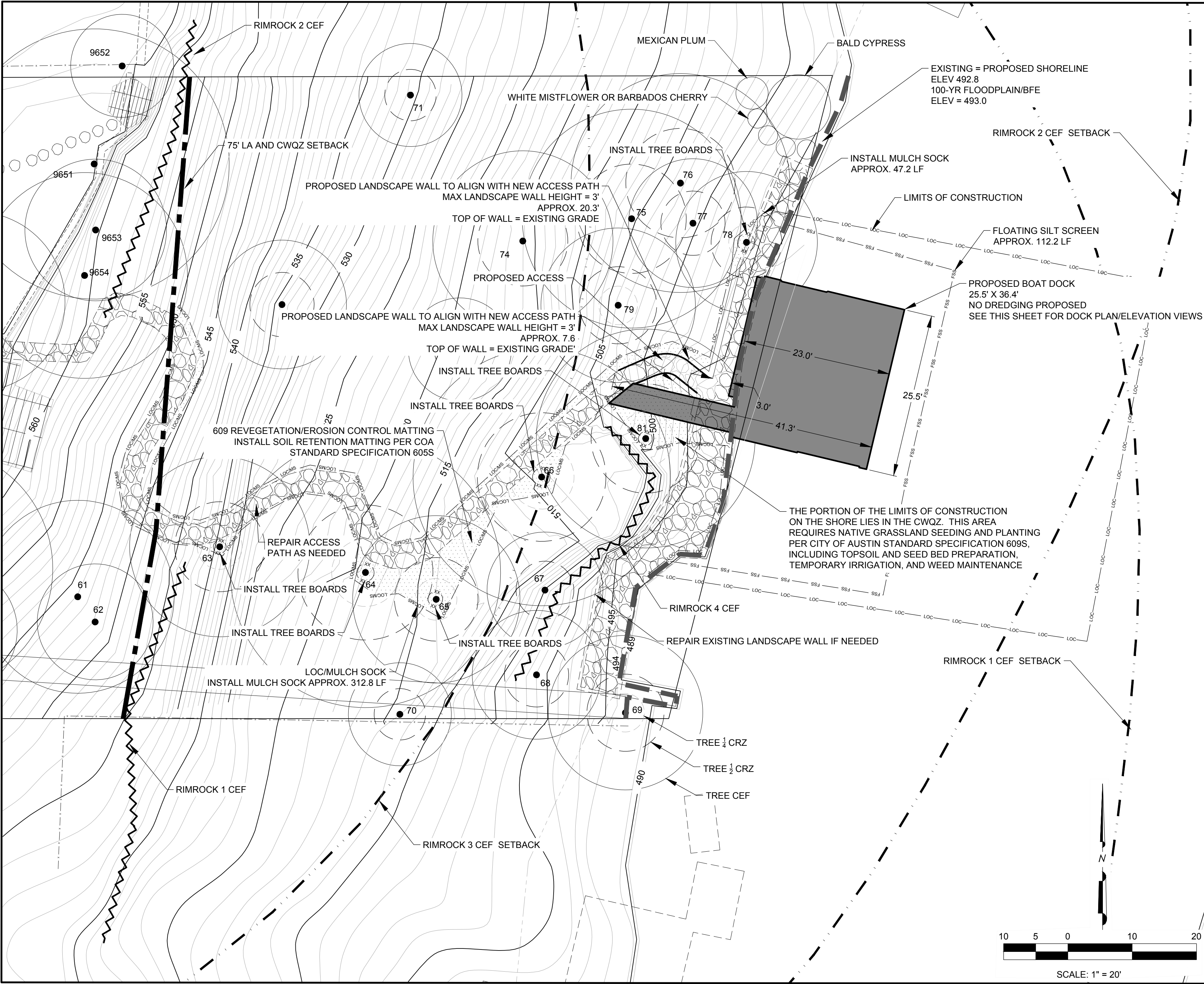
PLANTING MITIGATION CALCULATIONS

- 609S RESTORATION
- ALL DISTURBED AREAS WITHIN THE SHORELINE SETBACK SHALL BE REVEGETATED PURSUANT TO 609S SPECIFICATIONS, USING 609S SEEDING OR PLANTING
 - AREA OF IMPACT IS APPROXIMATELY 430 SF
 - PLANTING CRITERIA RECOMMENDS 1 NATIVE SHADE TREE AND 1 NATIVE UNDERSTORY TREE/500 SF OF DISTURBED AREA
430 SF/500 SF = 1 SHADE TREE AND 1 UNDERSTORY TREE
 - AND 1 NATIVE SHRUB/100 SF
430 SF/100 = 4 SHRUBS

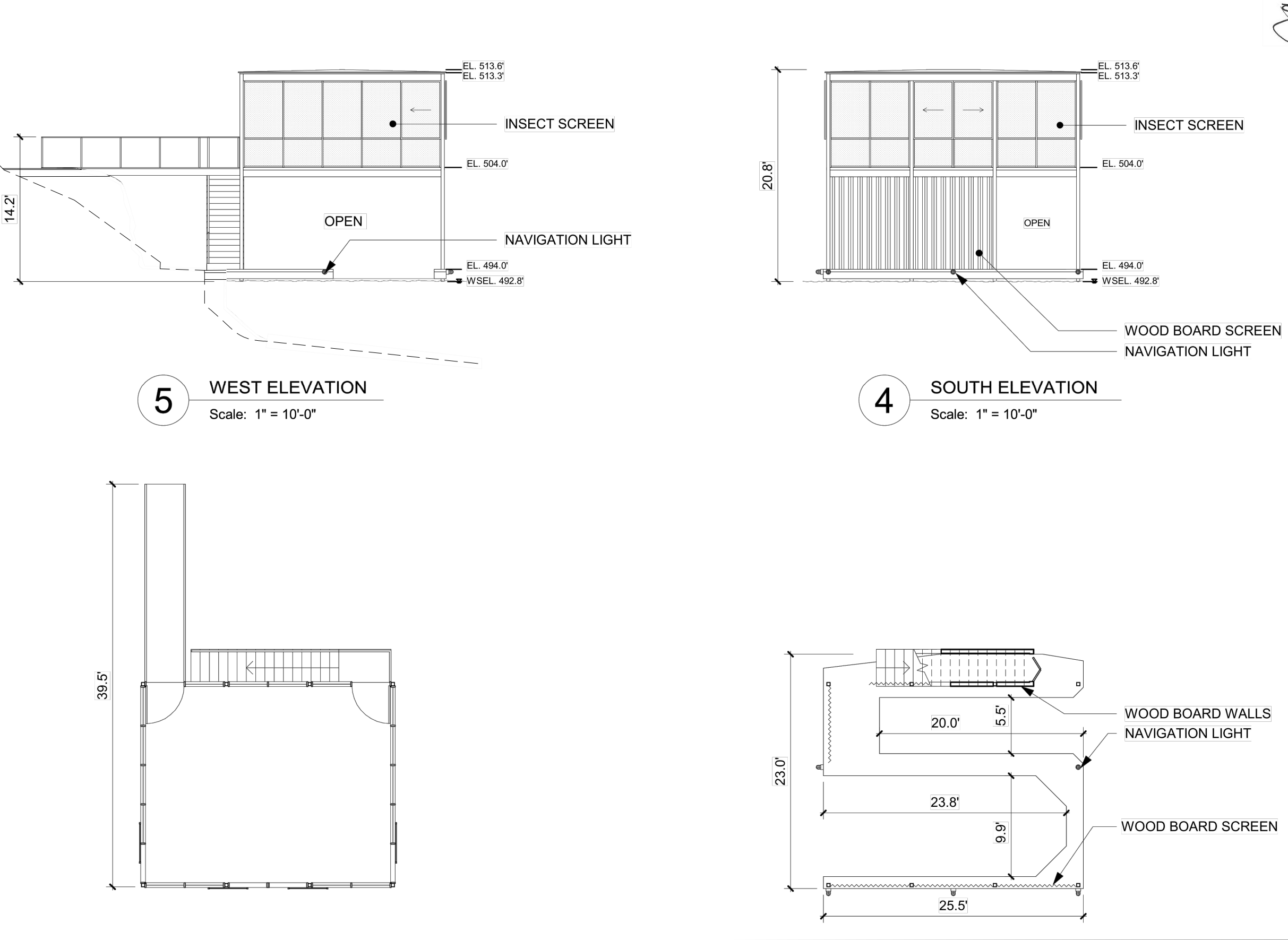
PLANTING MITIGATION NOTES

- ALL PLANTS TO BE SOURCED WITHIN A 200 MILE RADIUS OF AUSTIN.
- FOLLOW ALL GUIDELINES FOUND IN THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, REFERENCE CODE SECTIONS ECM 1.13.0, ECM 1.10.4(D), & ITEM NO. 609S AS APPLICABLE
- ALL PLANTS TO BE A MINIMUM OF ONE GALLON PLANTS INSTALLED AT A MAXIMUM OF 3FT ON CENTERS.

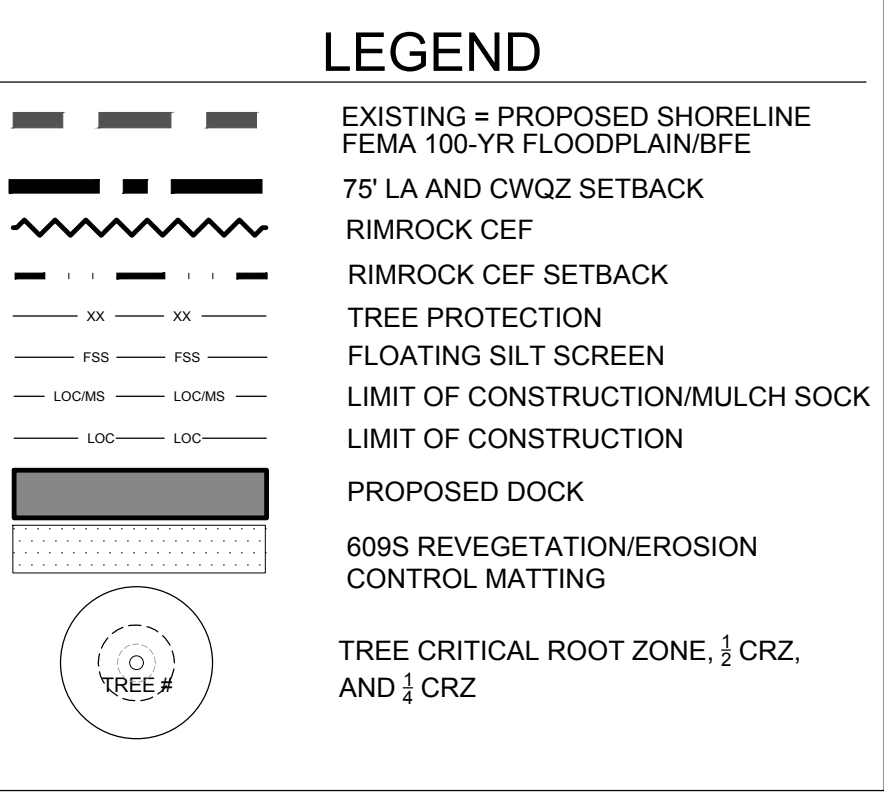
NOTE:
THE PROPOSED BOAT DOCK MUST COMPLY WITH ALL REQUIREMENTS OF LDC 25-2-1174 ("STRUCTURAL REQUIREMENTS"), AND MUST COMPLY WITH CHAPTER 25-12, ARTICLE 1 (UNIFORM BUILDING CODE) AND THE BUILDING CRITERIA MANUAL.



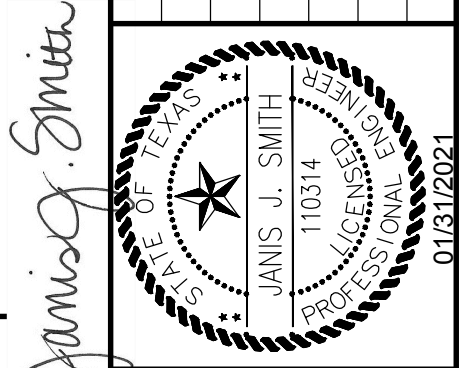
EXISTING SHORELINE LENGTH = 127.9'
ALLOWABLE DOCK WIDTH = 25.6'
PROPOSED DOCK WIDTH = 25.5'
PROPOSED DOCK DEPTH = 41.3'
DOCK FOOTPRINT = 657.1 SF
CHANNEL WIDTH = 116.7'
ALLOWABLE DOCK EXTENSION = 23.3'



PROPOSED DOCK PLAN/ELEVATION VIEWS



PROPOSED CONDITIONS



Janis J. Smith

Janis Smith Consulting, LLC
1505 Westover Road • Austin, Texas 78703 • 512-914-3729
Texas Board of Professional Engineers Registration Number F-16978

1881 WESTLAKE DRIVE
PROPOSED CONDITIONS SITE PLAN

DESIGNED: JJS
APPROVED:
SCALE: AS SHOWN
1881 WESTLAKE DRIVE
DATE: SEPT 25, 2021
SHEET 3 of 4

ATTACHMENT 3
BASIS OF DETERMINATION FOR THE FINDINGS OF FACT

- A. 1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

YES. The Environmental Commission has recommended every variance application pertaining to LDC 25-8-281(C)(2)(b) for the past six years except for one which included a tram.

2. The variance:

a. Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

YES. The entire shoreline is within the CEF setback. Any dock constructed at this site will require this variance.

b. Is the minimum deviation from the code requirement necessary to allow reasonable use of the property;

YES. A dock cannot be constructed on the lot without obtaining this variance.

c. Does not create a significant probability of harmful environmental consequences.

YES. None of the rimrock CEFs are in the LOC, and mulch sock and floating silt screen will be deployed to contain all sediment within the LOC. Post construction, all disturbed areas will be revegetated per the COA 609S specification.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

YES. Mitigation plantings will be added to the site which should result in a greater water quality from overland flow entering the lake. Repairing the fragile and deteriorating dock access should reduce rocks and debris flowing down the hillside. The floating silt screen should contain any sediment caused by the boat dock construction.

- B. 1. The criteria for granting a variance in Subsection (A) are met:

YES. Please see answers to A (1), (2), and (3).

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entirety of the property;

YES. The boat dock and portions of the dock access are unsafe and in need of repair. A safe dock can't be permitted without this variance, nor can the dock access be repaired. The stone steps down to the dock provide access to the entire slope down to the lake – about a third of the lot. Denying the owner the ability to construct a safe dock and access to a third of the lot "prevents a reasonable, economic use of the entirety of the property".

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property;

YES. The construction is limited to replacing a deteriorating dock and dock access with a safe dock and dock access. No further work is proposed; so this project "is the minimum deviation from the code". Denying the owner the ability to construct a safe dock and access to a third of the lot "prevents a reasonable, economic use of the entirety of the property".

ATTACHMENT 4

ENVIRONMENTAL RESOURCE INVENTORY



City of Austin – Environmental Resource Inventory (ERI)
1881 Westlake Dr
Travis County, Texas

May 14, 2021, **Revised December 16, 2021**

By:
DESCO Environmental Consultants, LP
26902 Nichols Sawmill Road
Magnolia, Texas 77355

Environmental Resource Inventory

For the City of Austin
 Related to LDC 25-8-121, City Code 30-5-121, ECM 1.3.0 & 1.10.0

The ERI is required for projects that meet one or more of the criteria listed in LDC 25-8-121(A), City Code 30-5-121(A).

1. SITE/PROJECT NAME: 1881 Westlake Drive
2. COUNTY APPRAISAL DISTRICT PROPERTY ID (#'s): 119788
3. ADDRESS/LOCATION OF PROJECT: 1881 Westlake Drive, Austin, TX 78746
4. WATERSHED: Lake Austin
5. THIS SITE IS WITHIN THE *(Check all that apply)*

Edwards Aquifer Recharge Zone* <i>(See note below)</i>	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No
Edwards Aquifer Contributing Zone*	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No
Edwards Aquifer 1500 ft Verification Zone*	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No
Barton Spring Zone*	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> No

**(as defined by the City of Austin – LDC 25-8-2 or City Code 30-5-2)*

Note: If the property is over the Edwards Aquifer Recharge zone, the Hydrogeologic Report and karst surveys must be completed and signed by a Professional Geoscientist Licensed in the State of Texas.

6. DOES THIS PROJECT PROPOSE FLOODPLAIN MODIFICATION?.....☐ YES** ☒ NO
 If yes, then check all that apply:
 - ☐ (1) The floodplain modifications proposed are necessary to protect the public health and safety;
 - ☐ (2) The floodplain modifications proposed would provide a significant, demonstrable environmental benefit, as determined by a **functional assessment** of floodplain health as prescribed by the *Environmental Criteria Manual (ECM)*, or
 - ☐ (3) The floodplain modifications proposed are necessary for development allowed in the critical water **quality zone under LDC 25-8-261 or 25-8-262, City Code 30-5-261 or 30-5-262.**
 - ☐ (4) The floodplain modifications proposed are outside of the Critical Water Quality Zone in an area determined to be in poor or fair condition by a **functional assessment** of floodplain health.

**** If yes, then a functional assessment must be completed and attached to the ERI (see ECM 1.7 and Appendix X for forms and guidance) unless conditions 1 or 3 above apply.**

7. IF THE SITE IS WITHIN AN URBAN OR SUBURBAN WATERSHED, DOES THIS PROJECT PROPOSE A UTILITY LINE PARALLEL TO AND WITHIN THE CRITICAL WATER QUALITY ZONE? ☐ YES*** ☒ NO

*****If yes, then riparian restoration is required by LDC 25-8-261(E) or City Code 30-5-261(E) and a functional assessment must be completed and attached to the ERI (see ECM1.5 and Appendix X for forms and guidance).**

8. There is a total of 4 (#s) Critical Environmental Feature(s)(CEFs) on or within 150 feet of the project site. If CEF(s) are present, attach a detailed **DESCRIPTION** of the CEF(s), color **PHOTOGRAPHS**, the **CEF WORKSHEET** and provide **DESCRIPTIONS** of the proposed CEF buffer(s) and/or wetland mitigation. Provide the number of each type of CEFs on or within 150 feet of the site *(Please provide the number of CEFs)*:

0 _____ (#'s) Spring(s)/Seep(s) 0 _____ (#'s) Point Recharge Feature(s) 0 _____ (#'s) Bluff(s)
 4 _____ (#'s) Canyon Rimrock(s) 0 _____ (#'s) Wetland(s)

Note: Standard buffers for CEFs are 150 feet, with a maximum of 300 feet for point recharge features. Except for wetlands, if the standard buffer is not provided, you must provide a written request for an administrative variance from LDC 25-8-281(C)(1) and provide written findings of fact to support your request. Request forms for administrative variances from requirements stated in LDC 25-8-281 are available from Watershed Protection Department.

9. The following site maps are attached at the end of this report (Check all that apply and provide):

All ERI reports must include:

- ☒ **Site Specific Geologic Map with 2-ft Topography**
- ☒ **Historic Aerial Photo of the Site**
- ☒ **Site Soil Map**
- ☒ **Critical Environmental Features and Well Location Map on current Aerial Photo with 2-ft Topography**

Only if present on site (Maps can be combined):

- ☐ **Edwards Aquifer Recharge Zone with the 1500-ft Verification Zone**
(Only if site is over or within 1500 feet the recharge zone)
- ☐ **Edwards Aquifer Contributing Zone**
- ☐ **Water Quality Transition Zone (WQTZ)**
- ☒ **Critical Water Quality Zone (CWQZ)**
- ☒ **City of Austin Fully Developed Floodplains for all water courses with up to 64-acres of drainage**

10. **HYDROGEOLOGIC REPORT** – Provide a description of site soils, topography, and site specific geology below (Attach additional sheets if needed):

Surface Soils on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups*. If there is more than one soil unit on the project site, show each soil unit on the site soils map.

Soil Series Unit Names, Infiltration Characteristics & Thickness		
Soil Series Unit Name & Subgroup**	Group*	Thickness (feet)
Brackett soils and Urban land, 12 to 30 percent slopes	D	1.5
Eckrant soils and Urban land, 18 to 40 percent slopes	D	0.67

***Soil Hydrologic Groups Definitions (Abbreviated)**

- A. Soils having a high infiltration rate when thoroughly wetted.
- B. Soils having a moderate infiltration rate when thoroughly wetted.
- C. Soils having a slow infiltration rate when thoroughly wetted.
- D. Soils having a very slow infiltration rate when thoroughly wetted.

**Subgroup Classification – See Classification of Soil Series Table in County Soil Survey.

Description of Site Topography and Drainage *(Attach additional sheets if needed):*

The property is sloped and drains from north northeast to south southwest toward Lake Austin in the Lake Austin watershed, downstream of Lake Travis. The average slope of the property is approximately 20 percent, with the steeper sloped areas being present closer to Lake Austin. The property is bordered on the north, east, and west by similar residential properties and Lake Austin to the south. At the time of the site visit the property had a main residence, outbuilding, greenhouse, and boat dock. The entire shoreline with Lake Austin is a stone/concrete bulkhead with no fringe wetlands. A total of four rimrock CEFs were located on the property. Rimrock 1 had previously been documented by the City of Austin and verified during the site visit. Rimrock 2, Rimrock 3, and Rimrock 4 were documented during the site visit on May 10, 2021. Rimrock 2 extends well past the mapped location to the southeast onto the neighboring property.

List surface geologic units below:

Geologic Units Exposed at Surface		
Group	Formation	Member
Trinity	Upper Glen Rose	Cretaceous

Brief description of site geology *(Attach additional sheets if needed):*

Upper Glen Rose Formation- limestone, dolomite, and marl in alternating resistant and recessive beds forming stairstep topography; limestone, aphanitic to fine-grained, hard to soft and marly, light-gray to yellowish-gray; dolomite, fine-grained, porous, yellowish-brown; marine megafossils including molluscan steinkems, rudistids, oysters, and echinoids; upper part relatively thinner bedded, more dolomitic and less fossiliferous than lower part, thickness about 220 feet.

Wells – Identify all recorded and unrecorded wells on site (test holes, monitoring, water, oil, unplugged, capped and/or abandoned wells, etc.):

There are $\frac{0}{0}$ (#) wells present on the project site and the locations are shown and labeled
 $\frac{0}{0}$ (#s) The wells are not in use and have been properly abandoned.
 $\frac{0}{0}$ (#s) The wells are not in use and will be properly abandoned.
 $\frac{0}{0}$ (#s) The wells are in use and comply with 16 TAC Chapter 76.
 There are $\frac{0}{0}$ (#s) wells that are off-site and within 150 feet of this site.

11. **THE VEGETATION REPORT** – Provide the information requested below:

Brief description of site plant communities (Attach additional sheets if needed):

The majority of the site is woodland dominated by live oak (*Quercus virginiana*), net-leaf hackberry (*Celtis reticulata*), eastern red-cedar (*Juniperus virginiana*), Shumard oak (*Quercus shumardii*), and Texas persimmon (*Diospyros texana*). There is a small maintained yard in the front of the residence dominated by St. Augustine grass (*Stenotaphrum secundatum*). No grassland/prairie/savanna or hydrophytic vegetation is present on the property.

There is woodland community on site ☒ YES ☐ NO (Check one).

If yes, list the dominant species below:

Woodland species	
Common Name	Scientific Name
Live Oak	<i>Quercus virginiana</i>
Net-leaf Hackberry	<i>Celtis reticulata</i>
Eastern Red-cedar	<i>Juniperus virginiana</i>
Shumard Oak	<i>Quercus shumardii</i>
Texas Persimmon	<i>Diospyros texana</i>

There is grassland/prairie/savanna on site..... ☐ YES ☒ NO (Check one).

If yes, list the dominant species below:

Grassland/prairie/savanna species	
Common Name	Scientific Name

There is hydrophytic vegetation on site ☐ YES ☒ NO (Check one).

If yes, list the dominant species in table below (next page):

Hydrophytic plant species		
Common Name	Scientific Name	Wetland Indicator Status

A tree survey of all trees with a diameter of at least eight inches measured four and one-half feet above natural grade level has been completed on the site.

☒ YES ☐ NO (Check one).

12. WASTEWATER REPORT – Provide the information requested below.

Wastewater for the site will be treated by (Check of that Apply):

- ☐ On-site system(s)
☒ City of Austin Centralized sewage collection system
☐ Other Centralized collection system

Note: All sites that receive water or wastewater service from the Austin Water Utility must comply with City Code Chapter 15-12 and wells must be registered with the City of Austin

The site sewage collection system is designed and will be constructed to in accordance to all State, County and City standard specifications.

☒ YES ☐ NO (Check one).

Calculations of the size of the drainfield or wastewater irrigation area(s) are attached at the end of this report or shown on the site plan.

☐ YES ☐ NO ☒ Not Applicable (Check one).

Wastewater lines are proposed within the Critical Water Quality Zone?

☐ YES ☒ NO (Check one). If yes, then provide justification below:

Is the project site is over the Edwards Aquifer?

☐ YES ☒ NO (Check one).

If yes, then describe the wastewater disposal systems proposed for the site, its treatment level and effects on receiving watercourses or the Edwards Aquifer.

13. One (1) hard copy and one (1) electronic copy of the completed assessment have been provided.

Date(s) ERI Field Assessment was performed: May 10, 2021

Date(s)

My signature certifies that to the best of my knowledge, the responses on this form accurately reflect all information requested.

Chris Little

281-252-9799

Print Name

Telephone

Signature

clittle@descoenv.com

Email Address

DESCO Environmental Consultants, LP

May 14, 2021, revised December 16, 2021

Name of Company

Date

For project sites within the Edwards Aquifer Recharge Zone, my signature and seal also certifies that I am a licensed Professional Geoscientist in the State of Texas as defined by ECM 1.12.3(A).

P.G.
Seal

City of Austin Environmental Resource Inventory - Critical Environmental Feature Worksheet

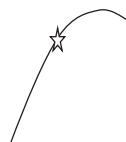
1	Project Name:	1881 Westlake Drive
2	Project Address:	1881 Westlake Drive, Austin, Texas 78746
3	Site Visit Date:	May 10, 2021
4	Environmental Resource Inventory Date:	May 14, 2021, revised December 16, 2021

5	Primary Contact Name:	Chris Little
6	Phone Number:	281-252-9799
7	Prepared By:	Chris Little
8	Email Address:	clittle@descoenv.com

[illegible]

City of Austin Use Only	
CASE NUMBER:	

For rimrock, locate the midpoint of the segment that describes the feature.



For wetlands, locate the approximate centroid of the feature and the estimated area.



For a spring or seep, locate the source of groundwater that feeds a pool or stream.



Please state the method of coordinate data collection and the approximate precision and accuracy of the points and the unit of measurement.

Method

Accuracy

GPS ☒ sub-meter ☒

Surveyed ☐ meter ☐

Other ☐ > 1 meter ☐

Professional Geologists apply seal below



List of Attachments for the Environmental Resource Inventory Form

Figure 1: Site Specific Geological Map with 2' Topography

Figure 2: Historical Aerial Imagery

Figure 3: Site Soils Map

Figure 4: Critical Environmental Features and Well Locations

Figure 5: CWQZ and Fully Developed Floodplain

Figure 6: 1881 Westlake Drive - ERI Site Photos



Figure 1: Site Specific Geologic Map with 2' Topography
1881 Westlake Dr.

Travis County, Texas

Legend

- 2' Contours (CoA)
- Geologic Atlas of Texas - 250K (TNRIS)
- Parcel of Interest (CoA)

Map Base: 2020 CAP Area Imagery from TNRIS
Map Datum: NAD 1983 UTM Zone 14N, meters
Map Date: May 11, 2021

N
1:800



0 25 50 100 Feet

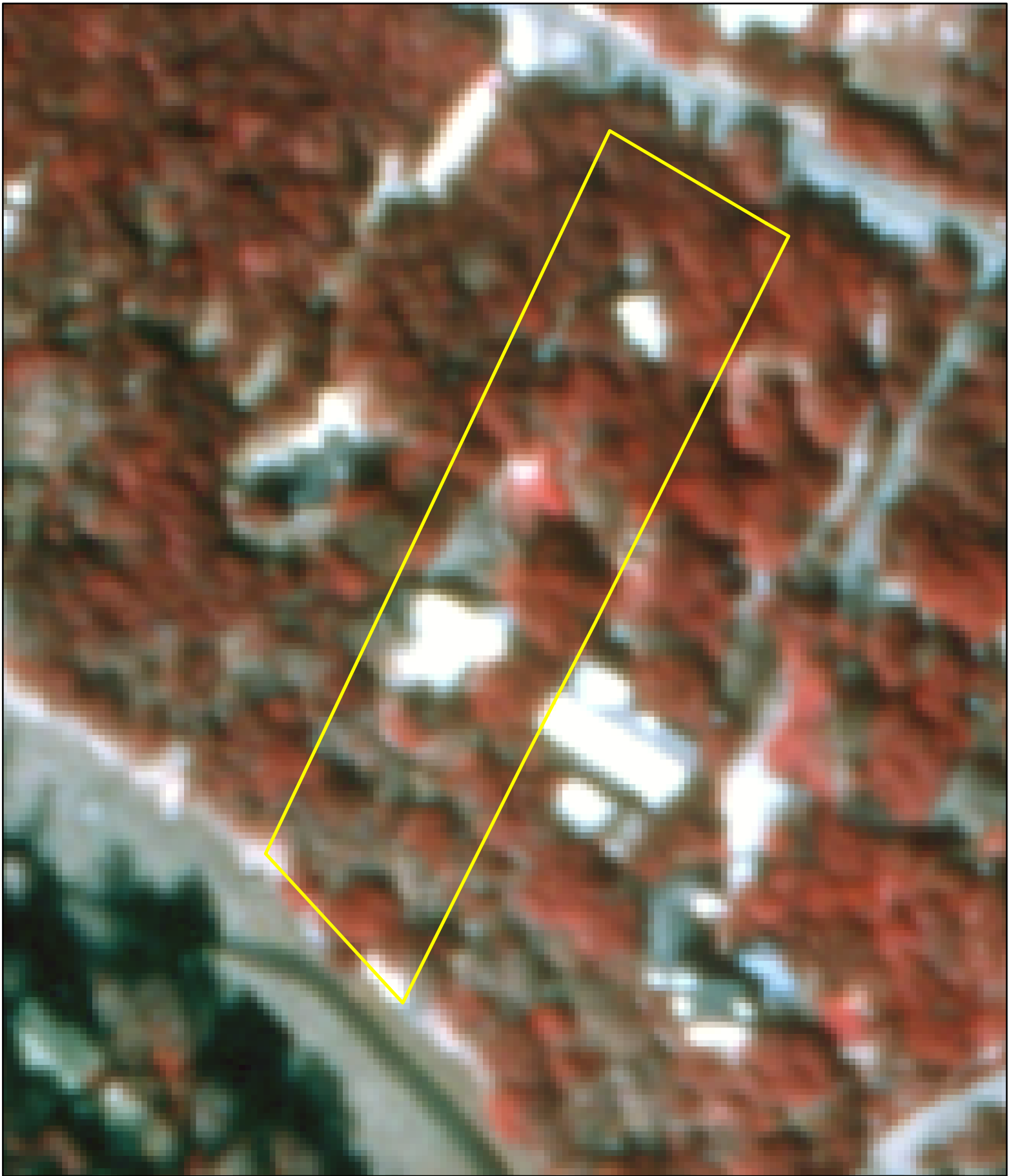


Figure 2: Historical Aerial Imagery
1881 Westlake Dr.


Travis County, Texas

Legend


 Parcel of Interest (CoA)

Map Base: 1996 TOP CIR Aerial Imagery from TNRIS
Map Datum: NAD 1983 UTM Zone 14N, meters
Map Date: May 11, 2021

N



1:800



02550100

Feet



Legend



-  Parcel of Interest (CoA)
-  Soils (USDA/NRCS)

Figure 3: Site Soils Map
1881 Westlake Dr.

Travis County, Texas

Map Base: 2020 CAP Area Aerial Imagery from TNRIS
Map Datum: NAD 1983 UTM Zone 14N, meters
Map Date: May 11, 2021



0 25 50 100 Feet



Legend

- Rimrock (CoA)
- - - Rimrock (DESCO)
- Parcel of Interest (CoA)
- - - 150' Rimrock Buffer

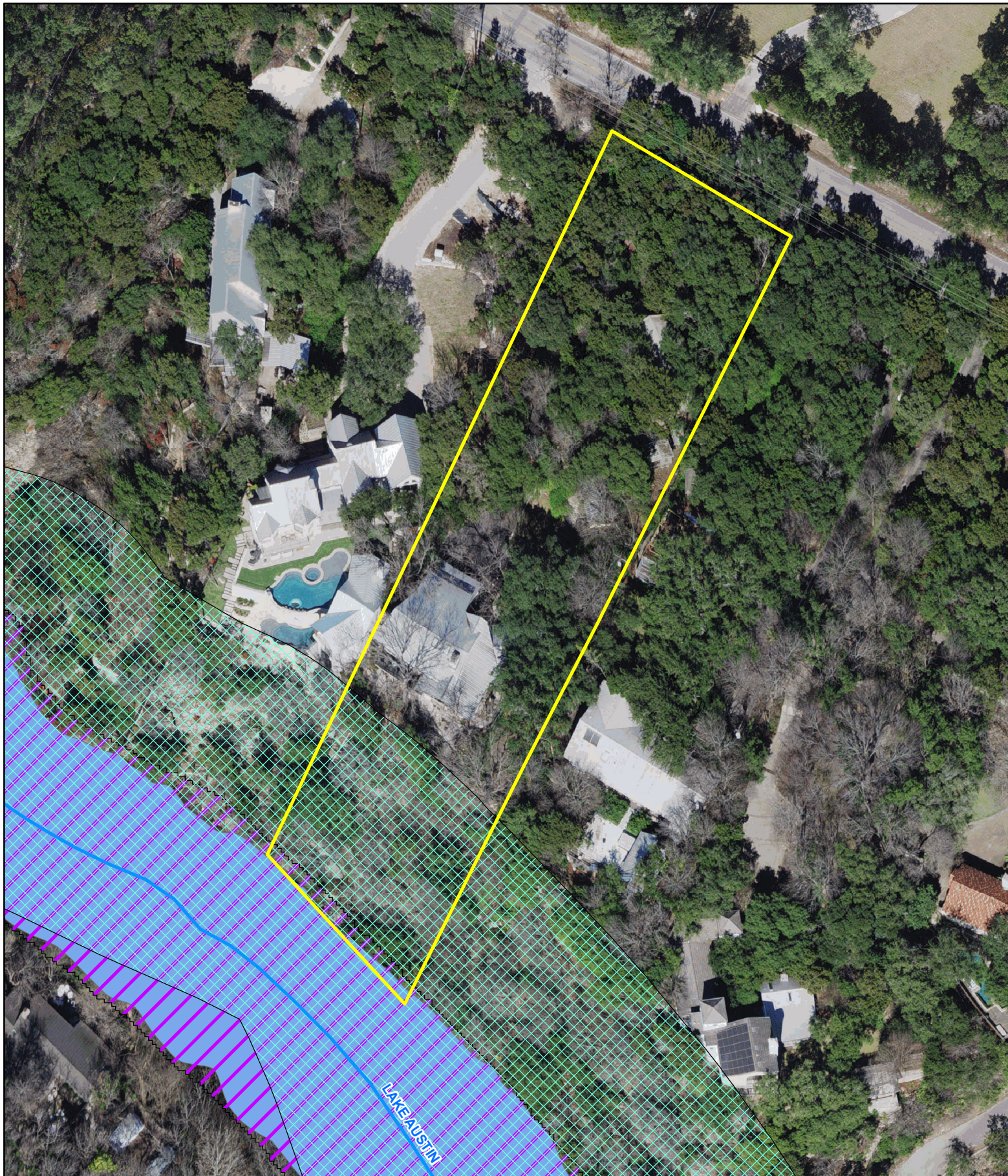
Figure 4: Critical Environmental Features and Well Locations
1881 Westlake Dr.

Travis County, Texas

Map Base: 2020 CAP Area Aerial Imagery from TNRIS
Map Datum: NAD 1983 UTM Zone 14N, meters
Map Date: December 13, 2021



0 25 50 100 Feet



Legend

- Creeks (CoA)
- ▨ CWQZ (CoA)
- ▭ Parcel of Interest (CoA)
- ▨ Austin Fully Developed Floodplain (CoA)
- ▭ Lakes (CoA)

Figure 5: CWQZ and Fully Developed Floodplain Map

1881 Westlake Dr.

Travis County, Texas

Map Base: 2020 CAP Area Aerial Imagery from TNRIS
Map Datum: NAD 1983 UTM Zone 14N, meters
Map Date: May 11, 2021



0 25 50 100 Feet

Figure 6. 1881 Westlake Drive ERI Site Photos



Photo 1: Driveway of property adjacent to Westlake drive. Photo is facing northeast toward Westlake Drive.



Photo 2: View of property facing main residence, with outbuilding and greenhouse to left. Photo was taken from upper portion of driveway facing south southwest.



Photo 3: Photo of outbuilding on upper portion of property near Westlake Drive facing east.



Photo 4: Photo of Rimrock 1 which had previously been documented by the City of Austin and verified by DESCO during the site visit. Photo was taken from near the east end of the rimrock facing northwest.



Photo 5: View of Rimrock 2 which extends further southeast than mapped. Photo was taken near the eastern property boundary facing northeast.



Photo 6: View of Rimrock 3, just above the main residence facing southeast.



Photo 7: View of western shoreline and Rimrock 4 from boat dock with no fringe wetlands facing northwest.



Photo 8: View of eastern shoreline from boat dock with no fringe wetlands facing east.