

**SITE PLAN REVIEW SHEET
ENVIRONMENTAL VARIANCE REQUEST ONLY**

CASE: SP-2017-0146D

ZAP COMMISSION DATE: December 19th, 2017

PROJECT NAME: 4213 Watersedge Cove

APPLICANT: Karl Buckman & Nelda Sue Yaw

AGENT: Janis Smith Consulting, LLC
(Janis Smith)

ADDRESS OF SITE: 4213 Watersedge Cove

COUNTY: Travis

AREA: .7 acres

WATERSHED: Lake Austin

JURISDICTION: Full Purpose

EXISTING ZONING: PUD

PROPOSED DEVELOPMENT:

The applicant is proposing to demolish an existing boat dock and replace it with a new one; as well as modifications to an existing bulkhead.

DESCRIPTION OF VARIANCES:

The applicant requests the following: To allow a bulkhead that was built in front of the existing bulkhead to extend beyond the allowed 6" to 1'. [25-8-368(D)]

STAFF RECOMMENDATION:

The findings of fact have been met and staff recommends approval with the following conditions:

1. Additional planting per the staff determination provided in the Environmental Commission back up materials.

ENVIRONMENTAL BOARD ACTION:

November 15th, 2017: The Environmental Commission recommends support of the request for the bulk head variance to 1' instead of the allowable 6" due to structural constraints with the following conditions; Additional planting per the Staff Determination provided in the Environmental Commission back up materials, and; The contractor shall provide a "Public Education" letter (approved by the City of Austin) to the other contractors that perform work on boat docks to educate them on the permit process. Vote 10-0.

ZONING AND PLATTING COMMISSION ACTION:

N/A

ENVIRONMENTAL REVIEW STAFF: Atha Phillips
Atha.Phillips@austintexas.gov

PHONE: 974-6303

CASE MANAGER: Clarissa Davis
Clarissa.Davis@austintexas.gov

PHONE: 974-1423

September 17, 2017



ENVIRONMENTAL COMMISSION VARIANCE APPLICATION FORM

PROJECT DESCRIPTION

Applicant Contact Information

Name of Applicant	<i>Karl Buckman and Nelda Sue Yaw</i>
Street Address	<i>4213 Watersedge Cove</i>
City State ZIP Code	<i>Austin, TX 78731</i>
Work Phone	<i>832-495-9062</i>
E-Mail Address	<i>neldasueyaw@gmail.com</i>

Variance Case Information

Case Name	<i>4213 Watersedge Cove</i>
Case Number	<i>SP-2017-0146D</i>
Address or Location	<i>4213 Watersedge Cove</i>
Environmental Reviewer Name	<i>Atha Phillips</i>
Environmental Resource Management Reviewer Name	<i>Atha Phillips</i>
Applicable Ordinance	<i>LDC 25-8-368(D)</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

September 17, 2017

Edwards Aquifer Recharge Zone	<input type="checkbox"/> Barton Springs Segment <input type="checkbox"/> Northern Edwards Segment <input checked="" type="checkbox"/> Not in Edwards Aquifer Zones
Edwards Aquifer Contributing Zone	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Distance to Nearest Classified Waterway	<i>The property is on the shoreline of Lake Austin</i>
Water and Waste Water service to be provided by	<i>Austin Water</i>
Request	The variance request is as follows (Cite code references: <i>LDC 28-8-368(D), Bulkhead replacement wider than allowable width</i>

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)	<i>The project entails the construction of a boat dock and partial construction of a bulkhead at a 0.8 ac lot in the Watersedge subdivision. The existing home is currently under renovation and as close as 10ft from the shoreline of Lake Austin. The shoreline and house are protected by a bulkhead that extends along the lakefront and wraps around the cut-in slip housing the boat dock. When the lake was lowered, the contractor for the house noticed that the bulkhead in the cut-in slip was failing. He constructed a concrete bulkhead within the cut-in slip to reinforce the existing, failing, bulkhead. He didn't modify the rest of the bulkhead, he just constructed within the cut-in slip. The contractor wasn't aware of the permitting requirements for bulkheads on Lake Austin and thought that he could repair the bulkhead because it was failing. The unpermitted bulkhead work was discovered when plans for permitting a new boat dock were underway and so is being permitted with a new Site Plan Permit application for the boat dock. An aerial photo showing the proximity of the house to the shoreline is included as Attachment 1; the Site Plan and Erosion and Sedimentation Control Plan sheet from the Site Plan is included as Attachment 2; a photo of the bulkhead is included as Attachment 3; and the bulkhead structural detail with a sealed letter from the structural engineer is included as Attachment 4.</i>	

September 17, 2017

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)	<i>In order to repair a failing bulkhead within an existing cut-in slip, a new concrete bulkhead was installed in front of the failing bulkhead while the lake was down. The shoreline was located at the face of the failing bulkhead. The new bulkhead is 12" thick. The allowable width of a replacement bulkhead constructed lakeside of the shoreline is 6". The new bulkhead is 6" too thick within the cut-in slip.</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: 4213 Watersedge Cove

Ordinance: LDC 28-8-368(D)

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 [provide summary of justification for determination]
See Attachment 5

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 [provide summary of justification for determination]
See Attachment 5

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

☒ Yes / No [provide summary justification for determination]
See Attachment 5

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

☒ Yes / No [provide summary justification for determination]

See Attachment 5

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 [provide summary justification for determination]

See Attachment 5

- 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 25-8-652 (Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long):

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

☒ Yes / No [provide summary of justification for determination]

See Attachment 5

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]

See Attachment 5

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

See Attachment 5

☒ Yes / No [provide summary of justification for determination]

See Attachment 5

****Variance approval requires all above affirmative findings.**

ATTACHMENT 1

AERIAL PHOTO



ATTACHMENT 2

*SITE PLAN AND EROSION and
SEDIMENTATION CONTROL SHEET*

MOVEMENTS ARE AUTHORIZED WITH THIS SITE PLAN.

HAZARDOUS MATERIALS, FUEL, OIL, HERBICIDES, INSECTICIDES, FERTILIZERS, OR OTHER POLLUTANTS WILL NOT BE STORED ON DOCKS EXTENDING INTO OR ABOVE LAKE AUSTIN.

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)].

WASTEWATER UTILITIES ARE PROPOSED WITH THIS DEVELOPMENT.

AT LEAST 66% OPEN.

6-5/8" DIAMETER STEEL PIPE.

IN THE CITY OF AUSTIN FULL PURPOSE BOUNDARIES. .

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.

1. SHORELINE IMPROVEMENTS ARE AUTHORIZED WITH THIS SITE PLAN.
2. CONTAINERS OF HAZARDOUS MATERIALS, FUEL, OIL, HERBICIDES, INSECTICIDES, FERTILIZERS, OR OTHER POLLUTANTS WILL NOT BE STORED ON DOCKS EXTENDING INTO OR ABOVE LAKE AUSTIN.
3. 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)].
4. NO WATER OR WASTEWATER UTILITIES ARE PROPOSED WITH THIS DEVELOPMENT.
5. DOCK SHALL BE AT LEAST 66% OPEN.
6. PILING SHALL BE 6-5/8" DIAMETER STEEL PIPE.
7. THE SITE IS WITHIN THE CITY OF AUSTIN FULL PURPOSE BOUNDARIES.
8. 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.

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.



TREE LIST		
TREE NO.	TRUNK DIAMETER	SPECIES
T10	17.5"	PALM TREE
T11	16.5"	PALM TREE
T12	18"	PALM TREE
T13	16'	PALM TREE
T14	15.5"	PALM TREE
T15	24"	PALM TREE
T16	17"	PALM TREE
T17	MT (2.5" + 2" + 2") = 4.5"	GRAPE MYRTLE
T18	MT (2.5" + 2.5" + 2" + 2" + 2") = 6.75"	GRAPE MYRTLE
T19	MT (2.5" + 2" + 2" + 2" + 2") = 6.5"	GRAPE MYRTLE

SHORELINE MITIGATION PLANTINGS SCHEDULE	
PLANT NAME	NUMBER OF PLANTS
Dwarf palmetto (Sabal minor)	5
Big Muhly (Lindheimer muhly)	10
Spider lily (Hymenocallis liriosme)	10
	TOTAL = 25 PLANTS


All plants are 1-gallon plants installed at a maximum of 3' C-C spacing.

Alternative native and adapted species may be substituted with the same quantity of another species as approved by the PDR Environmental reviewer, ERM Wetland and Biology or ERM Landscape Architect.

Required number of plants = $64.5LF(\text{bulkhead length})/3 = 22 \text{ Plants}$

LEGEND

- EXISTING SHORELINE
- BULKHEAD MITIGATION PLANTING AREA
- PROPOSED DOCK
- EXISTING HOUSE
- EXISTING IMPERVIOUS COVER
- PROPOSED BULKHEAD
- LA SETBACK
- CWQZ SETBACK
- TREE PROTECTION
- FLOATING SILT SCREEN
- LIMIT OF CONSTRUCTION
- MULCH SOCK
- TREE CRITICAL ROOT ZONE AND $\frac{1}{2}$ CRZ

<p>DESIGNED: JJS</p> <p>APPROVED:</p> <p>SCALE: AS SHOWN</p> <p>4213 WATERSEEDGE CV</p> <p>DATE: MAY 22, 2017</p> <p>SHEET of 7</p>	<h1>4213 WATERSEEDGE COVE</h1> <h2>SITE PLAN & EROSION AND SEDIMENTATION CONTROL PLAN</h2>
<h3>Janis Smith Consulting, LLC</h3> <p>1505 Westover Road • Austin, Texas 78703 • 512-914-3729</p> <p>Texas Board of Professional Engineers Registration Number F-16978</p>	
 <div style="float: right; text-align: right;"> <i>Janis J. Smith</i> SEPTEMBER 20, 2017 </div>	

ATTACHMENT 3

PHOTO OF THE BULKHEAD

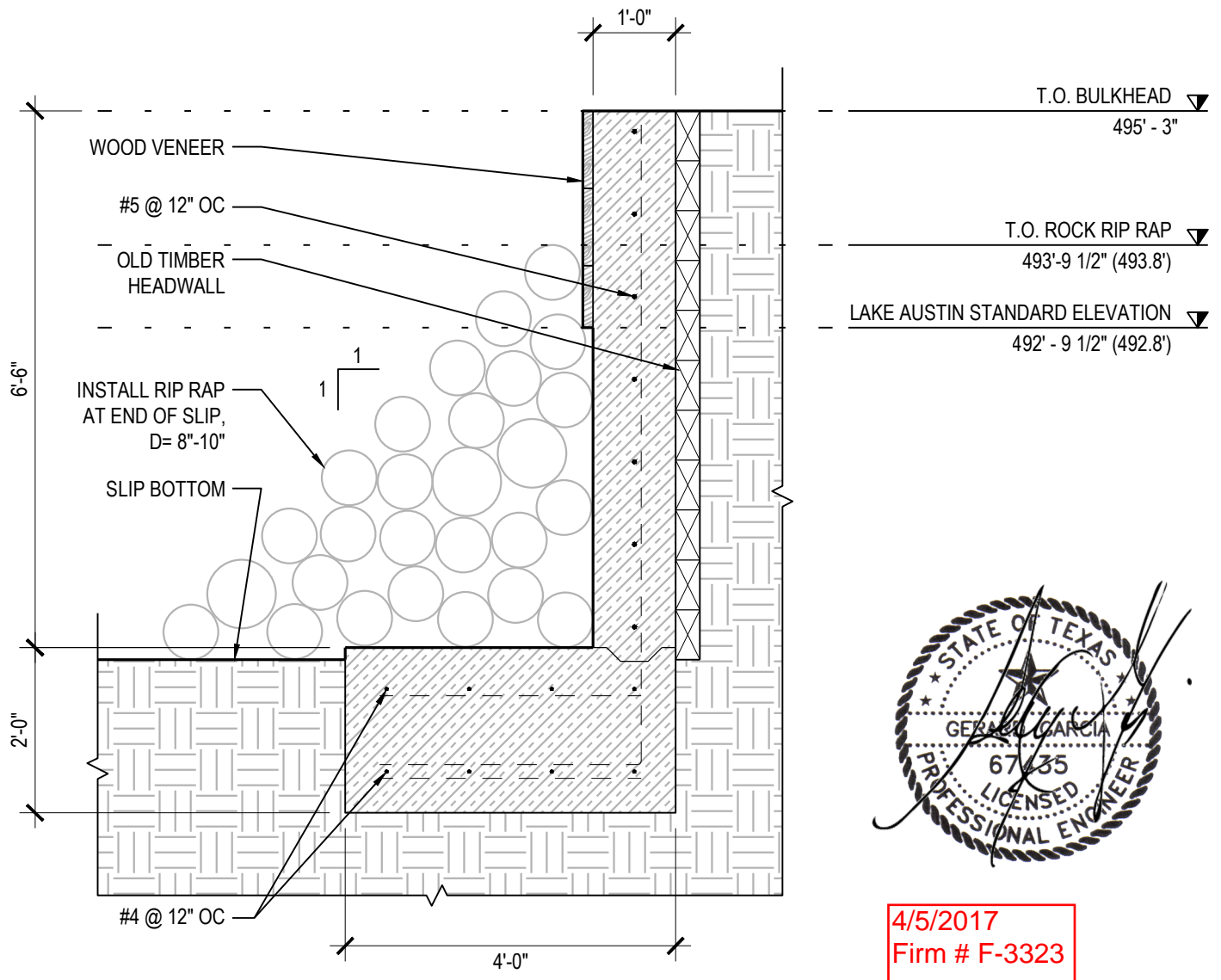


ATTACHMENT 4

BULKHEAD STRUCTURAL DETAIL

and

SEALED LETTER FROM STRUCTURAL ENGINEER



CONCRETE HEADWALL SECTION DETAIL 01

SCALE: 1/2" = 1'-0"



October 5, 2017

City of Austin
Department of Building Inspections
P.O. Box 1088
Austin, Texas 78767

**RE: 1603-4213 Waters Edge Cove
Austin, TX**

To Whom It May Concern:

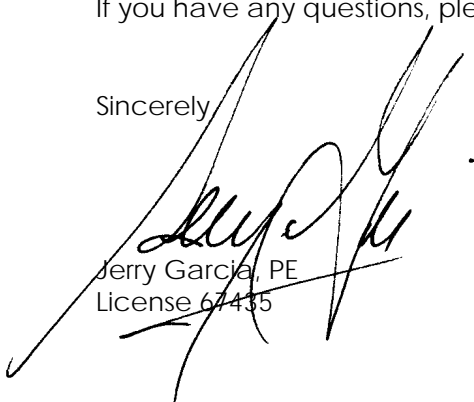
This letter serves to describe the design approach for the concrete bulkhead replacement for the above mentioned project.

Based on the required height of the bulkhead (approximately 6.5 feet) and the lateral loads induced, structural requirements dictated a 12" thick wall. A 6" concrete wall was found not to be structurally sufficient.

The option of a sheet pile installation was not considered as the existing overhang of the boat dock roof did not allow for proper access for pile driving equipment.

If you have any questions, please feel free to contact this office at 512.499.0919.

Sincerely,


Jerry Garcia, PE
License 67435



ATTACHMENT 5
FINDINGS OF FACT

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. When the lake was lowered, it became apparent that the bulkhead within the slip was failing. With the close proximity of the house to the existing bulkhead (10 ft. in some places), it's not recommended that the existing bulkhead is removed. The only way to repair a failing bulkhead in this situation is to install a new bulkhead lakeside of the existing wall. Sheetpile, which would not have required a variance, wasn't an option because there isn't enough vertical clearance underneath the dock roof to install a 6.5' tall sheetpile wall. A concrete wall was the only repair available, and a 12" thick concrete wall design was required per the structural engineer (see his sealed letter in Attachment 4). This wall was the only repair available to the owner without demolishing the dock.

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. This design is the only repair available to the owner to repair a failing bulkhead which was 10ft. from the house.

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

YES. The only code-compliant repair would have been sheetpile, and it wasn't possible to install it without tearing down the dock. A 6" concrete bulkhead wasn't a viable structural option. A 12" concrete bulkhead, constructed in front of the existing, failed, bulkhead was the only option to reinforce a bulkhead constructed as little as 10 ft. from the house.

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

YES. There are no negative environmental consequences of the wall. The concrete wall will eliminate soil leaching into the lake from the prior failing bulkhead.

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

YES. Water quality will not be ill-affected by the wall.

A. 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. There was no method of implementing a code-compliant repair of the bulkhead without demolishing the dock.

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

YES. The extra 6" required to install a structurally sound bulkhead was the minimum deviation from the code.

**ENVIRONMENTAL COMMISSION MOTION 20171115 008a**

Date: November 15, 2017

Subject: 4213 Waters Edge Cove, SP-2017-146D (D-10)

Motion by: Hank Smith

Seconded by: Linda Guerrero

RATIONALE:

WHEREAS, staff recommends approval of the variance and the Findings of Fact have been met per the City of Austin staff, and the applicant brought this issue to the City of Austin outside of a “red tag” process; and

WHEREAS, this work has already been done and per a structural engineer, was necessary to prevent potential failure of the old bulkhead and a 12” thick wall was determined to be necessary and a 6” thick wall would not be structurally sufficient;

THEREFORE, the Environmental Commission recommends support of the request for the bulk head variance to 1’ instead of the allowable 6” due to structural constraints with the following;

Staff Conditions:

- Additional planting per the Staff Determination provided in the Environmental Commission back up materials.

Environmental Commission Conditions:

- The contractor shall provide a “Public Education” letter (approved by the City of Austin) to the other contractors that perform work on boat docks to educate them on the permit process.

VOTE 10-0

For: Perales, Thompson, Istvan, Maceo, H. Smith, Guerrero, Gordon, Creel, Neely, Kitchin

Against: None

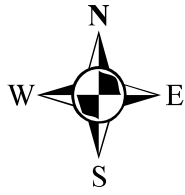
Abstain: None

Recuse: None

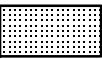

Absent: B. Smith

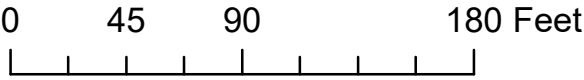
Approved By:

Marisa Perales, Environmental Commission Chair



Legend

-  Site Plan Case
-  Zoning



CASE#: SP-2017-0146D
ADDRESS: 4213 Watersedge Cove
CASE NAME: 4213 Watersedge Cove
MANAGER: Clarissa Davis

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

This product has been produced by the Planning and Development Review Department for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

OPERATOR: Clarissa Davis